Appendix I
Responses to Comments on the Draft Documents

As noted in Chapter 1, *Introduction*, the Placer County Conservation Program (PCCP) consists of three integrated programs.

- The *Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan* (Plan), a joint habitat conservation plan and natural community conservation plan (HCP/NCCP) that would protect fish, wildlife, plants, and their habitats and fulfill the requirements of federal Endangered Species Act of 1973, as amended (ESA), and California Natural Community Conservation Planning Act (NCCPA).
- The *Western Placer County Aquatic Resources Program* (CARP), which would protect streams, wetlands, and other water resources and fulfill the requirements of the Clean Water Act (CWA) and analogous state laws and regulations.
- The *Western Placer County In-Lieu Fee Program* (ILF Program), which fulfills compensatory mitigation requirements under Section 404 of the CWA.

On June 21, 2019, the draft EIS/EIR for the PCCP was released for public review, with the U.S. Fish and Wildlife Service (USFWS) publishing a notice of availability (NOA) in the Federal Register (84 FR 29224) for the draft EIS/EIR and draft Plan, and Placer County (County) publishing an NOA with the California State Clearinghouse (2005032050) for the draft EIS/EIR. The 60-day public review and comment period for these documents ended August 20, 2019.

Separately, the U.S. Army Corps of Engineers (USACE) released a draft CWA permitting strategy for the PCCP that was included as Appendix C of the draft EIS/EIR.

- *SPK-2005-00485, Proposed Section 404 Clean Water Act Permit Strategy Aligned with the Placer County Conservation Program, Placer and Sutter Counties, CA* (draft CWA Permit Strategy).

USACE's public notice opened on July 8, 2019, for a 30-day comment period, which was separate from the NOAs issued by USFWS and the County and ended on August 7, 2019.

In total, 49 comment letters were received on the draft EIS/EIR, the PCCP, and the draft CWA Permit Strategy, and responses to these comments have been provided in this appendix.

Although CEQA and NEPA require lead agencies to respond to comments on the draft EIS/EIR, responses to comments on the PCCP elements—i.e., the Plan, CARP, and ILF Program—have also been included here because the PCCP constitutes the proposed action analyzed in the EIS/EIR.

Furthermore, comments and responses on the draft CWA Permit Strategy have been included here in order to consolidate all comments and responses and to eliminate the need for USACE to issue a separate disclosure to the public for comments and responses. Important to note is that these responses have been provided by USACE—not USFWS nor the County—and are not in response to the USFWS or the County's NOAs, USFWS's NEPA obligations, or the County's CEQA obligations for the draft EIS/EIR, draft Plan, or Section 10(a)(1)(B) incidental take permit applications.

Some comments received on the draft documents resulted in revisions to the draft EIS/EIR, which are shown in the final EIS/EIR. Similarly, some comments resulted in revisions to the draft Plan, which are shown in the final Plan. In both cases, additions are shown with underline, and deletions are shown with ~~strikethrough~~. Most of the changes in the final EIS/EIR or final Plan were confined to minor factual corrections and minor text clarifications. Changes to the Plan (HCP/NCCP) since the release of the draft on June 21, 2019, fall into the following categories.

- Edits to document text and figures, such as correction of spelling errors.
- Updates to geographical naming conventions (e.g., *Coon Creek* revised to *Raccoon Creek*).
- Minor text clarifications and corrections, such as correcting cross-references to other parts of the document.
- Minor numeric corrections, such as small adjustments to land cover acreages.
- Clarification of activities not covered by the Plan.
- Updates to wildlife species accounts and associations with habitats in the Plan Area.
- Clarification of how Plan Conservation Strategy objectives related to vernal pool branchiopod occupancy would be monitored.
- Clarifications of how Plan Conservation Strategy objectives related to habitat restoration and creation would be monitored.
- Clarifications and additional details of vernal pool conservation measures.
- Increased detail of Species Conditions, such as those for tricolored blackbird, valley elderberry longhorn beetle, and vernal pool fairy shrimp and vernal pool tadpole shrimp.
- Increased detail of the process for granting take authorization for private projects.
- Clarification regarding Plan implementation as it relates to the Placer Vineyards Specific Plan.
- Changes in estimated costs and fees to reflect updated information.

The final EIS/EIR reflects changes to the Plan as described, where applicable, within the document, and the following updates are included as well.

- Minor updates to valley elderberry longhorn beetle modeled habitat acres to reflect changes in USFWS's approach to the species in 2017.
- Minor numeric corrections to impacts on acres of vernal pool branchiopod habitat and riverine/riparian complex and conservation targets for valley elderberry longhorn beetle, for consistency with the Plan.
- Clarification of the rationale for incorporating by reference the general plans for the City of Lincoln and Placer County and their associated the EIRs.
- Updates to NEPA significance determination language from "significant and unavoidable" to "significant," to appropriately distinguish between CEQA and NEPA terminology. (Note: these revisions are not related to any changes in the EIS/EIR analysis, and the physical effects on the environment remain the same.)
- Inclusion of comments received on the draft Plan and draft EIS/EIR, and responses to those comments.

- Minor revisions to correct spelling and other editorial errors.

The final EIS/EIR analyzes these updates to determine whether they would result in any changes to the impact analysis or conclusions reached in the draft EIS/EIR that was circulated on June 21, 2019, for a 60-day public review period. The analysis determines that the proposed changes to the Plan and EIS/EIR do not alter the analysis or impact conclusions in the draft EIS/EIR, and do not warrant recirculation pursuant to CEQA Guidelines Section 15088.5.

Some comments resulted in changes to the draft CWA Permit Strategy. A revised CWA Permit Strategy has been prepared by USACE and is included as Appendix C of the EIS/EIR.

This appendix comprises two subsections:

- Appendix I.1, *Comment Letters*. Each comment letter has been assigned a number corresponding to the order it was received, and each letter has been annotated numerically to identify discrete comments with the letter.
- Appendix I.2, *Responses to Comment Letters*. Responses are numbered to correspond with the numerical annotations on letters in Appendix I.1.

Table I-1 lists each comment letter, indicates its letter number, and identifies the page number where its corresponding response(s) can be found in Appendix I.2. For the reader's convenience, a list of all abbreviations used in this appendix has been included in Table I-2, and a list of references cited in the responses follows Table I-2.

Table I-1. Comment Letters Received on the Draft EIS/EIR, Draft PCCP, and Draft CWA Permit Strategy

Letter Number	Letter Author	Date of Letter	Response Page Number
1	Friends of Auburn Ravine	June 23, 2019	I.2-1
2	Friends of Auburn Ravine	July 10, 2019	I.2-3
3	Friends of Auburn Ravine*	July 2019	I.2-4
4	Jackson Shedd and Eric Olson	June 25, 2019	I.2-5
5	Daryl Consulo	June 26, 2019	I.2-6
6	Gary Barron	July 2, 2019	I.2-7
7	George T. Kammerer (Lincoln Village 3 Landowners' Association)	July 11, 2019	I.2-8
8	George T. Kammerer (Lincoln Village 3 Landowners' Association)	July 12, 2019	I.2-13
9	George T. Kammerer (Lincoln Village 3 Landowners' Association)	July 22, 2019	I.2-20
10	George T. Kammerer (Lincoln Village 3 Landowners' Association)	July 21, 2019	I.2-21
11	Central Valley Regional Water Quality Control Board	July 12, 2019	I.2-22
12	Placer County Air Pollution Control District	July 16, 2019	I.2-23
13	Sheppard, Mullin, Richter & Hampton LLP (AKT Investments Inc.)*	August 7, 2019	I.2-24
14	Sheppard, Mullin, Richter & Hampton LLP (AKT Investments Inc.)	August 20, 2019	I.2-29
15	Cox, Castle & Nicholson (Placer Vineyards, LLC)*	August 7, 2019	I.2-34
16	Cox, Castle & Nicholson (Placer Vineyards, LLC)	August 20, 2019	I.2-36
17	Sierra Club, Mother Lode Chapter	August 7, 2019	I.2-43

Letter Number	Letter Author	Date of Letter	Response Page Number
18	Sierra Foothills Audubon Society	August 13, 2019	I.2-48
19	Jim and Jean Piette	August 13, 2019	I.2-50
20	Jean and Jim Piette	August 12, 2019	I.2-55
21	Jim and Jean Piette	August 15, 2019	I.2-57
22	James and Jean Piette	August 20, 2019	I.2-60
23	City of Roseville Development Services Department	August 13, 2019	I.2-62
24	California Wildlife Foundation, California Oaks Program	August 16, 2019	I.2-65
25	Amber Beckler	August 20, 2019	I.2-71
26	Placer County Flood Control and Water Conservation District	August 20 2019	I.2-75
27	Remy Moose Manley LLP (Brookfield Sunset, LLC)	August 20, 2019	I.2-76
28	Cheryl Berkema	August 20, 2019	I.2-78
29	West Placer Groundwater Sustainability Agency	August 20, 2019	I.2-83
30	ECORP Consulting, Inc.	August 20, 2019	I.2-84
31	Delana Ruud	August 20, 2019	I.2-89
32	Dianna Suarez	August 20, 2019	I.2-91
33	Protect American River Canyons	August 20, 2019	I.2-93
34	Gary Estes	August 20, 2019	I.2-95
35	California Native Plant Society, Redbud Chapter	August 20, 2019	I.2-96
36	Taylor & Wiley (Teichert Aggregates)	August 20, 2019	I.2-101
37	Leslie Warren	August 20, 2019	I.2-102
38	Gary Zimmerman	August 20, 2019	I.2-111
39	Alliance for Environmental Leadership	August 20, 2019	I.2-113
40	Public Interest Coalition	August 20, 2019	I.2-117
41	Matthew Emrick (Albert and Connie Scheiber and Scheiber Ranches)	August 20, 2019	I.2-119
42	Placer County Tomorrow	August 20, 2019	I.2-120
43	Tahoe Cattlemen's Association	August 20, 2019	I.2-127
44	Center for Biological Diversity and AquaAlliance	August 20, 2019	I.2-134
45	Placer County Planning Commission Public Hearing (Jane Wurst, Leslie Warren, Amber Beckler, Mike Garabedian, Placer County Tomorrow)	August 8, 2019	I.2-151
46	George T. Kammerer (Lincoln Village 3 Landowners' Association)*	July 17, 2019	I.2-154
47	U.S. Environmental Protection Agency, Region IX	August 20, 2019	I.2-164
48	Albert Scheiber	August 20, 2019	I.2-165
49	Barton Ruud	August 20, 2019	I.2-171

* Letter submitted in response to public notice for USACE's Draft CWA Permit Strategy.

Table I-2. Abbreviations Used in this Appendix

Abbreviation	Definition
AB	Assembly Bill
Act	California Public Records Act
ARSP	*Amoruso Ranch Specific Plan*
BMP	best management practice
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CARP	*Western Placer County Aquatic Resources Program*
CDFW	California Department of Fish and Wildlife
CEHC	California Essential Habitat Connectivity Project
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CM	Conservation Measure
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	Placer County
CWA	Clean Water Act
DA	Department of the Army
EAs	environmental assessments
ECAs	Essential Connectivity Areas
EO	Executive Order
ERP	Ecosystem Restoration Plan
ESA	Endangered Species Act of 1973, as amended
EXR	Existing Reserves and Other Protected Areas
GHG	greenhouse gas
HCP	habitat conservation plan
HPI	Housing Price Index
HUC	Hydrologic Unit Code
ILF	in-lieu-fee
ILF Program	*Western Placer County In-Lieu Fee Program*
JPA	joint powers authority
JSA	by Jones and Stokes Associates
LAFCO	Local Agency Formation Commission
LID	low-impact development
LIDAR	Light Detection and Ranging
LOP	letter of permission
LSA	Lake and Streambed Alteration Program

Abbreviation	Definition
LSAA	Lake and Streambed Alteration Agreements
MOU	Memorandum of Understanding
NCCP	national community conservation plan
NCCPA	Natural Community Conservation Planning Act
Nexus Study	*Development Fee Nexus Study for the Western Placer County HCP/NCCP*
NHPA	National Historic Preservation Act
NID	Nevada Irrigation District
NOA	notice of availability
NWP	Nationwide Permit
OWCMP	*Los Angeles County Oak Woodlands Management Plan*
PA	Programmatic Agreement
PB	Program Biologist
PBO	programmatic biological opinion
PCA	Placer Conservation Authority
PCCP	Placer County Conservation Program
PCWA	Placer County Water Agency
PFG	Potential Future Growth Area
PGP	programmatic general permit
Placer Legacy	Placer Legacy Open Space and Agricultural Conservation Program
Plan	*Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan*
Procedures	State's Procedures for Discharge of Dredged or Fill Material to Waters of the State
PVSP	Placer Vineyards Specific Plan
RAA	Reserve Acquisition Area
Regional Water Board	Regional Water Quality Control Board
RGP	Regional General Permit
SB	Senate Bill
SGMA	Sustainable Groundwater Management Act
SHPO	State Historic Preservation Officer
SP	Standard Permit
UCCE	University of California Cooperative Extension
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WHR	Wildlife Habitat Relationship
WPCGMP	Western Placer County Groundwater Management Plan
WPGSA	West Placer Groundwater Sustainability Agency
WQC	Water Quality Certification

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Appendix I.1

Comment Letters

Shirlee Herrington

From: James Haufler <jhaufler@sbcglobal.net>
Sent: Sunday, June 23, 2019 6:04 PM
To: Placer County Environmental Coordination Services
Subject: Comments on Placer County Conservation Program
Attachments: Ninety-nine years of AR salmon history.pdf; Auburn Ravine - Daily data reports for 2016-2017 final.pdf; Auburn Ravine - Salmon Counting Vols 2016-2017.pdf

Sent by e-mail to Placer County at cdraecs@placer.ca.gov.

Sent by paper mail to U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, 2800 Cottage Way, W–2605, Sacramento, CA 95825.

Here are some comments and questions about the Placer County Conservation Program (PCCP).

1-1 1. The PCCP Designation Map (https://www.placer.ca.gov/DocumentCenter/View/9222/Placer-County-Conservation-Program-Designations-Map-PDF) shows an "Existing Reserve" (EXR) area along Auburn Ravine between Highway 193 and Highway 65. We are aware of reserve areas along Auburn Ravine from Highway 193 to a point near the east end of Moore Road (near 38.882673, -121.307225), but from that area and extending to the west along Auburn Ravine to Highway 65, we believe the land is privately held and not in a conservation easement or similar program. If fact, at the corner of Joiner Parkway and Moore Road, there is a sign advertising that 9 acres of the flood plain area along the creek is "For Sale" (https://www.realtor.com/realestateandhomes-detail/Moore-Rd_Lincoln_CA_95648_M26145-38769?view=qv).

   This area is also mentioned Appendix H - Existing Open Space Lands section 4.5. In that section, the acreage appears to be about right but the extent of the area along the creek is misrepresented in the same way that it is on the PCCP Designation Map.

1-2 2. Section 2.4.2.7.2 mentions "spring-run chinook salmon" in the 3rd paragraph. What evidence do you have of the present or past existence of spring-run chinook salmon in the streams of western Placer County? I can imagine that spring-run chinook may have used the Bear River for spawning before the Camp Far West dam (and other dams upstream) were built. But, whatever the case, we would like more info about spring-run chinook salmon in any of the streams of western Placer County.

1-3 3. Section 2.6.7.2.1 lists stream barriers that should be modified or removed to allow fish passage and/or prevent entrainment.
   a. One of the listed sites is the "Lincoln Ranch Duck Club Dam". That dam is now operated by AKT Properties and their land in that area has been converted to almond orchards over the last few years.
   b. The New Moore dam is not listed. It should be added to the list. It is operated by PCWA.
   c. A typo: "Coppin Dam" is the correct spelling, not "Copin Dam".

1-4 4. Table 3.2 is titled "Western Placer Watersheds –Length (stream miles)". It shows 79 miles for Auburn Ravine. The Auburn Ravine watershed is about 79 square miles, but the stream itself is only about 34 miles in length.

1-5 5. Figures 3-6 and 3-7 are mentioned in the text of the PCCP. They are described as depicting the canals that are used for irrigation. Please let us know where we can find those Figures.

1-6 6. Table 3-18 gives some Occurrence/Survey Data for fall-run chinook salmon in Auburn Ravine. Please see the attached newspaper clippings from 1917 and 1957. We have also attached our report showing the count of fall-run chinook salmon that were observed at the video counting station in Lincoln operated by Friends of Auburn Ravine and CDFW during the 2016/2017 season, and the list of our volunteers who did the counting. This monitoring system should also be mentioned in section 7.4.3.3.3.

1-7 7. In section 7.1.4.3 we would request that we be listed as one of the monitoring organizations.

If we have any additional comments, we will send them before the end of the 60-day comment period.

Thank you,

James Haufler – President
Friends of Auburn Ravine

916-801-3669 (cell)

Web site: www.auburnravine.org

From: Terry Davis [mailto:tmdavis317@gmail.com]
Sent: Friday, June 21, 2019 11:02 AM
To: Terry Davis <tmdavis317@gmail.com>
Subject: PCCP Released for Public Comment

Greetings,

You're receiving this email because you've indicated an interest in protecting habitat and agriculture in Placer County. The draft of the proposed Placer County Conservation Program (PCCP) and its environmental review documents have been released today for a 60-day public comment period. The Notice of Availability is attached, and you can find all the documents---the Draft PCCP, the EIR/EIS, etc., at this link: https://www.placer.ca.gov/3362/Placer-County-Conservation-Program

During the 60 day review period there will be a meeting of the Placer County Planning Commission to take oral comments on the draft EIR/EIS. This is set for:

Thursday August 8th at 10am at 3091 County Center Drive, Auburn.

In addition, there will be a minimum of two public meetings/workshops for the public to ask questions and discuss the PCCP with staff and the state and federal agencies. These are set for:

PCCP Meeting/Workshop: Thursday August 1st 2019 6pm – 8pm (3091 County Center Drive, Auburn – Cypress Conference Room/Planning Commission Hearing Room)

City of Auburn PCCP Meeting/Workshop: Thursday August 15th 2019 6pm – 8pm (600 6th Street, Lincoln – City Hall, First Floor Community Room)

Thank you for your interest in this effort, one that would have far-reaching effects on the future character of the county in which we live.

Terry Davis

--
Terry Davis
530 210-3600

Ninety-nine Years of Auburn Ravine Salmon History

1917

PLACER'S PREMIER PAPER
THE NEWS-MESSENGER
SIX PAGES OF HOME PRINT EVERY WEEK
VOL. XXIX — LINCOLN, PLACER COUNTY, CALIFORNIA, WEDNESDAY, NOVEMBER 7, 1917 — NO 48

* * *

Several catches of salmon have been made in Auburn ravine lately. The high water brings them up.

* * *

Fishermen were plentiful on Auburn Ravine Sunday. Since so much water has been in the ravine salmon and other fish are to be found in the pools.

There was a near tragedy last Sunday all because of a salmon coming up Auburn ravine. Tirza Ann seen it, and jumped in the creek after it, when the salmon turned on her and splached water in her face till she couldn't see, then run between her legs and up set her right in the water and if a passing motorist who heard her screams hadn't got her out, she might have got penumonia and died.

1957

the News Messenger
Serving Lincoln And Western Placer County
VOLUME LXIV — NUMBER FORTY-ONE — THE NEWS MESSENGER, LINCOLN, CALIFORNIA — THURSDAY, JAN. 24, 1957



IT HAS BEEN SAID OFTEN that salmon have been seen in Auburn Ravine and here is proof of the fact they do spawn in the local stream. This 38 inch specimen shown by Jerry and Gale Moore, children of Mr. and Mrs. Robert Moore, was carried home by the two youngsters and Robert Mustra. They grabbed it after it had flopped onto the bank near the NID dam at the Moore ranch west of town last Saturday. Bob Moore, an ardent salmon fisherman, theorized that the fish had completed its second spawning trip to fresh waters and died.

* The mention above of a “second spawning trip” is based on a misunderstanding. Pacific salmon die after spawning. Some Pacific steelhead and some Atlantic salmon survive to spawn more than once but Pacific salmon do not.

2016



Fall Run Chinook Salmon at our counting station in Lincoln 12-16-2016.

Friends of Auburn Ravine
AuburnRavine.org

Auburn Ravine salmon camera project operated by Friends of Auburn Ravine and the California Department of Fish and Wildlife

Daily Data Reports from the Oct 2016 - Mar 2017 season. See totals at the bottom of this spreadsheet.

The net total number of salmon counted migrating upstream past the Lincoln Gauging Station was 326. On the report, you will see that many dates are missing. Those are days when the water was too muddy to see anything, or the cameras were not working, or the cameras had been temporarily removed from the water to protect them from high flows.

	Approximate		Net observed upward migration for the day or partial day.				Cams				
Date	Time Frame Hours	Video Hours Total	>=24" Salmon	<24" Jacks	>=16" Steel-head	<16" Trout	On Line	Water Color	Fish Count By	FAR Disk #	CDFW Disk #
10/26	12-24	12	0	0	0	0	1,2,3,4	Clear	GS	13	AR-1
10/27	0-24	24	5	0	0	0	1,2,3,4	Clear	GS	13	AR-1
10/28	0-24	24	6	0	0	0	1,2,3,4	Murky	GS	13	AR-1
10/29	0-24	24	0	18	0	0	1,2,3,4	Clear	HW	4	AR-1
10/30	0-24	24	0	25	0	0	1,2,3,4	Clear	HW	4	AR-1
10/31	0-24	24	15	5	0	5	1,2,3,4	Clear	JM	9	AR-1
11/1	0-24	24	15	0	0	0	1,4	Clear	JM	9	AR-1
11/2	0-24	24	5	24	0	0	1,2,3,4	Clear	SS	6	AR-1
11/3	0-3	3	0	5	0	0	1,2,3,4	Clear	SS	6	AR-1
11/5	0-24	24	1	3	0	1	1,2,3,4	Clear	EC	8	AR-2
11/6	0-24	24	1	1	0	4	1,2,3,4	Clear	EC	8	AR-2
11/7	0-24	24	8	0	0	0	1,2,3,4	Clear	RB	3	AR-2
11/8	0-24	24	4	4	0	0	1,2,3,4	Clear	RB	3	AR-2
11/9	0-24	24	2	0	0	0	1,2,3,4	Clear	HW	14	AR-2
11/10	0-24	24	4	0	0	0	1,2,3,4	Clear	BB	3	AR-2
11/11	0-9	9	1	0	0	0	1,2,3,4	Clear	JM	5	AR-2
11/11	9-24	15	0	0	0	5	1,2,3,4	Clear	JGr	12	AR-3
11/12	0-24	24	4	1	0	0	1,2,3,4	Clear	JGr	12	AR-3
11/13	0-24	24	1	4	0	0	1,2,3,4	Clear	SH	12	AR-3
11/14	0-24	24	0	2	0	0	1,2,3,4	Clear	AV	10	AR-3
11/15	0-24	24	3	1	0	0	1,2,3,4	Clear	AV	10	AR-3
11/16	0-24	24	3	1	0	0	1,2,3,4	Clear	JH	1	AR-3
11/17	0-24	24	1	0	0	0	1,2,3,4	Clear	JH	1	AR-3
11/18	0-9	9	2	1	0	0	1,2,3,4	Clear	JH	1	AR-3
11/18	9-24	15	0	0	0	0	1,2,3,4	Clear	JG	11	AR-4
11/19	0-24	24	0	0	0	0	1,2,3,4	Clear	JG	11	AR-4
11/20	0-24	24	0	0	0	0	1,2,3,4	Mud	JG	11	AR-4
11/21	0-24	24	13	0	0	0	1,2,3,4	Clear	HW	4	AR-4
11/22	0-24	24	20	1	0	5	1,2,3,4	Clear	HW	4	AR-4

Date	Approximate Time Frame Hours	Approximate Video Hours Total	Net observed upward migration for the day or partial day. >=24" Salmon	<24" Jacks	>=16" Steel-head	<16" Trout	Cams On Line	Water Color	Fish Count By	FAR Disk #	CDFW Disk #
11/23	0-24	24	8	11	0	0	1,2,3,4	Clear	SS	6	AR-4
11/24	0-24	24	2	3	0	0	1,2,3,4	Clear	SS	6	AR-4
11/27	0-24	24	6	5	0	0	1,2,3,4	Murky	SS	1	AR-4
11/28	0-9	9	5	1	0	0	1,2,3,4	Clear	SS	1	AR-4
11/29	0-24	24	23	4	0	-12	1,2,3,4	Clear	HW	7	AR-6
11/30	0-24	24	12	3	0	7	1,2,3,4	Clear	HW	7	AR-6
12/1	0-24	24	2	3	0	0	1,2,3,4	Clear	AV	2	AR-6
12/2	0-8	8	3	1	0	0	1,2,3,4	Clear	AV	2	AR-6
12/2	8-24	16	2	0	1	0	1,2,3,4	Clear	JM	9	AR-8
12/3	0-24	24	1	2	0	0	1,2,3,4	Clear	JM	9	AR-8
12/4	0-24	24	2	0	1	0	1,2,3,4	Clear	JM	9	AR-8
12/5	0-24	24	0	0	0	0	1,2,3,4	Clear	GC	3	AR-8
12/6	0-24	24	0	0	0	0	1,2,3,4	Clear	GC	3	AR-8
12/7	0-24	24	2	0	0	0	1,2,3,4	Clear	GS	10	AR-8
12/8	0-24	24	3	3	0	0	1,2,3,4	Clear	GS	10	AR-8
12/9	0-9	9	-1	0	0	0	1,2,3,4	Clear	GS	10	AR-8
12/9	9-24	15	0	0	0	1	1,2,3,4	Clear	HW	4	AR-9
12/10	0-7	7	2	0	0	0	1,2,3,4	Clear	HW	4	AR-9
12/11	0-4	4	0	0	0	0	1	Murky	HW	8	AR-9
12/12	12-24	12	0	0	0	0	1	Murky	HW	8	AR-9
12/13	5-24	19	-1	0	0	1	1	Clear	HW	8	AR-9
12/14	0-24	24	7	2	0	0	1,4	Clear	HW	8	AR-9
12/15	0-1	1	0	0	0	0	1	Clear	HW	8	AR-9
12/21	0-24	24	-2	-3	0	0	1	Clear	SS	1	AR-10
12/22	0-6	6	1	0	0	0	1	Clear	JM	5	AR-10
12/25	0-24	24					1	Clear	BS	16	AR-10
12/26	0-24	16	0	1	0	0	1	Clear	HW	19	AR-10
12/27	0-24	24	-1	0	0	0	1	Clear	HW	17	AR-10
12/28	0-24	24	0	0	0	0	1	Clear	HW	18	AR-10
12/29	0-24	24	0	4	0	0	1,2,4	Clear	SH	15	AR-10
12/30	0-24	24	0	0	0	0	1,2,4	Clear	JG	14	AR-10
12/31	0-12	12	0	0	0	0	1,2,3,4	Clear	BS	6	AR-10
1/30	0-24	24	0	0	0	0	1,2,3,4	Clear	SH	9	AR-10
1/31	0-10	10	0	0	0	0	1,2,3,4	Clear	KF	13	AR-10
1/31	10-24	14	0	0	0	0	1,2,3,4	Clear	GS	1	AR-10
2/1	0-24	24	0	0	0	0	1,2,3,4	Clear	GS	1	AR-10
2/2	0-24	24	0	0	0	0	1,2,3,4	Clear	GS	1	AR-10
3/9	0-24	24	0	0	0	0	1,2,3,4	Clear	JG	5	AR-4
3/10	0-24	24	0	0	0	0	1,2,3,4	Clear	JG	5	AR-4

	Approximate		Net observed upward migration for the day or partial day.				Cams On Line	Water Color	Fish Count By	FAR Disk #	CDFW Disk #
Date	Time Frame Hours	Video Hours Total	>=24" Salmon	<24" Jacks	>=16" Steel-head	<16" Trout					
3/11	0-24	24	0	0	0	0	1,2,3,4	Clear	JG	5	AR-4
3/12	0-24	24	0	0	0	0	1,2,3,4	Clear	HW	6	AR-4
3/13	0-24	24	0	0	0	0	1,2,3,4	Clear	HW	6	AR-4
3/14	0-24	24	0	0	0	0	1,2,3,4	Clear	HW	7	AR-4
3/15	0-24	24	0	0	0	0	1,2,3,4	Clear	HW	7	AR-4
Totals		1469	190	136	2	17					

Data Summary

Total Volunteers on this project	19
Total Volunteer Work Hours on this project	490

Net total upstream count (Full size Salmon (24" or longer) plus Jack Salmon (less than 24")).	326

Total Days in Season (Oct 15 through April 15)	183

Total days scanned	73
Percent of season scanned	40%

Auburn Ravine salmon camera project operated by Friends of Auburn Ravine and the California Department of Fish and Wildlife

List of Volunteers who scanned the video to count the salmon in the 2016/2017 season.

First Name	Last Name Initial	ID Code
Amanda	V	AV
Bert	B	BB
Brad	S	BS
Doug	S	DS
Ed	C	EC
Gardner	C	GC
Gary	F	GF
Glen	S	GS
Heath	W	HW
James	H	JH
Jeff	G	JG
Jeff	H	JHw
Jennifer	G	JGr
Jerry	M	JM
Karen	F	KF
Roger	B	RB
Sally	S	SS
Steve	H	SH
Taila	K	TK

Shirlee Herrington

From: Gregg McKenzie (CDR)
Sent: Thursday, July 11, 2019 10:53 AM
To: 'James Haufler'
Cc: Placer County Environmental Coordination Services
Subject: RE: Placer County Conservation Program - Question about Figure 3-7.

Hi Jim –

Shirlee forwarded your email to me regarding the label B4.

B4 is a designation for part of the "plan area" covering potential fish passage improvement projects in Sutter County. This is included in order to allow the HCP/NCCP and the corresponding incidental take coverage from NMFS to cover fish passage improvement projects in this area, including Coppin Dam.

2-1

See PCCP section 1.2.1 Plan Area, Table 3-5 Pg. 3-21 Summary of Fish Barriers, and Ch. 5 Pg. 5-26 Riverine and Riparian Objective RAR 1.5 and figure 5-4. Coppin Dam is included as a potential fish passage improvement project for coverage by the permits should we be able to work collectively with the stakeholders (you, Sutter Co., land owners, SSID, NMFS, etc.) to design an improvement to the current barrier.

I believe you have a copy of our Coon Creek Watershed Assessment which includes a rough design for this potential improvement and an analysis of the existing barrier. If not, following is the link: https://www.placer.ca.gov/DocumentCenter/View/9322/Coon-Creek-Watershed-Assessment-PDF

Gregg

Gregg McKenzie
PCCP Administrator
Community Development Resource Agency
(530) 745-3074 / Cell (530) 320-1695 / gamckenz@placer.ca.gov
www.placerconservation.com

From: James Haufler [mailto:jhaufler@sbcglobal.net]
Sent: Wednesday, July 10, 2019 7:49 PM
To: Placer County Environmental Coordination Services
Subject: RE: Placer County Conservation Program - Question about Figure 3-7.

Just noticed that the same label is also on Figure 3-12 in the same place at the western end of Auburn Ravine.

From: James Haufler [mailto:jhaufler@sbcglobal.net]
Sent: Wednesday, July 10, 2019 6:28 PM
To: 'Placer County Environmental Coordination Services' <CDRAECS@placer.ca.gov>
Cc: 'Brad Cavallo' <bcavallo@fishsciences.net>; Steve Hubbard <steverhubbard@gmail.com>; Heath Wakelee <hwakelee@gmail.com>
Subject: Placer County Conservation Program - Question about Figure 3-7.

Shirlee:

2-1 cont.

Thanks for helping me find those Figures.

I have a question about Figure 3-7 Watersheds (Page 281).

At the far west end of Auburn Ravine, near where it joins with Raccoon Creek in the East Side Canal and then flows into the Cross Canal, there is a "B4" label. The legend says B4 indicates a Fish Passage Improvement. The point where B4 is marked on the map is near a site known as Coppin Dam. It is a site that could benefit from fish passage improvements, especially for downstream movement of juvenile salmonids, but I am unaware of any presently functioning Fish Passage Improvement at that site. Could you have someone look into this and let us know if that is labeling error, or if there is, in fact, a fish passage system at that site?

I have attached a copy of Page 281 so our Board Members (copied) will be able to easily access Figure 3-7.

I have also attached a map that the California Department of Water Resources produced last year. On that map there is a yellow dot where Auburn Ravine passes through Lincoln. That is the site of the NID Gaging Station (BR-200). There is a Fish Passage Improvement at that site that was installed by NID in 2011.

Thank you,

Jim

James Haufler – President
Friends of Auburn Ravine

916-801-3669 (cell)

Web site: www.auburnravine.org

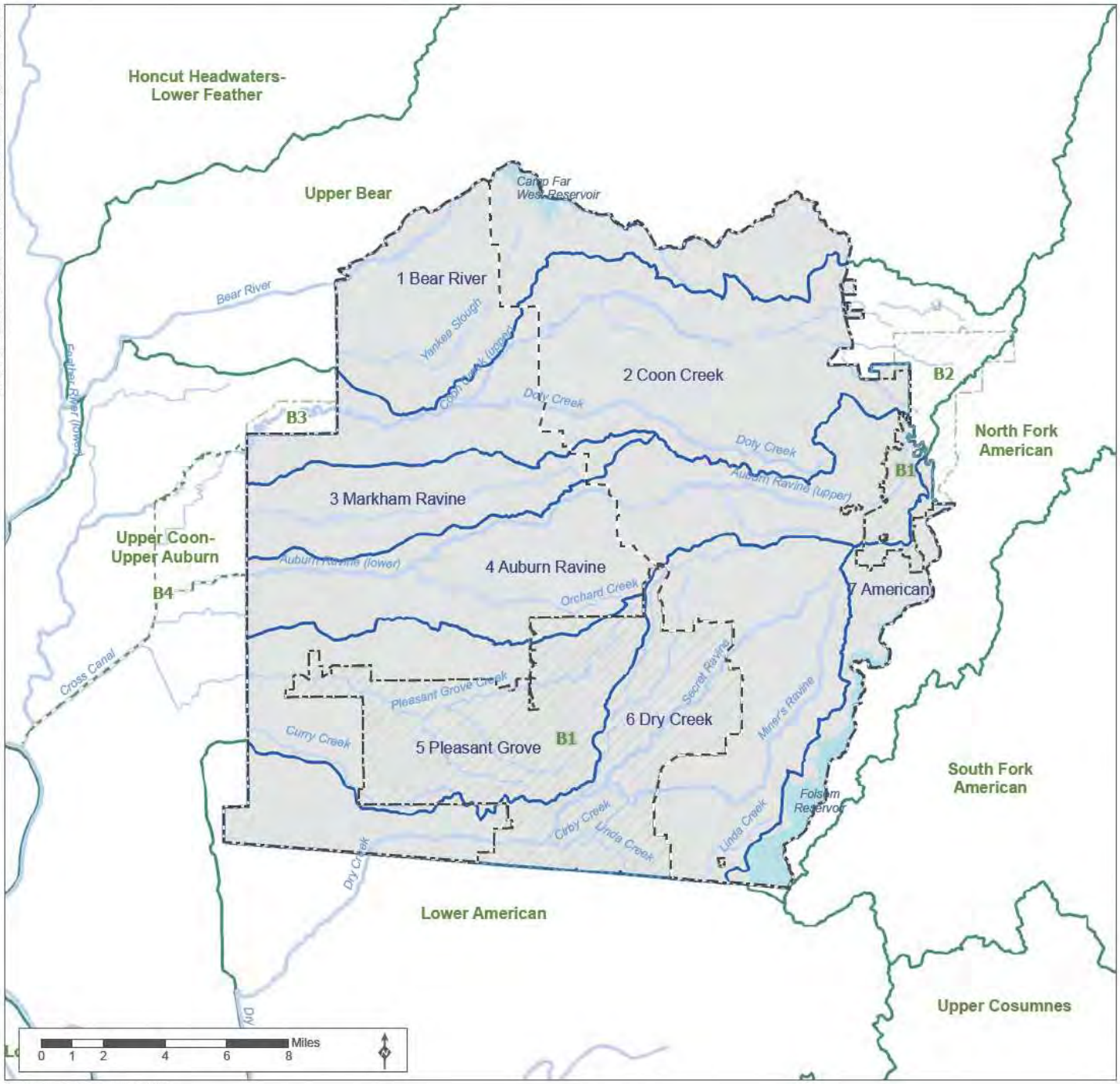
From: Shirlee Herrington [mailto:SHerring@placer.ca.gov] **On Behalf Of** Placer County Environmental Coordination Services
Sent: Monday, June 24, 2019 10:14 AM
To: James Haufler <jhaufler@sbcglobal.net>
Subject: RE: Comments on Placer County Conservation Program

Thank you for your interest in the subject project and for taking the time to provide comments. This is to confirm that your comments have been received. Also, you are now on our master email and/or USPS distribution list for the subject project and, as such, you will receive updates and notifications of future opportunities for public participation and input.

Figures 3.6 and 3.7 can be found at the end of Chapter 3 of the PCCP (Specifically pages 280 and 281)

Thanks.

Shirlee Herrington
Community Development Technician
Environmental Coordination Services
Placer County Community Development Resource Agency
3091 County Center Drive, Suite 190, Auburn, CA 95603
530-745-3132 fax 530-745-3080



Source: Placer County, 2014; USGS

HUC 8 Watersheds
Placer County Planning Watersheds
Stream
River
Valley/Foothill Divide

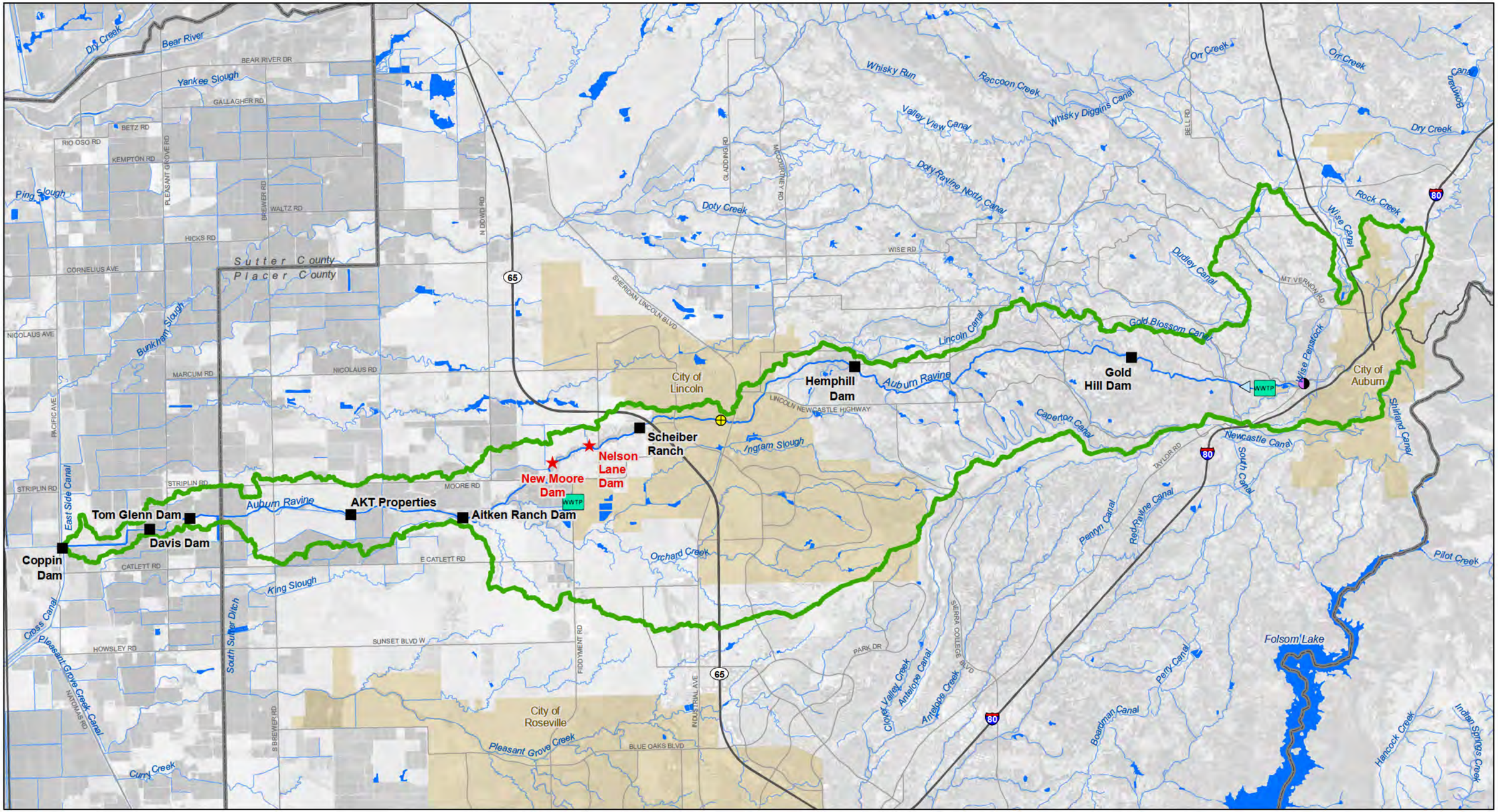
Plan Area A

Plan Area A

Plan Area B

B1 Non-Participating Cities
B2 PCWA O&M
B3 Coon Creek Floodplain
B4 Fish Passage Improvement
B5 Big Gun Conservation Bank (not shown)

Figure 3-7 Watersheds



Symbology

- Assessed Dam
- Dam
- NID Gaging Station BR-200
- PG&E Wise Powerhouse
- WWTP Wastewater Treatment Plant
- Ophir Cataract

Water Features

- River
- Waterbody
- Watershed Boundary

Other Features

- Freeway
- Road
- City Limit
- County Line

Notes:
1. The location of PG&E Wise Powerhouses is also the approximate loca ion of USGS Gage Station 11425415.

N

0 0.875 1.75
Miles

Figure 1

Assessment Vicinity Map

Auburn Ravine
Fish Passage
Improvement Assessment

Friends of Auburn Ravine
AuburnRavine.org

PO Box 1197
Lincoln, CA 95648
(916) 672-9672
FriendsOfAuburnRavine@gmail.com

To: Lisa M. Gibson, Regulatory Permit Specialist
US Army Corps of Engineers, Sacramento District
1325 J Street, Room 1350
Sacramento, CA 95814-2992
Email: Lisa.M.Gibson2@usace.army.mil
Phone: 916-557-5288

From: James Haufler – President
Friends of Auburn Ravine
PO Box 1197
Lincoln, CA 95648
Email: jbwx@att.net
Phone: 916-801-3669 (cell)
Web site: www.auburnravine.org

RE: SPK-2005-00485, Proposed Section 404 Clean Water Act Permit Strategy Aligned with the Placer County Conservation Program, Placer and Sutter Counties, CA

3-1 Friends of Auburn Ravine (a 501(c)(3) non-profit corporation) operating in western Placer County and southern Sutter County supports this proposal as written. We do not see any need for a Public Hearing.

It is clear to us that implementation of the proposed Section 404 Clean Water Act Permit Strategy will provide near-term and long term benefits to the wildlife of Placer and Sutter Counties and the people who live there.

Thank you,

James Haufler – President
Friends of Auburn Ravine

RECEIVED
JUN 28 2019
SACRAMENTO FISH
& WILDLIFE OFFICE

June 25, 2019

Mike Thomas
Conservation Planning Division
Sacramento Fish and Wildlife Office
United States Fish and Wildlife Service
2800 Cottage Way, W-2605
Sacramento, CA 95825

RE: Comments on Western Placer County Habitat Conservation Plan / Natural Community Conservation Plan (FWS-R8-2019-N062; FF08ESMF00-FXES11140800000-190)

Dear Mr. Thomas:

We appreciate the opportunity to provide additional information that may be useful in the development of the Western Placer County Habitat Conservation Plan / Natural Community Conservation Plan (HCP) in regards to the status of Western Spadefoot (*Spea hammondii*) within the HCP area.

On page 3-64, paragraph 3, the draft HCP it states:

"The aquatic habitat of vernal pools supports amphibians that use the pools for breeding. Western spadefoot toad (*Spea hammondii*) has been found in vernal pool complexes in the non-participating city of Roseville and may occur in the vernal pool complexes in the Plan Area, though there are no known occurrences to date."

4-1 This letter is to inform you that on the night of March 5, 2016 we observed many *Spea hammondii* in various locations that are within the HCP area and outside of the city of Roseville. These observations have been submitted to CNDDB, and a map from that submission is included as Attachment 1.

In addition to our direct observations of individual *S. hammondii*, we also heard calling from individuals from nearby vernal pools and inundated pastures, and believe that *S. hammondii* is breeding within the area of the HCP as mapped in Attachment 1.

4-2 As professional herpetologists who are very familiar with the herpetofauna of Northern California (Shedd, 2016; Olson et. al., 2016), and *S. hammondii* in particular (Shedd, 2016; Ervin and Shedd, *in prep*; Ervin et al., *in press*), we are of the opinion that this species should be covered under the HCP. Though *S. hammondii* is not a Federally listed species, as a California Species of Special Concern, and as a species that is currently "Under Review" for potential Federal listing, we urge that the HCP examine impacts upon *S. hammondii* more thoroughly.

Please don't hesitate to contact us further if you would like to discuss, or have any questions concerning our observations of this species as it relates to the HCP area.

Sincerely,

Jackson Shedd
Voice: 775-525-4468
Email: jackson_shedd@sbcglobal.net

Eric Olson
Voice: 916-742-1644
Email: openwatereric@gmail.com

Attachments:

1. Map of Western Spadefoot (*Spea hammondii*) Observed by Jackson Shedd and Eric Olson on March 5, 2016

References

Ervin, E.L., and J.D. Shedd. *In Prep. Spea hammondii* (western spadefoot). Catalog of American Amphibians and Reptiles. XXX

Ervin, E.L., J.D. Shedd, S. Morey, F. Santana, T. de Silva, and J. Pittman. *In Press. Spea hammondii* (western spadefoot). Polymorphic larvae. *Herpetological Review* XXX.

Olson, E.O., J.D. Shedd, T.N. Engstrom. 2016. A Field Inventory and Collections Summary of Herpetofauna from the Sutter Buttes, an "Inland Island" within California's Great Central Valley. Western North American Naturalist 76: 352-366.

Shedd, J.D. 2016. Distribution of the western spadefoot (*Spea hammondii*) in the northern Sacramento Valley of California, with comments on status and survey methodology. Pp. 19-29. *In:* R.A. Schlising, E.E. Gottschalk Fisher, and C.M. Guilliams (Ed's.). *Vernal Pools in Changing Landscapes*. Studies from the Herbarium, No. 18. California State University, Chico, CA.

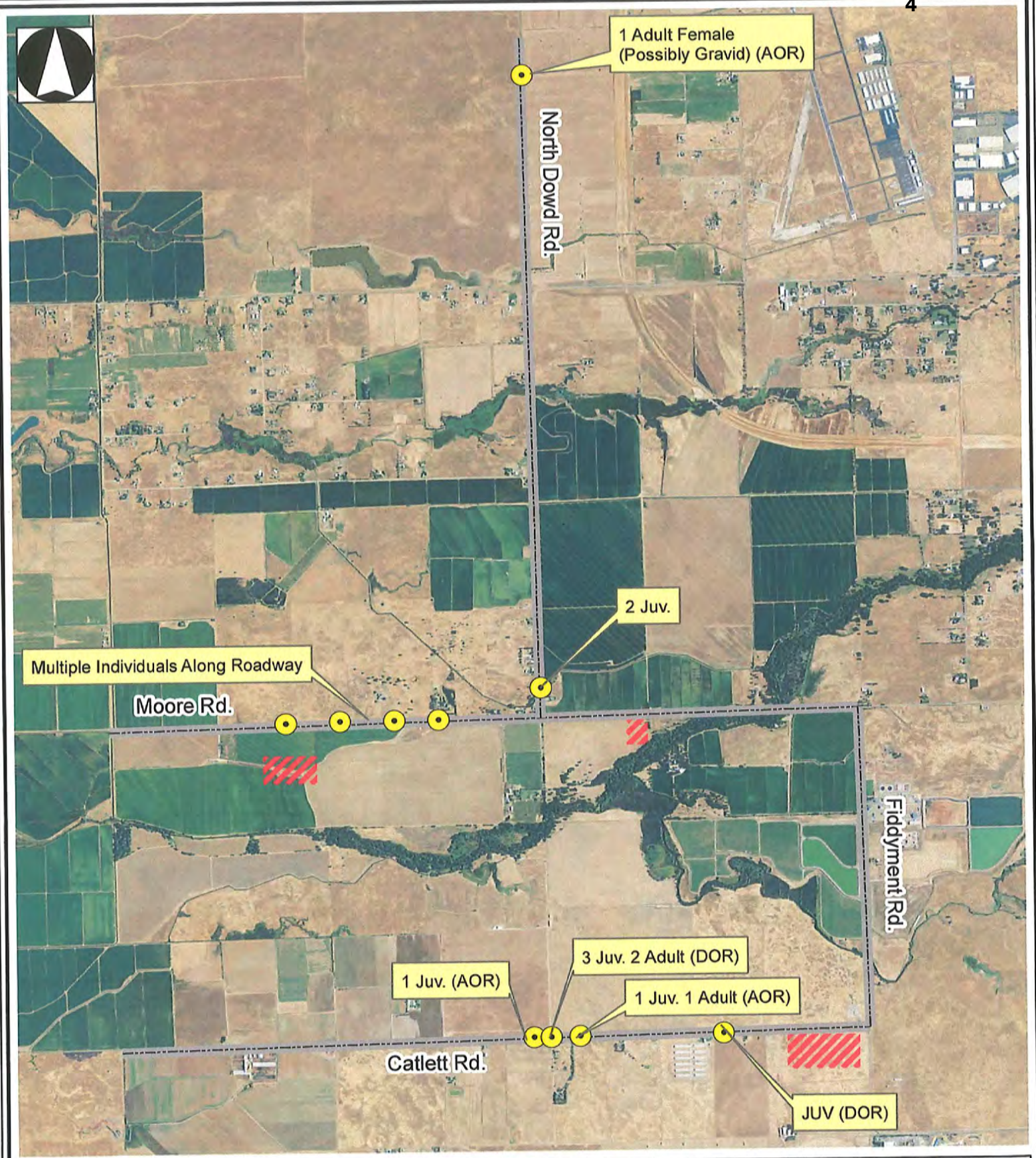


Fig. 1 Western Spadefoot (WSF) (Spea hammondii) Observed By Jackson Shedd and Eric Olson on March 5, 2016

WSF Calling Areas (Estimated) Roads

WSF Observations

0 1 2 Kilometers

Shirlee Herrington

From: Gregg McKenzie (CDR)
Sent: Wednesday, June 26, 2019 1:40 PM
To: darylconsulo@gmail.com
Cc: Shirlee Herrington
Subject: FW: PCCP / property designation

5-1

Good afternoon and thank you for your question regarding the PCCP designation for your property located on Country Acres Lane (7520), north of Baseline and east of S. Brewer Rd.

The public review draft document and map designate this area as Planned Future Growth (PFG), which includes existing rural residential and other development. If you have questions about this draft designation please let me know.

Thank you,
Gregg

Gregg McKenzie
PCCP Administrator
Community Development Resource Agency
(530) 745-3074 / Cell (530) 320-1695 / gamckenz@placer.ca.gov
www.placerconservation.com

From: Shirlee Herrington **On Behalf Of** Placer County Environmental Coordination Services
Sent: Wednesday, June 26, 2019 1:04 PM
To: Gregg McKenzie (CDR) <GAMckenz@placer.ca.gov>
Subject: FW: PCCP / property designation

See below…

Thank you,
Shirlee
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Shirlee I. Herrington
Environmental Coordination Services
Placer County Community Development Resource Agency
3091 County Center Drive, Suite #190
Auburn, CA 95603
530-745-3132
sherring@placer.ca.gov
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

COUNTY OF Placer
COMMUNITY DEVELOPMENT RESOURCE AGENCY

From: Daryl Consulo [mailto:darylconsulo@gmail.com]
Sent: Wednesday, June 26, 2019 11:31 AM
To: Placer County Environmental Coordination Services
Subject: PCCP / property designation

I have seen the map for the PCCP and western Placer County. Our property is at 7520 Country Acres lane, Elverta (actually Placer County). Where do we fall into the map? As PFG or Reserve area?

Thank you,

Daryl Consulo

Shirlee Herrington

From: Gary Barron <reedbarron@sbcglobal.net>
Sent: Tuesday, July 02, 2019 9:05 PM
To: Shirlee Herrington
Subject: Re: Placer County Conservation Program (PEIR20050226), Errata to Draft EIS/R

HOLY COW!

Sent from my iPhone

On Jun 26, 2019, at 7:23 AM, Shirlee Herrington <SHerring@placer.ca.gov> wrote:

Good Morning,

6-1 An error was discovered following the release of the DEIS/EIR. A Microsoft Word–generated error resulted in the deletion of approximately 65 pages of content in Section 4.3, Biological Resources, when this file was finalized for publication (See attached Errata). This email is to advise you that the online documents (accessed at the link below) and all print copies have been updated to include pages previously left out of Chapter 4.3. The Table of Contents for Section 4.3 has also been updated.

https://www.placer.ca.gov/3362/Placer-County-Conservation-Program

Thank you,
Shirlee
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Shirlee I. Herrington
Environmental Coordination Services
Placer County Community Development Resource Agency
3091 County Center Drive, Suite #190
Auburn, CA 95603
530-745-3132
sherring@placer.ca.gov
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
<image002.png>

Thank you,
Shirlee
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Shirlee I. Herrington
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Placer County Community Development Resource Agency
3091 County Center Drive, Suite #190
Auburn, CA 95603
530-745-3132
sherring@placer.ca.gov
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
<image003.png>

From: Shirlee Herrington
Sent: Friday, June 21, 2019 10:32 AM
Subject: Placer County Conservation Program (PEIR20050226), Draft EIS/R Released for Pubic Review

Good morning,

Placer County and the US Fish and Wildlife Service have released a Draft Environmental Impact Statement/Report (EIS/R) for the subject project. The EIS/R, HCP/NCCP, CARP, and PCCP Executive Summary can be accessed at the following link:

https://www.placer.ca.gov/3362/Placer-County-Conservation-Program

The 60-day public comment periods starts 06-21-19 and ends on 08/20/19 with a public meeting scheduled on August 8, 2019 to receive comments on the DEIS/R. Attached is the Notice of Availability for your reference.

If you will have comments on the DEIS/R, please send them to my attention at cdraecs@placer.ca.gov or at the mailing address below.

Thank you,
Shirlee

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Shirlee I. Herrington
Environmental Coordination Services
Placer County Community Development Resource Agency
3091 County Center Drive, Suite #190
Auburn, CA 95603
530-745-3132
sherring@placer.ca.gov

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

<image004.png>

<Errata_PCCP DEIS-DEIR_2019-06-25.pdf>

George T. Kammerer
Attorney At Law
P.O. Box 951
Rancho Murieta, CA 95683-0951

July 11, 2019

Placer County
Community Development Resource Agency
Environmental Coordination Services
3091 County Center Drive
Auburn, CA 95603

U.S. Fish and Wildlife Service
Sacramento Fish and Wildlife Office
2800 Cottage Way
Room W-2605
Sacramento, CA 95825

Re: Placer County Conservation Plan, City of Lincoln and Portions of Placer County, CA

To Whom It May Concern:

We represent the Lincoln Village 3 Landowners' Association ("V-3"), comprised of the largest landholding entities within the 2,040-acre Village 3 portion of the City of Lincoln General Plan 2050 planning area. We provide these initial comments upon select provisions of the **Placer County Conservation Plan (PCCP)** on behalf of V-3 for your review, consideration and most importantly modification of PCCP specifications as requested herein. We may submit additional comments as time allows. The V-3 is supportive of the PCCP and provides these comments and recommendations for the purpose of ensuring the technical, practicable, fiscal and pragmatic feasibility and viability of the PCCP over its proposed full 50-year life.

I. Placer County Conservation Plan (PCCP)

A. Chapter 5 - Conservation Strategy

Section 5.3.3 (Conservation Measure 3) Restore and Create Natural Communities and Covered Species' Habitat)

7-1 The discussion here seeks to make a distinction between "restoration" of habitat and "rehabilitation/enhancement" of habitat, stating a preference for restoration over rehabilitation/enhancement. We think this distinction and preference are unnecessary and counterproductive to the mission of the PCCP to preserve, protect and maximize the wildlife habitat carrying capacity of Reserve Acquisition Area (RAA) lands which are acquired and preserved with limited PCCP land conversion fees and special habitat fees. Restoration can

provide certain increases in habitat functions, but rehabilitation and especially enhancement often provide greater increases in habitat functions and carrying capacity for wildlife and plants. The PCCP should embody maximum flexibility to equally foster the implementation of whichever method - restoration or rehabilitation or enhancement or outright creation - that provides the greatest increase in habitat acreage, quality and carrying capacity in a given situation to maximize the benefits for wildlife, plants and their habitats. The PCCP should maintain maximum flexibility to allow the use of whichever technique provides the greatest return on investment of PCCP fees on a case-by-case basis, without creating an unnecessary hierarchy of preferences with unintended consequences.

7-1 cont.

Section 5.3.1.6.10 (CM1 VPB-1, Protection and Restoration of Occupied Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp Habitat)

This Section states, "Only data from natural, exiting [sic in original] pools will count toward the 72 wetted acres (i.e., restored or created pools will not count toward the 72 wetted acres, and calculation of the Occupancy Rate Standard)" (p. 5-92) to establish the baseline protocol for vernal pool branchiopod occupancy of vernal pools and swales. While we understand the rationale for making this distinction; should natural, existing pools not yield adequate or consistent occupancy data from which to create a reasonable or reliable baseline range, then the PCCP should embody the flexibility to allow reference to created, restored, rehabilitated or enhanced pool occupancy data to determine a reasonable range of branchiopod occupancy to establish baselines. After all, created, restored, rehabilitated and enhanced pools would have all been required to previously meet performance criteria that FWS would have already signed off on as fully functioning. Furthermore, baselines between natural or other pools are not likely to vary much, especially in light of PCCP criteria that, "If a [single] covered branchiopod occurs in a pool or swale, the entire area of that pool will be considered occupied" (p. 5-93). Density or abundance of that occupancy under this standard are not the operative PCCP concerns, so presence of a single individual branchiopod from any type of pool (natural or otherwise) would suffice to establish occupancy, making a distinction in pool origin or restored condition again unnecessary. Similarly, because data collection is expensive, data accumulated over a period of up to 10 years should be acceptable for use in determining occupancy (p. 5-92). To require 15 years of data collection becomes substantially more expensive while providing a small, marginal increment of additional data with a declining rate of biological return in knowledge or benefit.

7-2

7

Section 5.3.3.3 Natural Community–level Restoration/Creation
Section 5.3.3.3.1 CM3 VPCG-1, Vernal Pool Complex Restoration/Creation

The success criteria proposed here for determining vernal pool restoration/creation are unnecessarily far too complex. Vernal pool restoration and creation success has been adequately determined (and assured) for decades by the use of greatly simplified formulae obtained by performing a delineation of vernal pool performance after a reasonable time (3-10 years), with a goal of observing and establishing the "dominance" of vernal pool plants to assure success of restored/created pools. "Dominance" (50% + 1) is the standard used with natural existing pools found in nature to delineate the vegetative parameter for a wetland delineation. That standard should also be fully adequate (and no doubt much simpler to implement on a large scale in the field) to establish after a reasonable 3-10 year time period, the success of restoration or creation of a vernal pool or swale, or pool/swale complex. Again, the cost of PCCP criteria-required restoration/creation must be taken into account. Some 900+/- acres are required to be restored/created under the PCCP. To do this in a cost-effective, expeditious manner on a large scale, a much simpler, more expedited formulae (i.e., the dominance method) should be used which largely parallels the US Army Corps 1987 Manual.

7-3

Along the same lines, the PCCP-proposed 15-year monitoring period proposed here is unnecessarily lengthy and expensive. Ten (10) years has been accepted for years as adequate, and is already quite expensive and administratively burdensome to track and implement over a full decade of time. During a decade of monitoring there are plenty of opportunities to adjust or adapt management along the way at either 1, 3, 5, 7 or 10 year intervals. Tacking on another five (5) years adds unnecessary expense and delay when a decade of monitoring should have provided more than adequate assurances that branchiopod occupancy persistence will endure through a series of widely varying hydrological conditions and temperature fluctuations.

B. Chapter 6 - Program Participation and Conditions on Covered Activities

Section 6.3.5.15.1 Survey Requirements [Branchiopods] (Distinction Between Pools and Swales v. "Basins")

This related Section seeks to make a distinction between surveying in individual pools and swales v. requiring surveys of entire "basins" in order to obtain enough data to adequately determine occupancy (p. 6-76). This distinction is unnecessary and likely to be prohibitively expensive if data from single pools and swales are not considered adequate. A "basin" could be of almost any proportions and could entail a virtually unlimited number of pools, which such "basin" this criterion would require to be surveyed. Defining and depicting "basins" is likely to require the creation of multiple, separate topographical maps at significant additional expense.

7-4

Making such a determination is so subjective that different consultants are very likely to define or map "basins" differently, creating a recipe for inconsistency and discord. As the PCCP states repeatedly, if a single covered branchiopod occurs in a pool or swale, that entre pool will be considered occupied. Because branchiopod occurrence is actually quite common in moderate to large-sized pools and swales, the PCCP should anticipate surveys will readily find them with no need to resort to an undefined, expensive "basin" mapping and surveying effort to determine occupancy. The PCCP should dispense with use of such undefined, expensive "basin" concepts and maintain consistency by continuing to use individual pool and swale occurrences as being the well-accepted standard that has been in place for decades.

7-4 cont.

Section 6.3.5.9 Species Condition 4, Tricolored Blackbird (TCB)
Section 6.3.5.9.1 Survey Requirements

There are at least two particularly troublesome TCB survey requirements for foraging/nesting habitat. The first is a requirement to conduct surveys if there is any sign of TCB within three (3) miles of a project site. The second is a requirement to conduct surveys for ***nesting*** colonies within 1,300 feet of a project site if a "known" colony (translated: any colony existing anytime within the past 10 years) was documented within 3 miles of the project site (pp. 6-64 to 66). It is very likely that a property owner and his/her consultants will not have access to most properties within 1,300 feet of their project site on which to conduct meaningful surveys. Furthermore, 1,300 feet (a full quarter mile) away from any nesting colony - is far beyond any likely disturbance zone. Past CDFW buffer distances were 300 feet from a nesting colony.

7-5 Further, these requirements then become mandatory "avoidance" measures. The PCCP includes TCB as a covered species under the PCCP/NCCP "incidental take permit" (ITP). It is counter-intuitive to prevent "take" pursuant to a mandatory "avoidance" measure under an incidental take permit which already authorizes take of that covered species. (As a covered species, any associated take of TCB incidental to a lawful activity is authorized under the PCCP ITP - and should not be prohibited by the same ITP terms.) The incongruity of requiring take avoidance under an incidental take permit cannot be over-emphasized. Remove all avoidance.

Similar protection prohibitions are being required mandating avoidance of TCB ***foraging*** habitat. Again, why is total avoidance being required when TCB "take" is also authorized under the ITP for activities within foraging habitat? Farming and development are such lawful activities so there is no need to prohibit farming and development via mandatory avoidance measures when they might result in some take of TCB that is already authorized by the ITP.

Further still, if a total ban on take is enforced (avoidance), this will act as a disincentive to TCB habitat conservation by landowners. Instead of protecting TCB habitat types, landowners can

7-5 cont. be expected to chase them away from foraging or nesting sites on their land, and also change land use practices to remove all suitable nesting cover (i.e., plow set-aside acreage to remove wildlife habitat, permanently remove all Himalayan blackberries, willow thickets, cattail / tule patches, and other suitable nesting habitat to avoid these "no take" prohibitions) (p. 6-66).

C. Chapter 9 - Costs and Funding

Section 9.4 Funding Sources and Assurances
Section 9.4.1.3 Land Conversion Fee

7-6 Land conversion fees appear to be largely in line with current and future anticipated land acquisition costs. There appears to be no need to increase them for the foreseeable future.

Section 9.4.1.4 Special Habitat Fees

7-7 Special habitat fees are more complicated and vary based upon the resource being considered. For the most part they appear to be in line, but some may merit review post-PCCP approval.

Section 9.4.1.4.2 In-Stream Enhancement Provided In-Lieu Fee

It is helpful that the PCCP specifies that, "Project proponents . . . have the option of restoring, managing, and monitoring their own wetland, stream, or riparian mitigation site (on or off site) in-lieu of paying all or part of the special habitat fee" (p. 9-37). However the attractiveness of this option appears to largely vanish as too expensive and complicated when the PCCP requires that "the mitigation will be consistent with the requirements of Chapter 6, *Program Participation and Conditions on Covered Activities*; the site will be protected by a conservation 7-8 easement; and management and monitoring will be funded in perpetuity. Applicants may propose paying [an additional amount to] the PCA to manage and monitor the site after construction is completed. Construction of all wetland restoration and stream enhancement projects must comply with the Stay-Ahead provisions of the HCP/NCCP" (Ibid.) These provisions and the stream system impact fees themselves are so expensive, they appear to be designed to compel landowners to avoid stream system impacts altogether. Perhaps this is to reserve the maximum amount of stream system acreage for restoration, rehabilitation and enhancement for the Placer Conservation Authority to meet other PCCP requirements (Figure 9-1 [attached]).

Section 9.4.1.5 Temporary Effect Fee

Provision of a temporary effect fee in an amount reduced from the amount of the regular land 7-9 conversion fee is beneficial if it provides a realistic, proportionate reduction and is implementable over a time period with utilitarian application. The Temporary Effect Fee is problematic because the PCCP states that, "Most construction projects will not qualify as

temporary effects due to their size and their level of land disturbance, which usually cannot conform to the required 1-year time frame for complete restoration from time of groundbreaking" (p. 9-38). With the high degree of environmental permitting requirements and governmental agency-driven time lags to issue/obtain permits in California, a "1-year time frame" is unnecessarily restrictive and self-defeating, as it only probably allows for material lay-down yards and equipment parking land uses during construction, both of which typically do not require other permits. Other HCPs in California have allowed for longer temporary effect fee time horizons. For example, the Santa Clara Valley Habitat Conservation Plan allows for between 18-24 months. In order for a temporary effect fee to have a true measure of utilitarian value to the regulated public, it should allow at least 24 months to complete work.

7-9 cont.

Section 9.4.1.9 Options to Pay Fees with Special Tax of Assessment District

"The PCA may allow private applicants to fund all or a portion of their development fees with a special tax or special assessment applied only to a specific project covered by the Plan. Private applicants may apply a special tax or assessment to their covered project by forming a Community Facilities District or a special assessment district to the extent allowed by the appropriate enabling statute. When used, this option would benefit the PCA as well as private applicants. Private applicants would benefit by reducing up-front costs. The PCA would benefit by receiving an ongoing stable source of revenue for operating costs instead of reliance upon uncertain development fees and real estate cycles. As described below, any portion of the total fee obligation funded by an ongoing project-specific special tax or assessment and not fully funded immediately from bond proceeds is limited to that portion of the fee that will pay for ongoing operating costs such as administration, management, and monitoring. All other portions of the fee obligation must be paid according to Section 9.4.1.8, *Timing of Development Fee Payment"* (pp. 9-43 to 44). Allowance of these payment mechanisms for PCCP fees is critical to the long-term financial viability of the PCCP and it is essential that these local district mechanisms be maintained within the final PCCP. Lincoln and Placer County will cover any shortfall from these sources through other sources explained in Section 9.4.4 (pp. 9-55 to 9-60).

7-10

Section 9.4.1.10 Land Provided in Lieu of Development Fees
Section 9.4.1.10.1 Basic Land Dedication Policy
Section 9.4.1.10.2 Land Dedication Incentive Policy

Providing an option for dedication of land in-lieu of paying land conversion fees is a sound policy and should be included within in the PCCP. Furthermore, we agree, "If land proposed for dedication is of sufficient conservation value to the reserve, the PCA may offer an incentive to the project proponent for the land dedication" (p. 9-46). This can substantially streamline and

7-11

7

7-11 cont. expedite PCCP accumulation of reserve lands into its inventory and preserve fee revenues for other purchases, possibly at a time when un-committed fee revenues are not available for the purchase of a resource-intensive property that is only available for a limited time. This mechanism should be kept as an essential part of the PCCP land acquisition palette of options.

Section 9.4.2 Local Funding

7-12 All available local funding fees should be maintained as options, including Open Space and Fire Hazard Management Fees, County Parks and Non-profit Land Stewardship Organization Fees, Special Open Space Fees, Agricultural Lease Revenues, Interest Income on development fee revenue fund balances, and any other locally-generated fee or revenue allocatable to the PCCP.

Section 9.4.3 State and Federal Funding
Section 9.4.3.2 State and Federal Funding Sources

7-13 To ensure PCCP fiscal health and vigor over its 50-year life, it is essential to provide for as many funding source options as possible. Key funding source options include all possible state and federal funding sources allowable for acquisition and operation and administration, including federal ESA Section 6 land acquisition funds, state proposition bond funds such as Propositions 1 and 68, and any future bond funds that might be applicable. Wildlife Conservation Board funding from these and other sources should also be included as PCCP funding sources.

Conclusion

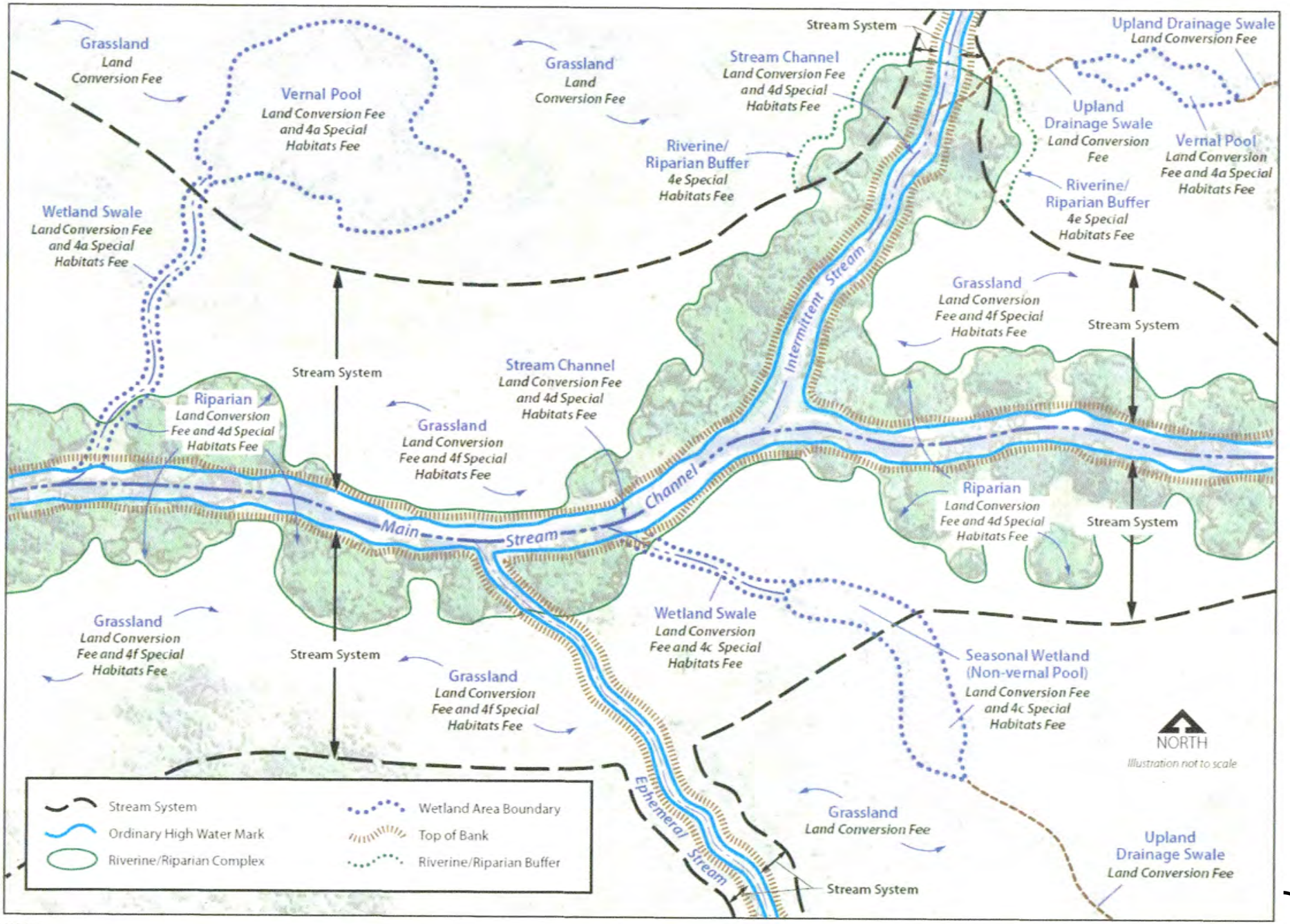
Thank you for the opportunity to provide these initial, surgical comments upon **the PCCP** on behalf of the Lincoln Village 3 Landowners' Association. We request that the PCCP be revised in response to the requested modifications herein. As the opportunity presents itself, we anticipate submittal of additional comments upon the PCCP, the PCCP Draft Environmental Impact Statement / Draft Environmental Impact Report (DEIS/DEIR), and the PCCP Clean Water Act Section 404 Permit Strategy for Waters of the United States. Thank you.

Do not hesitate to make contact if you have questions regarding any of the above comments.

Very truly yours,

George T. Kammerer

cc: Lincoln Village 3 Landowners' Association



NOTES:

1) The mitigation fees are found in Table 9-6 for the Land Conversion Fee and Table 9-7 for Special Habitat Fees.

2) For salmonid streams, any direct effects on the stream will be required to pay a Salmonid Stream Channel special habitats fee for each linear foot of disturbance (see Table 9-7 and 4f fees). The Salmonid Stream Channel special habitats fee (4g) is in addition to the Land Conversion Fee and any applicable Special Habitats fee (e.g., Table 9-7, 4d Riverine/Riparian special habitats fee).

Figure 9-1
Mitigation within the Stream System and Adjoining Areas

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July 12, 2019

Placer County
Community Development Resource Agency
Environmental Coordination Services
3091 County Center Drive
Auburn, CA 95603

U.S. Fish and Wildlife Service
Sacramento Fish and Wildlife Office
2800 Cottage Way
Room W-2605
Sacramento, CA 95825

Re: Draft Environmental Impact Statement / Draft Environmental Impact Report, for the Placer County Conservation Plan, City of Lincoln and Portions of Placer County, CA

To Whom It May Concern:

We represent the Lincoln Village 3 Landowners' Association ("V-3"), comprised of the largest landholding entities within the 2,040-acre Village 3 portion of the City of Lincoln General Plan 2050 planning area. We provide initial comments upon select provisions of the above documents on behalf of V-3 for your review, consideration and requested modification of the **Draft Environmental Impact Statement / Draft Environmental Impact Report (DEIS/DEIR)** for the Placer County Conservation Plan (PCCP). The V-3 is supportive of the PCCP and provides these comments and recommendations for the purpose of ensuring the technical, practicable, fiscal and pragmatic accuracy, feasibility and viability of the PCCP over its 50-year life.

I. Draft Environmental Impact Statement / Draft Environmental Impact Report

A. Chapter 4 - Environmental Consequences

4.1 Agricultural and Forestry Resources
4.1.1 Methods and Significance
Significance Criteria

"According to Appendix G of the State CEQA Guidelines, a proposed project would be considered to have a significant effect if it would . . .

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"⍰ Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, ***to nonagricultural use***" (p. 4-25). (Emphasis added.)

4.1.2 Impacts and Mitigation Measures
Alternative 2 - Proposed Action

Impact AG-1: Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use (NEPA: significant and unavoidable; CEQA: significant and unavoidable) (p. 4.1-4)

"Alternative 2, the proposed action, would serve to streamline the development in the Plan Area envisioned in the *Placer County General Plan*, *City of Lincoln General Plan*, as well as SPRTA and PCWA projects, as these are all part of the Covered Activities. As described under Alternative 1, Placer County and the City of Lincoln have determined that the implementation of their general plans would allow growth that would result in significant or potentially significant impacts by converting Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural uses. As stated in those EIRs, there are no feasible mitigation measures that would reduce impacts to less-than-significant levels. The growth allowed under the general plans could be Covered Activities that would result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Future projects of SPRTA and PCWA could also result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use to the extent that projects take place on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance" (p. 4.1-4).

8-1

Comment: The DEIS/DEIR statement that the PCCP would streamline development and thereby would "cause" significant or potentially significant impacts by converting Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural uses, in the Planned for Growth (PFG) areas of the PCCP, is not an accurate conclusion. The PCCP itself does not possess, convey or delegate land use authority to change certain agricultural lands's land use designation or their zoning to non-agricultural uses. Only the Placer County and City of Lincoln General Plans and Zoning Codes, as administered by the Placer County Board of Supervisors and City of Lincoln City Council, respectively, can actually "cause" (require) a change of land uses to nonagricultural uses. The PCCP merely implements the existing county and city General Plans' policies and zoning changes that were already in existence pre-PCCP which county and city policies would change these areas to nonagricultural uses over time with or without the PCCP.

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8-2 Comment: To the contrary, in reality the PCCP actually protects and ensures the continuation of agricultural uses upon thousands of acres within the Reservation Acquisition Area (RAA) and elsewhere within the Plan Area in the county and city by permanently placing those lands off limits to future General Plan and zoning changes from agricultural uses to urban uses. Without the PCCP's protections in the RAA and elsewhere, General Plan Amendments and re-zones by developers, the county and city could convert these lands over time from agricultural to urban uses. The PCCP will permanently prevent this from occurring, and preserve this farmland for agricultural uses in perpetuity. The DEIS/DEIR should be revised to acknowledge this fact.

8-3 Comment: With or without the PCCP, PCWA and SPRTA will move forward with proposals to expand their infrastructure and potential service areas as their customer bases increase over time. Loss of agricultural land uses from PCWA and SPRTA facility expansions will occur with or without the PCCP. Again, without the PCCP's protections in the RAA and elsewhere, PCWA and SPRTA would convert lands there over time from agricultural to urban uses. Here again, the PCCP will permanently prevent that from occurring, and preserve much farmland for agricultural uses in perpetuity. The DEIS/DEIR should be revised to acknowledge this fact.

Impact AG-1: (Continued)

"There are approximately 21,870 acres of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the RAA. As shown in Table 2-14, up to 10,050 acres of these agricultural lands—which could include lands identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance—could be acquired under Alternative 2, the proposed action, to be managed for the benefit of species. Of this land, 2,000 acres of rice land or fresh emergent marsh equivalent would be acquired for giant garter snake habitat yet would remain in agricultural use, managed for the benefit of the species. Portions of the remaining lands could be converted from agricultural uses to habitat uses. Therefore, implementation of Alternative 2 could result in conversion of up to 8,050 acres of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance in addition to lands converted as a result of covered activities" (p. 4.1-5).

8-4 Comment: As noted above, the PCCP will protect all 21,870 acres of farmland within the RAA from ever being developed and converted into urban uses (homes, offices, commercial, etc.).

8-5 The DEIS/DEIR fails to, and should be revised to, acknowledge and explain this result. Up to 10,050 acres of these agricultural lands could be acquired under Alternative 2 in order to protect species, but this doesn't automatically mean agricultural uses will cease or be lost. Quite the contrary. As explained above, 2,000 acres of currently farmed rice land and associated fresh emergent marsh would be acquired for giant garter snake habitat yet would remain in agricultural use. The DEIS/DEIR then states, "Portions of the remaining lands could be

8

8-5 cont.

converted from agricultural uses to habitat uses" such that "implementation of Alternative 2 could result in conversion of up to 8,050 acres" (p. 4.1-5). However, the DEIS/DEIR fails to acknowledge or explain that even lands which are "managed for the benefit of the species" can and typically do remain in active agricultural uses generating agricultural income. For example, rice land or orchards (often formerly farmed but pre-PCCP abandoned orchards or rice land) can be managed for vernal pool species and still support other types of agricultural activities such as livestock grazing, dry land farming, wild hay harvesting, etc., thereby continuing in agricultural production and generating agricultural income while being managed for species.

8-6

Comment: Furthermore, elsewhere in the Plan with slightly refined acreages it is stated that, "**Objective AO-1.1.** *Protect Agricultural Lands* . . . Protect as least 8,240 acres of agricultural lands . . . and provide large contiguous blocks of open space, . . . agricultural land . . . in the Reserve System" (PCCP, Chapter 5, Section 5.2.6.5 Agriculture and Other Open Space, p. 5-33).

8-7

Comment: Out of the 8,240 acres, after subtracting 2,000 acres remaining in rice cultivation, "[t]he remaining 6,240 acres will not be required to be maintained in any particular crop type, and therefore will not count toward meeting the permit requirements or habitat commitments for mitigation. The crops planted on the 6,240 acres will vary depending on market demand, future water availability, climate change, and a host of other factors. The 6,240 acres conserve representative natural and semi-natural landscapes, maintain the ecological integrity of large habitat blocks, ecosystem function, and biological diversity and sustain the effective movement and interchange of organisms between habitat areas in a manner that maintains the ecological integrity of the habitat areas within the Plan Area" (PCCP, Chapter 5, Section 5.2.6.5 Agriculture and Other Open Space, p. 5-33 to 34). Here again, on these 6,240 acres, there is no cessation of agricultural uses resulting from the PCCP.

8-8

Comment: Further still the PCCP states, "**Objective AO-1.1** Rationale. Since agriculture is an important component of the economy and culture of Placer County, the Plan [PCCP] seeks to achieve a sustainable balance of agriculture and conservation within the landscape. The commitment for agriculture and other open space protection is large enough to assemble . . . natural communities and agricultural land in the Valley RAA" (Ibid., p. 5-33). Here, again, the PCCP demonstrates a commitment to preserve and perpetuate continuing agricultural use of land within the RAA, and not to convert it to nonagricultural uses. All DEIS/DEIR statements that speculate that the PCCP "could result in conversion of up to 8,050 acres of Farmland" appear to be soundly contradicted by these assurances in the PCCP just described above. Mere speculation does not arise to the level of substantial evidence required by CEQA or NEPA to adequately support a conclusion that a potential impact is "significant and unavoidable". **Thus, the DEIS/DEIR conclusion under Impact AG-1 should be changed to "less than significant".**

Impact AG-5: Potential to cause other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to nonagricultural use or conversion of forest land to non-forest use (NEPA: significant and unavoidable; CEQA: significant and unavoidable) (p.4.1-6)

"As described in Impact AG-1, growth associated with Placer County and the City of Lincoln's general plans as well as future projects of SPRTA and PCWA would result in direct conversion of farmland to non-agricultural uses. No indirect conversion impacts were identified in the EIRs for those general plans, and both jurisdictions have Right to Farm regulations. However, it is possible that the SPRTA and PCWA projects could result in restrictions on agricultural uses of land in addition to direct conversion. Alternative 2, the proposed action, would result in the acquisition of lands that could be located adjacent to farmland and could potentially result in indirect conversion of those adjacent farmlands. This impact would be reduced to a less-than-significant level by the following Plan requirement for buffers (Appendix A: Chapter 6).

"When the PCA acquires land adjacent to existing or planned development or agriculture that has no buffer zone or an inadequate buffer zone, one must be created on the reserve (see Section 5.3.1.3, *Reserve System Components*). Therefore, the buffers described below will not extend onto private land when the species occurs on PCA reserves" (p. 4.1-6 to 7).

8-9 Comment: Because the DEIS/DEIR proposes that "This impact would be reduced to a less-than-significant level by the following Plan requirement for buffers", the DEIS/DEIR conclusion should be changed to "less than significant with mitigation".

Comment: A related concern has been expressed in public statements that the PCCP will force agriculturalists to sell their lands to the Placer Conservation Authority (PCA). However, PCCP Chapter 8, Section 8.4 Establishing the Reserve System, confirms that "The PCA will establish the Reserve System . . . and will assemble the Reserve System in the following ways:

- Purchase of land (fee title or conservation easement) ***from willing sellers*** (p. 8-21).

8-10 "The PCA will develop purchase offers and negotiate price and other terms and conditions with property owners" (PCCP, Section 8.4.2.6, p. 8-24).

"All conservation easements ['CE'] acquired to meet Plan land acquisition commitments will adhere to the guidelines below. They will:

- ***Be voluntarily offered by the fee title owner*** of the underlying property.
- ***Be negotiated on a case-by-case basis*** between the landowner and the PCA. (PCCP, Section 8.4.9.1, p. 8.24)

PCCP conversion of agricultural land, if any, will occur only if willing sellers decide to sell.

8

8-11 Comment: Finally, CE sellers should not have to pay for PCCP monitoring, fencing, or other requirements that are different from and/or not part of their usual farming practices.

4.3 Biological Resources
Section 4.3.1 Methods and Significance
Significance Criteria
Alternative 2 - Proposed Action

"Because the EIS/EIR defines habitat for tricolored blackbird and valley elderberry longhorn beetle differently than the Plan, the effects estimates for those species in the EIS/EIR are different than in the Plan" (DEIS/DEIR, p. 4.3-2).

"▯ **Tricolored Blackbird [Nesting]:** As discussed in Section 3.3, *Affected Environment*, the EIS/EIR assumes that nesting and foraging habitat for tricolored blackbird could occur at any elevation in the Plan Area (i.e., up to the maximum elevation of 1,600 feet). The EIS/EIR uses the same natural community mapping as the Plan but includes more refined mapping datasets to complement these data" which include "two crop types in which the species is known to nest" "wheat and triticale (crop hybrid of wheat and rye)" that were added to "fresh emergent wetland in both the valley and foothills" "(the Plan . . . only considered fresh emergent marsh at elevations to 300 feet as suitable nesting habitat for tricolored blackbird)" (p. 4.3-2).

"As noted in Section 3.3, *Affected Environment*, the EIS/EIR also considers blackberry thickets as suitable nesting substrates. Tricolored blackbirds nest primarily in blackberry thickets in the foothill region of the Sierra Nevada (Airola et al. 2015:97), which includes the eastern portion of the Plan Area." . . . "The resulting impact estimate was then added to the fresh emergent wetland impact throughout the Plan Area and the estimated impacts on wheat and triticale for total nesting impact." (p. 4.3-3).

"▯ **[Tricolored Blackbird Foraging]:** As discussed in Section 3.3, *Affected Environment*, the EIS/EIR analysis expanded the Plan model for tricolored blackbird foraging habitat to include the foothills and added rice. The EIS/EIR then used the Plan's estimated effects on these communities to obtain a estimate of effects on tricolored blackbird foraging habitat" (p. 4.3-3).

8-12 Comment: To the extent the added DEIS/DEIR discussion of both nesting and foraging areas adds potential impacts to tricolored blackbird (TCB) when nesting or foraging in these habitat areas to the list of "covered activities" under the PCCP ;and its incidental take permit (ITP), their inclusion is of likely benefit to the regulated public under the PCCP. The PCCP should clearly state that all TCB impacts in these newly identified areas will be "covered activities" with any associated take of TCB as a result of an otherwise lawful activity authorized under the PCCP ITP.

4.3.2 Impacts and Mitigation Measures
Alternative 2 - Proposed Action

Impact BIO-24: Effects on tricolored blackbird (NEPA: less than significant; CEQA: less than significant) (p. 4.3-90).

Of the "14 extant occurrences of tricolored blackbird in the Plan Area, all but one of which occur in the Valley portion of the Plan Area", "[a]ll the occurrences are either in the RAA or on existing reserves" (p. 4.3-90).

8-13 Comment: It is unclear how, with all "14 extant occurrences of tricolored blackbird in the Plan Area . . . either in the RAA or on existing reserves" where they are protected from development effects, that the DEIS/DEIR concludes the proposed action would result in permanent and temporary impacts due to urbanization activities occurring elsewhere in the PCCP 'Planned For Growth Area' (PFG) where there are no documented TCB nesting or foraging occurrences identified in the DEIS/DEIR.

"Covered Activities under Alternative 2, the proposed action, would result in permanent and temporary impacts on tricolored blackbird. Permanent impacts are estimated at 782 acres of nesting habitat (18% of total habitat in Plan Area A) and 22,268 acres of foraging habitat (21% in Plan Area A). These impacts would result primarily from urban/suburban development, rural residential development, transportation projects, and infrastructure projects. Most of the impacts on nesting and foraging habitat (77% and 81%, respectively) would be in the Valley portion of the Plan Area" (p. 4.3-90).

"Temporary impacts on tricolored blackbird habitat are estimated at 103 acres of nesting habitat and 836 acres of foraging habitat. These temporary impacts would be associated with urban/suburban development, rural residential development, transportation construction, fuels management, vegetation management, infrastructure operations and maintenance, and infrastructure construction" (4.3-91).

"In addition to habitat losses, Covered Activities have the potential to directly affect tricolored blackbirds through injury and mortality" (4.3-91).

8-14 Comment: If all 14 known, extant TCB populations are located within the RAA and in reserves as the DEIS/DEIR states where they are protected and will not be impacted, again how can the DEIS/DEIR plausibly conclude that there is any reasonable likelihood of direct potential injury or mortality to any individual TCB in the PFG Area? Same comment for indirect effect mortality.

Comment: Even if substantial evidence existed (which it does not) that supported a plausible conclusion there might be "potential mortality" or injury to individual TCB within the PCCP, the TCB is included as a "covered species" under the PCCP's incidental take permit which allows TCB "take" (a.k.a., mortality) incidental to otherwise lawful activities of real estate development, infrastructure construction, subsequent maintenance-related disturbances, and other causes.

Because incidental take of TCB is already authorized under the PCCP ITP, it is unclear why the DEIS/DEIR then goes on to add and require the following TCB take "avoidance" measures:

"Species Condition 4, Tricolored Blackbird

- Tricolored Blackbird 1—requires preconstruction surveys during the nesting season.

8-15 - Tricolored Blackbird 2—requires preconstruction survey of foraging habitat within 3 miles of known colony site prior to initiation of Covered Activities.

- Tricolored Blackbird 3—prohibits activity during the breeding season within a 1,300-foot buffer zone around the nest colony. This buffer may be modified to a minimum of 300 feet, with written approval from the Wildlife Agencies.

- Tricolored Blackbird 4—prohibits activity during the nesting season if the area within 1,300 feet of a project site was found to be actively used as foraging habitat. This buffer may be modified to a minimum of 300 feet, with written approval from the Wildlife Agencies.

- Tricolored Blackbird 5—requires a biological monitor to be present on-site to ensure that no Covered Activities occur within the buffer zone established around an active tricolored blackbird nest colony.

- Tricolored Blackbird 6—active foraging habitat that occurs within the no-disturbance buffer shall be monitored by the qualified biologist(s) to verify that the Covered Activity is not disrupting tricolored blackbird foraging behavior" (p. 4.3-93).

Comment: Inclusion of these "take avoidance" measures is unnecessary due to PCCP take authorization, and are even more unnecessary in light of the DEIS/DEIR conclusion that:

"Under Alternative 2, the permanent loss of tricolored blackbird nesting habitat would be offset
8-16 by the protection and management of an estimated 906 acres and restoration of 196 acres of suitable tricolored blackbird nesting habitats. The loss of tricolored foraging habitat would be offset by the protection and management of up to 27,308 acres and restoration of 4,000 acres of suitable tricolored blackbird foraging habitats" (p. 4.3-91).

8-17 Comment: In light of all of the foregoing, Tricolored Blackbird avoidance measures 1—6 above appear internally inconsistent with (1) the PCCP's already existing take authorization for TCB as

8-17 cont.

a covered species, (2) the remote likelihood of TCB disturbance or take if the DEIS/DEIR conclusion is correct that all 14 of the known extant TCB populations within the PCCP Plan Area are already located within protected areas which will not be developed (i.e., the RAA and existing preserves), and (3) loss of tricolored blackbird nesting habitat would be offset by the protection and management of an estimated 906 acres and restoration of 196 acres of suitable tricolored blackbird nesting habitats. The loss of tricolored foraging habitat would be offset by the protection and management of up to 27,308 acres and restoration of 4,000 acres of suitable tricolored blackbird foraging habitats.

8-18

Comment: In light of the fact that all potential direct and indirect effects upon tricolored blackbird are fully mitigated to less than significant levels by the permanent habitat protections within the PCCP and the fact that any residual "take" of individuals of the species is a Covered Activity under the PCCP, Tricolored Blackbird avoidance measures 1—6 appear unnecessary and should be deleted.

"Impact BIO-25: Effects on non-covered bats (NEPA: less than significant with mitigation; CEQA: less than significant with mitigation)

"The CNDDB lists three occurrences of Townsend's big-eared bat and one occurrence of pallid bat, in the Plan Area (California Department of Fish and Wildlife 2017). At least 11 special-status bats are known to or could occur in the Plan Area (Townsend's big-eared bat, pallid bat, spotted bat, silver-haired bat, western red bat, hoary bat, fringed myotis, Yuma myotis, long-eared myotis, long-legged myotis, and small-footed myotis). These bat species employ varied roost strategies, from solitary roosting in tree foliage to colonial roosting in trees, caves, mines, and artificial structures such as tunnels, buildings, bridges" (p. 4.3-93).

"Mitigation Measure BIO-3: Conduct preconstruction surveys for roosting bats and implement protective measures

"This measure was designed to avoid and minimize adverse direct and indirect effects on special-status bats. However, baseline data regarding how bats use the Plan Area, individual numbers of bats, and how populations vary seasonally are not available. Consequently, it is difficult to quantify the reduction in species numbers" (p. 4.3-96).

Protective Measures for Bats using Bridges, Structures, or Trees

"Avoidance and minimization measures will be necessary if it is determined that bats are using the bridge, structure, or trees as roost sites or if special-status bat species are detected during acoustic monitoring. PCA will determine appropriate measures in consultation with CDFW; such measures will include, as applicable, those listed below . . ." (p. 4.3-98 to 99).

Comment: This palid palate of 18 listed measures is quite lengthy, appears to be very expensive to implement, is likely to create substantial project delays, and is not something that PCCP land conversion or special habitat fees appear to pay for to offset that cost.

8-19 Then after doing all that, the DEIS/DEIR seeks to require, "Compensatory mitigation for the loss of non–tree-roosting habitat (e.g., bridge and structure habitat) will be determined through consultation with CDFW and may include the construction and installation of suitable replacement habitat onsite" (p. 4.3-99).

This would appear to be quite an extensive, and expensive, mitigation regime for species not even listed under either ESA and for which no take coverage is provided under the PCCP ITP.

Impact BIO-26: Effects on American badger, a non-covered species (NEPA: less than significant with mitigation; CEQA: less than significant with mitigation)

"There are no CNDDB records of American badger, in the Plan Area (California Department of Fish and Wildlife 2017)" (p. 4.3-100).

8-20 Comment: Because there are no known Plan Area records of this species, why is it included?

Mitigation Measure BIO-4: Conduct preconstruction survey for American badger

8-21 Comment: This survey regimen also includes detailed avoidance and mitigation requirements. While unclear whether the DEIS/DEIR can impose these measures on specific projects, to include this extensive regime here "tees up" such measures for later development project CEQA/NEPA document inclusion which would appear unnecessary.

"Impact BIO-1: Effects on vernal pool complex (NEPA: less than significant; CEQA: less than significant)

"Covered Activities under Alternative 2, the proposed action, would result in permanent and temporary impacts on vernal pool complex. Permanent impacts on vernal pool complex totaling 12,550 acres, approximately 28% of this community in Plan Area A, would result primarily from urban/suburban development, a limited amount of rural residential development, transportation projects, and infrastructure projects. These losses would occur primarily in the Valley portion of Plan Area A, with small losses occurring in the Foothill portion (100 acres) and Plan Area B (50 acres)" (p. 4.3-35).

"Existing vernal pool complexes could be permanently altered by the restoration/creation of a portion of the 900 acres of vernal pool–type wetlands in these complexes through implementation of the conservation strategy. As described in CM3 VPCG-1, the Plan would allow vernal pool–type wetlands to be created/restored in up to 6,000 acres of existing vernal

pool complex that can accommodate additional wetlands, typically in existing low- and medium-density vernal pool complexes (i.e., with less than 5% density of existing vernal pool-type wetlands), as well as in grasslands without existing vernal pools where there is evidence of vernal pools in the past and agricultural lands (e.g., field crops and rice lands). According to CM1 VPCG-1 and CM2 VPCG-2, some of this restoration and enhancement may also be undertaken in existing vernal pool–type wetlands to improve degraded conditions. If vernal pool restoration/creation is to be implemented in existing vernal pool complexes, these activities could affect upland resources and the hydrologic balance of the existing pools in these complexes.

"To address these concerns, the Plan includes the following language in CM1 VPCG-2.

- Any sites identified for restoration/creation will not affect any vernal pools onsite.
- Sufficient land is available for protection to provide the necessary vernal pool complex restoration/creation, including surrounding grasslands, to ensure the local watershed is sustaining vernal pool hydrology.
- Vernal pool density is representative of intact vernal pool complex in the vicinity of the restoration site. Restoration will not result in a density of vernal pools greater than 10% density, unless it can be demonstrated by historical or other data (e.g., aerial photograph) that a higher density is appropriate. The intention is to mimic historic conditions for high value vernal pool complexes" (p. 4.3-36).

Furthermore, CM3 VPCG-2 states:

"Creation of vernal pools within a vernal pool complex of existing pools can alter the hydrology of the existing pools and can affect ground-nesting bees and other upland plants and animals (U.S. Fish and Wildlife Service 2005). To minimize effects to existing vernal pool complexes, vernal pools will only be created in areas where they will be isolated hydrologically from existing pools and when adequate amounts of surrounding upland habitat are protected, as demonstrated in site-level restoration plans.

"Temporary impacts of Covered Activities on vernal pool complex would not exceed 455 acres, or approximately 1% of this community in Plan Area A. These temporary impacts would be associated with urban/suburban development, rural residential development, transportation construction, fuels management, vegetation management, infrastructure operations and maintenance, and infrastructure construction. Conservation actions of Plan implementation that could temporarily affect vernal pool complex include restoration and enhancement actions such as grading and contouring to restore, create, and enhance vernal pool–type wetlands in reserves.

"Indirect impacts on vernal pool complex could result from a variety of activities on adjoining land uses that change the hydrology of a complex as well as construction activities in the Plan Area, such as grading, trenching, and changes to topography. Indirect effects on vernal pools are generally considered to occur when ground-disturbing activities take place within 250 feet of a vernal pool—more specifically, when it can be demonstrated that the hydrology supporting a pool has been altered. Indirect effects on vernal pool complexes were estimated in the Plan at 1,979 acres. These indirect effects could adversely affect the functions and services of vernal pool–type wetlands and supporting uplands in vernal pool complexes" (p. 4.3-36).

"Permanent loss of vernal pool complex under Alternative 2 would be offset by the protection and management of 17,000 acres, improving the overall functions and services of vernal pools, and the restoration/creation of 3,000 acres of vernal pool complex in reserves within the Plan Area" (p. 4.3-37).

"Temporarily affected vernal pool complexes would be restored through implementation of General Condition 4, Temporary Effects, which requires that temporarily affected areas be restored to pre-project conditions or better based on performance standards such as percent vegetative cover, restored topography, and restored hydrology.

"Potential effects on vernal pool complex during construction and operations and maintenance would be avoided and minimized through the implementation of General Conditions 1, 2, and 4; Community Conditions 1.1, 1.2, 1.3, 1.4, and 1.5; and Regional Public Project Conditions 2 and 3. These conditions are described in Chapter 6 of the Plan.

"These objectives, conservation measures, and conditions establish performance standards for measuring the effectiveness of proposed conservation actions. The proposed landscape-level conservation of 20,000 acres of vernal pool complexes—17,000 acres protected and 3,000 acres restored/created—including enhancement of degraded conditions in existing complexes that would be protected and long-term management of these resources, would mitigate the effects of the proposed action. The proposed conditions further demonstrate the intent to avoid and minimize effects over the life of the Plan" (p. 4.3-37).

"The natural community creation, enhancement, restoration, and protection together with conservation measures and conditions pertaining to the long-term management of vernal pool complex in the Plan Area, support the conclusion that the impacts of Alternative 2 on vernal pool complex would be less than significant. No mitigation has been identified" (4.3-38).

8-22 Comment: The extensive preservation of 17,000 acres of vernal pool complex wetlands, plus creation/restoration of an additional 3,000 acres of vernal pool complex wetlands, coupled with enhancement of degraded conditions in these same type of existing wetland complexes, is a

8

8-22 cont. major mitigation effort which should more than fully mitigate all impacts of the Alternative 2 - Preferred Project upon vernal pool complexes within the PCCP Plan Area.

Conclusion

Thank you for the opportunity to provide these initial, surgical comments upon the PCCP **Draft Environmental Impact Statement / Draft Environmental Impact Report (DEIS/DEIR)**, on behalf of the Lincoln Village 3 Landowners' Association. We request that the PCCP Draft Environmental Impact Statement / Draft Environmental Impact Report (DEIS/DEIR), be revised in response to the modifications requested herein. As the opportunity presents itself, we anticipate submittal of additional comments upon the PCCP Draft Environmental Impact Statement / Draft Environmental Impact Report (DEIS/DEIR), the PCCP, and the PCCP Clean Water Act Section 404 Permit Strategy for Waters of the United States. Thank you.

Do not hesitate to make contact if you have questions regarding any of the above comments.

Very truly yours,

George T. Kammerer

cc: Lincoln Village 3 Landowners' Association

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JUL
City of Lincoln
DEV SVCS

George T. Kammerer
Attorney At Law
P.O. Box 951
Rancho Murieta, CA 95683-0951

July 22, 2019

Lincoln City Council
City of Lincoln
600 6th Street
Lincoln, CA 95648

Re: Placer County Conservation Plan, City of Lincoln and Portions of Placer County, CA

Honorable Mayor Joiner and Members of the City Council:

We represent the Lincoln Village 3 Landowners' Association comprised of the largest landholding entities within the 2,040-acre Village 3 portion of the City of Lincoln General Plan 2050 planning area. We have submitted detailed comments upon select provisions of the **Placer County Conservation Plan (PCCP), the PCCP Draft Environmental Impact Statement / Draft Environmental Impact Report (DEIS/DEIR), and the PCCP Clean Water Act Section 404 Permit Strategy for Waters of the United States** on behalf of the Lincoln Village 3 Landowners' Association for consideration and, we hope, modification of key provisions we have identified, by the City, Placer County, the U.S. Fish and Wildlife Service and U.S. Army Corps of Engineers.

9-1 The Lincoln Village 3 Landowners' Association is supportive of the PCCP and provides its comments and suggested changes for the purpose of ensuring the practicable, fiscal and pragmatic viability of the PCCP and its components over the PCCP's proposed 50-year life.

The Lincoln Village 3 Landowners' Association asks for your approval and adoption of the PCCP.

Very truly yours,

George T. Kammerer

cc: The Lincoln Village 3 Landowners' Association

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BOARD OF SUPERVISORS
5BOS__ TI__ ALL AIDES __
(mail person)
JUL 22 2019
SUP____ COB Corr____ CoCo____
AIDE ____ CEO ____ Other____

George T. Kammerer
Attorney At Law
P.O. Box 951
Rancho Murieta, CA 95683-0951

July 21, 2019

Placer County Planning Commission
County Administration
3091 County Center Drive
Auburn, CA 95603

Re: Placer County Conservation Plan, City of Lincoln and Portions of Placer County, CA

Honorable Chairman Moss and Members of the Commission:

We represent the Lincoln Village 3 Landowners' Association comprised of the largest landholding entities within the 2,040-acre Village 3 portion of the City of Lincoln General Plan 2050 planning area. We have submitted detailed comments upon select provisions of the **Placer County Conservation Plan (PCCP), the PCCP Draft Environmental Impact Statement / Draft Environmental Impact Report (DEIS/DEIR), and the PCCP Clean Water Act Section 404 Permit Strategy for Waters of the United States** on behalf of the Lincoln Village 3 Landowners' Association for consideration and, we hope, modification of key provisions we have identified, by Placer County, the U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers.

10-1 The Lincoln Village 3 Landowners' Association is supportive of the PCCP and provides its comments and suggested changes for the purpose of ensuring the practicable, fiscal and pragmatic viability of the PCCP and its components over the PCCP's proposed 50-year life.

Lincoln Village 3 Landowners' Association asks for your approval recommendation for the PCCP.

Very truly yours,

George T. Kammerer

cc: The Lincoln Village 3 Landowners' Association

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CALIFORNIA Water Boards

GAVIN NEWSOM
GOVERNOR

JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

12 July 2019

Gregg McKenzie
Placer County Planning Department
3091 County Center Drive, Suite 190
Auburn, CA 95603

CERTIFIED MAIL
7017 2620 0001 1359 1175

COMMENTS TO REQUEST FOR REVIEW FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, PLACER COUNTY CONSERVATION PLAN PROJECT, SCH#2005032050, PLACER COUNTY

Pursuant to the State Clearinghouse's 21 June 2019 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Draft Environmental Impact Report* for the Placer County Conservation Plan Project, located in Placer County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

11-1

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental

Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website: http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

11-1 cont. All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

> *Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*
>
> *This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

11-2 The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

11-3 Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
11-3 cont. http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

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[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

11-3 cont.

For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Waste Discharge Requirements – Discharges to Land

Pursuant to the State Board's Onsite Wastewater Treatment Systems Policy, the regulation of the septic system may be regulated under the local agency's management program.

For more information on waste discharges to land, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_land/index.shtml

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from

excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

Regulatory Compliance for Commercially Irrigated Agriculture

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program.

There are two options to comply:

11-3 cont.

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/regulatory_information/for_growers/coalition_groups/ or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.

2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100.** Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 11-100 acres are currently $1,277 + $8.53/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order.

11-3 cont.

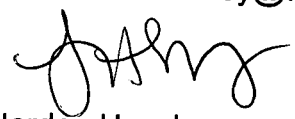
For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4812 or Jordan.Hensley@waterboards.ca.gov.



Jordan Hensley
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

Placer County
AIR POLLUTION CONTROL DISTRICT

110 Maple Street, Auburn, CA 95603 • (530) 745-2330 • Fax (530) 745-2373 • www.placerair.org
Erik C. White, Air Pollution Control Officer

July 16, 2019

Ms. Shirlee Herrington
Environmental Coordination Services
Placer County Community Development Resources Agency
3091 County Center Drive
Auburn, CA 95603

Subject: Review of Draft Environmental Impact Statement/Report for the Placer County Conservation Program (PEIR 20050226)

Dear Ms. Herrington:

The Placer County Air Pollution Control District (District) thanks you for the opportunity to review and comment on the Draft Environmental Impact Statement/Report (DEIS/R) prepared for the proposed Placer County Conservation Program (Program). The District has the following comments on the Program's DEIS/R for your consideration.

12-1

1. **Contents, Acronyms and Abbreviations** (page xiii)

   The District recommends changing the definition of "ATCM" from "Asbestos Airborne Toxic Control Measure" to "Airborne Toxic Control Measure." Asbestos is just one of the many substances regulated by Airborne Toxic Control Measures.

12-2

2. **Contents, Acronyms and Abbreviations** (page xiv)
   The District recommends changing the definition of "CH_4" from "Reducing Methane" to "Methane."

12-3

3. **Section 3.2.1 Air Quality, Greenhouse Gases, and Climate Change; Regulatory Setting** (page 3.2-8)

   The District recommends that the descriptions for the District's Rules 302 (Agricultural Burning Smoke Management) and 303 (Prescribed Burning Smoke Management) be switched. The District recommends the following descriptions:

   - **Rule 302 (Agricultural Burning Smoke Management)**: Establishes standards and administrative requirements under which agricultural burning, including the burning of agricultural wastes, limited to the growing of crops or raising of fowl or animals, may occur in a reasonably regulated manner that manages the generation of smoke and reduces the emission of particulates and other air contaminates from such burning.

12-3 cont.

- **Rule 303 (Prescribed Burning Smoke Management)**: Establishes standards and administrative requirements under which agricultural burning, including prescribed burning, may occur in a reasonably regulated manner that manages the generation of smoke and reduces the emission of particulates and other air contaminants from such burning. This rule regulates the use of open outdoor fires used in forest management, range improvement, improvement of land for wildlife and game habitat or disease or pest prevention, or the use of open outdoor fires used in the operation or the maintenance of a system for the delivery of water and wildland vegetation management burning.

4. **Section 3.2.3 Air Quality, Greenhouse Gases, and Climate Change; References Cited** (page 3.2-23, page 3.2-24)

   The links in the references to the District's material are incorrect. The District recommends updating the reference information for the *Approved Final Budget: Fiscal Year 2015-2016*, *Rules and Regulations*, and *Review of Land Use Projects under CEQA*.

12-4

5. **Section 4.2.4 Air Quality, Greenhouse Gases, and Climate Change; References Cited** (page 4.2-56)

   The links in the references to the District's material are incorrect. The District recommends updating the reference information for the *CEQA Thresholds and Review Principles*.

6. **Appendix F Placer County Air Pollution Control District Fugitive Dust Controls and Construction Equipment Emission Controls and Exhaust Emissions Offsets; References Cited** (page F-4)

   The links in the references to the District's material are incorrect. The District recommends updating the reference information for the *CEQA Air Quality Handbook, Appendix C*, and the *Fugitive Dust Control Requirements Fact Sheet*.

Thank you again for the opportunity to review and comment on the DEIS/R. If you have any questions, please feel free to contact me at 530-745-2376 or lmoore@placer.ca.gov.

Sincerely,

Lauren Moore

Lauren Moore
Air Pollution Control Specialist
Placer County Air Pollution Control District

Cc: Yushuo Chang, Planning and Monitoring Section Manager
Ann Hobbs, Associate Planner

SheppardMullin

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August 7, 2019

VIA ELECTRONIC MAIL ONLY

Lisa M. Gibson
Regulatory Permit Specialist
US Army Corps of Engineers, Sacramento District
1325 J Street, Room 1350
Sacramento, CA 95814-2992
E-Mail: Lisa.M.Gibson2@usace.army.mil

Re: Public Notice SPK-2005-00485; Proposed Section 404 Clean Water Act Permit Strategy Aligned with the Placer County Conservation Program

Dear Ms. Gibson:

I write on behalf of AKT Investments Inc. (AKT) to provide comments on the U.S. Army Corps of Engineers' proposed Clean Water Act Section 404 permit strategy (Permit Strategy) for the Placer County Conservation Program (PCCP). AKT manages several properties within the area that would be covered by the proposed PCCP, including land within the Potential Future Growth areas, and land within the Reserve Acquisition Area where the PCCP is intended to focus conservation activities. As a property owner with interests in both development and conservation activities that would be authorized by the PCCP, AKT appreciates the opportunity to provide constructive feedback on the proposed Permit Strategy.

AKT understands that the Corps has worked closely with the PCCP permittees, the U.S. Fish and Wildlife Service (Service), and other resource agencies and stakeholders to develop a permitting strategy for the PCCP that will streamline compliance with the Clean Water Act (CWA) and related federal laws for Covered Activities. These comments are intended to help ensure that the Permit Strategy is effective, efficient and consistent with the PCCP and its constituent parts, including the Western Placer County Aquatic Resources Program (CARP).

1. Overview

The Permit Strategy is intended to provide for compliance with the U.S. Environmental Protection Agency's 404(b)(1) Guidelines, 40 C.F.R. Part 230, at a regional level, while providing greater certainty and faster CWA Section 404 permit decisions for the regulated public, and protecting aquatic resources to an equal or greater level than existing regulations,

policies and processes.[1] The Permit Strategy outlines a multi-tiered approach to CWA Section 404 permitting that includes a programmatic general permit (PGP) for Covered Activities with minimal effects on the aquatic environment; a regional general permit for certain other activities; a procedure for issuing Letters of Permission (LOP) for activities with more than minimal but less than significant effects on the environment; and an abbreviated process for issuing standard permits for activities that may have a significant impact on the environment. This approach is based on the principle that Covered Activities will meet avoidance, minimization and mitigation requirements of the CWA and 404(b)(1) Guidelines by complying with the conditions of approval and mitigation obligations defined in the PCCP, including those of the CARP. In addition to the CARP, the PCCP includes an In-Lieu Fee (ILF) program, which will use impact fees collected under the PCCP to carry out approved projects that provide compensatory mitigation for impacts of Covered Activities to waters of the United States.

The Permit Strategy is also intended to provide programmatic compliance with the National Environmental Policy Act (NEPA), Section 7 of the Endangered Species Act (ESA), Section 401 of the CWA, and Section 106 of the National Historic Preservation Act (NHPA) for Corps permitting of PCCP Covered Activities. For Covered Activities authorized under the general permits, no additional project-specific review, consultation or certification under these laws would be necessary. For Covered Activities requiring individual permits, the Corps would rely on, or tier from, programmatic documents and decisions as much as possible.

13-1 AKT supports the Corps' efforts to provide options for streamlined CWA permitting and to facilitate programmatic compliance with the procedural requirements of other laws. Covered Activities that comply with PCCP requirements should not require individual, case-by-case compliance that duplicates analysis already performed at a regional level. As described in the following paragraphs, we recommend clarification of certain topics, including compensatory mitigation options, NEPA compliance, and consideration of avoidance, to ensure that the goals of the Permit Strategy are fully achieved.

2. Mitigation Options

The Western Placer County Habitat Conservation Plan/Natural Community Conservation Plan component of the PCCP (the Plan) states that project proponents may provide compensatory mitigation for impacts to aquatic resources through one or more of the following three options:

- Payment of Special Habitat fees into the ILF, which the Placer Conservation Authority (PCA) will use to create or restore aquatic resources;
- Purchase of credits at an approved mitigation bank that meets Plan requirements; or

[1] References to the Permit Strategy are to the Corps' CWA 404 Permit Strategy dated August 2017, provided as Attachment 2 to the Corps' Public Notice SPK-2005-00485, unless otherwise noted.

- Restoration or creation of aquatic resources at an approved mitigation site within the project site or off-site (with the PCA assuming responsibility for management of the site within the Reserve after mitigation implementation is complete).

E.g., Plan pp. 6-33, 8-43 – 8-45, 8-47 – 8-48.[2] The CARP, likewise, provides that compensatory mitigation shall be provided through payment of applicable PCCP Special Habitat fees to the ILF program *or* purchase of mitigation credits at an agency-approved mitigation bank.[3] CARP, p. 6-4.

13-2

However, the Permit Strategy and the draft general permits published with the Corps' public notice do not recognize purchase of bank credits or permittee-responsible mitigation as options for compensatory mitigation. For example, both the draft PGP[4] and the draft LOP Procedure[5] state that compensatory mitigation "shall be accomplished by payment into a Corps-approved HCP/NCCP ILF program." PGP, Gen. Condition 2, p. 6; LOP Procedure, p. 3.

The ability for project proponents to use mitigation bank credits as compensatory mitigation for impacts to waters of the United States provides critical flexibility for project proponents and for the PCCP, and protects the vested interests of bank sponsors who have proactively conserved sensitive resources within the PCCP area. In many cases, these conserved resources — both waters of the United States and habitat for sensitive species such as vernal pool branchiopods — will be essential to meeting Plan conservation goals. The option to provide permittee-responsible mitigation, when consistent with the Plan and the CARP, also represents a key point of integration with the multi-pronged conservation strategy of the PCCP. It provides an opportunity for landowners to perform mitigation on conserved land that will be dedicated to the Plan in lieu of fees, thus meeting multiple mitigation obligations under the Plan in whole or in part (*i.e.*, waiver of Special Habitat fees through permittee-responsible mitigation, and waiver of land conversion fees through land dedication). *See* Plan, pp. 9-37, 9-45. These options promote the success of the PCCP and the Permit Strategy by providing important financial flexibility, incorporating already-conserved resources, and creating incentives for landowners to make land available for inclusion in the Reserve system by means other than purchase from willing sellers.

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[2] References to the Plan are to the Public Review version dated December 2018 and published on the County of Placer's website at https://www.placer.ca.gov/3362/Placer-County-Conservation-Program.

[3] CARP Public Review draft, Appendix B to PCCP Draft Environmental Impact Statement/Environmental Impact Report. Consistent with these comments and the Plan, the CARP should be revised to reflect the additional option of approved permittee-responsible mitigation.

[4] PGP, Attachment 3 to the Corps' public notice.

[5] LOP Procedures, Attachment 5 to the Corps' public notice.

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13-2 cont.

AKT requests that the Corps revise the Permit Strategy and the draft general permits, LOP Procedure and standard permit process, to reflect that compensatory mitigation for impacts authorized under any of those CWA Section 404 permits may be provided through payment of Special Habitat fees into the ILF, purchase of credits at an approved mitigation bank, or approved permittee-responsible mitigation within the Plan area. All of these options are consistent with the Corps' mitigation rule, *see* 33 C.F.R. § 332.3(b), and are important to successful implementation of the PCCP.

3. Avoidance and Alternatives

The Permit Strategy states that the PGP would not impose additional requirements or conditions on individual activities for avoiding, minimizing or compensating for the loss of aquatic resources beyond those required under the Plan, CARP and implementing ordinances. Similarly, it states that the LOP Procedure would rely on the Plan to address avoidance, minimization and requirements for compensatory mitigation for impacts to aquatic resources. As to standard permits, the Permit Strategy states that an off-site alternatives analysis under the 404(b)(1) Guidelines would not be required because avoidance has already been addressed at the regional level, and that the on-site alternatives analysis "would focus on evaluating alternative means of applying on-site avoidance and minimization measures required under the [Plan]." Permit Strategy, pp. 4-5.

13-3

AKT understands the Permit Strategy to mean the following:

- For Covered Activities authorized under the PGP or the LOP Procedure, no on-site or off-site alternatives analysis would be required, since impacts to waters have already been avoided and minimized to the maximum extent practicable for these activities, through compliance with the Plan and the CARP.

- For Covered Activities authorized under the Standard Permit Abbreviated Process, no off-site alternatives analysis would be required. The on-site alternatives analysis should be limited to evaluating how the alternatives identified in the project-level NEPA review for the activity comply with the Plan and CARP requirements for avoidance and minimization of impacts to aquatic resources. The analysis of alternatives provided in the NEPA review "will in most cases provide the information for the evaluation of alternatives under [the 404(b)(1)] Guidelines." 40 C.F.R. § 230.10(a)(4).

Consistent with this understanding, AKT recommends that the Corps revise the Permit Strategy, general permits and LOP Procedure to more clearly identify the limited circumstances under which an alternatives analysis will be necessary for Covered Activities and to clarify how such an analysis will be performed, when required.

4. NEPA Compliance

13-4

The Permit Strategy states that the Corps intends to adopt the Environmental Impact Statement/Environmental Impact Report (EIS/EIR) prepared for the PCCP and to rely on that

13-4 cont.

document for programmatic compliance with NEPA at a regional scale, and that any necessary subsequent NEPA documentation would tier from the EIS/EIR. Permit Strategy, p. 2. Consistent with the Corps' NEPA regulations and existing practice, AKT understands that no additional NEPA documentation would be required for Covered Activities authorized under the proposed general permits, including the PGP, as these activities would have minimal environmental effects that are fully analyzed in the EIS/EIR.

13-5

For Covered Activities authorized under the LOP Procedure, AKT anticipates that any project-specific NEPA documentation required would be limited to an environmental assessment (EA) tiered from the EIS/EIR, given that these Covered Activities, by definition, are limited to those with less than significant effects on the human environment. LOP Procedure, p. 4. Any such EA should focus on any potential impacts of the proposed activity that have not been analyzed already in the EIS/EIR. *See* Council on Environmental Quality, Memorandum for Heads of Departments and Agencies: Guidance on Effective Use of Programmatic NEPA Reviews, p. 30 (Dec. 18, 2014), *available at* https://ceq.doe.gov/docs/ceq-regulations-and-guidance/Effective_Use_of_Programmatic_NEPA_Reviews_Final_Dec2014_searchable.pdf (the CEQ 2014 Memorandum).

13-6

The Permit Strategy states that activities that may have a significant effect on the environment will require a standard permit and may require the preparation of a project-level EIS. Permit Strategy, p. 3. AKT recommends that the Corps clarify how the determination of the need for a standard permit, and for an EIS, will be made. Specifically, the Corps should clarify that, consistent with its NEPA regulations, the Corps' review of proposed activities under NEPA will be limited to the proposed discharge of dredged or fill material within waters of the United States, and any other components of the larger project subject to the Corps' control and responsibility. *See* 33 C.F.R. Part 325, Appx. B, ¶ 7(b).[6] The determination of whether an EIS is required should be based on the potential effects of activities within this scope of review. In addition, an EIS should be required only if the activities in question would have one or more *new* significant effects that were *not previously analyzed* in the EIS/EIR. Significant effects of a project that have already been disclosed and considered in the EIS/EIR do not, by themselves, require preparation of a new EIS. *See* CEQ 2014 Memorandum, p. 42 ("[T]he appropriate question is not if there is a significant impact from the proposed action, but if there is a *new* significant impact that was not already considered and addressed in the programmatic review.").

Maintaining an appropriate scope of NEPA analysis for activities to be authorized through the Permit Strategy will help avoid unnecessary duplication of effort and allow the Corps to meet its goals for timely processing of requests for CWA Section 404 authorization.

[6] This principle applies to project-level NEPA review of activities authorized under the LOP Procedure, as well.

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5. ESA Section 7 Consultation

The Permit Strategy states that the Corps will request the Service and National Marine Fisheries Service to consult once, programmatically, for all Covered Activities that require a CWA Section 404 permit, thus eliminating the need for individual project-by-project consultations under ESA Section 7. AKT strongly supports this approach. By definition, the potential impacts of any Covered Activities authorized by the Corps under the Permit Strategy will be fully analyzed and addressed in the biological opinion prepared for the Plan. Further consultation under ESA Section 7 is unnecessary and would serve no purpose as long as the Plan remains in effect.

13-7

We recommend clarifying whether any additional process will be required to demonstrate compliance with ESA Section 7 for subsequent individual permit decisions authorizing Covered Activities, other than documentation that the activity is consistent with the Plan. If additional process is required, we recommend clarifying what the process will be — for instance, would the Corps request that the Service "append" a proposed permit action to the programmatic biological opinion for the Plan? We also recommend the Corps and the Service establish a process for expediting further Section 7 consultation in the unusual event that a proposed Section 404 permit would authorize activities that have the potential to affect listed species in a manner or to an extent not fully considered in the biological opinion for the Plan.

6. Water Quality Certification

The Permit Strategy states that the Corps will request programmatic water quality certification under CWA Section 401 from the Central Valley Regional Water Quality Control Board (Regional Board) for all activities under the Permit Strategy, which would eliminate the need for permit applicants to apply individually for CWA Section 401 certification. Permit Strategy, p. 3. Again, AKT strongly supports this common-sense approach to streamlining procedural requirements for issuance of CWA Section 404 permits. We note, however, that the Plan and the CARP contain several statements suggesting that Covered Activities not authorized through the PGP or other general permits would require individual water quality certification. *E.g.*, Plan, p. 8-4; CARP, p. 2-3. We recommend the Corps and the Regional Board enter into a memorandum of understanding (MOU) or similar agreement, as contemplated during the planning of the PCCP, that resolves this issue prior to finalizing the Permit Strategy. *See* CARP, pp. 2, 2-1.

13-8

AKT also recommends the Corps and Regional Board clarify that Covered Activities authorized through the Permit Strategy would not be subject to the Procedures for Discharge of Dredged or Fill Material to Waters of the State (Procedures) recently adopted by the State Water Resources Control Board, regardless of whether these activities require subsequent, project-level review by the Regional Board. The Procedures contain mitigation requirements, application requirements (including requirements for preparation of an alternatives analysis), definitions and procedures for delineating aquatic resources, and other provisions that may conflict with the process

established under the Plan, the CARP and the Permit Strategy.[7] *See*, *e.g.*, Procedures §§ II, III, IV.B.3. Given the extensive regional planning effort that has gone into the preparation of the PCCP, the Procedures do not add any environmental or administrative benefits and should not apply.

13-8 cont.

At minimum, we recommend that the Corps and Regional Board enter into a MOU that clarifies that the Plan is an approved "watershed plan," as that term is used in the Procedures, and that therefore Covered Activities will be exempt from the Procedures' requirements for preparation of an alternatives analysis and from the application requirements related to mitigation; and that compliance with the avoidance, minimization and mitigation requirements of the Plan and the CARP will be deemed to constitute compliance with the analogous provisions of the Procedures and their process for project review. *See* Procedures §§ IV.A.1.g.iii, IV.A.2.b, IV.B. Of course, issuance of a single, programmatic water quality certification for all Covered Activities, as proposed under the Permit Strategy, should largely eliminate these issues, as the certification would avoid the need for future project-level action by the Regional Board.

7. Conclusion

AKT appreciates the Corps' consideration of its comments, and we look forward to working with the Corps and other resource agencies to ensure that the PCCP achieves its goals for protection of sensitive resources and streamlining of federal and state permitting processes. Please feel free to contact me at the number above, or Ron Bertolina of AKT at (916) 383-2500, if you have any questions about these comments.

Sincerely,

James F. Rusk
for SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

SMRH:4834-6898-1919.2

cc: Chrysa Demos, President and CEO, AKT Investments Inc.
Ron Bertolina, Vice President and General Counsel, AKT Investments Inc.
Kirk Uhler, Chair, Placer County Board of Supervisors, PCCP Ad Hoc Committee
Robert Weygandt, Placer County Board of Supervisors, District 2, PCCP Ad Hoc Committee

[7] The Procedures will take effect nine months after they are approved by the State Office of Administrative Law. Procedures, § I.

Jennifer Norris, Field Supervisor, Sacramento Fish and Wildlife Office, U.S. Fish and Wildlife Service
Gregg McKenzie, Placer County PCCP Administrator
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August 20, 2019

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VIA FACSIMILE ONLY

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Re: Draft Environmental Impact Statement/Environmental Impact Report for Placer County Conservation Program (PEIR 20050226), State Clearinghouse No. 2005032050

To Whom It May Concern:

I write on behalf of AKT Investments Inc. (AKT) to provide comments on the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Placer County Conservation Program (PCCP). AKT manages several properties within the area that would be covered by the proposed PCCP, including land within the Potential Future Growth areas, and land within the Reserve Acquisition Area where the PCCP is intended to focus conservation activities. As a property owner with interests in both development and conservation activities that would be authorized by the PCCP, AKT appreciates the opportunity to provide constructive feedback on the EIS/EIR and PCCP.

AKT understands that the County of Placer (County) and other stakeholders have worked closely with the U.S. Fish and Wildlife Service (Service) and other cooperating agencies, including the U.S. Army Corps of Engineers (Corps), the Central Valley Regional Water Quality Control Board (Regional Board), and the California Department of Fish and Wildlife (CDFW) to develop the PCCP and to provide streamlined natural resource permitting and environmental review for activities covered under the PCCP. These comments are intended to help ensure that the proposed strategy effectively and efficiently facilitates authorized development and conservation activities within the PCCP area.

1. Overview

The PCCP includes three components: The Western Placer County Habitat Conservation Plan/Natural Community Conservation Plan (Plan), designed to comply with the federal Endangered Species Act (ESA) and California Natural Community and Conservation Planning Act (NCCPA); the Western Placer County Aquatic Resources Program (CARP), designed to fulfill requirements of the federal Clean Water Act (CWA) and state laws for protection of aquatic resources; and an In-Lieu Fee (ILF) program, which will use impact fees collected under the PCCP to carry out approved projects that provide compensatory mitigation for impacts of

Covered Activities to aquatic resources. Thus, although the Plan itself only supports issuance of permits by the Service under the ESA and the CDFW under the NCCPA, the PCCP as a whole is also intended to facilitate permitting of Covered Activities by the Regional Board under CWA Section 401 and the Porter-Cologne Act, by CDFW under California Fish and Game Code Section 1602, and by the Corps under CWA Section 404. In authorizing Covered Activities, those agencies are expected to rely on the requirements of the PCCP to ensure substantive compliance with applicable laws, and to rely on the EIS/EIR, the biological opinion issued for the Plan, and a programmatic agreement and Cultural Resources Management Plan adopted for the Plan to comply with procedural requirements of the National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), ESA Section 7, National Historic Preservation Act (NHPA) Section 106 and analogous state laws.

The Corps has proposed a Clean Water Act Section 404 Permit Strategy (404 Permit Strategy) that would rely on the CARP and Plan requirements to provide avoidance, minimization and mitigation for impacts of Covered Activities to waters of the United States.[1] The Permit Strategy explains how the Corps would achieve programmatic compliance with, and minimize project-specific review of Covered Activities under, NEPA, ESA Section 7, CWA Section 401, and NHPA Section 106 for Corps permitting of PCCP Covered Activities,. The EIS/EIR and PCCP currently provide less information about how CDFW and the Regional Board would rely on the Plan, CARP and EIS/EIR to streamline their permitting actions and environmental review for Covered Activities. Below we offer specific suggestions for clarifying this important topic, and for ensuring consistency among the components of the PCCP and the EIS/EIR.

2. Mitigation Options under the CARP

The Plan states that project proponents may provide compensatory mitigation for impacts to aquatic resources through one or more of the following three options:

- Payment of Special Habitat fees into the ILF, which the Placer Conservation Authority (PCA) will use to create or restore aquatic resources;
- Purchase of credits at an approved mitigation bank that meets Plan requirements; or
- Restoration or creation of aquatic resources at an approved mitigation site within the project site or off-site (with the PCA assuming responsibility for management of the site within the Reserve after mitigation implementation is complete).

[1] References to the 404 Permit Strategy are to the Corps' CWA 404 Permit Strategy dated August 2017, provided as Attachment 2 to the Corps' Public Notice SPK-2005-00485, unless otherwise noted. AKT's comments on the 404 Permit Strategy, dated August 7, 2019, are incorporated herein by reference.

E.g., Plan pp. 6-33, 8-43 – 8-45, 8-47 – 8-48.[2] The draft Implementing Agreement (IA) for the Plan also recognizes these options for compensatory mitigation. *See* IA, § 6.2.4.

14-1

The CARP provides that compensatory mitigation shall be provided through payment of applicable PCCP Special Habitat fees to the ILF program *or* purchase of mitigation credits at an agency-approved mitigation bank.[3] CARP, p. 6-4. However, the CARP does not appear to acknowledge the option of aquatic resource restoration or creation at an approved mitigation site by the permittee. To ensure consistency with the Plan, the CARP should be revised to reflect the additional option of approved permittee-responsible mitigation for impacts to aquatic resources. The option to provide permittee-responsible mitigation, when consistent with the Plan and the CARP, represents a key point of integration with the multi-pronged conservation strategy of the PCCP. It provides an opportunity for landowners to perform mitigation on conserved land that will be dedicated to the Plan in lieu of fees, thus meeting multiple mitigation obligations under the Plan in whole or in part (*i.e.*, waiver of Special Habitat fees through permittee-responsible mitigation, and waiver of land conversion fees through land dedication). *See* Plan, pp. 9-37, 9-45. This option promotes the success of the PCCP by providing important financial flexibility, incorporating already-conserved resources, and creating incentives for landowners to make land available for inclusion in the Reserve system by means other than purchase from willing sellers.

Other PCCP-related documents should also be revised to ensure that all three mitigation options are available to proponents of Covered Activities and recognized by all three resource agencies who will rely on the CARP: the Corps, CDFW and the Regional Board. As noted in AKT's August 7, 2019 comments on the 404 Permit Strategy, the Corps' draft general permits and Letter of Permission Procedure currently do not recognize purchase of bank credits or permittee-responsible mitigation as options for compensatory mitigation. They should be revised to allow all three options, consistent with the Plan.

14-2

In addition, we recommend that the IA, and/or a separate memorandum of understanding (MOU) among the resource agencies and the Plan Permittees, provide that both CDFW and the Regional Board shall recognize and accept any of the three options for compensatory mitigation under the PCCP as satisfying mitigation requirements for a streambed alteration agreement, CWA Section 401 water quality certification, or waste discharge requirements (WDRs) for Covered Activities. We also recommend ensuring that both CDFW and the Regional Board approve the ILF as a source of compensatory mitigation for impacts to aquatic resources under their respective permitting programs.

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[2] References to the Plan are to the Public Review version dated December 2018 and included as Appendix A to the EIS/EIR.

[3] CARP Public Review draft, Appendix B to the EIS/EIR.

3. Streambed Alteration Agreements

The CARP states that CDFW "does not have a regulatory mechanism for issuing a master streambed alteration Agreement for the CARP," and that applicants requiring a lake or streambed alteration agreement under Fish and Game Code Section 1602 "must contact CDFW." CARP, p. 2-4. The Plan states that "CDFW can use the CARP in issuing its separate Lake or Streambed Alteration Agreements to entities using CARP by agreeing to the same avoidance, minimization and mitigation measures as required under the CARP." Plan, p. 6-2. However, neither the Plan nor the CARP includes any standards or procedures for issuance of such agreements. 14-3

We recommend that the Permittees seek to enter into an MOU or similar arrangement with CDFW, which clearly states that CDFW will accept compliance with the CARP in satisfaction of compensatory mitigation requirements for Covered Activities that impact lakes or streambeds, and that CDFW will not impose additional avoidance and minimization measures on Covered Activities under any proposed streambed alteration agreement unless it finds that the Plan and CARP do not provide adequate protection for fish and wildlife resources. We also recommend that the MOU establish an expedited procedure and timelines for processing of agreements for Covered Activities.

4. Water Quality Certification and Waste Discharge Requirements

The Corps' 404 Permit Strategy states that the Corps will request programmatic water quality certification under CWA Section 401 from the Regional Board for all activities under the 404 Permit Strategy, which would eliminate the need for permit applicants to apply individually for CWA Section 401 certification. 404 Permit Strategy, p. 3. However, the Plan and the CARP contain several statements suggesting that Covered Activities not authorized through the Corps' general permits would require individual water quality certification. *E.g.*, Plan, p. 8-4; CARP, p. 2-3. In addition, the CARP states that Covered Activities having impacts to waters of the State, but not to waters of the United States, must submit an application for WDRs to the Regional Board. CARP, p. 2-4. However, the CARP also states that the CARP application fulfills the requirement to submit a report of waste discharge for WDRs under California Water Code Section 13260. CARP, p. 7-2. 14-4

We recommend the following:

- The resource agencies and the Permittees should enter into an MOU or similar agreement, as contemplated during the planning of the PCCP, that provides for programmatic water quality certification and clearly defines any activities that would not be covered by the programmatic certification. *See* CARP, pp. 2, 2-1.

- If Covered Activities would require individual water quality certification in some cases, the MOU should establish an expedited procedure and timeline for granting certification. The CARP application should be deemed to fulfill the requirement for an application for water quality certification for such projects.

- The Permittees should consider applying for general WDRs from the Regional Board for Covered Activities that involve impacts to waters of the State but do not involve impacts to waters of the United States.

- For Covered Activities that involve impacts to waters of the State (only), but do not qualify for coverage under general WDRs, the MOU should establish an expedited procedure and timelines for processing of WDRs.

AKT also recommends the Permittees seek clarification from the Regional Board that Covered Activities would not be subject to the Procedures for Discharge of Dredged or Fill Material to Waters of the State (Procedures) recently adopted by the State Water Resources Control Board, regardless of whether these activities require subsequent, project-level review by the Regional Board. The Procedures contain mitigation requirements, application requirements (including requirements for preparation of an alternatives analysis), definitions and procedures for delineating aquatic resources, and other provisions that may conflict with the process established under the Plan, the CARP and the 404 Permit Strategy.[4] *See*, *e.g.*, Procedures §§ II, III, IV.B.3. Given the extensive regional planning effort that has gone into the preparation of the PCCP, the Procedures do not add any environmental or administrative benefits and should not apply.

14-4 cont.

At minimum, we recommend that the Permittees, the Corps and the Regional Board enter into a MOU that clarifies that the Plan is an approved "watershed plan," as that term is used in the Procedures, and that therefore Covered Activities requiring individual permitting will be exempt from the Procedures' requirements for preparation of an alternatives analysis and from the application requirements related to mitigation; and that compliance with the avoidance, minimization and mitigation requirements of the Plan and the CARP will be deemed to constitute compliance with the analogous provisions of the Procedures and their process for project review. *See* Procedures §§ IV.A.1.g.iii, IV.A.2.b, IV.B.

5. ESA Section 7 Consultation

The Corps' 404 Permit Strategy states that the Corps will request the Service and National Marine Fisheries Service to consult once, programmatically, for all Covered Activities that require a CWA Section 404 permit, thus eliminating the need for individual project-by-project consultations under ESA Section 7. AKT strongly supports this approach. By definition, the potential impacts of any Covered Activities authorized by the Corps under the 404 Permit Strategy will be fully analyzed and addressed in the biological opinion prepared for the Plan. Further consultation under ESA Section 7 is unnecessary and would serve no purpose as long as the Plan remains in effect.

14-5

[4] The Procedures will take effect nine months after they are approved by the State Office of Administrative Law. Procedures, § I.

14-6 We recommend the Service clarify whether any additional process will be required to demonstrate compliance with ESA Section 7 for subsequent individual permit decisions authorizing Covered Activities, other than documentation that the activity is consistent with the Plan. If additional process is required, we recommend clarifying what the process will be — for instance, would the Corps request that the Service "append" a proposed permit action to the programmatic biological opinion for the Plan? We also recommend the Corps and the Service establish a process for expediting further Section 7 consultation in the unusual event that a proposed Section 404 permit would authorize activities that have the potential to affect listed species in a manner or to an extent not fully considered in the biological opinion for the Plan. Finally, we recommend the Final EIS/EIR reflect that the document is intended to support a programmatic consultation by the Service that addresses all Covered Activities.

6. NEPA Compliance

14-7 The Plan and the 404 Permit Strategy state that additional project-level review under NEPA may be required for certain Covered Activities with project-specific effects not analyzed in the EIS/EIR. AKT recommends that the EIS/EIR clarify that, if subsequent NEPA review is required, it should focus on any potential impacts of the Covered Activity that have not been analyzed already in the EIS/EIR. *See* Council on Environmental Quality, Memorandum for Heads of Departments and Agencies: Guidance on Effective Use of Programmatic NEPA Reviews, p. 30 (Dec. 18, 2014), *available at* https://ceq.doe.gov/docs/ceq-regulations-and-guidance/Effective_Use_of_Programmatic_NEPA_Reviews_Final_Dec2014_searchable.pdf (the CEQ 2014 Memorandum). In addition, a project-specific EIS should be required only if the activities in question would have one or more new significant effects that were not previously analyzed in the EIS/EIR. Significant effects of a project that have already been disclosed and considered in the EIS/EIR do not, by themselves, require preparation of a new EIS. *See* CEQ 2014 Memorandum, p. 42 ("[T]he appropriate question is not if there is a significant impact from the proposed action, but if there is a new significant impact that was not already considered and addressed in the programmatic review.").

7. CEQA Compliance

14-8 The EIS/EIR and the PCCP documents state that a project-specific CEQA document is required for issuance of water quality certifications, WDRs or lake or streambed alteration agreements if the EIS/EIR does not address project-specific impacts. We anticipate that, for private Covered Activities, the County or the City of Lincoln would ordinarily be the lead agency under CEQA and would prepare whatever documentation is required to comply with CEQA at the project level. We anticipate that this project-level review would tier from the EIS/EIR, addressing project-specific impacts in greater detail as necessary, and that the Regional Board and/or CDFW would be able to rely on the lead agency's CEQA document in issuing permits for the Covered Activity.

8. Conclusion

AKT appreciates the County's and the Service's consideration of its comments, and we look forward to working with the Permittees and the resource agencies to ensure that the PCCP achieves its goals for protection of sensitive resources and streamlining of federal and state permitting processes. Please feel free to contact me at the number above, or Ron Bertolina of AKT at (916) 383-2500, if you have any questions about these comments.

Sincerely,

James F. Rusk
for SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

SMRH:4827-5547-7666.2

cc: Chrysa Demos, President and CEO, AKT Investments Inc.
Ron Bertolina, Vice President and General Counsel, AKT Investments Inc.
Kirk Uhler, Chair, Placer County Board of Supervisors, PCCP Ad Hoc Committee
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File No. : 054619

August 7, 2019

BY EMAIL [LISA.M.GIBSON2@USACE.ARMY.MIL] AND U.S. MAIL

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U.S. Army Corps of Engineers
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Re: Comments on *Western Placer Proposed Section 404 Clean Water Act Permit Strategy Aligned with the Placer County Conservation Plan* (SPK-1995-00386 and SPK 2005-00485)

Dear Ms. Gibson:

On behalf of Placer Vineyards, LLC (PVLLC), we offer the following comments on the proposed *Section 404 Clean Water Act Permit Strategy Aligned with the Placer County Conservation Plan* (inclusive of the regional and programmatic permit authorizations and letter of permission procedures described therein) (Permit Strategy), as and described in and released for review under the public notice(s) described above.

15-1 Because the Permit Strategy is intended to implement the *Placer County Conservation Plan* (PCCP) and *Western Placer County Aquatic Resources Program* (CARP), we believe our comments on the PCCP and the CARP may be relevant to the Permit Strategy. Our comments on those documents will be submitted to Placer County (County) on or before August 20, 2019. We request the Corps to take those comments into consideration, when they are submitted, with respect to the Permit Strategy.

15-2 In the meantime, we are concerned about the limitation included in Section 6(3)(b) of the proposed Programmatic General Permit (PGP), which prohibits the use of the PGP for fill of vernal pool waters of the U.S. within the Lower American River 8-digit hydrologic unit code watershed 1802011. The PVSP is almost entirely within this watershed. Given that a significant portion of the waters of the United States to be filled in connection with the PVSP are vernal pools, we respectfully request this limitation to be deleted or its applicability limited to projects other than the PVSP or its off-site infrastructure.

Thank you for the opportunity to comment on these matters. Please feel free to call if you have any questions.

Sincerely,

R. Clark Morrison

RCM/sbl

cc (via email):
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Mike Thomas (USFWS)
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August 20, 2019

BY EMAIL

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Re: Comments on *Placer County Conservation Plan*

Dear Ms. Herrington:

On behalf of Placer Vineyards Development Group, LLC and its members, we offer the following comments on the proposed Placer County Conservation Plan (PCCP), inclusive of the County Aquatic Resources Program (CARP).

A. Background

In 2006, the owners of 23 properties within the Placer Vineyards Specific Plan (PVSP) collectively submitted a package of applications to the U.S. Army Corps of Engineers (Corps) for authorizations to fill waters of the United States in accordance with Section 404 of the Clean Water Act. Over the following decade, the owners worked with the Corps, EPA, the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service in their respective permit evaluations.

Following completion of NEPA review, completion of an exhaustive analyses of on-site and off-site alternatives in accordance with the Section 404(b)(1) Guidelines, and preparation of the Placer Vineyards Mitigation Strategy, the federal agencies issued two programmatic authorizations for PVSP: The Corps' programmatic record of decision, dated September 30, 2015, (ROD), and the Service's programmatic biological opinion, dated April 1, 2016, as subsequently amended (PBO). The Corps also issued a regional general permit (SPK-1999-00737, January 12, 2017) allowing fill associated with PVSP backbone infrastructure (RGP). These documents provided a foundation for certain projects within PVSP to secure project-level authorizations prior to adoption of the PCCP and established a framework for later projects within PVSP to proceed under the auspices of the PCCP.

With respect to avoidance, the Corps determined that it is practicable to to accommodate five additional avoidance areas within PVSP development, thus reducing the overall amount of fill required to develop the PVSP. In its ROD, the Corps determined that the PVSP, as modified by this combined reduction (referred to the in the EIS as Alternative 6), constitutes the environmentally preferable alternative and that other alternatives evaluated in the EIS are impracticable. Because the screening criteria used by the Corps in the EIS considered questions of practicability under the Section 404(b)(1) guidelines (i.e., technology, cost and logistics), the Corps further determined that, if individual projects within the PVSP are consistent with Alternative 6, "detailed alternatives information would not be required by the Corps" on a project-by-project basis (ROD, page 18). Instead, the Corps concluded, "the focus will be on minimizing impacts to waters of the U.S. in demonstrating compliance with the 404(b)(1) Guidelines. ROD, p. 17.

In its ROD, the Corps also required implementation of a mitigation strategy for Placer Vineyards (Mitigation Strategy) based upon the mitigation ratios now built into the draft PCCP, but requiring an additional 0.5:1 of compensatory mitigation (assuming participation in an ILF program rather than reliance on permittee-responsible mitigation) to reflect temporal loss and risk and uncertainty perceived by the Corps to arise out of the fact that certain projects within the PVSP might initiate grading prior to adoption of the PCCP. In adopting the Mitigation Strategy, as modified in the ROD, the Corps reserved the right to "reconsider the adequacy of the Strategy as new regulations or guidance is implemented but expects that such reconsideration will not be necessary for 10 years." Because the supplemental mitigation (i.e., 0.5:1) imposed by the Corps was based upon temporal loss and risk and uncertainty in the absence of the PCCP, we understand that, post-PCCP, projects within the PVSP will mitigate at the 1.5:1 ratio described in the CARP, the same as any other covered activity.

The Corps has now begun to issue both RGP authorizations and individual permits for the first phase of projects under the PVSP. With one exception (Placer 400) and it's associated infrastructure, all projects within the PVSP, both pre- and post-PCCP, are expected to satisfy their mitigation obligations by paying PCCP fees through the in-lieu fee program structures being established the Corps and Placer County as more fully described in Section C.7 below.

B. PVSP Relationship to the PCCP and the CARP

The PBO issued by USFWS was intended to address PVSP development occurring prior to adoption of the PVSP. As stated on page 5 of the PBO, "[u]nless and until the PCCP is approved, the PBO will continue to be used until the last PVSP project or the impact limits established [under the PBO] have been met, whichever comes first. After the PCCP Section 10 permit issued by [the] Service, all remaining PVSP projects will receive take exemption through the PCCP. At that time, the PVSP PBO will be replaced by the biological opinion for the PCCP." This transition notwithstanding, the PBO anticipates that all compensatory mitigation provided by PVSP will be incorporated into the PCCP reserve system.

16-1 The draft PCCP published for public comment includes two sections specifically describing how PVSP development will be treated under the PVSP as reflected in the PBO. In particular, Section 8.9.5 describes the on-ramp established under the PBO. Importantly, Section 8.9.5 acknowledges that, because the land plan for PVSP was finalized prior to adoption of the PCCP, "the avoidance and minimization measures and conservation requirements in the PVSP Mitigation Strategy differ slightly from the 'Conditions on Covered Activities' described in Chapter 6 of the PCCP." These differences, which are accommodated by and integrated into the draft PCCP, are described in Appendix N to the PCCP. As stated in the CARP's executive summary, "CARP avoidance, minimization and mitigation requirements are derived from the HCP/NCCP's requirements and do not add to them." Accordingly, the CARP as it applies to post-PCCP development will incorporate the provisions of Section 8.9.5 and Appendix N.

C. PVSP Comments on the PCCP

16-2 1. *Section 5.3.1.5.2.* This section (and others) outlines the 2-year proposed maximum extent of take as *"no more than 1,800 acres of vernal pool complex and 80 wetted acres of vernal pool constituent habitats (15 percent of the total allotted effects) will be authorized for take under the Plan until the advance acquisition goal described above has been met."* We have concerns about whether this limitation is too restrictive and might impair the ability of the PCA to issue permits on an ongoing basis depending on market conditions. To avoide the possibility of a rolling moratorium throughout the plan area, we recommend that greater flexibility be built into these requirements.

16-3 2. *Section 5.3.1.6.10.* This section outlines the initial survey phase for covered vernal pool invertebrates. During this time "*all Covered Activities affecting vernal pool branchiopod sites*" will be required to complete protocol level surveys for listed vernal pool branchiopods. Given that PVSP projects will be initiated quite soon, we presume this requirement would not apply to PVSP, and we request clarification on this point. Based upon our current construction schedule, it will not be possible to accommodate a massive dry season survey (i.e., once the the habitat is dry next year) without delaying some PVSP projects for an additional season (i.e., into 2021).

16-4 3. *Section 5.3.3.3.1.* This section includes success criteria/performance standards for vernal pool restoration. Vernal pool restoration is fundamental to the success of the PCCP. There are many problems with the proposed standards that would result in significant (and unnecessary) failures with approved vernal pool restoration projects. That is, failures would result solely because of the way these performance standards have been written, not because of the quality of the habitat restored. Just a few of the problems include an excessive number/duplicative standards, lack of clarity around group vs. individual standards, and hydrology requirements that could fail a

16-4 cont.

restored vernal pool that otherwise functioned with high native plant diversity/cover and supported listed vernal pool invertebrates. It is imperative that vernal pool performance standards and reference pool selection proceed on a project by project basis and not a one-size-fits-all approach.

16-5

4. *Section 6.3.5.6.2.* Regarding Swainson's hawk nests, this section states that "*If the active nest site is shielded from view and noise from the project site by other development, topography, or other features, the project applicant can apply to the PCA for a reduction in the buffer distance or waiver of this avoidance measure.*" Swainson's hawks thrive in Central Valley farmlands and nest in urban areas where the noise of large farm equipment, homes, and freeways is always present. The implementation of such a significant buffer, with relief only when a nest is "shielded" from view and noise, could stop a project for a season until nesting was complete the nest tree could be removed. Additionally, if the nest tree would be protected in a riparian corridor, this requirement could delay a project for multiple seasons if the hawks decided to nest there in consecutive years. The waiver should be available regardless of shielding based on project and nest-specific information.

16-6

5. *Section 6.3.5.9.1.* This section outlines the pre-construction survey requirements for tricolored blackbird. The measure appears to require monthly surveys March through July in the year a project is constructed and then three surveys within 15 days prior to the start of construction, thereby pushing the start of the construction season for applicable projects until July. If that is the case, why add the cost to the applicant of the earlier surveys? Also, consider that holding the start of all construction in the county to July because it will impact an aquatic/wetland complex or another of the listed vegetation communities in the measure is unreasonable given other limitations on the construction season. The measure should also clarify that no further surveys are needed if the first survey indicates the listed vegetation communities within the project site do not actually provide nesting habitat for the species.

16-7

6. *Section 8.9.5.1.* This section states that, upon issuance of the ITP for PCCP, "take authorization for the PVSP will expire" for any PVSP project that has not already been appended to the PBO. Given that the PBO did not include take authorization, this sentence is not entirely accurate.

16-8

7. Section 8.9.5.2 through 8.9.5.7. This language was written under the assumption that interim PVSP projects would provide permittee-responsible mitigation (PRM) projects that would later be folded into the PCCP reserve system. Since that time, the County, the Corps and the Service have developed an in-lieu payment structure that will be used by PVSP interim

16-8 cont.

projects. This structure includes a combination of the Corps' in-lieu fee program (ILF) and a supplemental in-lieu fee to be paid by PVSP owners to the County to address preservation (i.e., land cover mitigation) requirements established under the Mitigation Strategy. This alternative structure, under which the agencies have already begun to issue authorizations, should be reflected in Section 8.9.5.

16-9

8. *Appendix N (in general).* Appendix N as published appears to reflect our understanding regarding the implementation of PVSP projects under the PVSP. Please clarify the penultimate sentence in Section N.2 (Covered Activities), however, to confirm that the specific list of PVSP infrastructure described there contains *examples* of infrastructure types that will be covered by the PCCP and may not include all PVSP infrastructure types covered by the PVSP. Please also modify the second sentence of N.3.1, to add a reference to figures 1 and 2, as follows: "Because the on-site avoidance requirements for PVSP (Figures 1 and 2) were established …" Appendix N should also acknowledge that, if there are changes to Figures 1 or 2 over the life of the PVSP, such changes will not require an amendment to the HCP/NCCP.

16-10

9. *Appendix N (conditions on covered activities).* Appendix N properly notes that PVSP's on-site avoidance requirements will differ from those set forth in Sections 6.3.2.1.1 (vernal pool avoidance), 6.3.2.2.1 (riverine and riparian avoidance), 6.3.2.3.1 (valley oak woodland avoidance) and 6.3.3.1 (stream system avoidance). It appears to us that this section should also reference Section 6.3.2.1.2 (aquatic/wetland complex avoidance). Moreover, because it is unclear to us whether list completely identifies all specific sections of the HCP/NCCP that may vary from Appendix N, please also add a sentence stating that, *"Wherever there is a conflict between the provisions of Appendix N and other provisions of the HCP/NCCP (including, without limitation, the provisions of Sections 6.3.2.1.1 (vernal pool avoidance), 6.3.2.2.1 (riverine and riparian avoidance), 6.3.2.3.1 (valley oak woodland avoidance), 6.3.3.1 (stream system avoidance) and 6.3.2.1.2 (aquatic/wetland complex avoidance), the provisions of Appendix N will control."*

16-11

10. *Appendix N (relationship to PVSP RGP).* The PVSP RGP includes a variety of minimization and other measures associated with the construction of PVSP backbone infrastructure, some of which may vary from the minimization and other measures described in Chapter 6.3. Appendix N should indicate that, for activities covered by the PVSP RGP, minimization will occur in accordance with the provisions of that authorization.

16-12 11. *Section 2.6.1.* This section indicates that PVSP will be a covered activity "[t]o the extent that [it] is consistent with the goals of the PCCP …" Please clarify that, as reflected in Sections 8.9.5 and Appendix N, PVSP has been determined to be consistent with the goals of the PCCP.

16-13 12. *Section 2.7 (activities not covered).* Item 8 under Section 2.7 should include a notation that PVSP coverage will be as provided in Sections 8.9.5 and Appendix N.

D. PVSP Comments on the CARP

16-14 1. The CARP itself should specifically acknowledge its deference to and incorporation of the provisions of PCCP Section 8.9.5 and Appendix N. This acknowledgment should be made as a general statement but also specifically with respect to the application of CARP Section 6.3 (Regulation of Activity within the Stream System).

16-15 2. The CARP states that "*Once the application is deemed complete, the Program Biologist (PB) will conduct a site assessment to evaluate the extent of aquatic resources that are present. If a delineation has been conducted, the Local Jurisdiction will review the delineation, make suggested changes if necessary, and submit it to the USACE for verification.*" This process appears duplicative for wetland delineations conducted by qualified biologists. If the delineation has to pass through a verification at the PCA level and then a verification at the USACE level (in addition to any verification effort by the RWQCB under the new state dredge and fill procedures), the process will be significantly slower than it is today.

16-16 3. Section 6 of the CARP should explicitly acknowledge the provisions of the ROD with respect to PVSP avoidance and minimization under the Section 404(b)(1) Guidelines. That is, given the tremendous amount of work reflected in the EIS with respect to alternatives, the CARP should acknowledge that, with respect to PVSP, "the focus will be on minimizing impacts to waters of the U.S. in demonstrating compliance with the 404(b)(1) Guidelines" as stated on page 17 of the ROD.

16-17 4. Moreover, because the PVSP has been designed and permitted to incorporate low impact development strategies and certain best management practices,we request confirmation that LIDs and BMPs required under the CARP will not be applied in a manner that conflicts with or is duplicative of those already adopted for PVSP development. .

16-18 5. The CARP should acknowledge that, for PVSP projects undertaken following adoption of the PCCP, compensatory mitigation will be required at the 1.5:1

16-18 cont.

level reflected in the CARP as applied to all other covered activities. That is, the additional 0.5 (ILF) -0.7:1 (PRM) mitigation identified in the ROD will not be required for PVSP projects whose impacts will be mitigated through the PCCP and the CARP.

16-19

6. The CARP should acknowledge that the PVSP backbone infrastructure RGP will continue in effect. That is, PVSP projects may elect to rely on the Permits and Procedures, but this does not preclude reliance on the PVSP RGP for qualifying infrastructure projects. To the extent that the Permits and Procedures limit their application to "single and complete" projects, those authorizations should make clear that individual projects occurring within the PCCP are not precluded from consideration as single and complete projects due to the fact that they are occurring within the context of a broader specific plan.

16-20

7. Section 5.2 of the CARP should explicitly allow use of existing PVSP studies and information to satisfy the content requirements for PVSP projects operating under the CARP. This should include, for example, material from the PVSP EIS, prior delineations and site assessments, materials included in prior individual permit applications or the PVSP RGP, and other such materials.

16-21

E. PVSP Comments on the Draft EIR/EIS.

There are inconsistencies and duplicative requirements in Mitigation Measure BIO-3. Some requirements like "trees will be removed in pieces, rather than felling the entire tree" lack an explanation as to why. The use of night vision goggles will not allow a biologist to identify bats to the species level and identification to species isn't needed to implement the protective measures. The measure references a bat biologist in one location and a qualified biologist in another. As written, this measure is confusing. We suggest a thorough review the of the requirements being proposed, and a consolidation of general measures, measures for bridges and structures, measures for trees, measures for occupied bridges and structures, and measures for occupied trees.

Thank you for the opportunity to comment on the PCCP and the CARP. We look forward to working with you to address these thoughts.

Sincerely,

R. Clark Morrison

RCM:mp

cc: Greg McKenzie
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August 7, 2019

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Comments on the Draft PCCP and Draft EIS/EIR

Thank you for the opportunity to comment on behalf of both the Mother Lode Chapter of the Sierra Club and myself, as a member of the PCCP Biological Working Group from 2000-2019. These comments are generally directed to the Draft PCCP itself, but the intent is that any changes that are accepted would result in modifications in appropriate locations in the Final EIS/R. Recommended changes are made in two locations in the comments, on page 3 and page 7, but are numbered in combination. I have attached four addendums, each of which is one of the documents referenced in my comments but not found in the PCCP appendices. Please ensure that those addendums are available to those who respond to my comments.

The extent to which the PCCP is successful in meeting its conservation goals will largely depend on its ability to ensure that over time the two large geographic areas of the Plan retain their distinct character and purposes. The Potential Future Growth Area (PFG) is to be the location of future development, which will generate mitigation fees to enable the Placer Conservation Authority (PCA) to acquire land for building and managing a Reserve System in the Reserve Acquisition Area (RAA), where reserves will benefit from size, connectivity, and freedom from the harmful effects of adjacent development.

Issue: Potential Urban Development in the Reserve Acquisition Area

Although the RAA is not intended to accommodate urban development, if it does intrude there are a number of ways in which urban development in the RAA would impair the ability of the PCCP to meet its conservation goals:

- Edge effects: Reserves are harmed by edge effects from adjacent development, among them changes in hydrology (DEIS/R p. 4.6-3) and disturbances by edge-dwelling species (such as cowbirds) and domesticated animals (*Report of the Science Advisors*[1] p. 8).

- Loss of connectivity: Urban development in the RAA would consume agricultural land and threaten the connectivity between habitat reserves that is critical to the

17-1

[1] *Report of the Science Advisors, For the Placer County Natural Communities Conservation Plan and Habitat Conservation Plan,* January 8, 2004, Peter Brussard, et al. Attached to these comments as Addendum 1.

interpopulation dispersal needed for species persistence (*Report of the Science Advisors*, p. 7). Where reserves are not directly connected, the conservation strategy relies on agricultural land to provide that connectivity (PCCP p. 4-28).

17-2

- No surplus of land in the RAA: Almost 96 percent of the RAA needs to be acquired through fee title or conservation easement to meet conservation goals (PCCP p. 5-68). Since the PCCP relies on willing sellers, some land may not be able to be acquired, so maintaining a margin is critical. There is no surplus of land for development.

17-3

- Inflation in the cost of land: If any portion of the RAA is designated for uses beyond existing ones, it will unleash speculation in the real estate market that will increase the cost of land for acquisitions. PCCP fees would have to be increased in order to maintain the funding levels needed for the Plan to meet its conservation goals.

The RAA: a key component of the regional LEDPA and the USACE 404 permitting strategy

DEIS/R Appendix C explains how the PCCP would incorporate the USACE 404 Permitting Strategy. The RAA and the PFG together are intended to provide a regional LEDPA that is compliant with CWA 404(b) (1) and ESA Section 10, obviating the need for the usual process of ESA Section 7 consultation and the analysis of alternatives. Appendix C p. 5 refers to a 2006 document written by the USEPA Wetland Regulatory Office and a five-agency workgroup.[2] It is attached to these comments as Addendum 2. Here is an excerpt:

> *The regional LEDPA methodology concentrates avoidance of existing aquatic resources and endangered species habitat in the conservation envelope while development and associated impacts are concentrated in the development envelope. This framework provides avoidance and protection of thousands of acres of vernal pool grasslands, riparian forests, and oak woodlands within the conservation envelope and thousands of acres of development to meet County and City needs within the development envelope.*

The regional LEDPA relies on a regional avoidance strategy rather than the usual project level avoidance. In the PCCP, consistent with the USACOE 404 permitting strategy, the RAA is intended to serve as the "conservation envelope," free of development, while the PFG is the "development envelope" where impacts occur.

The PCCP should ensure that the RAA is not encroached upon by urban development

Three land use jurisdictions are adjacent to the RAA, one of which (City of Roseville) is not currently a permittee or Participating Special Entity, thus not bound by the PCCP. Over the 50-year term of the permit, as build-out of general plans occur political and economic pressures on
17-4 the City of Roseville, the City of Lincoln and Placer County to approve development in the RAA can be expected.

Given the risks and repercussions, why is it that the Draft PCCP does little to alleviate the possibility that urban incursions will occur in the RAA? There are multiple statements throughout the Draft PCCP and the DEIS/R that it is the intent of the Plan that the RAA will be reserved for acquisitions and the existing rural/agricultural uses while the PFG will be the

[2] *A Proposed Methodology for a "Regional LEDPA" Determination: Permitting under CWA Section 404 in Western Placer County (*April 6, 2006) Tim Vendlinski – USEPA Wetland Regulatory Office, and a five-agency workgroup

location of development (e.g. PCCP p. 5-68). However, this commenter has been unable find any specific language that addresses the threat of unplanned urban intrusion into the RAA, nor consequences should it occur in the future.

The PCCP does provide for permit suspension or revocation (PCCP p. 8-13), but the section is short on specific failures that would trigger the loss or suspension of the permit. Only noncompliance with "Stay Ahead" is mentioned, which is the responsibility of the PCA. But permittees with land use authority are no less likely to be out of compliance with requirements. There must be measures to make any contemplated urban intrusion into the RAA more difficult, and provide consequences should it occur.

Recommended Changes (continued on page 7):

17-4 cont.

1) Each permittee with land use authority should be expected to adopt an amendment to their general plan or adopt an ordinance with a policy committing to the conservation goals and strategies of the PCCP. For the City of Lincoln, the policy should also specifically preclude approval of any project requiring annexation into the RAA. For the County, the policy should preclude approval of greater density or intensity of land use in the RAA, allowing only rural/agricultural development that is permissible under existing land use designations.

2) The City of Roseville, which is currently a non-permittee, has indicated an interest in annexing land in the PFG and obtaining take coverage by applying to become a Participating Special Entity (PCCP 6.2.3). As a condition of the application, 6.2.3 should include the requirement that a general plan amendment or city ordinance should be adopted committing the City to forgo any annexation in the RAA for the term of the permit.

3) Permittees with land use authority should request that Placer LAFCO adopts a policy that supports the conservation goals and strategies of the PCCP, and will not approve the expansion of urban services, spheres of influence, or annexations into the RAA for the term of the permit.

4) 8.2.6.8 *Permit Suspension or Revocation* should include a statement that the section applies if any jurisdiction with land use authority approves development in the RAA that is not consistent with existing rural/agricultural land use designations. If it is a permittee, any take permits issued to the permittee under the PCCP will be revoked. Whether the offending jurisdiction is a permittee or not, there will be a suspension of the issuance of any new permits under the PCCP until analysis is completed that provides a remedy in which the Plan can still meet its conservation goals (for example, shrinkage of the PFG and expansion of the RAA).

Issue: Indirect Effects Avoidance in the PFG

17-5 Claims of avoidance of indirect effects in the PFG is problematic from a biological perspective, whether it is proposed as qualifying for basic Permanent Effect Avoidance within a project, or an addition to the Reserve System. Below is the required analysis and criteria that currently must be met to qualify for avoidance (PCCP, p. 6-26), followed by comments.

17-5 cont.

6.3.1.3.1 Permanent Effect Avoidance in the PFG

To qualify as "avoided," land within the PFG must meet all the applicable natural community and Covered Species habitat requirements in Section 6.3.2, Conditions to Avoid and Minimize Effects on Specific Natural Communities, and Section 6.3.5, Conditions to Minimize Effects on Covered Species. Avoided lands must also meet at least one of the following criteria:

1. It is a minimum of 200 contiguous acres.

2. It is located adjacent to the RAA or adjacent to an existing reserve that together totals at least 200 acres (either a HCP/NCCP reserve or a non-HCP/NCCP reserve protected in perpetuity).

3. It is located in or abuts the Stream System boundary.

4. It contributes to meeting the goals and objectives of the Plan as described in Chapter 5, Conservation Strategy, and as determined by the PCA (i.e., the PCA may want to acquire the avoided area for the Reserve System).

5. It is set aside to avoid occurrences of certain Covered Species or sensitive land-cover types per the conditions in this chapter.

6. It is required to be avoided by the PCA.

The avoidance determination, including an evaluation of direct and indirect effects, will be made by the Permittee with jurisdiction over the project and will take into account such factors as the avoidance area's relationship to existing or potential reserves and Stream System boundary. The Permittee may consult the PCA for guidance in determining the extent of the reduction of effects.

<u>An avoided area of 200 acres may be too small</u>

While Criteria 1 is consistent with the *Report of the Science Advisors* specific to 200 acres as the minimum size for a vernal pool preserve (p. 33), a later Wildlife Agencies comment letter[3] stated that 200 acres within an area of urban development would be too small to avoid being susceptible to edge effects. Here is an excerpt from those comments:

> *We do not envision a 200 acre parcel, as noted in the Agency Review Draft, as a minimum size for a reserve, to be fully functional and part of a larger conservation strategy when surrounded or nearly surrounded by an urban landscape. The 200 acre minimum preserve size proposed in this Agency Review Draft may only be acceptable within the CO area* [the precursor of the RAA], *not within an urban matrix unless it has exceptional specific importance.* (p. 6)

<u>Shape must be considered</u>

The shape of the avoided area is also an important consideration. A report entitled *Effectiveness of Small Vernal Pool Preserves*[4] named the relationship between preserve shape and function as one of its key findings:

[3] Untitled multi-agency comment letter dated June 1, 2005, the first sentence of which reads: *The U.S. Fish and Wildlife Service (Service), the National Marine Fisheries Service (NMFS) and the California Department of Fish and Game (DFG) (collectively, the Wildlife Agencies) have Reviewed the Agency Review Draft of the Placer County Conservation Plan (PCCP), Western Placer County, dated February 22, 2005 (hereafter the Agency Review Draft).* The letter is attached to these comments as Addendum 3.

[4] *Effectiveness of Small Vernal Pool Preserves*, prepared for Placer Land Trust by Vollmar Consulting and AECOM, December 2009. Attached as Addendum 4.

17-5 cont.

> *Small preserves have a much higher edge to area ratio, especially for preserves that are more linear in shape, as well as a much shorter distance into the center of the preserve. As a result, as shown in this study, small preserves, especially those in proximity to moderate to high density residential areas, are generally prone to much higher levels of human and domestic animal impact as compared to large preserves or more remote small preserves.* (p. 18)

> *Preserves varied in shape from square or oval to linear; preserve shape is an important consideration [as is] size; more linear preserves have a greater edge to area ratio and thus greater potential edge effects.* (p. 20)

The *Report of the Science Advisors* also notes that:

> *Species that are susceptible to the deleterious consequences of edge are more likely to retain populations in habitat patches that are rounded or squared than in patches that are elliptical or rectangular when those patches are surrounded by disturbed or developed land. In such circumstances, small, linear strips of habitat that maximize the ratio of edge to area are least desirable.* (p. 8)

Biologists quantify edge effects by calculating the edge to area ratio. For example, if two reserves are of equal acreage, the reserve that is in the shape of a circle will have a lower edge to area ratio and thus less exposure to edge effects than the reserve that is rectangular in shape. The Plan should adopt an edge to area ratio standard to help determine whether an avoided area is likely to suffer from edge effects. If the 200-acre criteria is to be retained, it should be modified to include an evaluation of whether its shape would make it susceptible to indirect effects and thus disqualify it as avoided. The edge to area ratio standard should be applied to both applications for permanent effects avoidance and proposed additions to the Reserve System.

<u>Linkage to other protected habitat by itself is not enough</u>

Criteria 2 and 3, respectively, offer linkage to an existing reserve to qualify for meeting the 200-acre threshold, or simply qualifying by linking to the Stream System, regardless of the size of the avoided area. However, such linkage may not avoid indirect effects.

As discussed above, even if an avoided area within a project is linked to other conserved habitat, if the avoided area is linear or otherwise has a high edge to area ratio, it should not qualify for permanent effects avoidance.

Another factor that needs to be considered is whether the linkage is to the same habitat (which is preferable), or to similar habitat that is suitable for interpopulation dispersal. If not, the avoided habitat may not be adequate to sustain populations of the covered species, as noted below in the *Report of the Science Advisors*:

> *Interpopulation dispersal is important for regional species persistence. Because of the amount of habitat that already has been developed in western Placer County, populations of most species are badly fragmented. Therefore, it is critical to identify areas that can provide connections between conservation areas to increase the likelihood of successful dispersal ... Landscape linkages function better when the habitat within them resembles habitat that is preferred by target species.* (p. 7)

Meeting the requirements of PCCP Sections 6.3.2 and 6.3.5

To qualify for the avoidance of indirect effects in the PFG, besides meeting one of the six criteria previously discussed, the requirements of Section 6.3.2, *Conditions to Avoid and Minimize Effects on Specific Natural Communities,* and Section 6.3.5, *Conditions to Minimize Effects on Covered Species* also must be met. These requirements are lengthy, detailed and complex in their application, requiring specialized knowledge and experience. It is quite surprising that the Draft PCCP provides for the determination of avoidance of indirect effects to be made solely by the permittee for the project, without even the review and approval of the PCA (PCCP, p. 6-26). It is the PCA that will have independent biologists with the expertise and experience readily available for the surveys and analysis that meet the rigorous requirements of 6.3.2 and 6.3.5.

Potential cumulative effects of project level avoidance

Over the term of the permit, the total amount of land qualifying for avoidance of indirect effects under the current requirements could cumulatively be substantial. While there is an estimate of the total acreage that may be acquired in the PFG for inclusion in the Reserve System (discussed below), there is no corresponding estimate of the total acreage in all projects over build-out of the PFG that may qualify as avoided. Such an estimate may be difficult, as it is unknown the extent to which projects will claim avoidance, but under the current criteria and review process the potential loss of land conversion fees and special habitat fees may be substantial. It may hamper the ability of the PCA to acquire and manage sufficient land to meet conservation acreage targets, as it strives to build the system of interconnected reserves in the preferred location (in the RAA).

17-5 cont.

Implications of adding to the Reserve System in the PFG

Our previously discussed concerns about permanent effects avoidance in the PFG also apply to additions to the Reserve System. Although we are pleased that such additions must be approved by both the PCA and the Wildlife Agencies, we have additional concerns. It is worth repeating that (in addition to protecting the Stream System) the PCCP's fundamental conservation strategy is to establish large interconnected reserves in the RAA, nested in a matrix of agricultural and very low density residential uses—not in the PFG where development will occur.
The extent to which the Reserve System is established within the PFG both reduces the mitigation fees generated by development in the PFG and also shifts a portion of the acreage targets for reserve acquisition from the RAA to the PFG, where habitat values are more likely to be compromised by adjacent development.

Over the term of the permit, the total amount of land added to the Reserve System in the PFG could cumulatively be substantial. The PCCP and DEIS/R provide some vague estimates:

> *A small portion of the Reserve System (approximately 2,000 acres) may be acquired in the PFG.* (PCCP p. 5-68)
>
> *Two thousand acres or more of vernal pool complex and other communities may be acquired in the PFG, primarily in the Valley.* (PCCP p. 5-77)
>
> [Acquisitions in the PFG] are expected to be approximately 2,500 acres. (DEIS/R p. 4.6-3)

Since these are only estimates, they do not represent a cap on the total acreage that may be added to the Reserve System in the PFG. If over the term of the permit the total is considerably larger, the PCCP may not have the ability to build a large system of interconnected reserves within an agricultural/rural landscape, which is fundamental to the regional conservation strategy.

Recommended Changes:

5) When a permittee with jurisdiction over a project applies for permanent effects avoidance, the PCA should conduct the needed surveys and analysis to ensure that requirements under Section 6.3.2, *Conditions to Avoid and Minimize Effects on Specific Natural Communities*, and Section 6.3.5, *Conditions to Minimize Effects on Covered Species* are met. Final approval of the application must be subject to PCA review.

17-5 cont.

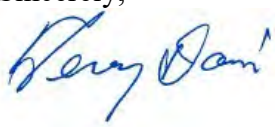
6) Provide language in 6.3.1.3.1 that enables the PCA to consider the shape of the area that claims avoidance of indirect effects. Incorporate an appropriate edge to area ratio standard in evaluating those edge effects. Conduct the edge to area analysis irrespective of the size of the avoided area (even 200 acres can be linear) and irrespective of linkage to other habitat.

7) Adopt a requirement that when avoided habitat claims credit for linkage; it must be shown that the linked habitat is compatible or sufficiently similar so that it provides interpopulation dispersal for covered species.

8) Not including land that is avoided to protect the Stream System, establish a total number of acres that can be added to the Reserve System in the PFG over the term of the permit. Rather than using 2,000 acres as an estimate, set 2,000 acres as the maximum number of acres that can be added to the Reserve System over the term of the permit.

Again, thank you for this opportunity to comment on the Draft PCCP and Draft EIR/S. Please feel free to contact me with any questions or needed clarifications regarding these comments. You can reach me by email at tmdavis317@gmail.com or by phone/text message at 530 210-3600.

Sincerely,



Terry Davis
For the Conservation Committee
Mother Lode Chapter Sierra Club

Four Attachments to Comments:

Addendum 1. *Report of the Science Advisors - For the Placer County Natural Communities Conservation Plan and Habitat Conservation Plan - Planning Principles, Uncertainties, and Management Recommendations,* January 8, 2004, Peter Brussard, et al

Addendum 2. *A Proposed Methodology for a "Regional LEDPA" Determination: Permitting under CWA Section 404 in Western Placer County,* April 6, 2006, Tim Vendlinski (USEPA Wetland Regulatory Office), and a five-agency workgroup

Addendum 3. Untitled multi-agency comment letter on the February 22, 2005 Agency Review Draft of the PCCP. Comment letter dated June 2, 2005

Addendum 4. *Effectiveness of Small Vernal Pool Preserves,* Prepared for Placer Land Trust by Vollmar Consulting and AECOM, December 2009

County of Placer

Natural Community Conservation Plan
Habitat Conservation Plan
Phase One

Report of the Science Advisors

January 8, 2004







Preface *

This document is a requirement of the Natural Community Conservation Plan Act (Act) of 2002 (California Fish and Game Code 2800-2840). Independent scientific counsel and input is required to advise the Natural Community Conservation Plan (NCCP) planning process and help provide sound principles for conservation, species protection, and adaptive management. The Science Advisors were selected by Placer County based on criteria provided by the California Department of Fish and Game (CDFG) in *Guidance for the NCCP Independent Science Advisory Process* (August 2002). Members of the Science Advisors were selected due to their expertise in a particular field of landscape ecology or biology, strong publication record and/or record of scientific leadership, objectivity, and ability to function well within a team. Science Advisor qualifications were reviewed and approved by the CDFG. The following Science Advisors were selected:

Peter Brussard, University of Nevada
Frank Davis, University of California at Santa Barbara
Joseph Medieros, Sierra College
Bruce Pavlik, Mills College
Donald Sada, Desert Research Institute

The Science Advisors met independently to discuss the Placer County NCCP, review available data, and determine their collective recommendations for the NCCP planning process, which are outlined in the following report. This report was prepared by the Science Advisors independent of review or modification from any outside party and has been reproduced in its entirety.

* This preface was prepared by the Placer County Planning Department.

Report of the Science Advisors

For the Placer County Natural Communities Conservation Plan and Habitat Conservation Plan

Planning Principles, Uncertainties, and Management Recommendations

January 8, 2004

Peter Brussard
Frank Davis
Joseph Medieros
Bruce Pavlik
Donald Sada

Table of Contents

Introduction 1

Planning Principles

Planning Phases 1
Network of Conservation Areas.....2
Watersheds.....2
Land Cover Types.....3
Other Coverages.....4
Design of Conservation Areas 6
Linking Covered Species to Conservation Areas 10
Data Gaps and Uncertainties.....14

Major Land Cover Types and their Management

Introduction.....14

Oak Woodlands

Introduction.....15
Vegetation.....15
Wildlife 16
Conservation Issues 16
Conservation Management-Rangelands 17
Conservation Management-Suburban Interface 18

Aquatic and Wetland Ecosystems

Introduction.....19
Vegetation.....21
Fish and Wildlife.....21
Best Management Practices 22

Valley-foothill Riparian Ecosystems

Introduction.....24
Vegetation.....25
Fish and Wildlife.....25
Assessment.....26
Conservation and Restoration.....26

Valley Grassland/Vernal Pool Ecosystems

Introduction.....28
Vegetation.....29
Fauna.....30
Conservation and Management.....31
Restoration and Creation of Vernal Pools 33

Management Goals and Practices 33

Agricultural Ecosystems
Introduction.....35
Vegetation.....35
Wildlife 36
Conservation and Management.....36

Urban Ecosystems
Introduction.....38
Vegetation.....38
Wildlife 38
Conservation and Management.....39
Urban Development BMPs.....41

Adaptive Management and Associated Monitoring
Introduction.....42
Principles.....42
Implementation 44

References
Literature Cited.....45
Additional References.....49

Introduction

Placer County is in the process of preparing a Habitat Conservation Plan (HCP) and a Natural Communities Conservation Plan (NCCP) as a practical way of meeting county-wide conservation challenges. The Natural Communities Conservation Planning process was established in California in 1991 as Assembly Bill 2172 and codified in Section 2800 *et. seq*. of the State Fish and Game Code. The goal of Natural Communities Conservation Planning is to conserve healthy functioning ecosystems and the species that are supported by them. At present the planning process is concentrating on the western part of the county where vernal pool-grassland complexes, streams and their associated riparian areas, freshwater emergent wetlands, and oak woodlands are the primary conservation targets.

Multi-species habitat conservation planning must be done in a context that includes population, community, and ecosystem processes. Although covered species are the focus of habitat conservation plans, the ecological factors that directly or indirectly affect their populations often result from processes that occur at several levels of biological organization. Thus, the development of multi-species conservation plans must proceed from the autecology of individual species through the community- and ecosystem-level processes that affect their populations. Planning also must be done within the constraints of available conservation options.

Unfortunately, no simple recipe exists for this process. Wildlife biologists have traditionally used indicator species (or indicator guilds) to draw inferences concerning habitat conditions; the northern spotted owl in the coniferous forests of the Pacific Northwest is a classic example. However, current data suggest that conservation actions focused on a single species or a small group of species is unlikely to confer protection to all species region-wide. Thus, the County must consider all available biological information on all target species such as habitat preferences, specific mortality risks, and dispersal abilities in the design of the NCCP/HCP.

For many species, the success or failure of the HCP/NCCP will depend upon land use and land management patterns in adjacent counties. A regionally coordinated conservation strategy has a far better chance of achieving biological success than county-by-county planning. NCCP implementation should include the County working closely with state and federal agencies and neighboring counties to achieve coordinated multi-county conservation planning, management and monitoring. Without region-wide planning, even excellent landscape-level plans may fail (Bestelmeyer et al. 2003).

Planning Principles

Planning Phases

Because Placer County covers a large area and conservation is more urgent in some parts of the county than others, it was decided to do the HCP/NCCP in three phases. Phase 1, to be implemented first, includes the western part of the county from the headwaters of the major creeks that drain the area (e.g., Coon Creek, Auburn Ravine Creek, Dry Creek, etc.) to the county lines. Phase II includes the developing areas in the foothills east of the Phase I area (Colfax and Foresthill) plus the area from the Sierra crest east to the Nevada line, excluding the Tahoe Basin.

Phase 3 is the area in the middle of the county that is experiencing much slower rates of growth and contains much public land. This report covers Phase 1 only.

Network of Conservation Areas

The County's first task is to locate conservation areas that will provide adequate representation of the full range of ecosystems and community types in the Phase 1 area. Conserving these areas not only will ensure the continued provision of ecological goods and services from these ecosystems but also will facilitate the redistribution of species along environmental gradients in response to future disturbance and climate change. To facilitate locating conservation areas, a number of geographic information system (GIS) coverages must be developed. One set of coverages should be watershed-based; watersheds are the optimal planning units for aquatic and riparian species and communities. The second should be based on land cover types; these are the most appropriate units for terrestrial species and communities.

Watersheds

There are many advantages to organizing data by watersheds, including:

- In Placer County many of the special-status species and sensitive habitats are associated with aquatic systems.
- Watershed boundaries are coincident with the boundaries of many key ecological processes such as surface water flow and most nutrient inputs.
- Aquatic and riparian systems are good indicators of the health of the overall ecosystem.
- In California, water is the most limited and limiting resource for both the natural and human economy.

Watersheds defined by smaller stream systems (first- to third- or fourth-order) already have been mapped by CalWater. These watersheds range from about 5,000 to 15,000 acres and are relatively large for sub-county level analysis. However, they were used by Davis et al. (1996) for the Sierra Nevada Ecosystem Project, and thus have the virtue of continuity with this major effort and are recommended.

The following landscape-scale indicators of environmental status and quality should be developed for each CalWater watershed in the western part of the county, and metadata for each coverage need to be fully developed. This approach will provide a first cut at the identification of watersheds that are particularly favorable for conservation.

1. General watershed statistics provide necessary background information for subsequent analyses. These include, but are not limited to:

- area
- elevational range
- ecological subregion, section, and subsection (Miles and Goudey 1997)
- average annual precipitation
- means and variances of precipitation and temperature over the past 50 years
- land ownership and land use
- road density
- number of road crossings

2. Aquatic habitat types should be classified according to the system developed by Moyle and Ellison (1991), and crosswalked back to the other habitat classifications used in this analysis (e.g., WHR, see following section). Maps and data required are:

- miles of permanent and intermittent streams
- extent of lakes or other lentic waters
- number of dams and diversions
- miles of free-flowing versus impounded streams
- ditches, canals, reservoirs, and other artificial modifications to the natural flow regime
- extent of Aquatic Diversity Areas
- extent of Pacific River Council Critical Aquatic Refuges
- isolated springs, wet meadows, fens, bogs, seeps

3. Riparian extent and distribution are key indicators of habitat quality within a watershed. Some coverages are available; in most cases accurate information for mapping will have to come from aerial photographs. While the vegetation can be classified initially by using WHR units, field measurements of local habitat conditions, (e.g., the presence of special habitat elements such as snags and large woody debris) ultimately will provide the assessment of habitat quality. Maps and data required:

- extent of riparian habitat

4. Buffering around riparian areas is important for conservation. Fixed-width buffers tend to be more politically expedient, but variable-width buffers are more biologically realistic (Kondolf et al. 1996).

- maps with various fixed buffer widths
- maps with variable buffer widths
- roads in riparian zones as defined by both vegetation type and by various buffer widths

These GIS coverages should be evaluated to determine the conservation value of the watersheds in western Placer County. The watersheds need to be ranked by a clearly described protocol, and high-ranking areas can be considered to be high priorities for management as conservation areas.

Land Cover Types

Watersheds have two major limitations as conservation planning units; terrestrial vegetation types do not stop at watershed boundaries, and many species move freely from one watershed to another. Thus, a second set of coverages must be developed for land cover types.

1. Land cover composition and pattern will be a mosaic of native and cultural vegetation types. Dominance of agricultural or other human-modified ecosystems not only reflects land use pressure but also the potential for erosion and low water quality (Hunsaker and Levine 1995). The most useful classification scheme for land cover is the California Department of Fish and Game's California Wildlife Habitat Relations (WHR) (Zeiner et al. 1990). In addition to native vegetation, WHR cover types include cultural

vegetation such as pasture, cropland, orchard-vineyard, and urban. The WHR coverage needs to be prepared at the same scale so it can be overlaid on the watershed maps, and summary statistics (e.g., X% blue oak woodland, Y% orchard-vineyard, etc.) need to be prepared for each cover type in western Placer County. If more detailed coverages than WHR become available (e.g., Cal Veg), the same procedure should be followed for them as well. Maps and data analyses required include:

- land cover
- acreage and percentages of urban, agricultural, and natural vegetation
- acreage and percentages of different types of natural vegetation
- areas with large size classes of oak woodlands

2. Land cover patch sizes are important predictors of the habitat value of a given watershed to a particular species or group of similar species (Ritters et al. 1996). In general, large habitat patches support higher densities and diversities of plants and animals than do small patches. Maps and data analysis required are:

- cover types
- frequency histograms of WHR cover type patch sizes

3. Small patch communities. Some species of conservation concern are confined to small community types of a few acres or less that are imbedded in larger land cover types. These species, such as many rare plants, invertebrates, reptiles, and amphibians, often have low dispersal powers. Maps and data required are:

- soils
- geology
- maps and extent of serpentine/gabbro substrate, if any
- maps of caves, cliffs, and rock outcrops

The Nevada County Natural Resources report obtained much of the information on small patch ecosystems by digital orthophotos and field mapping (Beedy and Brussard 2002). A similar process should be used by Placer County.

Other Coverages

In addition to watersheds and land cover types, a number of other coverages will be necessary to develop a conservation network.

1. Percentage of land in public ownership or private protected status within western Placer County provides an indication of the feasibility of aggregating large blocks of land into conservation areas. Lands in conservation easement status adjacent to protected public lands (e.g., state parks and wildlife areas) have especially high potential for inclusion in regional conservation planning efforts. Data and maps required:

- extent of public lands and private conservation easements
- extent of sites given high priority by conservation NGOs (e.g., TNC, local land trusts, etc.)
- average parcel sizes of private land not in conservation easements
- number of owners (often the same individual owns multiple adjacent parcels.

In terms of the complexity of conservation, the number of owners and the size of patches under one owner is important. See Stoms et al. (2001).

- average parcel sizes of private land not in conservation easements

2. Existing parcel sizes and their General Plan designations within each watershed, along with summary statistics and histograms of the frequency of each type of parcel size, should be prepared.
   - parcel sizes, general plan designations, and summary statistics and histograms

3. Roads and transportation corridors fragment habitats, and roads in particular can be major sources of erosion (Trombulak and Frissell 2000). Therefore, the extent and number of areas larger than 100 ha that are not transected by roads or transportation corridors are major indicators of the conservation potential of an area. Maps and data analyses required are:
   - road network
   - miles of roads by road type per square mile of watershed area
   - miles of major transportation corridors
   - miles of utility corridors
   - areas without maintained roads > 100 ha.
   - erosion potential of major soil types and slopes

   Road density (or miles per area of any linear feature) may be less informative than a measure of "road affected area" based on modeled road effect zone. Such an approach is described at the following website: http://www.nceas.ucsb.edu/nceas-web/projects/4040/TerrBiod_framework-report.pdf.

4. Percentage of residential or agricultural land on slopes greater than 5% is an indicator of potential soil loss and runoff. Maps and data required:
   - 30 meter Digital Elevation Models (DEMs) to derive slope, elevation, and aspect.
   - agriculture and development on steeper slopes

5. Land use and disturbance history is important for understanding ecosystem composition, structure, and functional organization. For example, supposedly "pristine" oak woodlands in Placer County were orchards as recently as 60 years ago, according to aerial photographs taken in 1938. Useful maps and data would be:
   - logging history
   - agricultural history
   - mining history
   - fire history

   Historical land use maps are notoriously hard to produce, and archival photos may not be early enough to pick up signatures of late 19th century and early 20th century agriculture and mining. Post-1950 fire history is already available in GIS form from CDF FRAP but would need to be checked and refined.

6. Records of occurrence of all special-status species in the County and an assessment of total vertebrate species richness by habitat type are obvious determinants of conservation priorities. Maps and data analyses required:

- NDDB and other locality data for all special-status species
- total vertebrate species richness by habitat type (estimated from WHR models)

Design of Conservation Areas

The GIS coverages described above should be used to identify a viable but also efficient (in terms of cost and/or area) regional conservation network that will (1) provide adequate representation of ecosystem and community types within the county, (2) conserve most of the species associated with these ecosystems and communities, and (3) ensure adequate protection for most listed and sensitive species. Design of this network must focus simultaneously on watersheds, landscapes, and small-patch ecosystems. (4) The planning process also must give particular consideration to certain species that are at immediate risk of extirpation in the County (nesting colonies of bank swallows, for example). These species are so rare that they very likely will not be adequately represented in conservation areas or landscape linkage areas and will need to be protected in special reserves outside of the main conservation network. These reserves must be matched in grain and scale to the species of concern.

The following basic tenets of conservation biology are central to conservation planning.

1. Species that are well-distributed across their native ranges are less susceptible to extinction than are species confined to small portions of their ranges. This means that the recovery of many target species will depend on conservation programs throughout the State and that their dynamics will be strongly influenced by activities outside of Placer County. Thus, it does not make sense to set specific numerical targets for those species within Placer County conservation lands. Instead, maintaining appropriate habitat for these species within the context of broader ecological goals (e.g., improve or maintain desirable vegetation structure and hydrological regimes, eliminate invasive exotics) is the most important conservation action.

2. Although some species can be conserved in a "working landscape," most sensitive species require protection in reserves where conservation is the major land-use goal. Existing patches of habitat that support populations of sensitive species should be provided with reserve-level protection, and these areas should be managed to maintain the structure, composition, and processes found in the natural community.

3. Large conservation areas containing large populations of the target species are superior to small conservation areas containing small populations. While the persistence of all populations is subject to the effects of normal random environmental events (environmental stochasticity) and catastrophes such as wildfires and severe drought, the persistence of small populations is additionally threatened by random variations in birth or death events (demographic stochasticity) and random changes in genetic composition (genetic stochasticity). Large areas with high quality habitat for target species tend to mitigate the combined effects of these factors. Thus, acquisition of conservation areas should preferentially add to existing protected areas.

Conservation areas should be designed to maximize the viability of local populations of area-sensitive species. For the most part, species with limited aerial requirements will be accommodated within conservation areas designed for species with more extensive home ranges.

4. Conservation areas that are close together are better than those far apart. An arrangement of conservation areas that facilitates dispersal of individuals among these areas is necessary to encourage demographic rescue effects (whereby dwindling populations are supplemented by migrants), and continued genetic interchange. All else being equal, conservation areas that are close together are more likely to support sensitive species for longer time periods than will isolated areas; thus, if it is not possible to acquire new conservation areas that add to existing ones, acquisitions should be made in proximity of protected areas. In the absence of suitable landscape linkages, conservation areas should not be separated by gaps of unsuitable habitat greater than the normal dispersal distances of the least vagile target species.

5. Interconnected conservation areas are far better than isolated ones. Interpopulation dispersal is important for regional species persistence. Because of the amount of habitat that already has been developed in western Placer County, populations of most species are badly fragmented. Therefore, it is critical to identify areas that can provide connections between conservation areas to increase the likelihood of successful dispersal. Such dispersal not only enhances the persistence probabilities of sensitive species (Wiens et al. 1993), but it also helps maintain the overall diversity of plants and animals within a given area (Hansen and Urban 1992) and allows the entire regional habitat network to function as a healthy ecological community.

Multiple linkages among conservation areas are optimal because they provide alternative movement pathways for species. Redundancy is particularly important in areas subject to high rates of disturbance, such as fire. Since connectivity and fragmentation are habitat- and species-specific, an analysis of landscape permeability (e.g., Singleton et al. 2002) should be done for each special-status species.

Conservation areas in the western part of the county should be linked to National Forest lands to the east whenever possible to provide for viable populations of large vertebrates and migratory species and to allow for dispersal of species in response to potential changes in regional climatic conditions.

Connectivity and degree of fragmentation also can be significant determinants of the spread and magnitude of disturbance factors including fire, disease, and flooding (Turner et al. 1989, EPA 1994), and these also factors must be considered in conservation planning.

6. Landscape linkages function better when the habitat within them resembles habitat that is preferred by target species. The network of conservation areas should make use of naturally existing movement corridors in the landscape (such as riparian strips or traditional wildlife migration routes), and whenever possible, natural linkages between conservation areas should be restored through restoration or improved management.

Landscape linkages wide enough to contain resident individuals of target species must be established to connect conservation areas farther apart than the species' normal dispersal distances. These corridors must include habitat components to meet all of the species' life history requirements.
Where doubt exists concerning optimal widths, linkages should be designed to be as wide as possible. The creation of narrow, weedy corridors should be avoided.

Low-impact buffer zones should be planned between developed areas and landscape linkages. Use of off-road vehicles and other disruptive human activities should be prohibited in these buffer zones.

7. Habitat for a particular species within a conservation area that occurs in less fragmented, contiguous blocks is preferable to habitat that is fragmented. Conservation areas should minimize internal fragmentation and barriers to species movement. Viable populations of many species require large blocks of habitat where the presence of disruptive edge-dwelling species, such as cowbirds and house cats, is minimized. Habitat highly fragmented by disturbed or developed lands has relatively little conservation value for species that exhibit high habitat specificity. Species that are susceptible to the deleterious consequences of edge are more likely to retain populations in habitat patches that are rounded or squared than in patches that are elliptical or rectangular when those patches are surrounded by disturbed or developed land. In such circumstances, small, linear strips of habitat that maximize the ratio of edge to area are least desirable.

8. Blocks of habitat that are roadless or otherwise inaccessible to humans serve better to conserve target species than do roaded and accessible habitat blocks. Human contact is thought to be a major cause of decline in certain sensitive species, so populations of these species in habitats that are inaccessible to motorized recreation or similar activities are more likely to persist than those in habitats where human access is less restricted.

Currently roadless areas and other wildlands should be maintained in an undeveloped state; unnecessary roads should be closed whenever possible, the County should not permit new roads to be built within roadless areas.

Access and human use of conservation areas and landscape linkages must be restricted to protect species sensitive to human disturbance. Trails should be diverted from sensitive areas, such as rare plant populations. Fencing and control of domestic dogs and cats may be necessary.

Where landscape linkages are intersected by roads that cannot feasibly be closed, tunnels, underpasses, or other wildlife crossings should be provided at sites documented to be commonly crossed by animals that are vulnerable to roadkill. The width of such crossings should be roughly proportional to the size of the animal; for example, three-foot-wide tunnels are adequate for amphibians and small mammals, hundred-foot underpasses may be necessary for large mammals. Fences or other barriers can be used to funnel animals into road crossings.

9. Whenever, possible, maximize heterogeneity in conservation areas. Areas that have diverse topography, soils, and vegetation tend to capture a variety of different habitat types and thus support a richer biota than more homogeneous areas. As presently

described, the Conservation Opportunity Areas are confined to agricultural habitats in the western Phase 1 area. Exchange strategies to conserve some lands to the east and south of the hard line would increase heterogeneity substantially.

10. Stakeholders must participate in conservation planning and decision-making. Community-based conservation is a relatively new way of approaching natural resource challenges. It entails seeking a much broader consensus in management actions by involving the greater community in all phases of conservation: planning, implementation, and adaptive management. A wide representation of stakeholder groups is essential to this effort; engaging the broader community serves an important educational function, helps develop ownership in conservation goals and objectives, and often provides a corps of volunteers to do some of the work necessary to implement conservation actions

11. Conservation is expensive, and the costs don't end with land acquisition. Either the developers, landowners, taxpayers, or some combination of the three will have to tithe to meet the requirements of an HCP/NCCP. Once conservation lands or easements are acquired, they must be managed, and management requires a permanent source of funding.

12. There is a tradeoff between area and management intensity. Small conservation areas require much more active management, and thus are more costly on an ongoing basis, than do large areas. These trade-offs should be weighed when particular parcels are being considered for inclusion in the conservation network.

13. There is considerable uncertainty in conservation planning and management, and the more endangered a species, the more uncertainty there is in its recovery. Conservation actions are always implemented with imperfect information on the species, its habitat, and the greater ecosystem in which it occurs. Climate change and other forces outside of corrective action add to this uncertainty. Thus, the precautionary principle demands a conservative approach to all conservation actions.

14. The matrix matters. Reserves with hard boundaries are a critical component of conservation plans. However, activities outside of reserves affect processes and events inside them. Thus, it is critical to assess the likely impacts that surrounding land uses will have on reserves. In many cases it will be desirable to establish a "soft edge" around reserve boundaries to minimize the impacts of nearby roads, urbanization, and agriculture. Much of this could be accomplished by requiring more conservation-friendly development; for example, green belts should be put on the edges of projects, not in their centers, and new roads should be constructed adjacent to developed areas and not transect open space. Public information programs should be developed that explain the values of conservation lands to the general public. A better-informed public will come to regard conservation lands as highly valued assets rather than trash dumps.

In summary, designing an effective and efficient system of conservation areas is a very complex process that involves consideration of biological resources, threats, costs,

and opportunities. Many tools have been developed to help conservation planners and stakeholders design and evaluate alternative conservation systems (e.g. http://www.biogeog.ucsb.edu/projects/tnc/toolbox.html , http://www.biogeog.ucsb.edu/projects/wb/TAMARIN_Manual.pdf and http://www.natureserve.org/aboutUs/dss.jsp). We encourage the County to use modern conservation planning support software to help integrate, visualize and analyze GIS data and craft a conservation plan to meet the stated NCCP objectives.

Linking Covered Species to Conservation Areas

Covered species can be linked to conservation areas by proceeding down two separate but eventually convergent pathways.

The first path involves the compilation of species profiles, envirograms, and a multi-species ecological assessment. Species profiles need to be constructed for each species that could potentially be included in the HCP/NCCP. Data on regulatory status, basic life history, distribution, threats, and potential conservation strategies should be obtained from the published literature, web sites, and other available sources. The species profiles are not intended to be detailed compendia, but they should contain adequate information to identify their life history and habitat needs in western Placer County. The species profiles that have been prepared for the County are adequate.

Envirograms are then created for each species from the information contained in the species profiles. An envirogram is simply a tool that sharpens our understanding of the most important ecological factors that affect a population or group of populations of a particular species. The concept was developed originally by Andrewartha and Birch (1984), and envirograms were first applied to conservation planning by James et al. (1997) who used them to identify factors limiting the abundance of endangered Red-cockaded Woodpeckers in the southeastern United States. The version described below is modified somewhat from these previous applications.

An envirogram consists of a "centrum," components of the environment that directly affect a species' chances to survive and reproduce, and several "webs," distal factors that act in sequence to affect the proximate components of the centrum. The centrum consists of four major categories, resources, reproduction, hazards, and dispersal. Each of these can be subdivided as necessary. For example, resources could be subdivided into foraging habitats, breeding habitats, and food; reproduction could be divided into finding mates, nesting, and fledging. Hazards can be divided into predators (an animal that consumes the subject species in whole or part) and "malentities" (organisms or events that can adversely influence the subject species in other ways such as a cow stepping on a dispersing western spadefoot or the premature drying of a vernal pool). Dispersal also can be subdivided since it can occur at different times in a species' life cycle and it can be either local (such as moving from one habitat type another) or long-distance.

The web identifies the underlying ecological processes or human actions that influence each centrum component. The idea is that distal factors in the web flow in to activate proximate components of the centrum. Each of these flows is called a pathway. Pathways in the web are constructed from right to left, with Web-1 factors directly affecting centrum components, Web-2 factors affecting Web-1 factors, and so on. It is

usually unnecessary to have more than three webs to track a centrum component along a pathway to its ultimate underlying influence.

A web factor can have both positive and negative aspects. For example, precipitation is critical to vernal pools. Too little rain results in pools that dry up before their dependent species can complete their life cycles, but greater than average rainfall can result in flooding and dispersal of individuals among pools—an event necessary for gene flow and to replenish dwindling populations.

The centrum components of the envirograms should be accurate reflections of the information in the species profiles, and the web pathways should be logical linkages of indirect environmental components to the proximate drivers of population processes in the centrum. Envirograms are not intended to be stand-alone documents but should be used in conjunction with species profiles and maps showing the distribution of populations and suitable habitat. They are considered to be "works in progress" and always can be modified by new and better information. For example, the vernal pool plant envirograms are a bit too simplistic at present. In particular, they need to tie life stage and phenology to resources and hazards more effectively.

Once the envirograms have been constructed, the multi-species ecological assessment is prepared in the form of a spread-sheet that lists and organizes the centrum and web factors identified for each species. This process facilitates the recognition of resource overlaps and commonalities (e.g., several species use the same habitat), conflicts (e.g., one species requires an early successional habitat while another needs a late successional habitat in the same community), and biological interactions (e.g., one species is a predator on another).

The second pathway involves species-specific surveys, qualitative population viability analyses (PVAs), and a multi-species spatial assessment.
A PVA is an assessment of the persistence probability of a population based on habitat and population parameters. A PVA can be applied either to a single population or a population system (metapopulation). Well-connected populations are usually treated as metapopulations, but single, isolated populations are generally dealt with separately. The basic assumption of a PVA is that the population is stationary or increasing or, if not, that systematic mortality can be controlled. If the population is declining or systematic mortality cannot be controlled, a PVA is not necessary. The population will go extinct at a rate directly proportional to its decline and the longevity of individual organisms.

A PVA must be based on specifically-stated goals. For example, the goal for one PVA might be simply to assess the immediate probability of extinction of a population, while the goal for another PVA might be to assess its probabilities of extinction under various levels of protection. PVAs are treated as hypotheses, subject to future refinement as new data come in or a better understanding is gained of underlying processes. PVAs can either be quantitative or qualitative.

Quantitative PVAs can be applied either to single populations or to metapopulations. At a minimum, necessary data include variation in population size over time, age-specific recruitment and mortality, annual variation in life history characteristics, and the frequency and severity of events that affect population growth (e.g., variation in weather patterns). For a metapopulation PVA, data on these parameters must be available for each subpopulation.

Once these data are in hand, a deterministic population model is constructed, usually by using one of several "canned" programs (e.g., Ramas, Stella). Stochastic variance is then incorporated in the model. Individual demographic stochasticity is estimated from annual variation in life history characteristics, and environmental stochasticity is estimated from the frequency and severity of events that affect population growth. Simulation modeling is then used estimate time-to-extinction from random forces. Thus, a specific prediction of population persistence time can be made in the form of, "this population (or population system) has an X percent probability of persistence for Y number of years." If data are available, predictions of persistence times under various management strategies also can be made.

Clearly, quantitative PVAs are very data intensive. In most cases the relevant data are not available, and time and money are usually far too short to obtain them. However, a qualitative PVA risk assessment can be performed by organizing whatever information is available on habitat and population parameters and by obtaining missing information in the form of expert opinion from knowledgeable and experienced biologists. This approach will yield a verbal descriptor of extinction risk probability in a short, but meaningful, time frame: high, moderate, or low. Information should be organized as follows:

I. Habitat/population distribution and status (displayed as a base map with a series of overlays)
   A. Current habitat availability
      - Vegetation types
      - Spatial/temporal variation in quality
      - Occupied or unoccupied
      - Connectivity
      - Land ownership/management

   B. Current population status
      - NDDB and other historical records
      - Current records and survey results expressed as qualitative estimate of population size, e.g., *abundant:* in numbers; *common*: always to be seen, but not in large numbers; *fairly common:* very small numbers or not always seen; *uncommon:* seldom seen but not a surprise; *rare:* always a surprise, but not out of normal range; *casual:* out of normal range; *accidental:* far from normal range and not to be expected again
      - Qualifiers can be added to these descriptors if appropriate, e.g., *irregular:* not found every season; *erratic:* found only a few seasons each decade

II. Potential habitat distribution and condition in the future
   - Systematic factors that will result in habitat loss (e.g., residential or infrastructure construction)
   - Systematic factors that may degrade habitat quality (e.g., invasion of exotic species, conversion of rice to vinyards)
   - Random factors that may degrade habitat quality or quantity (e.g., estimated probability of a major flood)

- Habitat improvement under different management alternatives (e.g., restoration, status quo)

III. Single population dynamics
- Trend – is the population increasing, decreasing, or stationary over time?
- Potential take (numbers)
- Impact of take on total population
- Other systematic factors – how do things over which management has control potentially affect population numbers (e.g., grazing, predator management)?
- Random factors – estimated probability of various stochastic factors that might influence vital rates (e.g., droughts, spring hailstorms)

IV. Population system dynamics
- Patch arrangements (maps to accompany spatially-resolved data)
- Potential take (populations)
- Impact of take on metapopulation
- Likely correlations in systematic factors
- Likely correlations in random factors

Considerable "hypothesis testing" can be done with these maps and associated data. In addition, this procedure provides an assessment of current knowledge and the information needed to push the analysis further.

The surveys are intended to help determine the present status and distribution of each potentially-covered species. Data should be obtained on current habitat availability and occupancy and, if possible, on current population status and trends. Since the relevant data for quantitative PVAs on any potentially-covered species are not available and the time and money are too short to obtain them, qualitative PVAs should be done on these species by organizing whatever information is available on habitat and population parameters and by obtaining missing information in the form of expert opinion from knowledgeable and experienced biologists. This approach is expected to yield a verbal descriptor of the extinction probability of each potentially-covered species in the county in the immediate future: *high*, *moderate*, or *low*.

The data from the qualitative PVAs for each species is then combined with GIS coverages of potential conservation lands and landscape linkages. Again, considerable "hypothesis testing" can be done with the emergent maps and associated data. The results of this analysis should be combined with the results of the multi-species ecological assessment to create a draft of a preliminary conservation plan. If the goals and objectives of this plan clearly contribute to the recovery of a listed species or provide adequate protection to a non-listed species, the species can be incorporated into the HCP/NCCP.

All steps in this process are considered to be works-in-progress, subject to revision as more or newer data become available. Because species profiles and envirograms are basic to this process, outside review of these documents should be obtained.

Data Gaps and Uncertainties

Placer County has expended a great deal of effort and money to obtain the data necessary to proceed with the HCP/NCCP. Contracts have been awarded to verify land cover and rectify historical and current aerial photographs, study biodiversity in riparian zones, and assess the status of oak woodlands, freshwater marshes, vernal pools, small patch ecosystems, wintering waterfowl, and salmonid habitat. As a result, the accumulated database is impressive.

Despite these efforts, we do not know what the original complement of biodiversity was in western Placer County and what has been lost already. Therefore, it is impossible to predict the effects of removing 90% of the natural communities in this area, and consequently, we do not know what level of mitigation is sufficient to compensate for this loss. (We do know that the areas that have been impacted the most need the highest mitigation ratios.) The second major data gap is that the distribution and ecology of most of the target species is not well enough understood to evaluate their viability under different conservation alternatives. To lessen these uncertainties, it will be necessary to (1) survey and (2) conduct adaptive management trials on both Conservation Opportunity Areas and lands scheduled for development as soon as possible.

Surveys are necessary to prioritize mitigation lands, obtain scientifically defensible mitigation ratios, and determine where populations of covered species are persisting. Access to make such surveys should be part of the HCP/NCCP agreement, and incentives to make surveys more palatable to landowners should be developed. For example, a no-cost survey of a Conservation Opportunity Area might result in a higher price for the land, and a "No Surprises" agreement would provide security to a developer. Similarly, the County should negotiate to have lands that are scheduled for development become areas where adaptive management trials are conducted at no cost—or risk—to the landowner. These trials would be designed to assess the impacts of different management regimes on sensitive species' habitats and population trends before the habitats are lost. The US Fish and Wildlife Service should make "Safe Harbor" agreements available to participating landowners, and the County should establish a system of incentives to encourage participation. Simplifying and streamlining these process will be critical.

Major Land Cover Types and their Management

Introduction

The network of conservation areas will be embedded in a landscape that has been greatly impacted by past and ongoing human activities. Many natural ecosystem processes have been altered, and natural and human-generated disturbances will continue. Some management prescriptions are universal and include (1) the explicit management of conservation lands to meet ecological goals and the long-term protection of natural values, (2) the restoration or enhancement of landscape linkages, (3) the maintenance of native vegetation within conservation areas and landscape linkages, (4) the eradication or control of invasive non-native species, and (5) the provision or enlargement of buffer zones ("soft edges") between developed areas and conservation lands.

The Conservation Opportunity Areas are confined to agricultural habitats in the western Phase 1 area. None of the alternatives propose changes in zoning or conservation goals to benefit oak woodlands or riparian areas although these communities will bear the brunt of future development in this area. In fact, the current strategy calls for significant urban impacts on two-thirds of remaining riparian areas. Unless this is a GIS artifact, it means that the County will lose more riparian than it will conserve. Given their ecological importance and historical losses, riparian environments should be conserved and restored w herever possible in all parts of the Phase 1 area, and they need the highest mitigation ratios. Furthermore, the success of aquatic and riparian conservation depends on what goes on upstream within the watershed, but this is not addressed in the current strategy.

Below are descriptions of and management guidelines for the major land cover types involved in the Phase 1 HCP/NCCP in Western Placer County.

Oak Woodlands

Introduction

Oak woodland consists of a zone of oak-dominated communities growing between Valley grassland and montane forest or chaparral. The dominant trees are deciduous oaks, *Quercus lobata* (valley oak), and *Quercus douglasii* (blue oak). The lower elevational border of oak woodland is well defined by the absence of oak trees and the appearance of true grassland. The upper border, where an increasingly dense woodland becomes forest, is more difficult to define. Relict forest trees well within the present woodland zone and eroded forest soils that are now supporting woodland suggest that the upper border may have moved upward after destructive logging and severe burning of the lowest elevation forests occurred.

Since European settlement, oak woodlands have been managed primarily for livestock production, and over 80% are in private ownership. Historically, losses of oak woodlands occurred because of clearing for range improvements and agriculture; the major losses now are from intensive residential and industrial development. Poor oak recruitment and regeneration is a major problem in many areas.

In addition to their value as rangeland, oak woodlands are important wildlife habitat, and they provide public recreation and aesthetics. Since virtually all of the state's water flows through or is impounded in the oak woodland belt, these communities are also very important to water quantity and quality.

Vegetation

Oak woodland in the Phase 1 area is conventionally divided into two different vegetation types, valley oak woodland, blue oak woodland, and blue oak-foothill pine woodland.

Valley oak woodland. On deep, well-drained alluvual soils, usually in valley bottoms, valley oak forms nearly pure, parklike stands of large trees (mature valley oaks range in height from 50-115 feet). A few live oaks (*Q. wislizenii*, interior live oak) may be mixed in. These stands blend into riparian forests (Valley Oak type of Valley Foothill Riparian) along stream courses and on active floodplains. The understory of valley oak woodland consists of a carpet of introduced annual grasses and forbs, and the shrub layer,

if present, contains bird-dispersed species such as poison oak, toyon, and coffeeberry. At lower elevations, valley oak woodlands merge with annual grasslands or border on agricultural land. In the foothills they intergrade with blue oak woodland or blue oak-foothill pine woodland.

Blue oak woodland. Blue oaks are relatively slow-growing, long-lived trees that can reach 80 feet in height. On shallower, well-drained upland soils, they form savanna-like stands on dry ridges and gentle slopes. Interior live oak and valley oak also may be present where the soils are deeper. The shrub layer in these communities is rarely extensive, often occurring only on rock outcrops. Shrubs include poison oak, coffeeberry, buckbrush, California buckeye, and several species of manzanita. The understory is typically composed of annual grassland species such as bromegrass, wild oats, foxtail, and fiddleneck. Blue oak woodland intergrades with annual grasslands or valley oak woodland at lower elevations and blue oak-foothill pine woodlands at higher elevations. Blue oaks are well adapted to dry, hilly terrain where the water table is usually unavailable, and they have an unusual tolerance for severe drought, shedding their leaves under extreme moisture stress.

Wildlife

Oak woodlands are one of the richest wildlife habitats in California, with over 300 vertebrate species relying on them for feeding, cover, or nesting sites during all or some part of the year.

Conservation Issues

Oak woodlands have decreased by over 1,000,000 acres during the last 50 years because of agricultural, residential, and industrial development. Moreover, in many places, blue and valley oaks have reproduced poorly during this time period. Even when germination occurs, seedling survival usually fails.

Valley oak regeneration. The failure of valley oak regeneration seems to be related to competition for soil nutrients and moisture between oak seedlings and introduced annuals, consumption of acorns and seedlings by wild and domestic animals, [ungulate browsing of seedlings and saplings], and flood control projects. Valley oaks are tolerant of flooding while other components of the community that are potential predators or competitors are not.

Blue oak regeneration. Poor blue oak regeneration also is related to competition for soil moisture from introduced annual grasses and the consumption of acorns and seedlings by insects, domestic livestock, and wildlife. Blue oak is somewhat shade-intolerant, and disturbances producing openings in the canopy may be necessary for seedling growth and survival.

Livestock and wildlife relationships. Some ecologists think that the lack of regeneration in oak woodlands can be explained by the consumption of acorns and seedlings by cattle. However, the cessation of livestock grazing does not generally result in oak regeneration because wildlife and insects also cause heavy damage to acorns, and seedlings and saplings. Populations of deer and many other species of mammals and birds that eat acorns and young oaks are probably more abundant now than in the past because of land use changes and predator control. However, some of these species have positive effects on oak regeneration; acorns buried by scrub jays, yellow-billed magpies,

western gray squirrels, and California ground squirrels are more likely to germinate because they root better and are less likely to be eaten.

Fire. Frequent fires historically occurred in oak woodlands, and fire control has affected regeneration negatively in both valley and blue oaks. Young trees of both species will sprout when fire damaged, but older trees will not. Thus, frequent fires tend to maintain oak stands of younger age classes, but a century of fire control has resulted in the predominance of older trees. When these stands eventually burn, they do not regenerate themselves. Furthermore, the absence of frequent, non-catastrophic ground fires encourages the invasion of evergreen oaks, and their seedlings seem to be more browse resistant than those of deciduous oaks.

Conservation Management—Rangelands

Management goals for grazed oak woodlands in Placer County should include; (1) r egeneration of dominant oak species throughout their ecological and geographic ranges, (2) trends toward increasing or stable cover and extent by native understory plant species, (3) trends toward decreasing or stable cover and extent by invasive, non-native plant species, and (4) maintenance of associated species of concern and small-patch ecosystem types.

To attain these goals, Placer County will need to work with private and public landowners to disseminate and encourage the widespread implementation of best management practices (BMPs) relevant to grazed oak woodlands. The following BMPs have been shown to counteract the four major problems facing oak woodland conservation (Pavlik et al. 1991, McCreary 2001, CalPIF 2002); overgrazing, fire suppression, and the deleterious effects of non-native plants and animals.

Seedling and Sprout Shelters. Natural and outplanted seedlings must be protected from livestock and native grazing animals in order to survive and grow enough to support regeneration. In recent years many techniques and protective devices have been developed that can enhance regeneration on small spatial scales (summarized in McCreary 2001). Careful selection of critical areas for this kind of “intensive care” management (Pavlik et al. 1998, 2000, 2001) is necessary to be cost-effective and ecologically meaningful. Protection of stump-sprouts after stands have been thinned for wood harvest is also critical (Standiford and Tinnin 1996, McCreary 2001). See also: Costello et al. (1996), McCreary and Tecklin (1997), Weitkamp et al. (2001).

Artificial Regeneration Techniques. Directly outplanting container-grown native oaks in their appropriate habitat and geographic ranges can jump-start the process of regeneration (McCreary 2001), especially in edge habitats, areas with previous damage from overgrazing and agricultural development, isolated stands, and potential corridor areas near riparian zones. Selection of sites for this kind of restoration is critical because the costs are relatively high, as is the risk of failure if technical, logistic and environmental factors conspire against the project. McCreary (2001) presents a site-specific decision key (his Figure 3) to help determine if artificial regeneration techniques are appropriate. See also: Adams et al. (1997), Alpert and Peterson (1999), Bernhardt and Swiecki (1997), Brooks and Merenlender (2001), Griggs and Peterson (1997), Holmes (1996a, b).

Progressive Livestock Management. Progressive systems of grazing are those that maintain the economic use of oak woodlands for livestock production while maintaining

or enhancing oak-related habitat features. Short-duration and deferred-rotation systems provide landowners with cost-effective, large-scale options that can encourage oak regeneration and control invasive plant species (George 1991, Johnson 1992, Jansen et al. 1997). On smaller scales, winter grazing is probably less damaging to seedlings than spring or summer grazing (Hall et al. 1992, Jackson et al. 1998). It should be emphasized, however, that there is still much to be learned about oak-compatible grazing systems in California that a program of adaptive management can elucidate and document (CalPIF 2002).

Prescribed Fire. Low-intensity ground fires may promote regeneration in some oaks by improving soil conditions, reducing acorn and seedling predation and removing a closed, competitive understory while at the same time lowering the probability of destructive canopy burns (Standiford and Tinnin 1996, CalPIF 2002). The benefits are neither universal nor reliable, however (especially at low elevation grassland-oak woodland boundaries), and the optimal fire frequency for many woodland types has yet to be determined (McCreary 2001). Efforts to conduct prescribed fires in Placer County should do so within an adaptive management framework so that science-structured learning and implementation can take place. See also: Biswell (1989), Schwan et al. (1997), Swiecki and Bernhardt (1998).

Weed and Feral Animal Control. Invasive, non-native plants ("weeds") should be controlled on a large scale with prescribed grazing and fire regimes and disking and on a small scale with mowing, mulching, hoeing, or judicious use of herbicides (McCreary 2001, Tu et al. 2001). Similarly, non-native animals (e.g. feral pigs, wild turkey) that severely impact oak woodlands should be controlled (McCreary 2001, Sweitzer and Van Vuren 1998). The techniques and timing of weed and feral animal control not only determine effectiveness, they also can determine the extent of unintended damage to sensitive resources (CalPIF 2002). For these reasons, such control practices should be part of an adaptive management program that can monitor benefits and costs to major resource elements. See also: Adams et al. (1997), McCreary and Tecklin (1997).

Habitat-Sensitive Wood Harvest. Downed and standing dead trees are essential habitat components for many important and often rare animal species. Constant removal of these materials can lead to soil depletion, reduction in beneficial insect populations, and reduction in the numbers of small vertebrates (Tietje and Vreeland 1997). Wood harvesting should be habitat-sensitive by leaving dead trees and wood (at least 1 snag per acre; Standiford and Tinnin 1996), as well as a variety of sizes or ages of living trees to maximize the structural diversity of the overstory canopy. Large, old trees capable of high acorn production are especially important for promoting regeneration and providing food and other essential resources for wildlife. Thinning, rather than clearing, stands is thought to have less negative impact on regeneration and habitat quality. Thinned stands should be small in size (< 3 ha), and left with (1) >75% of their original basal area, (2) large, old, and standing dead trees intact, and (3) spaced brush or trimmings piles as an artificial, temporary understory (Aigner et al. 1998, CalPIF 2002). No harvesting should be conducted adjacent to riparian zones (Standiford and Tinnin 1996).

Conservation Management—Suburban Interface

Management goals for suburbanized oak woodlands in Placer County should include; (1) maintenance of patches of oak overstory, (2) maintenance of patches of

native understory plant species, (3) avoidance of accidental or intentional introductions of invasive, non-native plant species, including trees with flammable canopies, and (4) avoidance of practices that spread or encourage oak diseases.

To attain these goals, Placer County will need to work with private and public landowners to disseminate and encourage the widespread implementation of BMPs relevant to suburbanized oak woodlands. The following BMPs have been shown to encourage oak woodland conservation where human population growth creates special concerns or limits management options (Pavlik et al. 1991, Johnson 1991, McCreary 2001, CalPIF 2002).

Minimize Rootzone/Dripzone Alterations. Avoid rootzone/dripzone soil compaction, paving, grade and drainage changes, trenching, fertilizing, sprinkling and irrigation, lawn installation, construction, and animal grazing or penning. Firewood, especially if brought from other areas, should never be stored beneath oaks because it may release insect pests and diseases (www.suddenoakdeath.org). Guidelines for maintaining oaks in gardens, near buildings, or around domesticated animals are found in Johnson (1991, 1992).

Artificial Regeneration. Directly outplanting container-grown native oaks in their approp riate habitat and geographic ranges can jump-start the process of regeneration (McCreary 2001), especially where suburban development has removed mature trees. Special attention should be paid to filling canopy gaps between isolated groups of trees or maintaining continuity with riparian zones (CalPIF 2002). Guidelines for planting oaks are found in Johnson (1991, 1992) and McCreary (2001).

Encourage Native Plants in Native Soil. Where previous land uses (e.g. intense grazing) or current patterns of development have removed the native understory of shrubs, grasses. or herbs, landowners might allow these species to reclaim outlying portions of their properties. Remnant patches of chaparral, grassland, and riparian communities also should be left as unaltered as possible to maintain diversity in the overall landscape (CalPIF 2002). If gardens, planting beds, and lawns are installed, on-site native soil should be used instead of soil imported from nurseries or other foreign sources (including potted plants) that could be contaminated with oak disease organisms (CalPIF 2002, www.suddenoakdeath.org).

Aquatic and Wetland Ecosystems

Introduction

Aquatic and wetland ecosystems in Placer County include riverine (rivers and streams), lacustrine (lakes and ponds), fresh emergent wetlands (marshes), and springs. These are distinguished from terrestrial systems by the presence of water (permanent or seasonal), hydric soils, and hydrophilic vegetation. The boundary between wetland and upland ecosystems is generally delineated by the boundary between hydric and non-hydric soils. The boundary between wetlands and lacustrine or riverine ecosystems is identified by the deep-water edge of emergent vegetation, about 6.6. feet in depth. All wetlands in Placer County are within the Sacramento-San Joaquin drainage that dominates California's Central Valley. During very wet years, these rivers historically connected with the Kern, Kings, Tule, and Kaweah Rivers of the southern Central Valley.

Riverine, or lotic, systems flow westward from the Sierra Nevada and its woodland foothills before entering the large rivers on the Central Valley floor. Rivers flowing through foothill woodlands are supported by many small streams that originate along the Sierra Nevada crest as well as by small foothill streams.

Rivers and high elevation streams support permanent aquatic habitats, contrasting with many foothill streams whose flow is seasonal and limited to periods of high precipitation or runoff. Many foothill streams are dry during summer and early autumn. Historically, rivers throughout Placer County experienced wide seasonal variations in discharge; high flows occurred in winter and during spring snow melt, and lowest flows occurred during summer. During high runoff, water typically rose to levels that that inundated expansive floodplains and often created freshwater emergent wetlands.

Most of the large streams and rivers in Placer County have been modified from natural conditions by channelization, loss of riparian vegetation, and alterations in discharge. Reservoir management has homogenized the hydrograph by decreasing the magnitude of floods and increasing discharge during summertime low flow periods. The discharge in small streams is elevated from historic conditions by seepage and runoff from agriculture lands. This suite of alterations has resulted in a drastic reduction of anadromous salmonids in Placer County rivers and streams.

Lacustrine systems in Placer County include natural lakes and ponds and reservoirs. Lakes are larger systems with littoral zones (areas where light is adequate to support plant growth) and limnetic zones (deep areas where light is inadequate for plant growth). Ponds are shallow and support only littoral habitats. A number of large reservoirs have been built along rivers in the County to control floods and store water for agriculture and urban uses. These impoundments have effectively altered natural lotic ecosystems and created new, artificial lacustrine ecosystems. A number of additional small reservoirs impound small streams and springs, mostly to store water for agriculture or recreation. Vernal pools are technically a type of lacustrine ecosystem, but because of their conservation importance in Placer County, they are treated separately.

Fresh emergent wetlands (FEWs) may occur in association with various terrestrial ecosystems or with riverine and lacustrine ecosystems. They range in size from small patches to areas covering several square miles. FEWs historically covered thousands of acres in Placer County and the Sacramento Valley, but most of this was drained and converted to agriculture. They are now small and usually limited to areas supported by seepage or agricultural runoff.

Springs occur throughout Placer County. They are most abundant in the foothills and higher elevations and scarce on the Central Valley floor. Some springs flow continuously and provide permanent aquatic habitat while others are intermittent and flow either seasonally or only during years with high precipitation. Permanent springs may support distinctive communities of aquatic species, including fishes and macroinvertebrates. The importance of springs recently has been demonstrated by recent surveys throughout large portions of the western U.S. that have documented an amazing diversity of aquatic macroinvertebrates (including mollusks, insects, and crustaceans) with limited distributions. Many newly described species are endemic to a small number of springs.

Vegetation

Riverine ecosystems can be subdivided into open water (depth greater than 6.6 feet) and submerged zones, which are between open water and the shore. Streams are smaller, and they rarely have open water zones. If the current is sufficiently slow, rooted vegetation may occur in the submerged zone. If vegetation on the shore has a canopy cover greater than 10% (and therefore creates significant shade), it is considered to be riparian habitat.

Lacustrine ecosystems also show zonation that is organized according to water depth. The limnetic or open water zone extends from the deepest water up to the depth of effective light penetration. The littoral zone is in shallow water along shorelines and above the limnetic zone, and it is distinguished by sufficient light to support plant growth. Rooted plants occur in this zone. The shoreline zone borders the water; if it has more than 2% vegetative cover it is classified as riparian.

Freshwater Emergent Wetlands are characterized by saturated or periodically flooded hydric soils that support some combination of rushes, sedges, nutgrass, saltgrass, cattail, bulrush, and arrowhead. Vegetation may be distributed as concentric zones, which follow basin contours and reflect the relative water depth during flooding, or if the bottom of the wetland is uneven, the vegetation zones may be patchy rather than concentric.

Springs are smaller aquatic systems that occur where ground water flows onto the land surface through natural processes. Under natural conditions, persistent springs generally support woody riparian vegetation that is similar to what is found along small streams. Where woody vegetation is sparse, rushes, sedges, bulrush, and cattail may be found. At ephemeral springs, vegetation includes species that tolerate more xeric conditions.

Fish and Wildlife

Freshwater Emergent Wetlands are among the most productive wildlife habitats in California. They provide food, cover, and water for more than 160 species of birds and numerous mammals, reptiles, amphibians, and fish. Many species rely on this ecosystem for their entire life cycle. Lacustrine systems are used by 18 species of mammals, 101 birds, 9 reptiles, and 22 amphibians for reproduction, food, cover, and water. This represents about 23% of the terrestrial vertebrates in California. The open water zone of large rivers provides resting and escape cover for many species of waterfowl and many fish-eating and insectivorous birds and mammals.

Several Phase 1 species, the Central Valley steelhead, chinook salmon, Sacramento splittail, and foothill yellow-legged frog, are completely dependent on healthy riverine ecosystems. The giant garter snake and California Black Rail use FEWs almost exclusively. The Bald Eagle uses both riverine and lacustrine ecosystems, and the California red-legged frog and Peregrine Falcon use those ecosystems plus FEWs.

Due to the large size, variety of habitats, and ancient age of Central Valley aquatic systems, they support a distinctive native fish fauna that includes seven endemic genera and 28 native species. The compounding influences of competition and predation from non-native fishes, reservoir construction and management (including water diversion and changes in water temperature and flow regime), channel alteration, pollution, and

decreased watershed stability resulting from logging, excessive livestock grazing, and mining, have resulted in extinction of three native fish species. Populations of an additional eight species have undergone substantial declines and are at risk of extinction. Most native species have little economic importance, with the exception of trout and salmon, sturgeon, and Sacramento perch. Forty non-native species of fish also occur in this system. Most non-native fishes have been introduced from other North American habitats, although some are native to Europe and Asia. A number of invertebrate species. most notably crayfish and mollusks, also have been introduced into Central Valley aquatic ecosystems.

Spring ecosystems either may be isolated or tributary to other aquatic systems, and their biotic importance is generally a function of size and permanence. Large springs that flow continuously usually support a canopy of riparian vegetation and diverse aquatic communities that may include crenobiontic species (species that occur only in springs). Smaller springs and seeps may dry periodically, and their aquatic biota will consist of vagile species that also colonize ephemeral streams. Woody riparian vegetation is usually sparse at these types of springs. Few surveys have been conducted to assess biotic and abiotic characteristics of spring ecosystems in Placer County.

In California, where a large and growing human population competes with aquatic organisms for limited supplies of fresh water, amphibian populations are declining precipitously, and 77 of the 115 native fish species are either extinct or in danger of extinction within the next 50 years. The situation with other aquatic organisms is presumably just as bad or worse, but their status is poorly known. The acreage of FEWs in California has decreased dramatically since the turn of the century due to drainage and conversion to other uses, primarily agriculture. Virtually all aquatic and wetland systems in the state are in need of major conservation actions.

Necessary management actions for aquatic and wetland conservation include (1) restoring natural hydrologic regimes, including low and high flow events; (2) reconnecting rivers to their floodplains by de-channelization and other means; (3) restoring and managing riparian areas properly; (4) reducing or eliminating populations of non-native fishes, amphibians, invertebrates, and plants; (5) controlling water quality by decreasing nutrient and toxin loading and sedimentation; (6) providing for fish passage around diversion structures; and (7) educating people on the economic, aesthetic, and other values of properly functioning aquatic ecosystems These activities can be most effectively implement by organizing management by watershed boundaries, not by administrative units or political borders.

Best Management Practices

Best management practices (BMPs) are designed to reduce adverse environmental impacts that result from human activities in and near aquatic ecosystems. Many BMPs for aquatic ecosystems are similar to those for riparian ecosystems.

1. Restore rivers and streams to natural conditions wherever possible. A number actions will be required to accomplish this, including, but not limited to, removing channelization features (e.g., riprap, gabions, dikes, levees etc.), reestablishing historic meander patterns, enhancing riparian vegetation, modifying ditch networks, and reestablishing the natural hydrograph as much as possible. Restoration must be

conducted using an integrated plan that reconnects streams and rivers in a pattern where salmon may again migrate around urban and agricultural lands to their spawning areas.

2. Implement programs that decrease the amount of stormwater entering aquatic ecosystems to minimize its adverse affects on water quality and the hydrograph. This may be accomplished by reducing impervious surfaces, detaining runoff, disallowing construction along stream and river banks, and protecting riparian corridors.

3. Control runoff to maintain water quality and prevent introduction of nutrients and suspended material from reaching streams and rivers from non-point sources such as highways, construction sites, farms, and urban areas.

4. Wherever possible, enhance native fish and aquatic macroinvertebrate populations by restoring habitat, eliminating deleterious non-native aquatic species, and discouraging the introduction of additional aliens.

5. Maintain water quality standards in all streams and rivers.

6. Springs and a portion of their springbrooks should be protected from activities that result in functional changes in aquatic and riparian communities. Modifications resulting from diversion, recreation, and ungulate use should not impact the natural character of a spring source and at least 50 meters of its uppermost springbrook. Greater lengths of large springbrooks should be protected, possibly extending downstream for several hundred meters. For these springs, the length of springbrook needing protection should be determined by surveys to identify areas with highest biotic value. If diversion is necessary, all structures should be placed at least 50 meters downstream from the spring. Spring sources should be maintained in natural condition. Environmental damage by springbox construction and operation can be minimized by collecting water from a dry well placed in the springbrook bed at least 50 m downstream from the source. Diversions also should be limited to only the amount of water needed for the intended use, and at least 25% of a spring's total discharge always should remain in the springbrook. Unnecessary diversion should not occur, and diversions should be limited to periods when water is needed at a specified destination and should not continue when water is unnecessary. All water should remain in a springbrook when not being used for other purposes.

7. Adequately protect riparian areas to maintain watershed processes and functions. Because of the intensity of disturbance in surrounding uplands, riparian protections are critical in urban and in rural areas.

8. Manage vehicle use within riparian habitats by minimizing stream crossings that can harm watershed processes by disrupting fish passage, creating sedimentation, modifying channels, and changing drainage patterns. Vehicle use should be limited to specified locations where impacts can be minimized by using bridges instead of culverts, sizing bridges to a minimum width, designing culverts to pass at least the 100-year flood event, and ensuring regular and long-term monitoring and maintenance. Vehicles should not enter or cross streams except in cases where no alternative exists. Where stream crossings are required, minimize the number of crossings, and cross streams at right angles to the main channel whenever possible.

9. Control erosion and minimize suspended and deposited sediments that can suffocate eggs incubating in stream gravels, adversely affect fish respiration, and disrupt aquatic macroinvertebrate community structure. By covering or in-filling cobble, gravel, and boulder substrates, sedimentation also will decrease habitat heterogeneity and species

richness of the macroinvertebrate community. This will decrease the amount and quality of food available for fish and the ability of aquatic systems to process nutrients effectively. Minimize to the extent practicable, the use of heavy equipment and techniques that will result in soil disturbance or compaction of soils, especially on steep or unstable slopes. Implement sedimentation and erosion controls on all project sites where activities have the potential to deposit sediment into a stream or water body. Control structures must be placed and/or anchored appropriately to prevent adverse impacts to down slope habitats. Structures/techniques for erosion control may include, but are not limited to, silt fences, straw bale structures, seeding by hand and hydro-seeding, jute mats, and coconut logs. Grading and shaping should maintain or restore natural topography and hydrology.

10. Use of heavy equipment near streams should be permitted only when safeguards are implemented to prevent contamin ation of any water body.

11. Application of herbicides, pesticides, and fertilizer must follow label instructions to protect public health and avoid fish and macroinvertebrate mortality.

12. Minimize the adverse effects of excessive livestock use within riparian corridors. Site livestock watering facilities away from stream channels in areas where compaction and/or damage will not affect sensitive soils, slopes, or vegetation due to congregating livestock. Livestock fords across streams should be rocked to stabilize soils/slopes and prevent erosion. Place fords on bedrock or stable substrates whenever possible.

13. Fence habitats where necessary to regulate deleterious use. Replace and install new culverts following National Marine Fisheries Service guidelines to facilitate fish passage and minimize instream and bank erosion.

14. Develop programs to encourage careful landscaping that can help conserve water and reduce demands for flow that compete with aquatic ecosystem needs. These programs also should reduce the use of fertilizers, pesticides, and herbicides that may contribute to water pollution.

15. Develop mechanisms to implement programs that fund monitoring, maintenance, enforcement, and reporting that are necessary to assure that development will comply with approved policies, ordinances, and permitting procedures that protect and enhance aquatic ecosystems.

Valley-Foothill Riparian Ecosystems

Introduction

Riparian zones are dynamic areas of transition between riverine and upland environmen ts that are not only the most productive environments of Placer County but also are critically important habitat for many wildlife species. Delineated as the area between the low water line in the stream zone and the upper edge of upland areas influenced by flooding or high water tables (Naiman and Decamps 1997), riparian areas perform vital ecological services such as dissipating floodwaters, capturing nutrient-rich sediments, enhancing groundwater recharge, bank stabilization, providing organic matter and woody debris to aquatic food webs, and providing shade and cooler microclimates in streams and rivers. California riparian ecosystems are among the most productive in the world (Warner and Hendrix 1984).

Valley Foothill Riparian communities (VFR) in Placer County extend from the Great Valley to roughly 3,000 ft in the Sierra Nevada. These communities are generally associated with low velocity flows, flood plains, and gentle topography. In Placer County, VFR borders perennial streams such as the Bear River, Dry Creek, Coon Creek, Pleasant Grove Creek, and Auburn Ravine.

VFR has suffered more degradation and reduction than any other environment in Placer County and the Sierra Nevada in general. This community has been particularly impacted by human activities including industrial, agricultural, and residential development; historical hydraulic mining; gravel mining; altered flow regimes from water diversions and dams; floodplain drainage; road and railroad construction; and livestock grazing (Kondolf et al. 1996).

Vegetation

A healthy, mature VRI forest has a canopy layer of cottonwood, California sycamore, valley oak, or some combination of the three, a subcanopy tree layer, an understory shrub layer, and an herbaceous layer consisting of sedges, rushes, grasses, and some forbs. Generally the understory is impenetrable and includes considerable down wood. Transition to non-riparian vegetation is usually abrupt, especially near agriculture. *Fremont cottonwood type*. Fremont cottonwood is the most important tree in the canopy. Black willow, box elder, California Sycamore, narrowleaf willow, Oregon ash, Pacific willow, red willow, walnuts, and/or yellow willow may be present. Trees are less than 25 m tall; the canopy can be continuous or open. Shrubs and grape lianas are infrequent to common; the herbaceous layer is variable. Most cottonwood dominated stands have been altered by grazing.

California sycamore type. California sycamore is the most important tree in the canopy, distributed as widely spaced trees. Arroyo willow, black willow, California bay, Fremont cottonwood, red willow, valley oak, white alder, and/or yellow willow may be present. Trees are less than 35 m tall; the canopy is open; shrubs are common to infrequent. The ground layer is grassy. Grazing reduces tree regeneration in this type.

Valley oak type. Valley oak is the most important tree in the canopy. Black oak, blue oak, California sycamore, and/or Oregon ash may be present. Trees are less than 30 m tall; the canopy can be continuous, intermittent, or open. Shrubs are occasional, and lianas are common. The ground layer is grassy.

Under natural flow regimes VRI communities are periodically disturbed by severe floods and undergo succession over many decades from herbaceous species and shrubs to multi-layered forests. In all three types succession usually begins with shrubby willow thickets. After a variable number of years these are overtopped and shaded out by trees. Cottonwood-dominated VRI ecosystems may reach climax in 25-30 years; valley oak dominated riparian systems take much longer to mature.

Fish and Wildlife

Research has repeatedly demonstrated causal linkages between riparian condition and fish habitat quality. Recent research is revealing the important role of Valley foothill riparian habitats during high water periods for native fish species such as juvenile Chinook salmon. Particularly important functions of riparian forests are their ability to provide shade and a source of wood to streams and to regulate inputs of nutrients and

other materials. It is also well known that maintaining the physical connection between riparian forests along fish bearing streams and the rest of the stream network is a necessary prerequisite for high quality stream ecosystem.

VRI ecosystems also provide food; water; migration and dispersal corridors; and escape, nesting, and thermal cover for a number of wildlife species. Fifty-five species of mammals and 147 species of birds use VRI ecosystems as habitat in the Central Valley region. This represents 30% of the mammals and 27% of the birds in the entire state. In the planning area species of special concern that are strongly associated with VRI habitat include Chinook salmon, California red-legged frog, Foothill yellow-legged frog, Yellow-billed cuckoo, Swainson's thrush, and Willow flycatcher.

Assessment

Riparian conditions vary dynamically depending on flooding, drought, and land and water management and can recover quickly under appropriate management regimes. Systematic assessment of current riparian conditions (ongoing in Placer County) is an important first step in identifying management needs and prioritizing areas for conservation and restoration [see National Research Coucil (2002) for a review of assessment approaches].

The ecological health of Valley riparian habitats depends on (Moyle et al. 1996)

- good water quality and flow regime,
- periodic flooding,
- habitat connectivity along the long profile of the stream,
- vegetation productivity,
- vegetation structural diversity and connectivity within a variable-width buffer zone connecting aquatic and upland environments.

The assessment of riparian condition involves both structural and functional characteristics and some measure of species presence. Healthy riparian systems should have floodplains that are inundated fairly frequently, channels that have sinuosity and width/depth ratios in balance with the landscape setting, and point bars that are revegetating. Erosion or deposition should not be excessive for the landscape, and upland areas should not be contributing to riparian degradation. Vegetation should be diverse in both species composition and age structure, and individual plants should be vigorous. Understories should not be dominated by exotic species. Finally, the stream should support a diverse community of native fishes, and the terrestrial community should have a good complement of native, riparian-dependent species.

To obtain data on riparian condition it will be necessary to use aerial photographs or videography to visualize the gross structure of riparian vegetation, the continuity of riparian corridors, and surrounding land uses. It also will be necessary to survey riparian areas on the ground to obtain data on channel morphology, vegetation, and riparian-dependent species. Ideally, this would be done by sampling stream reaches at random, but that may not be possible.

Conservation and Restoration

Given the current degraded condition of most riparian areas in western Placer County, management and conservation strategies will need to focus on four related issues:

- Restoration of flow regimes in impounded and diverted streams
- Restoration of degraded channels, embankments and environments immediately adjacent to stream channels
- Conservation and restoration of the broader riparian zone that is infrequently flooded and that contributes energy and materials to the aquatic system
- Watershed management to control point and non-point sources of nutrients to riparian and aquatic systems.

Restoration of flow regimes. Riparian vegetation and ecosystem processes are inextricably tied to the stream flow regime (Poff et al. 1997) that can be defined by flow magnitude, frequency, duration, timing, and rate of change. Land use, water withdrawals, impoundments, and channel modifications such as levees and floodwalls all affect the flow regime and associated riparian processes.

Conserving and restoring flow regimes will require a multi-pronged strategy that will be somewhat reach-specific and dependent on the watershed context. Best management practices include water conservation and groundwater replenishment (e.g. stormwater recharge), changes in the timing and magnitude of dam releases to more closely mimic historical flows, and channel and bank restoration. Many of these management options are highly constrained by current patterns of land use and water demands and will need to be exercised through careful planning and adaptive management at the watershed scale in cooperation with the appropriate private landowners and public agencies. A number of such local and regional initiatives are already underway in Placer County [e.g., CALFED, Dry Creek Coordinated Resource Management Plan (CRMP) group].

Examples of best management practices to promote ecologically desirable flow regime and associate riparian conditions include:

1. Water conservation and groundwater replenishment
2. Water releases from dams to produce overbank flows at times when peak flows occurred historically
3. Channel and bank restoration
    a. Protect relatively undisturbed reaches that still have intact banks and channels.
    b. Manage and control upstream sediment sources.
    c. Remove or re-engineer roads and road stream crossings to reduce sediment yield.
    d. Modify or replace culverts to improve in-channel hydrological connectivity
    e. Remove in-channel barriers
    f. De-channelize to restore the connection between the channel and the floodplain
    g. Inject root wads and other large organic debris in areas where sources for such debris have been removed.

Additional detail on restoration channel and floodplain restoration for salmonids is provided in the California Salmonid Stream Habitat Restoration Manual (Flosi et al. 1998).

Floodplain Restoration and Management. The goals of floodplain restoration and management include protecting best existing intact areas and, to the extent possible, restoring desired ecological structure and function to degraded floodplains. Possible management actions include:

1. Creation of riparian management zones (Kondolf et al 1996). These are areas (sometimes referred to as buffers or setbacks) where vegetation cannot be disturbed and ground compaction is avoided in order to minimize bank erosion and promote native floodplain vegetation and its associated ecological benefits. The minimum width of the riparian management zone should be from 50-300 ft depending on stream size and local topography. Riparian areas on public and private lands are already under various strictures (summarized for the Sierra Nevada by Moyle et al. 1996). In Placer County local and County Ordinances already limit some activities on the 100-year floodplain or within specified riparian setback areas. Expanding floodplain protection may entail additional restrictions on industrial and residential development as well as agricultural setbacks, fencing to exclude livestock and provision of alternative water sources for livestock, etc.
2. Grading and filling to restore floodplain topography modified by past mining and other development activities
3. Reforestation through planting of desirable and appropriate tree and shrub species
4. Exotic plant species removal
5. Limiting application of pesticides and other potential pollutants

Watershed Management. Management of non-point sources of sediments, nutrients and other pollutants is critical to restoring and maintaining riparian areas. There are many guides for best management practices to reduce erosion and sediment yield and to improve stormwater quality. For a discussion of methods for assessing cumulative watershed effects, see Dunne et al. (2001). Many agencies (eg. CalTrans, USDA Forest Service, Tahoe Regional Planning Authority) have produced manuals detailing best management practices for minimizing cumulative watershed effects of construction, grazing and timber harvest activities in California (*www.dot.ca.gov/hq/oppd/stormwtr*).

Valley Grassland/Vernal Pool Ecosystems

Introduction

Valley Grassland occurs as a ring around the Central Valley from sea level to about 3900 feet and was the predominant ecosystem of the Phase I area. Prior to European settlement, the Valley Grassland ecosystem was most likely a bunchgrass-dominated prairie with native annual grasses and forbs filling the interspaces between the bunchgrasses. Unfortunately, no detailed descriptions of the presettlement community, other than "excellent pasture," (from early Mission Period accounts) exist. However, botanists are fairly certain that the prairie was dominated by perennials in the genera *Stipa (Nasella)*, *Poa*, and *Aristida*, particularly purple needle-grass *Nasella pulchra*.

Permanent alterations to the original ecosystem began when Europeans first reached the Americas. First, seeds of alien plant species, including scores of annual grasses, arrived in packing material, hay, and debris from Spain, and once these species

became locally established, they were widely distributed throughout California by birds, mammals, and human activity. Second, domestic livestock shifted the natural timing and extent of grazing. Although the original bunchgrass prairie supported large numbers of native grazing ungulates, they tended to be seasonal and migratory herds. Livestock were maintained in the grasslands throughout the year and in increasingly large numbers during the gold rush period and afterward. Yearlong, heavy grazing favored the introduced annual grasses and forbs at the expense of the native grassland ecosystem. Third, large-scale cultivation that began in the Valley Grassland ecosystem during the latter half of the 19th century also has contributed to the replacement of the original prairie. Abandoned farmland came back as introduced annual grassland rather than as the original community. Fourth, changes in the fire regime also may have favored the new annual grasslands.

Vernal pools or "hogwallows" are seasonal wetlands that form in shallow depressions of various sizes at sites where soils contain an impermeable layer such as claypan, hardpan, or some other material that produces a perched water table. The depressions fill during winter rains and dry out completely by spring or summer. In Placer County, vernal pools are most common in the Valley Grassland ecosystem, but they also occur in Blue Oak Woodland and on top of volcanic tables. Pools tend to be clustered in archipelagos in localities where the proper conditions for their formation occur. Vernal pools have been a part of the California landscape for thousands of years judging from the number of endemic species restricted to this ecosystem and from soil studies indicating their old age.

There are two types of vernal pools in Placer County. Northern volcanic mudflow vernal pools occur on Tertiary volcanic mudflows called lahars. These are usually small pools, forming in irregular depressions in gently sloping surfaces. In the foothills of the Sierra Nevada this type of pool is found primarily on the Merhten Formation. A second type, northern hardpan vernal pools occurs on acidic soils on old alluvial fans ringing the Central Valley.

Vegetation

The Valley Grassland ecosystem now consists of a wide mixture of species, mostly introduced, annuals. Grasses include wild oats, soft chess, ripgut brome, red brome, wild barley, and foxtail fescue, and forbs including numerous species of filaree, mullein, clovers, and many others. The boundaries of this ecosystem are probably little different from the original perennial prairie. A few small remnants of the original ecosystem still exist, and most of the original perennial species can still be found as scattered individuals throughout the ecosystem. This ecosystem is now commonly named the California Annual Grassland since less than 1% of the original Valley Grassland community still exists in the Great Valley.

The annual plants begin to germinate in the fall with the first good rains, grow slowly through the winter, grow rapidly in the spring, and mature between late April and June. A few warm-season annuals may reach their peak growth in summer. Since soil water deficits characterize this ecosystem for 4-8 months every year, most of the vegetation lives through the dry season in the seed stage. While species composition, distribution, and densities have changed radically since settlement, grasslands are still

highly productive and support a broad diversity of native fauna. A Jones and Stokes study

California vernal pool vegetation is characterized by a high proportion of plants that are endemic or regionally restricted to that habitat, and many species are of conservation concern. Studies have identified 56 genera and 200 species of vascular plants known to grow within vernal pools (Holland 1976); more than 70% are native annuals. Nearly 70% are endemic, and 1/3 (73 taxa) are considered endangered. Introduced species comprise less than 7% of this flora.

The vegetation in vernal pools is arranged concentrically. The first zone corresponds to the pool bottom, the second occurs around the pool margin, and a third zone is on higher ground and supports typical California Annual Grassland species. Because of winter flooding there is a sharp boundary between the grassland and the pool zones. Few other ecosystems are delineated as discretely. Plant cover in the grassland zone may exceed 100%, while most pools have a characteristically low total cover, frequently less than 15-30%. Species richness is highest in the pools' marginal zone, slightly lower in the grassland zone, and considerably lower in the pool zone.

The number of plant species within an individual pool (alpha diversity) is usually low and is related to pool area, pool depth, and the amount of bare ground. However, the number of species among pools in an archipelago (beta diversity) is quite high. Thus, typical vernal pool plants are characterized by highly subdivided populations, probably with low genetically effective sizes and low dispersability.
Sensitive vernal pool plant species known in Placer County include the Bogg's Lake hedge-hyssop *Gratiola heterosepala* (State Endangered), dwarf downingia *Downingia pusilla* (CNPS list 2), Ahart's dwarf rush *Juncus leiospermus* var. *aharti* (Federal SC, CNPS list 1B), legenere *Legenere limosa* (Federal SC, CNPS list 1B), and Red Bluff dwarf rush *Juncus leiospermus* var. *leiospermus* (CNPS list 1B).

Fauna

The original Valley Grassland ecosystem supported large numbers of pronghorn, deer, tule elk, rabbits, hares, squirrels, voles, gophers, mice, and other rodents. Coyote, fox, and even wolf roamed with grizzly bears. As European humans and their domestic animals rapidly increased in numbers in the 1850s, the larger wild animals diminished, but the smaller ones remained numerous. The California Annual Grassland ecosystem is still high-quality habitat for numerous native reptiles, birds, and mammals. A few vertebrates such as California tiger salamander *Ambystoma californiense* (Federal Candidate, State SC), and western spadefoot *Scaphiopus hammondii* (Federal and State SC) may use vernal pools for breeding in Placer County, but the vast majority of the pool fauna consists of invertebrates.

The invertebrate fauna of conservation concern in Placer County's vernal pools consists of two fairy shrimp, *Linderiella occidentalis* and *Branchynecta lynchi* (Federal Threatened) and the vernal pool tadpole shrimp *Lepidurus packardii*, (Federal Endangered). Although both species of fairy shrimps occasionally co-occur in the same pool, *Linderiella occidentalis* is typically found in pools that are moderately predictable (fill regularly) and long-lived (remain filled more than three weeks). In contrast, *Branchinecta lynchi* is most commonly found in less predictable and shorter-lived pools.

Lepidurus take longer to develop to maturity than the fairy shrimps, so they are effectively restricted to longer-lived pools.

Most vernal pool plants are pollinated by native, ground-nesting, solitary bees in the family Andrenidae. Many of these bees are quite specialized and take pollen from only a single genus of plants.

Many typical grassland bird species are still found in this fast-dwindling habitat. Swainson's Hawks *Buteo swainsonii* (State Threatened) and Burrowing Owls *Athene cunicularia* (Federal and State SC) often are associated with vernal pools since they often utilize the surrounding grasslands for foraging. Nesting Northern Harriers *Circus cyaneus* (State SC) and wintering Ferruginous Hawks *Buteo regalis* (Federal and State SC) and Rough-legged Hawks *Buteo lagopus* (no legal or protected status) overlap in habitat use with Swainson's Hawks.

Conservation and Management

California Annual Grassland ecosystems continue to disappear under agricultural, residential, and industrial development, so their conservation is an important goal for Placer County. This dovetails well with open space conservation for agriculture, since these grasslands thrive under grazing disturbance and need to be managed as grazing systems. In the absence of livestock, annual grasslands often become dominated by tall, dense stands of grasses such as ripgut brome and wild oats that are not used by many wildlife species. Many annual grasslands can withstand fairly heavy livestock use with little soil erosion, high productivity, and little change in floristic composition. The introduced grasses are now permanent members of the ecosystem; and their elimination, except perhaps in small, restored areas, is highly unlikely. Thus, they should be thought of as naturalized species rather than as invaders characteristic of rangeland in poor condition. Certain exceptionally troublesome species such as goat-grass, Medusa-head, and yellow star-thistle present a different situation and should be reduced or eliminated whenever possible.

In Placer County, urbanization, industrial development, and infrastructure construction have resulted in substantial losses of vernal pool ecosystems. To date, most conservation efforts have focused on fencing off single pools or tightly confined small pool complexes and surrounding them by various types of development. The majority of these conserved pools reside in an urban or suburban landscape. In addition to vernal pools being protected through this onsite avoidance strategy, offsite conservation has occurred on a 600-acre vernal pool conservation bank in the Orchard Creek watershed near Lincoln. The conservation effort has been coupled with an offsite mitigation strategy that has resulted in the 1:1 creation of new vernal pools, although little or no new Mehrten habitat has been created. The creation of new vernal pools in mitigation banks is of marginal long-term conservation value at best. Rather, effective conservation must focus on the protection of archipelagos of pools containing a number of pools and pool types plus a substantial portion of the surrounding catchment area.

Pool number. Because of the complexity of vernal pool habitats and the life history requirements of their associated species, a conservation area must contain many pools of different types.

- The diversity of plant species is low at single pools but each pool tends to have a different complement of species.

- Vernal pool invertebrates require different pool types in terms of longevity and predictability.
- Since tadpole shrimps and larvae of salamanders and spadefoots are predators of fairy shrimps, long-term survival of fairy shrimps requires that some of their populations are in pools free of tadpole shrimps and vertebrates.

Catchment area. A vernal pool conservation area must include a significant amount of the surrounding drainage basin or sub-watershed. The following points suggest that reserves of less than several thousand acres will be ineffective in conserving all the components of the vernal pool ecosystem.

1. A large catchment area helps ensure sufficient runoff to fill the pools with regularity and to resupply the bicarbonates, carbonates, and hydroxides needed for adequate buffering capacity.
2. Vernal pool plants are pollinated by specialized bees, and it is quite likely that a number of bee species are required in a pool archipelago to pollinate the plants. Species richness of bees is almost certainly dependent on area.
3. Spadefoots migrate at least several hundred meters from non-breeding to breeding habitats, and California salamanders are known to migrate at least one mile from their non-breeding habitat to a breeding pool. This suggests that the amphibians breeding in a single pool may have come from an area encompassing over 3 square miles or more than 2000 acres.
4. Burrowing Owls have been observed at densities of 8 pairs per 640 acres in California. Thus, a minimally viable population of Burrowing Owls (ca. 50 individuals) requires at least 2000 acres of suitable habitat.
5. Swainson's Hawks apparently need between 1400 and 10,000 acres to support a single nesting pair.
6. The watershed surrounding the pools must be large enough to contain viable populations of several species of mammals since they are important in the ecology of several grassland and vernal pool species. Both the California tiger salamander and western spadefoot live in mammal burrows during the non-breeding season. The Burrowing Owl depends on fossorial mammals such as the California ground squirrel to excavate nest sites, and it feeds on small mammals such as deer mice and meadow voles in addition to insects.

Management. Management strategies must include fencing for the protection of pool archipelagos from off-highway vehicle use, trash dumping, unauthorized hunting, and watershed alteration.

1. Off-highway vehicles can alter hydrology, damage vegetation, and kill or injure small animals, especially when they are migrating to breeding areas.
2. Ground squirrels and other rodents must not be shot or poisoned because of their importance to the vernal pool community.
3. Pool complexes must be sufficiently free from disturbance so that ducks and other aquatic birds are able to move freely from pool to pool. Fairy shrimps are an important part of the diet of many birds, and the resistant cysts of the shrimps are dispersed from pool to pool in the guts of these birds or in the mud adhering to their feet.

4. Artificial drainages that alter pool hydrology must be eliminated, and the natural drainage pattern must be restored.

5. Vernal pools and their associated Valley Grassland habitats could be managed as grazing systems. In the absence of grazing, annual grasslands often become dominated by tall, dense stands of grasses such as ripgut brome and wild oats that are not used by many wildlife species. Fall grazing is also necessary to keep the vernal pools free of invasive vegetation.

6. Prescribed fire also may be considered as a management tool to mimic natural conditions and maintain the natural vegetative community.

7. Many other human uses including hiking, horseback riding, and other types of "soft" (less invasive) recreation are compatible with vernal pool conservation.

8. In the absence of protected areas, large areas of ranchland managed for both conservation and livestock production, provided that the grazing regime is consistent with vernal pool conservation, may be the best conservation prescription for vernal pools and their associated species. The latter strategy fits in well with Placer Legacy's agricultural conservation goals.

Restoration and Creation of Vernal Pools

The results of vernal pool restoration are mixed, ranging from qualified successes to dismal failures. The lack of detailed knowledge of the physical and biological attributes of natural reference pools makes the evaluation of restoration success quite difficult, and much further study is necessary. Avoidance of disruption is clearly the preferred option for remaining vernal pools.

While the creation of new pools may be useful in the short term for the conservation of some species of vernal pool plants, its long-term effectiveness for those species is doubtful unless the right species of pollinating bees also have been established near the pool complex. Unless the created pools mimic the heterogeneity in predictability and duration of a natural pool complex, it seems unlikely that they will be very effective for the conservation of pool invertebrates either. It is also very hard to see how a created pool complex can provide the appropriate habitat for the vernal pool-associated vertebrates discussed above. In any event, it should be the responsibility of those creating the pools to demonstrate their long-term effectiveness for any species before relying on created pools as a major conservation tool. Until that has been done, the conservation of existing pools and their associated catchments is a far better strategy.

Management Goals and Practices

1. Biodiversity
   - Minimum preserve size should be approximately 200 acres.
   - Reduce or remove non-native plant species, especially weedy/invasive ones.
   - Restore native perennial bunchgrass and native plant associations.
   - Maintain and increase native species diversity.
   - Reduce and remove non-native animal species such as feral dogs and cats, beaver, bullfrogs, mosquito fish.

2. Water/hydrology
   - Provide a range of hydrological conditions to buffer against climate change.

- Reduce/remove augmented water from storm drains, irrigation, outfalls, etc.
- Control agents of hydrologic change (beaver dams, water table alterations, etc.).

3. Management (general)
   - Focus on ecosystems, not single species.
   - Follow best management practices; monitor results. Change management practices if they are not achieving goals (adaptive management).
   - Focus management trials on small sections of reserves only.

4. Grazing management
   - Disturbance is important in grassland and vernal pool ecosystems, and the complete removal of grazing will most likely lead to the collapse of the natural ecosystem.
   - Grazing should be conducted both on grassland and in vernal pools
   - Cows are best for grass management; sheep will work for some forbs but won't enter pools when wet; goats are quite problematic; horses have little success (but few research trials yet).
   - Moderate to intense grazing should mimic natural migratory regimes by moving grazers from pasture to pasture at regularly scheduled intervals.
   - Do not remove existing grazing regime until a grazing management plan is in place.

5. Fire management
   - Careful and strategic use of fire along with grazing has been shown to reduce alien weed populations, increase biodiversity, and encourage perennial bunchgrass and native annual species expansions.
   - Mowing, baling, mulching, and various other biomass reduction techniques have provided small to moderate successes toward these goals.
   - Preserves should be large enough so that burning and grazing can continue regularly on a rotational basis.

6. Access and exclusion
   - Access to reserves should be restricted to a well-designed system of entry and exit points; visitors should be restricted to trails and boardwalks.
   - All intensive and/or invasive recreational activities (i.e., any activities that would disrupt natural ecosystem functioning) must be prohibited.

7. Research and Monitoring
   - Conduct baseline research on biological resources and current management practices.
   - Monitor the effects of human access on ecosystem structure, composition, and processes.
   - Monitor for contaminants.

Agricultural Ecosystems

Introduction

Agricultural ecosystems include pasture, cropland, orchard-vineyard, agricultural riparian, and eucalyptus; other classification systems differentiate between flooded agriculture, seasonally flooded agriculture, and non-flooded agriculture. Agricultural ecosystems generally have been planted on deep, fertile soils that once supported productive natural ecosystems and an abundance of wildlife. This conversion, while resulting in tremendous economic gain, has impacted California's biological diversity significantly.

Pasture, cropland, and orchard-vineyard ecosystems are found throughout the Phase 1 area in the Central Valley and lower foothills. Many orchards have been abandoned in Placer County since the 1950s. These have been invaded by native or naturalized vegetation, and some are now reverting to oak woodlands.

Vegetation

Pasture vegetation is a mix of perennial grasses and legumes that normally provide 100% canopy closure. Vegetation height varies according to season and livestock stocking levels, and the mix of grasses and legumes depends on management practices. Pastures are often established on soils not suitable for other crops where an ample water supply is available. They are a fairly permanent agricultural vegetation type; with proper management, pastures will remain productive for 30 years.

Cropland is almost always grown as monocultures, using tillage or herbicides to eliminate unwanted species. Most crops are rotated between annuals and perennials on a five to seven year rotation. Hay crops are grown on more acreage than any other crop in California.

Orchards are typically single-species, open-canopied, tree dominated ecosystems planted in a linear pattern with uniform spacing between trees. Vineyards are also single-species plantations arranged in rows, with the crop often supported on trellises. In both vegetation types the understory usually consists of bare soil (controlled by tillage or herbicides) or a cover crop of herbaceous plants. In California, orchards are generally planted in citrus, nuts, and other fruits; vineyards are primarily grapes with berries and kiwi fruit making up the remainder.

Agricultural riparian ecosystems are found along irrigation ditches, canals, and stock ponds. These ecosystems have some of the species found in natural riparian zones, particularly willows and cottonwoods, but the vegetation is often cut, sprayed with herbicides, or burned periodically to reduce water loss through transpiration. Water-saving practices such as lining canals or replacing ditches with pipes results in the elimination of this ecosystem--with poorly understood consequences on riparian-dependent species.

Eucalyptus has been extensively planted throughout California since its introduction from Australia in 1856. Most eucalyptus have been planted into rows for wind protection or into groves for hardwood production in agricultural landscapes, but eucalyptus also can be a significant vegetation type in urbanized areas.

Wildlife

Although agricultural ecosystems are used periodically by a number of species, they are not major reservoirs of biodiversity. Ground nesting birds, including waterfowl, nest in pastures if adequate vegetation is present at the onset of nesting season, and flood irrigation of pastures provides feeding and roosting sites for many shorebirds, wading birds, and waterfowl. Some species of waterfowl feed on waste rice and corn that remain in the fields after harvesting. Croplands flooded for weed control, leaching, irrigation, or waterfowl hunting also serve as temporary habitat for a variety of wetland wildlife, including the giant garter snake, a Placer County species of particular interest. Swainson's hawks use pasture and cropland ecosystems for foraging. Eucalyptus can be important as roosts, perches, and nest sites for a number of bird species, especially raptors.

Fleishman et al. (1999) and Simpkin (1999) have shown that agricultural ecosystems support a fairly large subset of the native riparian-dependent butterflies and dragonflies and in the western Great Basin, and there is no reason to think that these findings would not apply to California as well.

Conservation and Management

Agricultural ecosystems can be both beneficial and detrimental to biodiversity. On the one hand, since these lands are managed primarily for crop production, pest species need to be controlled to prevent excessive crop losses. If these actions are not carried out with some care, many non-target species are killed as well. Agricultural operations also can be major sources of pollution. Fertilizers, pesticides, and herbicides all can find their way into rivers and streams with highly deleterious impacts on native biodiversity. Environmentally friendly practices such as no-till and organic farming can help reduce these impacts considerably.

On the other hand, agricultural lands can provide habitat for many species, and small changes in management sometimes result in substantial benefits to biodiversity. For example, in the Sacramento Valley rice fields and irrigation ditches have become the giant garter snake's last retreat. During the summer the rice fields are flooded, providing good foraging habitat, and during the winter the snakes hibernate in the ditch banks. Until recently, the fields were drained in the fall so the stubble could be burned; however, if the water were let out too fast, some of the snakes became stranded in the fields and became easy prey for raptors. Because of recent air quality legislation that prohibits burning, rice farmers are now letting the water remain in their fields, and this wintertime flooding reduces stranding and helps confine the snakes to the drier levees when springtime planting begins. Over the winter, the rice stubble is broken down by bacteria in the water, and the invertebrates that feed on the bacteria provide food for overwintering birds. This provides a win-win situation for both the grower and wildlife. Unfortunately, rice fields are not stable habitat for the giant garter snake since the amount of acreage in rice production is highly variable and depends on market conditions and water availability.

Biodiversity provides many services to agriculture that are not always recognized by the agricultural community. Many wildlife species act as biological control agents by feeding on weed seeds and deleterious insects, and wild bees now pollinate many crops such as alfalfa, fruits, and nuts. These crops once were pollinated by domestic

honeybees, but now that honeybee populations are drastically reduced by low honey prices and parasites, growers are becoming more and more dependent on wild bees. Thus, the melding of conservation and production interests in rural landscapes makes good sense. The best hope for conserving biodiversity in western Placer County is a mosaic of agricultural, natural, and semi-natural areas. Such a landscape will not only serve conservation objectives but also will improve economic returns for agriculture through the restoration of ecosystem functions at a landscape level and by helping to minimize inputs and costs (Recher 2003). The following guidelines suggest some ways in which farming and ranching practices can be integrated with biodiversity conservation (Doley 2003, Hobbs 2003, Lambeck 2003, Lefroy 2003, Lloyd and Butterworth 2003).

• Work with the natural system rather than against it. California's climate and water availability are different from other areas; practices designed for the Midwest are not optimal here.

• Maintain diversity and keep options open. Build resilience into the system so that it is less susceptible to extreme events and conditions (e.g., droughts, floods, insect outbreaks). A farming system that combines raising a diversity of livestock and crops is good insurance against economic and environmental disasters. Monocultures and low diversity systems can survive only with high inputs and are inherently susceptible to environmental variability, pests, disease, and market fluctuations.

• Manage according to natural boundaries. Farming to soil type increases yields and makes efficient use of fertilizers and pesticides if they are needed. Careful identification of where most of the yield comes from can release low productivity areas for other uses such as revegetation.

• Preserve or restore representative patches of the original vegetation. This not only helps preserve biodiversity, but remnant vegetation also provides habitat for many species of birds and predaceous insects that help control insect pests. Patches of native vegetation also retain many important functional attributes beneficial to agriculture. There is evidence that mixtures of native vegetation and production areas result in less energy use and fertilizer demand, are more efficient in water use, are more productive, and degrade the soil less than conventional agricultural systems (Melvin 2003).

• Maintain permanent strips of native trees and shrubs to connect the patches.

• Be cautious in the use of herbicides and insecticides. Reduce production of weed seeds by cultivating instead of using herbicides. Rely more on natural enemies to control pests; use chemicals only as a last resort and not as routine insurance. All weeds and insect pests eventually develop some degree of resistance to chemical control measures.

• Manage nutrient cycles by maintaining a low input system that utilizes nitrogen from legumes or animal waste rather than chemical fertilizers. Minimize nutrient losses by decreasing runoff and wind erosion. Contour plowing, retaining stubble, and creating shelter belts of native vegetation can help accomplish this.

• Use water entering the system effectively.

• Get to know the species in and around your land. Survey the birds, mammals, amphibians, reptiles, and common insects on your land at least once a year; keep records. Get out of the truck on off of the 4-wheeler whenever possible to increase observation time.

• Provide roosting perches and nestboxes for birds and bats.

• Leave winter crop stubble and brush piles through the winter to provide ground cover; plant cover crops to provide food and cover for native birds.

• Control feral cats, foxes, bullfrogs, weeds, and other non-native species. Feral cats kill an estimated 4 million birds per day.

Urban Ecosystems

Introduction

Urban ecosystems are created by the construction of buildings, roads, and other infrastructure accompanied by the replacement of native vegetation with exotic species. They are found throughout the Phase 1 area. There is usually no abrupt boundary between urban and non-urban ecosystems; rather, a gradient of increasing urbanization can be identified. An example of such a gradient might be: natural ecosystem, low-density suburban, golf course, city park, higher-density suburban, urban residential, and city center.

Urbanization results in the loss and fragmentation of native vegetation and wildlife habitat and modifies many environmental parameters to favor introduced species. For example, wind velocities tend to be reduced in highly urbanized areas (except where there is high-rise construction), and temperatures tend to be 3o to 5o C higher than in the undeveloped landscape. The latter is the "urban heat island" effect, largely due to intensive energy use and changed albedo (surface reflectivity).

Vegetation

The structure of urban vegetation varies, and five types of vegetative cover have been defined. Tree groves have a continuous canopy and are found in city parks, green belts, and cemeteries. Street tree strips can have either continuous or discontinuous canopies. Both types are often monocultures of non-native species. Shade tree/lawns are typical of residential areas; they tend to have more diversity of tree species than the first two. Lawns tend to be structurally uniform. Although a variety of grass species may be planted, lawns are usually maintained at a uniform height and as continuous ground cover. The fifth type, shrub cover, is more limited in distribution than the others, and the kinds of species, planting design, and maintenance schedule determine its structural characteristics. All these cover types, along with areas lacking significant vegetative cover, intergrade and form a complex mosaic within cities and towns and along urbanization gradients. The characteristics of the matrix as a whole may be more important in determining the value of urban ecosystems for biodiversity conservation than the characteristics of any particular cover type.

The richness of native plant species tends to decline along the urbanization gradient, and the richness of non-native species, particularly trees, tends to peak in suburban and urban residential areas. Weedy exotics and a few hardy exotic trees and shrubs dominate city centers--if any vegetation grows there at all.

Wildlife

Recent studies by Blair (1996, 1998) and Blair and Launer (1997) in oak woodlands in the San Francisco Bay Area using birds and butterflies as biodiversity

indicators have shown that any development at all is detrimental to some species, but that others can tolerate varying degrees of urbanization. Species intolerant of any urbanization in this area were Steller's jay, wrentit, western wood-pewee, Hutton's vireo; grass skipper, and western checkerspot butterfly. The 57 other native species in the study dropped out at different places along the urbanization gradient. Only four native species of birds--white-throated swift, Anna's hummingbird, Brewer's blackbird, Scrub jay, and mourning dove--and two native but highly migratory butterflies, the fiery skipper and painted lady, were present at the most urbanized part of the gradient.

More recently Niell (2001) examined the relationships among parcel size, landscape-level vegetation characteristics, and butterfly community composition in rural residential development in Placer County oak woodlands. She sampled butterflies on twenty-six 8-hectare sites that spanned a range in development intensity from sites with small 0.4 hectare (1 acre) parcels and highly modified vegetation to large parcels greater than 81 hectares (200 acre) in size that were characterized by substantial amounts of undeveloped oak woodland. She found that parcel size was negatively correlated with diversity of vegetation types and positively related to the percent area of native vegetation across the range of parcel sizes observed. Butterfly species richness was negatively related to parcel size, positively related to vegetation diversity, and peaked where intermediate levels of area of native vegetation exist. The loss of native vegetation associated with smaller parcel sizes, however, resulted in the loss of butterfly species that are closely associated with native vegetation. These trends represent a shift in butterfly species composition from specialist to generalist with increasing urbanization. This suggests that zoning for larger parcel sizes may be useful for conserving native oak woodland vegetation types and its associated biotic diversity; however, her data also showed that maintaining patches of oak woodland, even on small parcels, helps retain specialist species at a landscape scale.

In general, low-density suburban areas support many species of native wildlife, but few of these species are of conservation concern. A few native species such as scrub jays, house finches, monarch butterflies, raccoons, and striped skunks, have adapted well to fairly heavy urbanization, and these species can become quite common in residential neighborhoods. In commercial and industrial districts most native species have been replaced by a handful of invasive, exotic species. One study found that rock doves (feral domestic pigeons), house sparrows, and starlings comprised over 90% of city center birds. The cabbage white, an exotic species, is often the only species of butterfly that can be found in city centers.

Curiously, the Peregrine Falcon *Falco peregrinus*, a Phase 1 covered species, has been known to colonize high-rise buildings in city centers where it preys primarily on rock doves. Burrowing owls, another Phase 1 covered species, occasionally use vacant lots in urban areas.

Conservation and Management

Urban ecosystems generally require substantial management such as irrigation, pruning, fertilizing, and pesticide spraying to maintain their structure and species composition. When management stops, these ecosystems are invaded by both native and exotic species, and unmanaged urban ecosystems eventually may revert to communities of largely native vegetation.

Since a goal of the HCP/NCCP is to maintain current levels of biodiversity, development must be spatially concentrated, and the amount of undeveloped land must be maximized. Golf courses, city parks, and other recreational areas support relatively little native biodiversity, and even though many species can adapt to lightly urbanized environments such as low-density suburban, completely undeveloped reserve areas must be established to maintain the highly specialized species found only in undisturbed natural ecosystems.

There are two design elements for new developments that are directly under the control of developers and planners: the size and shape of green spaces and the intensity and design of development on adjacent lands. Green spaces should be large with internal fragmentation minimized, close together, interconnected (preferably with multiple linkages), and contain heterogeneous vegetation, soils, and topography whenever possible. Vegetation should be kept natural, and exotic species should be removed; shrubs and small trees should not be removed to achieve a park-like effect. Wide, maintained paths and landscaped areas within green spaces should be avoided; rather, walking and biking trails should be sited along edges.

Developers should not design residential areas with straight lines of grassy lawns and hedges planted with non-native species. Instead, neighborhoods should be designed with as much natural cover as possible and should be landscaped with shrubs and native grasses rather than lawns. Native trees should not be replaced with exotic ones, and dead trees should be left in places where they pose no threat to humans.

Individual homeowners need to minimize intrusions into the green spaces. Homeowners associations should encourage residents to keep their cats inside at all times, keep dogs in fenced yards and on leashes when outside of the yards, and not to dump lawn trimmings or other debris in green spaces.

Waters near urban and suburban areas are often adversely affected by urban storm water runoff. Impacts of this runoff are manifested in a variety of ways, including:

• Altering hydraulic characteristics of receiving streams by increasing peak discharge, increasing flooding and the duration and frequency of elevated discharge, and reducing base discharge.

• Changing stream morphology by increasing shoreline erosion, stream bed scouring, channel widening, sediment transport, and stream bed scouring.

• Altering fish and macroinvertebrate communities, and decreasing populations of sensitive species.

• Increasing risks to public health by increasing human contact with contaminated water, and by contaminating drinking water supplies, and fish and shellfish used for recreation and by the food industry.

The goal of urban BMPs is to minimize affects of these impacts. In existing urban areas, BMPs should address a range of water quantity and water quality issues. In new developments, BMPs should be designed so that post-development peak discharge rates, volume, and pollutant loadings are no greater than pre-development conditions. Within context of these goals, it is usually inappropriate to identify specific BMPs that can resolve a wide range of problems because BMPs must be designed to address the specific challenges and issues at each particular site. Therefore, BMPs shown below provide general design guidance to resolve a wide variety of issues. Assessment and implementation of individual BMPs should be an integral part of the Placer County

planning and permitting process, and programs should be periodically reviewed to ensure their effectiveness. More detailed information about the variety of designs that may be utilized for urban BMPs is available in a number of reports by the U.S. Environmental Protection Agency, American Society of Civil Engineers, and the Water Environment Federation that should be consulted to maximize the efficacy of individual projects. A selection of these reports is shown in the References section.

Urban Development BMPs

There are two basic types urban development of BMPs. *Stru ctural BMPs* are designed to treat storm water at either the point of generation or at the storm water or sewage treatment point of discharge. *Non-structural BMPs* include educational, pollution prevention, and runoff management programs to prevent pollutants from entering runoff. It may be necessary to use a suite of structural and non-structural BMPs to minimize entrance of storm waters into stream and lake systems and their adverse impacts.

Structural BMPs include:

• *Infiltration systems* to capture runo ff and allow it to infiltrate into the ground. These systems include porous pavement, trenches, and wells.

• *Detention and retention systems* to temporarily capture runoff and retain it for a short period of time before it is slowly released. Detention systems are usually dry between runoff events and retention systems usually maintain a pool of water.

• *Constructed wetland systems* are similar to detention and retention systems but wetland vegetation is maintained in the system to allow biological uptake of pollutants.

• *Filtration systems* use granular material such as sand, organic material, carbon or other membranes to remove suspended material from the runoff. These systems may be constructed on the surface or underground.

• *Conveyance and delivery systems* that minimize connections between impervious surfaces and storm water drainage. Such conveyance and delivery systems direct storm water away from impervious surfaces (e.g., include rooftops, driveways, parking lots, streets, and highways) to areas where it may be detained or infiltrated.

Non-Structural BMPs

• Establish county and/or city *recycling programs* to minimize the amount of waste material that is released into the environment.

• *Public education* is necessary to inform the community about the affects of their activities on surface water pollution. Education should emphasize non-point source pollutants such as fertilizers, pesticides, automotive products, household chemicals, and animal (e.g., pets) and plant (e.g., lawn clippings) waste. These programs also should inform the public about city and county programs that allow the proper disposal of pollutants (e.g., recycling, hazardous waste).

• *Maintenance practices* can be implemented by cities and counties to minimize runoff from the urban landscape. These practices generally ensure that existing systems are operating properly and efficiently and include sweeping parking lots and streets to remove organic and inorganic debris, cleaning catchment basins, maintaining streets and ditches to prevent deteriorating pavement and accumulated materials from entering the storm water system, collecting floatable material (e.g., styrofoam), enforcing laws to

prohibit unlawful discharge of chemicals, and maintaining sewer facilities to minimize leakage.

Adaptive Management and Associated Monitoring

Introduction

Current levels of information are inadequate to identify minimum ecosystem units that will stay healthy through time, to identify minimum viable population sizes for target species, or to describe an effective system of habitat linkages that will facilitate ecological interaction and gene flow among these species. The combination of these factors reduces the probability that the network will support some of the target species over the long term without active management.

Since this process will provide only a best-guess about the ecological and conservation requirements of most of the covered species, the HCP/NCCP will rely heavily on the process of adaptive management for its execution. Unlike the usual prescriptive approaches that rely on rigid standards and guidelines, adaptive management acknowledges the various sources of uncertainty inherent in resource stewardship, takes an experimental approach, and is self-correcting if the management actions are failing to achieve the conservation goals.

For these reasons the NCCP will require the establishment of a monitoring and adaptive management program. Monitoring will evaluate population levels of sensitive species in conservation areas, patterns of use of landscape linkages, and the responses of species to disturbance. Adaptive management incorporates newly acquired information from monitoring and allows response to unforeseen circumstances.

Principles

Adaptive management is an iterative process that evaluates management actions or program elements through carefully designed monitoring and proposes subsequent modifications (Mulder et al. 2000). The modifications are in turn tested with an appropriate, perhaps redesigned, monitoring. Even though adaptive management is logical, can deal with uncertainty and data gaps, is similar to the scientific process of hypothesis testing, there are few examples of its successful implementation in the existing literature [but see Wisconsin DNR (1999) and Pavlik et al. (2002) for operating examples]. There appear to be three main reasons for its limited success: (1) failure to have clear ecological and social goals that are endorsed by all parties, (2) reluctance of planners or resource managers to rely on monitoring data for decision-making, and (3) monitoring programs that are not specifically-focused on the management actions or that lack the statistical power to provide the necessary level of certainty. These problems are discussed at length in a recent NRC report on Adaptive Management of the Everglades: http://books.nap.edu/catalog/10663.html.

Implementing an effective program for adaptive management and monitoring in Placer County requires understanding the following principles:

> *Policy-makers, resource managers and scientists must collaborate on the design of the adaptive management program from DAY ONE.*

Initial "buy-in" as to how adaptive management works is absolutely essential so that policy makers and resource managers know how the monitoring program should be used and how it cannot be used. They must specify which management actions most urgently require evaluation, provide focus on specific issues to be included in the monitoring, and understand how the monitoring will provide the necessary data for modifying the existing action or proposing a new action. Similarly, the scientists must understand the policy and management needs, explain the design and limits of the proposed monitoring (e.g. error and power analyses), and provide useful distillations of the monitoring data for decision-making.

Different types of monitoring programs provide distinctively different services.

"Monitoring" is too vague a term to convey the kinds of designs and information feedbacks that will be required for implementing an adaptive management program for all of eastern Placer County. Therefore, effective implementation of the NCCP/HCP will require these three types:

1. *Compliance Monitoring*: This is a simple information feedback on fulfillment of permit conditions, mitigations, rates of land conversion, spatial patterns of development, preservation, or other forms of land use, and other non-biological measures are recorded and analyzed. In essence, it will track whether the most basic objectives of the NCCP/HCP are being met. Placer County, through its planning department, is probably the organization that can provide compliance monitoring for the NCCP/HCP.

2. *Status and Trend Monitoring*: Biological data on the population sizes, numbers of populations, areal extent, or quality of critical biological resources are subjected to trend analysis to determine how they are performing under the existing conditions imposed by the NCCP/HCP or under specific management regimes. Although agencies will probably require some kind of status assessment on all listed or CEQA species, the selection of indicator species or habitat types (see questions 3 and 4 of Species Addressed section, below) may provide a reasonable subsample of different organisms or community types for more detailed trend analysis. It should be noted the Status and Trend Monitoring does not establish cause and effect, but simply gives an evaluation of resource condition though time. Consequently, its statistical power must be appropriately evaluated to give managers clear indications of its limitations and levels of uncertainties. Resource agencies (CDFG, USFWS) have the appropriate expertise and databases for performing this kind of monitoring in cooperation with the eastern Placer County NCCP/HCP. The principles and techniques of trend analysis are given in Pavlik (1994), Willoughby et al. (1997), and Thompson et al. (1998).

3. *Cause and Effect Monitoring*: This is the most scientific of all three types of monitoring because it tests management hypotheses with field experiments. It attempts to fill very specific data gaps by testing the effects of relevant variables (e.g. controlled burns, grazing regimes, reintroductions of rare species) on resources of concern (see Management and Monitoring section, question 2, below). A well-designed experiment with appropriate controls, replications and statistical power can provide the best management guidance, but is very specialized, time-consuming and relatively expensive.

Consequently, this type of research-oriented monitoring is most likely to be performed by qualified consultants or university scientists supplied with adequate levels of funding. The principles and techniques of cause and effect monitoring are given in Taylor and Gerrodette (1993), Pavlik (1994), Willoughby et al. (1997), Thompson et al. (1998) and Feinsinger (2001).

> *Oversight committees must facilitate communication among government, scientists, and the private sector.*

Information flows between decision-making bodies and constituencies must be facilitated to promote the synergy necessary for successful adaptive management. Various structures can be proposed (Pavlik et al. 2002), but efficient and timely exchange of information between policy, research, and management must be of primary concern.

Implementation

Adaptive management can accommodate much of the uncertainty inherent in the planning and implementation processes. However, it is one thing to design and adaptive management program and quite another to implement it. Leadership, decision-making authority, and scientific expertise are all needed to make adaptive management work. Public agencies generally do not have these capacities, nor do consulting firms. Optimally, adaptive management and the administration of conservation lands should reside with an independent, adequately funded organization with broad representation (agencies, university officials, local government, development and agricultural interest) and the power to redirect or modify development or conservation activities. This HCP/NCCP oversight organization would coordinate monitoring activities, track progress toward county-wide conservation goals, and have the ability to change management practices if the goals are not being met. An independent technical advisory group (TAG), consisting of policy, resource management, and scientific representatives also should be created. Data from the various monitoring programs would flow to the TAG, who would then recommend management alternatives or modifications to the oversight organization.

The oversight organization and the TAG need to be created by the County, participating agencies, and stakeholders in the earliest stages of HCP/NCCP implementation and provided with adequate funding to do their jobs. The source of the funding stream for this organization must be identified explicitly in the HCP/NCCP. Until such an organization can be created, the County needs to hire staff with the proper expertise to ensure that conservation lands are acquired expeditiously and managed intelligently.

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A Proposed Methodology for a "Regional LEDPA" Determination: Permitting under CWA Section 404 in Western Placer County
(6 April 2006)[1]

Planning and Permitting at a Regional Scale

The Placer County Conservation Plan (PCCP) is a proposed strategy and regulatory framework designed to guide and streamline permitting for large-scale development in western Placer County over the next fifty years while establishing a network of conservation areas to protect and conserve sensitive species and natural communities. The PCCP covers ~221,000 acres in western Placer County including important natural communities such as stream environments, vernal pool grasslands, grasslands, blue oak and valley oak woodlands and agricultural lands such as rice. Many stream and wetland resources found in the western part of Placer County are regulated under the federal Endangered Species Act (ESA) and the Clean Water Act (CWA) because they provide aquatic habitat for threatened and endangered species. The goal of combining these regulatory frameworks is a streamlined permitting process and greater environmental benefits.

The PCCP includes methods for integrating compliance procedures for Section 404 of the Clean Water Act (CWA), Section 10 of the Endangered Species Act, and Section 2800 of Fish and Game Code, California's Natural Communities Conservation Planning Act (NCCPA). A key element of the PCCP is the County Aquatic Resources Program (CARP) that will allow Placer County to authorize projects under Section 404 of the CWA for projects impacting 3.0 acres or less of jurisdictional waters. The CARP proposes that the Army Corps of Engineers (Corps) delegate the permitting role to the County through a Programmatic General Permit. Currently, under the standard permitting process, the Corps requires permit applicants to follow the Individual Permit (IP) process if their proposed projects will directly impact 0.5 acres or more of jurisdictional waters.

The Regional LEDPA Concept

The most unique aspect of the PCCP is that a "regional" least environmentally damaging practicable alternative (LEDPA)[2] established by the County provides permittees within Placer County greater certainty in environmental permitting for development projects.

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[1] This document was drafted by Tim Vendlinski (EPA's Wetlands Regulatory Office) and was substantially revised and improved by his colleagues and on the five-agency workgroup.

[2] This paper incorporates by reference a succinct description of EPA's Federal Guidelines (40 CFR 230), and the Corps' implementing regulations (33 CFR 323) released by Sylvia Quast at RLG entitled: *Clean Water Act Section 404 Permit Process For Projects in Western Placer County That Cannot Be Authorized Under The County's Aquatic Resource Plan*; plus the classic treatment of "impact avoidance" published in the journal Wetlands: *Wetlands Protection Through Impact Avoidance: A Discussion of the 404(b)(1) Alternatives Analysis* (Yocom, Leidy, and Morris, 1989).

Under this scenario, areas are identified for protection as part of a regional network of conservation reserve areas (the "conservation envelope"), while certain other areas are identified for development (the "development envelope"). The conservation envelope would be established based on sound scientific principles of conservation biology with the objective of meeting both the biological requirements of the sensitive and covered species in western Placer County as well as providing for the long term conservation of the areas natural communities.

The standard permitting approach currently used by State and Federal agencies for development in Placer County routinely fragments large vernal pool landscapes and stream environments as the result of compliance with conventional rules for on-site avoidance, minimization, and mitigation. This fragmentation exposes remaining conservation sites to myriad threats associated with isolation in a matrix of suburban sprawl while foreclosing options for "natural" disturbance (e.g. burning and grazing) needed to maintain the health, biodiversity, and productivity of landscapes set-aside via "avoidance" measures or for mitigation.

One key premise underlying the proposed PCCP methodology is that a regional conservation strategy is environmentally superior to the practice of project-level mitigation. **Establishing a regional LEDPA with a system of large, connected conservation reserve areas under the PCCP allows the regulated community to comply as a whole with <u>avoidance</u> requirements of the Federal Guidelines promulgated under CWA §404(b)(1)**. The regional LEDPA would view the ~221,000-acre landscape in the western County as the regulatory unit for which a LEDPA must be formulated. This type of landscape-scale avoidance should not be confused with large-scale compensatory mitigation. For example, filling intact vernal pool landscapes in exchange for creating vernal pools out of ricelands is not avoidance but compensatory mitigation.[3] Such an approach would not comply with the Federal Guidelines under the standard permitting process or the proposed methodology for a regional LEDPA determination.

The regional LEDPA methodology concentrates avoidance of existing aquatic resources and endangered species habitat in the conservation envelope while development and associated impacts are concentrated in the development envelope. This framework provides avoidance and protection of thousands of acres of vernal pool grasslands, riparian forests, and oak woodlands within the conservation envelope and thousands of acres of development to meet County and City needs within the development envelope. Degraded parcels connecting priority conservation parcels are targeted for enhancement and restoration as part of a regional compensatory mitigation strategy.

[3] Some in the regulated community are advocating an approach whereby they would be allowed to develop the remaining intact vernal pool landscapes in western Placer County in exchange for re-creating vernal pools on the ricelands that straddle the borderlands of Placer and Sutter counties. This proposal is not acceptable because: (1) CWA compliance requires applicants to first avoid existing wetlands before considering compensatory mitigation; (2) created vernal pools cannot necessarily replace the unique bio-geo-chemistry of intact vernal pools; and (3) the existing ricelands already perform important functions as surrogates for the natural wetlands they replaced in the Central Valley.

A second key premise of the proposed Regional LEDPA is that avoidance within the development envelope is limited to stream corridor set backs, wetlands adjacent to streams, and Low Impact Development Strategies (LIDS)[4] incorporated into project design. These avoidance strategies are focused on mitigating negative impacts to water quality and surface water runoff that occur with watershed development.

The function of the LIDS is to mitigate for the direct, secondary, and cumulative impacts of on-site development, **and** to improve upon pre-construction environmental conditions (thereby reversing historical environmental damage and degradation). The LIDS should be designed to produce post-construction environmental conditions that represent an improvement in ecological health and function. This methodology allows for filling some on-site jurisdictional waters as long as the lost functions and values can be re-created and amplified elsewhere.

Together, the LIDS and the stream setbacks will minimize adverse impacts from the introduction of new impervious surfaces, installation of storm drains, construction of wastewater treatment facilities and transportation infrastructure, landscaping, and other human activities. **Establishing the LIDS and the stream setbacks under the regional LEDPA is necessary if the regulated community as a whole is to comply with minimization requirements of the Federal Guidelines**[5].

A Proposed Methodology for Avoidance & Minimization under a Regional LEDPA

Perhaps the most important incentive for applicants under the PCCP and regional LEDPA framework is the "streamlining" of requirements for on-site avoidance, minimization, and mitigation. The implementation of a scientifically- based conservation strategy through the PCCP, LIDS, and mandatory creek setbacks will replace the standard wetland permitting process which requires applicants to: (1) prepare an "alternatives analysis" for each project examining alternative off-site locations and alternative on-site configurations; (2) prove their preferred alternative is the LEDPA by examining the potential direct, secondary, and cumulative impacts of several alternatives; and (3) avoid on-site aquatic resources and minimize environmental damage to the maximum extent practicable. Failure to incorporate such a proposed process would result in the continuation of the existing standard regulatory framework. The result would be the continuation of the individual permitting process by every applicant on every parcel proposed for development until build-out is reached in western Placer County.

Under a binding regional LEDPA agreement, projects proposed within the development envelope that incorporate the on-site avoidance strategies, including stream setbacks and

4 http://www.usc.edu/org/seagrant/calnemo/Factsheet_1a.pdf
Nonpoint Education for Municipal Officials (NEMO)
http://www.lowimpactdevelopment.org/

5 Existing regulations clearly describe available strategies to minimize the adverse effects of discharges of fill into waters at *Subpart H: Actions to Minimize Adverse Effects* (40 CFR 230.70 et seq.).

LIDS, **will not** be required to: (1) provide a separate off-site alternatives analysis; (2) prove that their project location meets LEDPA requirements, or (3) prepare a rigorous on-site alternatives analysis. Projects proposed within the development envelope are automatically considered the most suitable places to develop and the least environmentally damaging location because the PCCP provides for a regional network of conservation reserve areas established, in part, by lands provided by project proponents. Proposed projects that implement the on-site LIDS and establish stream setbacks will be able to eliminate most of the jurisdictional waters within the development envelope occurring outside the boundaries of stream setbacks for streams. These projects should provide minimal on-site alternatives analysis information to demonstrate how LIDS and stream setbacks will be established.

The on-site jurisdictional waters in question are principally: (1) vernal pools; (2) swales and seasonal wetlands other than "classic" vernal pools; and (3) un-named tributaries to the (4) prominent creeks and rivers. With the regional LEDPA methodology (including LIDS and stream setbacks) applicants are required to avoid and protect the jurisdictional waters referenced in the previous paragraph if they occur within stream setbacks measuring from 100-300 feet outward from the edge of each bank (i.e., the total width of the setback would range from 200 to 600 feet plus the width of the stream channel), or the width of the 100-year FEMA floodplain boundary, whichever is greater.

Conceptual Scenarios of On-site Avoidance and Minimization

The following conceptual scenarios attempt to describe how the on-site avoidance and minimization methodology might work in conjunction with LIDS for parcels within the "development envelope"; please see **Figure 1** for a crude illustration of these scenarios:

(i) A freshwater spring deemed ecologically important, but positioned beyond both the 100-300 foot stream setback, and the 100-year FEMA floodplain boundary, might be targeted for protection within an on-site conservation boundary.

(ii) An "adjacent wetland" that is not a vernal pool, and does not support listed species, occurs beyond the 100-year FEMA floodplain boundary, but straddles the boundary of the 100-300-foot stream setback. In this case, the agencies and the applicant might choose to incorporate protection of this wetland within the protected stream corridor

(iii) A vernal pool larger than 3.0 acres -- a "playa" pool -- occurs beyond the 100-300-foot stream setback, connected to a tributary through swales, and is not considered an "adjacent wetland." The pool is positioned in the middle of a development site; however, it supports an abundance and diversity of listed species. The regulatory agencies would need to make a site specific call on whether to require preservation of the pool as a stand-alone conservation site, or whether to permit the conversion of the pool into development. Under this scenario, agencies might choose to permit development and require the harvesting of flora and fauna for translocation to parcels within the "conservation envelope" where degraded pools are being enhanced or restored under a compensatory mitigation strategy.

(iv) Numerous, small vernal pools are scattered across a site within the "development envelope." The pools are arrayed so that some are connected through a swale or stream system and others are not. In this case, the regulatory agencies would require the implementation of LIDS as appropriate, and authorize the grading/filling of these wetlands in exchange for compensatory mitigation within the "conservation envelope." Before the wetlands are filled, the agencies might require harvesting of flora and fauna for translocation.

(v) An un-named tributary/ditch traverses the development parcel, and flows into a primary creek flowing east to west toward the Sacramento River. While the tributary contributes substantial freshwater input into the primary creek, the flows are polluted by surrounding uses (e.g., agricultural drainage, suburban run-off). Also, the bio-geo-chemical functions of the tributary have been impaired by historical human activities (e.g., channelization, a decrepit impoundment, an agricultural diversion, a perched culvert, and/or introduction/infestation by invasive flora and fauna).

While the tributary/ditch is a significant topographical feature, the agencies could allow the developer to bury this linear feature to maximize buildable space, and re-direct the flows through a newly constructed, open-air channel built with state-of-the-art creek restoration principles (e.g., contouring a sinuous channel, installing vegetated "step-pools" and energy dissipaters per guidance from NOAA fisheries, constructing a wetland treatment system).[6]

Compensatory Mitigation Strategies

The Placer County PCCP will include specific mechanisms by which individual projects can realize mitigation for impacts within the development envelope by participating in the collation of a reserve system within the conservation envelope. Compensation for the unavoidable impacts to on-site jurisdictional waters will likewise require such a system. **Establishing a compensation system under the regional LEDPA is necessary if the regulated community as a whole is to comply with <u>compensatory</u> mitigation requirements of the Federal Guidelines.**

Compensation ratios for the LEDPA should be calculated to achieve no-net-loss of aquatic resources, and ideally, a net-gain of ecosystem functions at a regional scale. The starting point for the PCCP's compensatory mitigation framework should be the regulatory guidance issued by the U.S. Army Corps of Engineers and other federal agencies under the National Wetlands Mitigation Action Plan.[7]

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[6] http://www.epa.gov/watertrain/stream_class/
http://www.lib.berkeley.edu/WRCA/227_05.html
http://search.epa.gov/s97is.vts

[7] U.S. Army Corps of Engineers' Regulatory Guidance Letter (RGL 02-2) *Guidance on Mitigation Projects for Aquatic Resource Impacts Under the Corps Regulatory Program Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899* (24 December 2002) **<u>and</u>** the *National Wetlands Mitigation Action Plan*..

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RECEIVED
JUN 0 1 2005
PLANNING DEPT.

Loren Clark
Assistant Planning Director
Placer County Planning Department
11414 B Avenue
Auburn, CA 95603

Dear Mr. Clark:

The U.S. Fish and Wildlife Service (Service), the National Marine Fisheries Service (NMFS) and the California Department of Fish and Game (DFG) (collectively, the Wildlife Agencies) have reviewed the Agency Review Draft of the Placer County Conservation Plan (PCCP), Western Placer County, dated February 22, 2005 (hereafter the Agency Review Draft). This plan is the first of three comprehensive, multi-species plans for the County, and is called the Phase 1 PCCP. The Agency Review Draft provides a framework for completion of a Habitat Conservation Plan (HCP) pursuant to Section 10 of the Endangered Species Act (ESA) (16 U.S.C. § 1531 et seq.) and a Natural Community Conservation Plan (NCCP) pursuant to the NCCP Act (Fish & G. Code, § 2800 et seq.) for the Phase 1 PCCP Planning Area in Placer County. The Phase 1 PCCP encompasses approximately 221,000 acres in the western portion of the County from the valley floor to the foothills of the Sierra Nevada near the City of Auburn. The Phase 1 area includes significant natural resources, including stream environments, vernal pool grasslands, grasslands, oak woodland, and associated listed species, sensitive species and a diverse array of other wildlife species. At Placer County's request, our review focuses on, but is not limited to, issues relative to the proposed conservation strategy in the Agency Review Draft of the PCCP.

The Wildlife Agencies share the opinion that, at this juncture, the Agency Review Draft does not yet meet the regulatory standards in the ESA or the NCCP Act. We underscore, however, that solutions to all the issues identified below are feasible if Placer County and the plan participants continue to work closely with the Wildlife Agencies. We stand ready to assist in that effort in a collaborative and productive manner, and stress that a successful conservation strategy in Placer County is a high priority for the Wildlife Agencies.

We acknowledge the difficult and complex issues involved in devising a workable conservation strategy. Along these lines, the ESA and the NCCP Act are quite similar in their shared objectives of conserving natural resources while allowing for compatible growth and development. These objectives pose formidable challenges, especially in urbanizing areas where land available for conservation and appropriate development is more and more limited. Placer County is one such area and the increasingly limited opportunities for conservation and development put even more pressure on participants to devise an equitable and intelligent balance between economic and environmental considerations. Permits to be issued pursuant to the ESA and the NCCP Act must meet controlling legal standards, and the PCCP must clearly articulate how those standards are met. Our shared challenge then is to ensure that growth in the County is accommodated while protecting adequate lands for conservation of the biological resources proposed for coverage under the Phase 1 PCCP.

As for the Agency Review Draft specifically, we begin with an important point of introduction. The Wildlife Agencies and Placer County entered into a Planning Agreement regarding the PCCP in the fall of 2001. At that time, the Wildlife Agencies were confident that, working together, the County could achieve conservation in the western portion of the County based on the land use designations in the 1994 Placer County General Plan. The current planning landscape, however, is quite different than what the County and the Wildlife Agencies envisioned at the time we completed the Planning Agreement. The Wildlife Agencies and Placer County have responded to numerous development proposals, including the City of Roseville's annexation of over 5,000 acres, two new university proposals in the unincorporated western portion of the County, alternative alignments for Placer Parkway, Placer Ranch, Placer Vineyards, and a proposal by the City of Lincoln to expand its sphere of influence. The Wildlife Agencies believe that these projects, taken together, have the potential to preclude adequate levels of conservation for species and natural communities proposed for coverage under the Phase 1 PCCP. This significant possibility will remain a foremost concern as we move forward to develop a fundamentally sound, scientifically based conservation plan that can be permitted under the federal ESA and the State NCCP Act.

Even with existing concerns, the Wildlife Agencies believe the Agency Review Draft of the PCCP provides an excellent foundation to ultimately complete a conservation plan. We also concur that the Agency Review Draft contains the principle components of a conservation strategy that can meet standards in the ESA and NCCP Act. However, the plan does not yet meet these regulatory standards and there are significant local land use issues that have the potential to compromise our shared goal of establishing a viable conservation strategy in Western Placer County. With that introduction, we turn to specific comments regarding the proposed conservation strategy in its present form.

The Wildlife Agencies believe the following issues regarding the Agency Review Draft of the Phase 1 PCCP need to be addressed:

- The general focus of the Agency Review Draft should be redirected from a mitigation strategy to a conservation strategy that contributes to recovery of covered species in the planning area.

- The historic development pattern in the County carried forward in the Agency Review Draft is likely not compatible with a viable conservation strategy.
- The conservation strategy should be further refined to include specific conservation measures, the location and specific acre objectives of conservation lands, and to focus on conservation of existing high value habitats.
- Proposed retention of 30% of the growth area in natural habitat as part of the conservation strategy may not be viable or feasible.
  The conservation strategy relies too heavily on restoration and creation of vernal pool grasslands.
- Reliance on parcels as small as 200 acres for conservation purposes within the urban matrix may not be viable.
- Exclusion of parcels of less than 20 acres from mitigation obligations related to oak woodlands and grasslands is not appropriate.
- The designation and use of the Development Opportunity (DO) area, Conservation Opportunity (CO) area, and Conservation Management Units (CMU) lack clarity, consistency, and purpose.
- The cost share assumptions of the permittees and the State and Federal governments are not yet appropriate.
- HCP 5-point policy issues, as they pertain to the Phase 1 PCCP, should be presented or summarized together in a section of the PCCP
- The biological goals and objectives lack measurability.
- The Monitoring and Adaptive Management components of the conservation plan need to be further developed.
- Implementation measures need clarification.
- A Changed and Unforeseen Circumstances section needs to be developed.
- Current information is needed regarding plan financing, which is not included in the Agency Review Draft as noted in the County's letter to the Wildlife Agencies, dated March 4, 2005.

These and related issues are more fully discussed below.

PROPOSED GROWTH PATTERN

According to the Agency Review Draft, the majority of the growth projected for Western Placer County is expected to occur from continued parceling of fragmented oak woodlands within the southeast portion of the Plan area and within intact, non fragmented, vernal pool grasslands in the western portion of the Plan area. In total, the Agency Review Draft indicates that approximately 57,000 acres of undeveloped land will be urbanized during the 50-year term of the proposed permit, and will nearly double the human population in this portion of the County. The Wildlife Agencies have no basis to question the growth projections in the Agency Review Draft. We emphasize, though, that how and where the County grows during the term of the proposed permit over the next five decades has a much more significant effect on the prospect of conservation than does the number of new residents.

A review of aerial photos completed in 2002 indicates approximately 20,000 acres of vernal pool grassland community existed in Placer County at that time. The Agency Review Draft states on page 6-18 that, "it is reasonable to estimate that the present extent of valley grassland/vernal pool, and particularly the vernal pool component of it, is probably less than one-quarter of its original extent in the Western Placer Area." Yet, the Agency Review Draft includes a proposed Development Opportunity area for Placer County and the City of Lincoln that includes approximately 15,000 acres of vernal pool grassland community. In so doing, the Agency Review Draft contemplates urban development within an area supporting 15,000 acres of the remaining vernal pool grassland in Western Placer County. The Agency Review Draft further states that a portion of the 15,000 acres would not be directly lost as a result of development but would be retained within the urban matrix. This would result in only 5,000 acres of the remaining vernal pool grasslands to be retained in an environment buffered from urban uses by either other native habitats or active agriculture. This would represent a potential 75% reduction in the biological value of this important community since 2002 and loss of over 85% of the same community from 1937 through the 50-year term of the permit. The Wildlife Agencies believe that a loss of vernal pool grassland habitat of this magnitude compromises a sound conservation strategy.

A related issue concerns historic development patterns in the County, which are carried forward in the Agency Review Draft. The current plan and the financial models used to develop the plan assume a buildout scenario based on past development patterns and densities. The Conservation Strategy Overview, dated April 15, 2004, states on page 6, item #12,

> . . . the protected areas will need to be substantial and ecologically connected, particularly as they will inevitably support compatible land uses and multiple management objectives. In order for this to happen, historical patterns of urbanization will need to change-the present trend of continual extension of urban boundaries with only small areas of retained natural open space is inconsistent with the biological reality of conservation. The Western Placer of the future has a limited capacity for further urbanization as historically conducted if the conservation goals and objectives of the NCCP/HCP are to be met and Placer County's quality of life is to be preserved. Conservation will thus require modifications to urban growth patterns with conservation emphasis placed outside of the urban areas. Incentives and regulatory measures may be created to encourage participating agencies to provide more efficient use of land through infill/redevelopment and higher density inside urban/suburban areas. This new pattern will require the differentiation of conservation areas from growth areas . . .

The conservation strategy in the Agency Review Draft, in contrast, appears to continue historic growth patterns. The net result of this approach from a conservation standpoint is that the plan contemplates a high level of impact to natural communities and covered species, along with correspondingly intensive actions necessary to achieve what is, at this point, an uncertain level of conservation. Under the proposed development scenario, for example, the conservation strategy relies on acquisition of existing high value natural communities, significant restoration of degraded communities, and preservation of 30% of intact vernal pool ecosystems within the assumed footprint of the future urban matrix. According to the Agency Review Draft, all of this

is necessary to achieve plan goals and objectives for conservation of natural communities and covered species. To achieve conservation with this approach, however, nearly all remaining intact natural communities (principally vernal pool grasslands) will need to be acquired, an excessive amount of restoration (grasslands or rice to vernal pool grasslands) will need to occur, and significant areas of existing intact systems will have to be preserved in areas slated for urban development.

At this point, the Wildlife Agencies believe the approach to conservation, from a practical standpoint, in the Agency Review Draft is not feasible or attainable. We doubt, for example, it is feasible to acquire nearly all remaining intact vernal pool systems within a willing seller system. The expectation that the few remaining landowners of high quality intact habitat will be willing sellers of either conservation easements or fee title is unreasonable. Additionally, even if all these lands could be acquired and managed, we are concerned about the biological quality of these lands, their ability to be managed through time, and their ability to be appropriately linked or adequately sized to provide conservation in the long term.

The Agency Review Draft supplements the shortcoming in this aspect of the conservation strategy by relying too heavily on creation and restoration for vernal pool grassland habitat conservation. These restoration efforts are directed at agricultural and non-vernal pool grassland habitat. Though such efforts hold promise, restoration of vernal pool grassland is complex and, at this point, unproven. The Wildlife Agencies believe as a result that the biological risks associated with the conservation strategy relying on the restoration of over 5000 acres of vernal pool grassland is just too great.

Against this backdrop the Wildlife Agencies believe the area of impact contemplated in the Agency Review Draft is too large. The County and other plan participants may want to consider modifying the proposed development area and thus enhancing the ability to preserve existing high-value habitat. In our view, this will allow for the opportunity to assemble adequately sized and configured conservation areas. Taking this approach could also reduce the need to rely so heavily on restoration. Likewise, it might reduce the need for avoidance of impacts on covered species and biological communities within development project boundaries. Finally, such an approach will provide greater assurance of conservation.

THE RESERVE SYSTEM AND THE CONSERVATION STRATEGY

The area of growth has major impacts on the ability to provide for conservation and implement any proposed conservation strategy. The conservation strategy must provide for an adequate amount of land in an appropriate configuration to assure that conservation and recovery and other biological goals are achieved. The Agency review Draft does not demonstrate that conservation can be achieved but merely provides a mitigation concept without an appropriately specific strategy for conservation.

The conservation strategy must be based on clearly articulated, measurable biological goals and objectives. These will dictate all of the implementation measures, including reserve design, and they comprise a critical component of the conservation plan. To facilitate design of a monitoring program, the goals and objectives should be organized in a hierarchy, including those at

ecosystem or landscape, natural community, and species-specific levels. The conservation strategy section must also be able to describe uncertainties about conservation actions and propose approaches to resolving them.

Basic tenets of Conservation Biology, as embodied in documents prepared by Placer County as part of Placer Legacy and the NCCP/HCP, define the need for large, roadless, interconnected sites void of urban influences as the foundation of a conservation reserve system. Reserve design including size and shape and proposed human use of retained natural habitats as well as adjacency to human activities will dictate ecological values and functions of these habitats through time. The Agency Review Draft does not specify, even in broad terms, the distribution, configuration or linkages among conservation lands or methods for ensuring appropriate reserve establishment or consolidation. This makes it difficult for the Wildlife Agencies to ascertain that conservation can be achieved.

For example, the Agency Review Draft presumes that retained habitats within the DO area will provide full function and value and contribute to and be a part of a larger regional conservation strategy. We believe that this assumption cannot be scientifically validated. Retained parcels within an urban matrix often fail to provide full value over time due to the small size of the retained areas, adjacent urban uses, and the inability, due to small size and proximity to urban landscapes, to actively manage retained sites. We do not envision a 200 acre parcel, as noted in the Agency Review Draft, as a minimum size for a reserve, to be fully functional and part of a larger conservation strategy when surrounded or nearly surrounded by an urban landscape. The 200 acre minimum preserve size proposed in this Agency Review Draft may only be acceptable within the CO area, not within an urban matrix unless it has exceptional specific importance.

The Wildlife Agencies do not believe it is feasible to develop a conservation strategy that relies on significant areas within the urban matrix as potential conservation sites. We fundamentally question the biological effect of a requirement that project applicants consider limited "avoidance" in project design. A strategy can only be fair if all parties can concur with the designation of areas for urban development and the areas designated for conservation with minimal risk of conflict from adjacent urban growth. Except for unique habitat areas, all but stream environments should be considered to be urbanized within the urban growth area or the DO. At the least, zones should be established, based on specific criteria, where all vernal pool resource values are assumed lost and no conservation credit is allowed for avoided areas. This type of strategy would also require specific measures designed to mitigate potential water quality impacts related to a lack of onsite avoidance. We suggest that the PCCP include Low Impact Development criteria as a requirement for all covered activities related to urban growth as a means to resolve this issue. We suggest this strategy because the Agency Review Draft relies too heavily on review of potential reserve areas at the same time development projects are brought forward. Likewise, we suggest this strategy because a system whereby the development community and the Wildlife Agencies resolve issues regarding appropriate conservation areas on a project-by-project basis are similarly unworkable. We also do not believe the issue can be deferred to the project-specific level because it poses too great a risk to the conservation strategy due to future decisions and it places undue hardship on the regulated community to consider the extent to which potentially developable areas are avoided.

Loren Clark

We do not agree, as stated on page 6-63, that all 5,530 acres of lands currently under various open space designations within Placer County will qualify to be part of a reserve system. This statement is conclusory and not supported by specific management or ownership conditions for the parcels comprising these 5,530 acres. Each parcel must be examined for the applicability of the parcel to be incorporated into a reserve system, including its location relative to other biological reserves, proposed use, management, and funding source.

We know that nothing in this Agency Review Draft can prevent a developer from proposing a project to any plan participant. We also know that acceptable measures can be instilled within the plan that will significantly improve the ability of the plan to successfully establish and maintain a conservation program. In this regard we believe that clear restrictions should be placed on development within any defined conservation area until delineated development concentration areas are at or near capacity. This will allow adequate time to achieve a well conceived and implemented conservation strategy. The plan must also include specific assurances that conserved lands are not fragmented or degraded by subsequent urban development. This is especially important for those areas that are designated for future urban growth and also surrounded or nearly surrounded by high value grassland, vernal pool grassland, or riparian or oak woodland ecosystems. Specific criteria must also be developed to establish and retain the viability of the reserve system as it grows and changes over time.

As the Agency Review Draft states, large connected preserves are critical for conservation. To achieve this goal, the conservation strategy must more clearly describe a future conservation strategy as well as a future growth strategy. We believe the reserve system should be designed to occur entirely, or nearly entirely, outside delineated urban growth areas. Likewise, the conservation strategy should emphasize acquisition of existing high value conservation lands adjacent to lands currently dedicated to natural resource conservation through conservation easements or fee title. Additional lands not adjacent to existing conserved lands should also be considered for conservation in the plan, specifically, large parcels of high quality habitats that could form the base for an enlarged reserve system and lands critical to habitat linkages between larger preserve areas.

We suggest the development of a conceptual conservation reserve model. This model would allow all plan participants to fully understand the ramifications of both development and conservation. Results from this model should be included in the next draft plan and their purpose should be described more fully. Likewise, acreage objectives based on the biological needs of each covered species should be included for all species identified within the Plan.

ISSUES RELATED TO MITIGATION AND CONSERVATION

The approval of the plan and the consequent authorization of take and associated assurances given under the NCCP Act and ESA are predicated on the participants' development of a plan that includes a conservation strategy that meets State standards and federal issuance criteria with assurances, financial and otherwise, that it will be successful. There is currently a lack of sufficient detail in the plan to provide for and assure actual implementation of the strategy. Furthermore, the Agency Review Draft appears to rely too heavily on the State and Federal

governments to provide the assurances from a conservation standpoint. This issue is exacerbated by the current focus within the Agency Review Draft on mitigation, an expected cost share assumption by the State and Federal governments and a failure to identify additional measures supported by the plan participants that will contribute to conservation. An appropriately revised plan will allow the Wildlife Agencies to seek funds for land acquisition or other conservation measures but the primary responsibility for plan implementation lies with the plan permittees.

The reserve system should be based on the land and management activities needed to provide for conservation of the covered species and the natural communities within the Plan area. The Agency Review Draft does not take this approach. Rather, it focuses on mitigation as the primary mechanism to provide for conservation. A conservation plan, in contrast, should be driven by the needs of the covered species within the Plan area and the ability of the plan to provide for ecosystem integrity. A conservation plan must include a variety of measures designed to assure conservation, one of which may be the use of mitigation derived from covered activities.

The relationship of the Plan to species recovery within the plan area and to the conservation of natural communities must be more fully explored and supported in the next draft plan. More specific measures must be identified that contribute to species recovery and assure effective conservation. One approach to address this issue could be to include a more detailed description of Conservation Management Units and all measures the plan intends to incorporate to achieve conservation.

The Wildlife Agencies are concerned the Agency Review Draft does not provide mitigation for impacts to oak woodland and grassland habitat on parcels of less than 20 acres and discounts the value of rice to winter migrant birds. Conservation plans typically require levels of take and conservation to be roughly proportional. This may create an imbalance in the level of take and the level of mitigation within the total plan area.

MONITORING AND ADAPTIVE MANAGMENT

The Wildlife Agencies believe the monitoring and adaptive management section is an appropriate foundation by which to further develop specific measures required for permit issuance. These specific measures are not fully developed at this time.

The adaptive management feedback loop, from monitoring and targeted studies to decision-making, needs to be better developed and described in detail in the plan. Critical management uncertainties need to be disclosed and a program devised to resolve or inform them.

The PCCP thus far has amassed much information on the natural resources to be conserved and managed, and it has developed envirograms that can provide the foundation for more conceptual models at multiple levels that can guide design of the monitoring program.

The plan needs to make clear that adaptive management and monitoring will continue beyond the duration of the permit and that funding and other commitments for these programs must be assured in perpetuity.

We recommend that sections within Chapter 7 that pertain to compliance monitoring and implementation structure be moved to Chapter 9, Implementation, thus focusing discussion within this chapter on effectiveness monitoring and experimental management.

IMPLEMENTATION

The plan must link conservation targets to enforceable actions in order for the Wildlife Agencies to determine that the plan can be adequately implemented. This would include adoption of ordinances by all permittees, as well as more specific language for management of reserve lands. Vague objectives, suggestions, goals, or non-specific or unenforceable actions do not provide the level of assurance that must be included within the plan. Biological objectives at all levels must be quantitative. To this end, we suggest that measurable objectives for reserve development be included in the revised plan as a means by which to track implementation. Included, for example, within these measures would be a fully functioning management authority, acres under management, connectivity, reserve size objectives and implementation of a specific monitoring and adaptive management program. Obligations of each permittee (Section 9.1.2) should be specific as to acres of conservation obligation to implement the plan. The first such target should be 2010 at which point the measurable objectives must be met.

The next draft must specify (Section 9.1.2.6) that the plan is only one plan, with only one permit and one Implementing Agreement. Separate permits are not issued to each plan participant and the plan participants' take authorities are not severable from each other.

The next draft must clarify that any plan implementation operator is merely acting for the plan permittees and that the ultimate responsibility for plan implementation is with Placer County and the other plan participants. Individual jurisdictions that are included on the permits (Section 9.2.2) must be participants in the plan operating authority. Permittees cannot choose to independently implement a joint plan. A potential solution for the next draft is to either retain the language in this Agency Review Draft as written with full explanations of the sharing of responsibilities for each permittee or describe an Implementing Entity. Alternatively, the County could be named the implementing entity on behalf of all permittees.

While the plan proposes the need to maintain a 500 acre surplus of conserved land ahead of take, the plan fails to consider that impacts be roughly proportional to the total conservation obligation of the permittees. This relationship must be established within the context of the next draft. Except for the vernal pool grassland complex, the Draft does not have a cap on take for any habitat or species. Impacts need to be quantified for permit issuance.

Plan Implementation, Chapter 9, should focus discussion on the implementation structure prior to discussions of the specific obligations for each party.

ADDITIONAL ITEMS OF SIGNIFICANCE

Project applicants should not be required to survey project sites for presence of covered species except as needed for preconstruction surveys. Only that data needed for the development of mitigation requirements and that needed for 404 permitting should be obtained.

Covered activities in general need greater specificity. Projects that are specifically listed, such as Placer Parkway, must provide even greater detail. We believe that this project, in particular, poses considerable risk to the integrity of a conservation strategy due to the potential fragmentation issues related to selection of any route that lies north of Pleasant Grove Creek.

The Agency Review Draft does not include a chapter discussing financial issues which is needed for the Wildlife Agencies to understand and evaluate the financial integrity of the program including adaptive management and monitoring in perpetuity.

The plan must contain a discussion of the procedures to be followed in the case of changed or unforeseen circumstances that may affect species or their habitat.

Conservation alternatives (Section 8.1.5) should include an alternative which has a larger reserve system.

The Agency Review Draft identifies three State Fully Protected species as covered species. The DFG cannot authorize take for these species, however they can be included as a covered species provided adequate conservation is included for these species.

The Agency Review Draft does not adequately address issues related to subsequent permits for either the Section 404 programmatic permit or the programmatic Streambed Alteration Agreement. The relationship of these proposed permits and the Agency Review Draft need to be more fully detailed.

CONCLUSIONS

The issues we have identified are both interrelated and interdependent. The Wildlife Agencies believe that a reduction of the proposed development land base of 57,000 acres would lead to solutions for the issues we have identified. Consideration of this action would likely reduce direct and indirect impacts, would significantly increase the likelihood that intact existing resources could be acquired for a conservation system and would rely substantially less upon unproven restoration to achieve plan goals. The overall result is a plan that is less costly to implement, has a much higher likelihood of providing successful conservation, and yet achieves all of the plan participant goals to accommodate projected growth.

The Wildlife Agencies believe that a plan can be developed that provides for the conservation of the covered species in Placer County. Assuring conservation of the covered species and habitats could allow the Service to pursue actions within existing law and policy to address the critical habitat designations for listed vernal pool invertebrates in west Placer County and be consistent with the soon to be finalized Recovery Plan for vernal pool species.

The Wildlife Agencies are available to discuss the comments outlined in this letter and will provide additional comments on the Agency Review Draft that we believe can assist in the preparation of a final plan.

Thank you for the opportunity to review this Agency Review Draft. The Wildlife Agencies fully support the completion of the Phase 1 PCCP and believe that the Agency Review Draft provides a coherent foundation on which a successful plan can be formulated. We have provided you herein with comments and recommendations designed to achieve our shared goals. We look forward to continued close coordination with Placer County and other plan participants. If you have questions or concerns please contact us at (916) 414-6600 (USFWS), (916) 414-930-3623 (NMFS) or (916) 358-2900 (CDFG).

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Effectiveness of Small Vernal Pool Preserves



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TABLE OF CONTENTS

Section **Page**

ACKNOWLEDGMENTS ..... **iii**

ABSTRACT ..... **iv**

1.0 INTRODUCTION **1**

2.0 BACKGROUND **2**

3.0 METHODS **4**

3.1 Level of Effort and Selection of Sites 4
3.2 Data Gathering 4
3.3 Data Analysis 5

4.0 RESULTS **6**

5.0 DISCUSSION of KEY FINDINGS AND RECOMMENDATIONS **18**

5.1 General Physical and Biological Characteristics 20
5.2 Infrastructure, Public Use and Surrounding Land Use 21
5.3 Preserve Establishment and Funding 23
5.4 Preserve Management 25
5.5 Preserve Monitoring 29
5.6 Ecological Conditions and Trends 32
5.7 Education and Outreach 36
5.8 Regulatory Compliance and Oversight 37

6.0 REFERENCES **38**

Photograph

2-1 Small Vernal Pool Preserve within an Urbanized Landscape 3

TABLE OF CONTENTS

Section **Page**

Tables

4-1 General Physical and Habitat Characteristics of 11 Small Vernal Pool Preserves in California's Central Valley....7

4-2 Special-Status Species Reported at 11 Small Vernal Pool Preserves in California's Central Valley....8

4-3 Status of Infrastructure, Public Use, and Disturbance in 11 Small Vernal Pool Preserves in California's Central Valley....9

4-4 Summary of Surrounding Land Uses (within 1,000 Feet) for 11 Small Vernal Pool Preserves in California's Central Valley....9

4-5 Easement, Endowment, and Funding Information for 11 Small Vernal Pool Preserves in California's Central Valley....10

4-6 Status of Preserve Management Plans for 11 Small Vernal Pool Preserves in California's Central Valley....11

4-7 Frequency of Management Activities Conducted on 11 Small Vernal Pool Preserves in California's Central Valley....11

4-8 Reported Monitoring Activities Conducted on 11 Small Vernal Pool Preserves in California's Central Valley....12

4-9 Preserve Establishment, Endowment, Management, and Monitoring Compared with Reported Overall Ecological Trends at 11 Small Vernal Pool Preserves in California's Central Valley....13

4-10 Ecological Trends within Preserved and Created Vernal Pools Since Preserve Establishment at 11 Small Vernal Pool Preserves in California's Central Valley....14

4-11 Observed and Reported Threats to Pool Hydrology at 11 Small Vernal Pool Preserves in California's Central Valley....15

4-12 Occurrence, Monitoring, Management, and Reported Condition of Listed and Other Special-Status Vernal Pool Plant Occurrences at 11 Small Vernal Pool Preserves in California's Central Valley....16

4-13 Invasive Plant Species Observed on 11 Small Vernal Pool Preserves in California's Central Valley....16

4-14 Ecological Trends of Upland Vegetation Components Since Preserve Establishment at 11 Small Vernal Pool Preserves in California's Central Valley....17

Appendices

A Brief Narratives of Study Preserves
B Survey Questionnaire
C Site Visit Data Form
D Representative Small Preserve Photographs

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- Placer Land Trust for administering the study;
- a consortium of environmental organizations—Butte Environmental Council, California Native Plant Society, Defenders of Wildlife, Sierra Foothills Audubon Society, and Sierra Club Mother Lode Chapter—for obtaining the necessary funding;
- all of the preserve managers and their supporting organizations for providing information and access to the 11 small preserves included in the study; and
- Carol Witham (VernalPools.org), Robert Gilliom, Joselin Matkins, and Jeff Ward (Placer Land Trust) for their continued input and review during the course of the project.

ABSTRACT

This study evaluates the status, conditions and trends of small vernal pool preserves (< 60 acres total area) in California's Central Valley. The goals of the study were to evaluate the effectiveness of small vernal pool preserves in conserving vernal pool resources and to provide those who establish, manage, evaluate, or regulate small preserves with an improved understanding of the value and pitfalls of small preserves; tools for evaluating when and where new small preserves should be established; and the best means to establish, manage, and monitor small preserves. The project team contacted 54 preserve managers to obtain project participation. Participation was voluntary and confidential. It proved challenging to find sites that both were suitable and had managers willing to participate in the study, and ultimately only 11 small preserves were included in the study. Because of this selection process, the selected preserves are not considered a random nor fully representative sample. However, the 11 preserves in the study provided a substantial range of conditions and insights into the issues pertinent to small vernal pool preserves. Data were gathered through questionnaires completed by preserve managers, review of preserve management and monitoring documents provided by the preserve managers, and site visits.

Small preserves share conditions and issues relevant to all preserves, including the importance and value of protecting rare and endangered habitats and species; the need to limit potential impacts from human trespassing or overuse; the importance of developing well-prepared management and monitoring plans and providing a sufficient non-wasting endowment or other funding source to ensure management and monitoring tasks are carried through; and the importance of a responsive regulatory process. In addition to these more general conditions, the study identified numerous conditions and issues that are more characteristic of even unique to small preserves:

- Small preserves can be important for the conservation of extremely rare and highly localized species, especially those that are restricted to highly developed areas, where frequently no other opportunities exist for their protection. Agencies should consider this factor when determining when and where to permit the establishment of small preserves.

- The management of thatch (dead grass) through regular grazing or mowing is often critical for maintaining ecological health within vernal pools and associated annual grasslands. The size of small preserves presents unique challenges related to thatch management and invasive plant control. Small preserves often must pay livestock operators to graze (rather than charging a fee as on large preserves), may not have a source of reliable on-site water, and surrounding residents may object to the close proximity of livestock. Thus, thatch management is often lacking, sporadic or otherwise inadequate on small preserves. This is often an important factor in the frequently observed declining ecological conditions in small preserves, which may include an increase in invasive plant cover and loss of rare species over time.

- Small preserves, especially those in proximity to moderate to high density residential areas, are prone to much higher levels of human and domestic animal impact as compared with large preserves or more remote small preserves.

- In combination, these unique management challenges translate to the need for much more intensive management and monitoring efforts and consequently typically much higher funding requirements on a per acre basis for small preserves as compared with large preserves. This higher funding requirement should be considered when determining endowments for small preserves.

- Small preserves may provide one of the few remaining open spaces in highly developed areas. As such, they have the capacity to provide easily accessible sites for public education and appreciation regarding vernal pools and their conservation. One preserve, located near dense residential development, has a well developed public use and education program, but also exhibited low levels of human impacts because of carefully facilitated access. Several other small preserves in the study near residential areas that did not allow public

access showed high levels of human impact from unplanned trails, vandalism and trash build-up. This indicates that it may be more cost-effective and beneficial in terms of site maintenance and public appreciation of vernal pools, to facilitate responsible and engaged public use of small preserves rather than to attempt excluding public access.

1.0 INTRODUCTION

This study evaluates the status, conditions and trends of 11 small vernal pool preserves in California's Central Valley. In this study, a "small" preserve is defined as a preserve with an area less than 60 acres, whether isolated or contiguous with adjacent open space, that is independently managed as a preserve. This size was selected by the project team as a reasonable threshold to detect conditions and issues that may be characteristic of smaller preserves. The preserves evaluated in this study support natural, created, or restored vernal pools, or some combination thereof. The study includes only sites that were actively established as preserves and not areas that were simply "avoided" in the context of larger development projects, but have no management requirements. Even though these avoided areas may support significant vernal pool resources, they are difficult to evaluate because of a lack of data and little to no recorded documentation about their existence.

Numerous small vernal pool preserves have been established over the past few decades with the large majority established as mitigation. Although precise numbers are unavailable, the study authors estimate that more than 100 such preserves currently exist in the state, supporting more than 2,000 acres of habitat and numerous occurrences of federal- or state-listed threatened or endangered species. Some of these occurrences represent local populations of exceptionally rare and endangered species that have been protected in situ as surrounding areas have been developed. Also, it is expected that new small preserves will be established in the future, primarily for mitigation.

This study was undertaken to gauge the current conditions and trends of selected Central Valley small vernal pool preserves to contribute to the understanding of the effectiveness of small preserves in conserving the sensitive resources for which they were established to protect. The study evaluates multiple parameters related to the functioning and success of these preserves:

- general physical and biological characteristics;
- infrastructure, public use and surrounding land use;
- preserve establishment and funding;
- preserve management;
- preserve monitoring;
- ecological conditions and trends;
- education and public outreach; and
- regulatory compliance and oversight.

This study also provides a brief narrative discussion of each preserve included in the study (Appendix A) to give a more comprehensive view of how individual preserves function.

The goal of this study is to provide those who establish, manage, evaluate, or regulate small preserves—preserve managers, agency personnel, consultants, landowners, etc.—an improved understanding of the value and pitfalls of small preserves; tools for evaluating when and where new small preserves should be established; and the best means to establish, manage, and monitor small preserves based on lessons learned from existing small preserves.

This study, along with a study of cumulative impacts on Central Valley vernal pools, was conducted jointly by Vollmar Consulting and AECOM. John Vollmar and Cassie Pinnell of Vollmar Consulting were the lead authors of this study. Several others individuals contributed to the study design and review: Gerrit Platenkamp, Matt Wacker, Ron Unger, and Shannon Hickey of AECOM; Robert Gilliom, Joselin Matkins, and Jeff Ward of Placer Land Trust (PLT); and Carol Witham, a representative of the environmental consortium that obtained the funding for this study.

Funding for both studies was provided by PLT through the West Placer Habitat Protection Program (WPHPP), which focuses on protecting vernal pool grassland habitat in western Placer County. PLT is administering these two studies as a component of this program. WPHPP received its funding through settlement funds obtained by a consortium of environmental organizations from the proposed Westpark/Fiddyment Ranch development in western Placer County. This consortium includes the Butte Environmental Council, California Native Plant Society, Defenders of Wildlife, Sierra Foothills Audubon Society, and Sierra Club Mother Lode Chapter.

2.0 BACKGROUND

Vernal pools are ephemeral wetlands that support a unique assemblage of native wildlife and plant species specifically adapted to the combination of winter/spring inundation and summer/fall desiccation characteristic of the Mediterranean climate where they occur (Jain 1976, Witham et al. 1998). Vernal pools are typically found on level to nearly level terrain. They become seasonally inundated by rainwater due to an underlying restrictive soil layer (hardpan, claypan, cemented lahar [volcanic mudflow], or bedrock) that prevents downward percolation of rainwater and causes water to pond in depressional basins. Vernal pool habitats are found worldwide where appropriate climate and geomorphic conditions exist, including the western North and South America, southwest Australia, South Africa, and the Mediterranean basin (Keeley and Zedler 1998). Where they occur, vernal pools are generally regarded as unique or sensitive habitats because of their rarity on the landscape and high number of native species that only occur in vernal pools (i.e., vernal pool endemics).

California, with its Mediterranean climate and extensive suitable terrain and soils, is a global hotspot for vernal pools. However, California also has an increasing human population, with most development concentrated on more level terrain—including many areas where vernal pools are most common. In the last 200 years, an estimated 90–95% of the historic vernal pool acreage in the state has been lost through agricultural conversion or development (Holland 2009). Although this historic loss is dramatic, the remaining habitat continues to be lost at a rapid pace with nearly 100,000 acres lost between 1997 and 2005 alone (Holland 2009).

Concurrent with these accelerating impacts and increasing awareness of the ecological value of vernal pools has been an increase in the regulatory oversight of vernal pool impacts. The U.S. Army Corps of Engineers (USACE) and California's regional water quality control boards (RWQCBs) have both been involved in regulating impacts on vernal pools as jurisdictional wetlands. USACE recently published new "Arid West" wetland delineation standards that specifically address vernal pools (USACE 2006). Numerous wildlife and plant species endemic to vernal pools have been listed as endangered or threatened under the federal and state Endangered Species Acts in the past 30 years, with the first listings taking place in 1979. Also, proposed statewide conservation and recovery actions have been addressed in the recently published *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* (USFWS 2005) and in previous listing packages and recovery plans for individual species.

Mitigation standards for impacts to vernal pools have also evolved over the past 30 years in response to increased regulatory oversight and improved understanding of vernal pool ecology and conservation biology. Mitigation in the form of habitat preservation, creation, and restoration has been achieved by development projects through four primary methods: on-site mitigation, off-site mitigation, purchase of mitigation bank credits, and payment of in-lieu fees. On-site mitigation involves reserving a portion of the project site as undeveloped and maintaining this area as a permanent mitigation preserve (Photo 2-1). Off-site mitigation involves establishing a single, permanent mitigation preserve on a property separate from the project site. Purchase of mitigation bank credits involves purchasing the required mitigation acreage from a bank that has been permitted by the regulatory agencies to provide mitigation for multiple projects. In-lieu fee involves paying funds into an account established by the U.S. Fish and Wildlife Service (USFWS) to be used to purchase vernal pool preserve lands or future bank credits.

Early (1970s and 1980s) vernal pool mitigation requirements were achieved by establishing on-site or off-site preserves because mitigation banks and the in-lieu fee program had not yet been developed. The concept of using larger, regional mitigation banks followed the development of concepts in conservation biology, whereby larger preserves were considered more ecologically sustainable than smaller, isolated "postage stamp" preserves (Noss 1983). This preference has continued to evolve among the regulatory agencies as the process for establishing banks has been improved. Recent mitigation guidelines published by USACE (*Federal Register*, Vol. 73: 19594–19705, April 10, 2008) and supported by other federal and state regulatory agencies explicitly identify purchasing mitigation bank credits as the preferred means for development projects to satisfy vernal pool mitigation requirements. Nonetheless, numerous small vernal pool preserves exist and, based on information gathered through this study, it is expected that new small preserves will be established in the future. Of the 11 preserves in this study, 10 were established for mitigation, all but one as on-site preserves. These preserves were established

between 1979 and 2007, and three of the preserves (two on-site and one off-site) were established since 2006, after mitigation banking was well under way. Only one donated small preserve was identified by this study; it seems unlikely that donated preserves will ever make up a significant portion of existing small vernal pool preserves.

There are several reasons why new small preserves will continue to be established. First, it may be much cheaper for a project proponent to establish an on-site preserve than to purchase credits in a bank, especially for projects with larger vernal pool impacts. During 2007–2008, prices at established mitigation banks for vernal pool credits ranged from $150,000 to $750,000 per acre for created or restored vernal pools and $30,000 to $90,000 per acre for preserved vernal pools, with higher prices typically in areas with more limited remaining vernal pool habitat such as the Santa Rosa Plains and West Placer County (Vollmar pers. obs.). Second, suitable mitigation banks may not be available in the vicinity of a project site, forcing a project to establish a preserve either on-site or off-site. Third, a portion of a project site may have such a high concentration of vernal pools and/or associated listed or other special-status species that development of the area is not permitable or economically feasible. Because development must be avoided, the developer may opt to utilize the area as a mitigation site. Fourth, isolated small preserves may be the only means of protecting a small number of remaining occurrences of special-status species situated within highly developed or fragmented vernal pool habitats, such as regions around Sacramento, western Placer County, central Solano County, Sonoma County, and San Diego County (e.g., Contra Costa goldfields (*Lasthenia conjugens*), Orcutt grasses (*Orcuttia* spp.), Sebastapol meadowfoam (*Limnanthes vinculans*), and San Diego fairy shrimp (*Branchinecta sandiegoensis*). Some regional Habitat Conservation Plans and Natural Community Conservation Plans include specific provisions for small preserves to protect these types of species.

Given these circumstances, it is expected that new small preserves will continue to be established as a component of vernal pool mitigation when deemed appropriate by developers or regulators. Also, existing small preserves will need continuing management to ensure the preservation of resources they were established to protect. This study is intended to provide land managers, regulators, and others with insight and guidance on the establishment and management of small vernal pool preserves based on lessons learned from 11 existing preserves.



Photo 2-1. Small vernal pool preserve within an urbanized landscape
(Source: Photograph taken by Vollmar Consulting in 2009)

3.0 METHODS

3.1 LEVEL OF EFFORT AND SELECTION OF SITES

The project team undertook an intensive effort to locate suitable small preserves within the study region and obtain the authorization and cooperation of preserve managers in providing preserve information and documents. A site was considered suitable for this study if it was:

- equal to or less than 60 acres in total area;
- an established preserve with some level of past or on-going management;
- documented to support preserved, created, and/or restored vernal pools;
- isolated or managed independently from adjacent undeveloped or preserved land;
- located within the study region; and
- managed by persons willing and able to provide site information.

The project team selected 60 acres as a reasonable size threshold where certain conditions or issues that may be characteristic of small vernal pool preserves would become evident such as more pronounced edge effects, greater difficulty in implementing site grazing, and higher per acre management costs.

A total of 54 individuals were contacted to identify suitable preserves and gain the participation of preserve managers. The individuals contacted represented private consulting firms, federal, state, and county government agencies, and nonprofit land trust organizations. Participation was voluntary and confidential and no compensation was provided. Other potential preserves were identified by reviewing lists of mitigation banks and information about vernal pool mitigation sites obtained through Freedom of Information Act requests for USACE records of Section 404 permits, which were made as a separate component of the larger PLT vernal pool study (AECOM 2009).

The initial target sample size for the project was 30 sites in the study region. This target was selected to provide a robust cross-section of conditions and issues relevant to small preserves and, depending on the selected sites, allow statistical analysis of certain site characteristics and trends. It proved challenging, however, to find this number of sites that both were suitable and had managers willing to participate in the study. Ultimately, a total of 11 sites were included in the study. More details on the reasons for this sub-target number are discussed in Section 4.0, "Results." Some bias, no doubt, resulted from the selection process. As an example, it is conceivable that managers of preserves in particularly poor condition or with other problems may have been less interested in participating in the study. Also, the small sample size makes it unlikely that the selected sites reflect the full range of conditions and issues of small preserves. Therefore, the sites included in the study are not considered to represent a random or fully representative sample.

3.2 DATA GATHERING

Data on the study preserves were gathered through questionnaires completed by preserve managers, review of preserve management and monitoring documents provided by preserve managers, and site visits conducted by project team members, as described below.

3.2.1 QUESTIONNAIRES

The project team developed a questionnaire to gather key site information, a copy of which is provided in Appendix B. The questionnaire was completed by preserve managers participating in the study and included questions related to preserve attributes and infrastructure, sensitive resources, mitigation elements, financial endowments, preserve management and monitoring, and preserve conditions and trends. The questionnaire was developed to provide insights into the purpose of site establishment; the purpose, extent, and success of site

management and monitoring; and the status and trends in site conditions. Information was compiled under confidentiality agreements and is intended to provide insights into the general conditions and trends within small preserves. This study was not intended to present the quality or success of individual sites.

3.2.2 SITE VISITS

All study preserves were visited by project team members to assess current site conditions and enhance, expand, or verify information provided in the questionnaires. The team developed and field-tested a field survey form (**Appendix C**) to standardize data collection. Site visits were conducted from October 2008 through January 2009 and were scheduled in groups based on preserve location in an attempt to minimize potential external variables such as rainfall and climate. Whenever possible, site visits were conducted with site managers or biologists so that the project team could obtain more in-depth information. Aerial images from Google Earth (2008) were also reviewed before field visits to note any features of special interest.

At each site, the entire perimeter was walked to verify land uses, edge disturbances, general habitat conditions, and fencing and signage conditions reported by preserve managers in their questionnaire responses. Any variation between information reported by preserve managers and conditions observed in the field was recorded on the field survey form. The site was then traversed multiple times, covering most of the preserve, to note conditions in the interior of the site and to collect data on the biological condition of the preserve.

A minimum of six vernal pools were surveyed at each preserve (except at sites with fewer than six pools). Where possible, three pools within 100 feet of the preserve edge (edge pools) and three pools greater than 100 feet from the preserve edge (interior pools) were surveyed. The 100-foot threshold between ‘edge’ and ‘interior’ pools was selected as a reasonable threshold for higher levels of human trespass, trash accumulation, and passive invasive weed establishment from adjacent non-preserve areas. An effort also was made to survey pools of different sizes (large, medium, and small) and origin (created, restored, and preserved), as well as pools supporting special-status species or with obvious signs of disturbance. Representative photographs of both pools and upland conditions were taken at each site.

3.2.3 DOCUMENT REVIEW

Preserve managers were asked to provide copies of resource management plans, monitoring reports, and any other documents that could provide additional information about the status of the preserves. When available, these documents were reviewed for management and monitoring strategies, as well as for trends related to disturbance and ecological conditions.

3.3 DATA ANALYSIS

All questionnaire and field data were collected using standardized data forms designed to gather information in a quantifiable, consistent manner. All data were entered into a Microsoft Access database and linked by preserve site. Qualitative data taken from supporting documents and field notes were incorporated into the report but not managed in the project database.

4.0 RESULTS

Questionnaires were completed by preserves managers for 11 preserves included in the study; sites visits were conducted on 10 of the 11 preserves; management and monitoring documents were provided by preserve managers for eight of the 11 preserves. To maintain anonymity, each preserve was assigned an identification letter (A-K) that is referred to throughout the sections below, and no citations are provided for preserve documents or personal communications with preserve managers. The preserves included in the study are located in Placer, Sacramento, Solano, Shasta, and Tulare Counties.

As noted above, the initial goal of the project was to include a minimum of 30 preserves. Ultimately, it proved very challenging to find this many because of a combination of factors including the small number of suitable preserves that exist in the study region, possible reluctance of some organizations to participate in the study, and lack of responsiveness of some organizations that had initially expressed interest. The small sample size and selection process undoubtedly resulted in bias and therefore the preserves included in the study are not considered to be a random nor even fully representative set of small preserves. Nonetheless, the 11 participating preserves provide a substantial range of conditions and insights into the issues pertinent to small vernal pool preserves.

Information on preserve characteristics, conditions, and trends was gathered through the questionnaires, site visits, and document review. Summaries of these results are presented in Tables 4-1 to 4-14 and address the following eight categories relevant to the small preserve assessment:

- general physical and biological characteristics (Tables 4-1 and 4-2);
- infrastructure, public use and surrounding land use (Tables 4-3 and 4-4);
- preserve establishment and funding (Table 4-5);
- preserve management (Table 4-6 and 4-7);
- preserve monitoring (Table 4-8);
- ecological conditions and trends (Tables 4-9 to 4-14);
- education and outreach (Table 4-3), and
- regulatory compliance and oversight.

Note that rows within the tables have different shading (none, light gray and dark gray). This shading indicates three sets of preserves with distinct conservation and funding characteristics as follows: Preserves A–C in non-shaded rows were recently established, are protected by conservation easements and have sizable endowments; Preserves D–H in light gray rows are older, are protected by deed restrictions or fee simple ownership, and have either endowments or other funding sources; Preserves I-K in dark gray rows are also older and protected by deed restrictions or fee simple ownership, but have no endowment or funding source. These differences were found to be related to important overall differences among the preserves in terms of management, monitoring and overall condition.

Section 5.0, “Discussion of Key Findings and Recommendations”, provides a thorough interpretation of preserve information and presents key findings and recommendations related to each above-listed category. No specific information was gathered on regulatory compliance and oversight, and therefore no table is provided. However, certain information related to this topic was gleaned through this study as discussed in Section 5.0.

Appendix A provides a brief narrative discussion of each preserve included in the study. These narratives are intended to augment the information presented in Sections 4.0 and 5.0 to give a more comprehensive view of how the individual preserves function. Appendix B provides an example of the survey questionnaire that was completed by the preserve managers. Appendix C provides a copy of the data form completed during site visits to individual preserves by the project team. Appendix D presents representative photographs from the small preserves highlighting conditions and issues addressed in the study.

Table 4-1
General Physical and Habitat Characteristics of 11 Small Vernal Pool Preserves in California's Central Valley

Preserve No.	Total Area (acres)	General Shape	Approx. Max. Width (feet)	Approx. Min. Width (feet)	All Vernal Pools			Preserved Vernal Pools			Created Vernal Pools			Restored Vernal Pools			Upland Habitats		Non–Vernal Pool Wetlands
					Number	Acreage	% Cover	Number	Acreage	% Cover	Number	Acreage	% Cover	Number	Acreage	% Cover	Non-native Annual Grassland	Blue Oak Woodland	
A	53	Oval	1,050	600	34*	ND	ND	ND	ND	ND	0	0	0	0	0	0	>80%*	0%	ND
B	6	Square	375	300	4*	0.02	0.3	4*	0.02	0.3	0	0	0	0	0	0	97%	0%	3%
C	15	Oval	ND	ND	1	ND	ND	0	0	0	0	0	0	1	ND	ND	0%	0%	0%
D	48	Rectangle	3,900	480	91	10.97	23	2	0.87	2	89	10.10	21	0	0	0	77%	0%	0%
E	36	Linear	900	300	6	0.88	2	0	0	0	6	0.88	2	0	0	0	64%*	30%*	4%
F	33	Square	1,800	900	281	1.68	5	211	0.99	3	70	0.69	2	0	0	0	95%	0%	0.3%
G	8	Flag	1,050	30	6*	ND	ND	6*	0	0	0	0	0	0	0	0	>70%*	60%*	ND
H	15	Rectangle	1,650	300	15*	ND	ND	15*	ND	ND	0	0	0	0	0	0	>30%*	8%*	ND
I	10	Triangle	600	300	12	1.86	19	4	0.60	6	8	1.26	13	0	0	0	74%	0%	7%
J	37	Rectangle	1,800	300	41	5.34	14	14	0.54	1	27	4.80	13	0	0	0	85%	0%	0.6%
K	40	Square	900	900	50*	ND	ND	50*	ND	ND	0	ND	ND	0	0	0	100%	0%	0%

Notes:

* = Approximation from remote analysis of aerial photography; ND = No data available; VP = vernal pool

Shading:

No Shading (A–C) = recently established preserves, protected by conservation easements, sizable endowments;

Light Gray (D–H) = older preserves, deed restrictions or fee simple ownership, either endowments or other funding sources;

Dark Gray (I–K) = older preserves, deed restrictions or fee simple ownership, no endowment or funding source.

Source: Data obtained from preserve managers, site visits, and review of preserve documents and compiled by Vollmar Consulting in 2009

Table 4-2
Special-Status Species Reported at 11 Small Vernal Pool Preserves in California's Central Valley

Special-Status Species	Listing Status[1]	Preserve Number										
		A	B	C	D	E	F	G	H	I	J	K
Large Branchiopods												
Branchinecta lynchi Vernal pool fairy shrimp	FT	●	●		●		●				●	●
Lepidurus packardi Vernal pool tadpole shrimp	FE	●	●	●								
Linderiella occidentalis California fairy shrimp	FSC				●	●					●	
Amphibians												
Spea hammondii Western spadefoot toad	FSC	●							●			●
Plants												
Atriplex cordulata Heartscale	CNPS 1B											●
Atriplex persistens Vernal pool smallscale	CNPS 1B											●
Delphinium recurvatum Recurved larkspur	CNPS 1B											●
Downingia pusilla Dwarf downingia	CNPS 2				●							
Gratiola heterosepala Boggs Lake hedge-hyssop	CE CNPS 1B	●										
Lasthenia conjugens Contra Costa goldfields	FE CNPS 1B									●		
Legenere limosa Legenere	CNPS 1B	●		●								
Navarretia myersii ssp. *myersii* Pincushion navarretia	CNPS 1B							●	●			
Orcuttia tenuis Slender Orcutt grass	FT/CE CNPS 1B	●		●								
Orcuttia viscida Sacramento Orcutt grass	FE/CE CNPS 1B							●	●			
Trifolium depauperatum var. *hydrophilum* Saline clover	CNPS 1B									●		
Total Special-Status Species		**6**	**2**	**3**	**3**	**1**	**1**	**2**	**3**	**2**	**2**	**5**

Notes:

ND = No data available.

[1] Listing status: FE = federally listed as endangered; FT = federally listed as threatened; FSC = federal species of concern; CE = California listed as endangered; California Native Plant Society (CNPS) List 1B = rare, threatened, or endangered throughout its range; CNPS 2 = rare, threatened, or endangered in California, but more common elsewhere.

Shading:

No Shading (A–C) = recently established preserves, protected by conservation easements, sizable endowments;

Light Gray (D–H) = older preserves, deed restrictions or fee simple ownership, either endowments or other funding sources;

Dark Gray (I–K) = older preserves, deed restrictions or fee simple ownership, no endowment or funding source.

Source: Data obtained by Vollmar Consulting in 2009 from preserve managers, site visits, and review of preserve documents.

Table 4-3
Status of Infrastructure, Public Use, and Disturbance in 11 Small Vernal Pool Preserves in California's Central Valley

Preserve No.	Fencing Type[1]	Fencing Condition	Signage[2]	Fence/Sign Vandalism[2]	Public Access[2]	Trails[2]	Recreational Use[2]	Educational Use[2]	Domestic Animal (Pet) Use[2]	Trash/Debris[2]	Human Disturbance of Habitat [2]
A	BW, CL	Good	Y	N	N	N	N	N	N	L	L
B	BW, CL	Good	ND	N	N	N	N	N	N	L	L
C	BW	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D	BW	Poor	N	M	N	L	L	L	M	L	L
E	BW, CL	Poor	N	H	N	M	H	L	M	L	M
F	PC, CL	Good	Y	N	N	N	L	N	M	L	L
G	PC	ND	N	ND	N	N	N	N	N	L	L
H	CL	Good	Y	L	N	N	N	N	M	L	L
I	PC	Good	Y	N	Y	M	H	H	L	L	L
J	PC, CL	Good	N	L	N	L	L	N	L	L	L
K	BW	Poor	Y	L	Y	N	N	L	N	L	L

Notes:
[1] Fencing types: BW = barbed wire; CL = chain link; PC = post and cable.
[2] N = None; L = Low; M = Moderate; H = High; NA = not applicable; ND = no data available.
Shading:
No Shading (A–C) = recently established preserves, protected by conservation easements, sizable endowments;
Light Gray (D–H) = older preserves, deed restrictions or fee simple ownership, either endowments or other funding sources;
Dark Gray (I–K) = older preserves, deed restrictions or fee simple ownership, no endowment or funding source.
Source: Data obtained from preserve managers, site visits, and review of preserve documents and compiled by Vollmar Consulting in 2009

Table 4-4
Summary of Surrounding Land Uses (within 1,000 Feet) for 11 Small Vernal Pool Preserves in California's Central Valley

Preserve No.	Total Area (acres)	Surrounding Land Use (% Area)						Bordered by Paved Roads?
		Native or Naturalized Habitats	Disturbed Field	Intensive Agriculture (Croplands)	Parks/ Recreation	Residential	Commercial/ Industrial	
A	53	–	50	–	–	50	–	No
B	6	75	–	–	–	25	–	No
C	15	90	–	–	–	–	10	Yes
D	48	27	–	–	7	40	15	Yes
E	36	63	–	–	–	8	23	Yes
F	33	15	–	–	6	36	41	Yes
G	8	15	–	–	10	75	–	Yes
H	15	–	–	–	25	75	–	Yes
I	10	25	–	–	–	–	75	Yes
J	37	25	–	–	–	75	–	Yes
K	40	–	–	100	–	–	–	Yes
Mean	**27**	**30**	**5**	**9**	**4**	**35**	**15**	**NA**

Notes:
NA = not applicable
Shading:
No Shading (A–C) = recently established preserves, protected by conservation easements, sizable endowments;
Light Gray (D–H) = older preserves, deed restrictions or fee simple ownership, either endowments or other funding sources;
Dark Gray (I–K) = older preserves, deed restrictions or fee simple ownership, no endowment or funding source.
Source: Data obtained from preserve managers, site visits, and review of preserve documents and compiled by Vollmar Consulting in 2009

Table 4-5
Easement, Endowment, and Funding Information for 11 Small Vernal Pool Preserves in California's Central Valley

Preserve No.	Total Area (acres)	Year Established	Establishment Mechanism	Resources Driving Preserve Establishment[1]	Preserve Type	Land Protection Instrument[2]	Site Manager	Endowment Amount	Other Funding Sources	Annual Amount Available	Annual Amount Required[3]
A	53	2006	Mitigation: Residential	Vernal pools, BRLY, LEPA, GRHE, LELI	On-site	CE	Land trust	$900,000	None	ND	ND
B	6	2007	Mitigation: Residential	Vernal pools, BRLY, LEPA	On-site	CE	Land trust	$400,000	None	ND	ND
C	15	2007	Mitigation: Residential	Vernal pools	Off-site	CE	Land trust	$180,000	None	$8,000	ND
D	48	1990	Mitigation: Mixed use	Vernal pools	On-site	DR	City agency	$390,000	None	$11,025	$31,307
E	36	1993	Mitigation: Commercial	Vernal pools	On-site	DR	Private landowner	$18,305	None	ND	$24,000
F	33	1988	Mitigation: Mixed use	Vernal pools	On-site	DR	City agency	$3,750	None	ND	$15,000
G	8	1979	Mitigation: Residential	Vernal pools, ORVI, NAMY	On-site	FS	State agency	$0	Public Funds	ND	$4,000
H	15	1979	Mitigation: Residential	Vernal pools, ORVI	On-site	FS	City agency	$0	Public funds	ND	$4,000
I	10	1998	Mitigation: Industrial	Vernal pools, LACO	On-site	DR	Private landowner	$0	None	ND	ND
J	37	1992	Mitigation: Residential	Vernal pools	On-site	FS	City agency	$0	None	$0	ND
K	40	1964	Conservation: Donation	Vernal pools, open space	NA	FS	Land trust	$0	None	$0	ND

Notes:

NA = Not applicable; ND = No data available.

[1] Species acronyms: BRLY = vernal pool fairy shrimp (*Branchinecta lynchi*); GRHE = Boggs Lake hedge-hyssop (*Gratiola heterosepala*); LACO = Contra Costa goldfields (*Lasthenia conjugens*); LEPA = vernal pool tadpole shrimp (*Lepidurus packardi*); NAMY = pincushion navarretia (*Navarretia myersii* ssp. *myersii*); ORVI = Sacramento Orcutt grass (*Orcuttia viscida*); LELI = legenere (*Legenere limosa*).

[2] Land protection instruments: CE = conservation easement; DR = deed restriction; FS = fee simple.

[3] Annual amount required to maintain and monitor site, as reported by preserve manager.

Shading:
No Shading (A–C) = recently established preserves, protected by conservation easements, sizable endowments;
Light Gray (D–H) = older preserves, deed restrictions or fee simple ownership, either endowments or other funding sources;
Dark Gray (I–K) = older preserves, deed restrictions or fee simple ownership, no endowment or funding source.

Source: Data obtained from preserve managers and review of preserve documents and compiled by Vollmar Consulting in 2009

Table 4-6
Status of Preserve Management Plans for 11 Small Vernal Pool Preserves in California's Central Valley

Preserve No.	Acres	Preserve Manager	Date Est.	Mgmt. Plan?	Date Prepared	Ever Updated?	Preparer	Agency Guidelines?
A	53	Land trust	2006	Yes	2006	No	Consultant	No
B	6	Land trust	2007	Yes	2006	No	Consultant	No
C	15	Land trust	2007	Yes	2007	No	Consultant	USACE
D	48	Public agency	1990	Yes	2000	No	Consultant	No
E	36	Public agency	1993	Yes	2000	No	Consultant	No
F	33	Public agency	1988	Yes	1999	No	Consultant	No
G	8	Public agency	1979	Yes	2006	No	Consultant	DFG
H	15	Public agency	1979	Yes	2006	No	Consultant	DFG
I	10	Private	1998	Yes	2000	No	Consultant	No
J	37	Public agency	1992	No	ND	ND	ND	ND
K	40	Land trust	1964	No	ND	ND	ND	ND

Notes:
DFG = California Department of Fish and Game; Mgmt. = management; ND = no data available; USACE = U.S. Army Corps of Engineers

Shading:
No Shading (A–C) = recently established preserves, protected by conservation easements, sizable endowments;
Light Gray (D–H) = older preserves, deed restrictions or fee simple ownership, either endowments or other funding sources;
Dark Gray (I–K) = older preserves, deed restrictions or fee simple ownership, no endowment or funding source.
Source: Data obtained from preserve managers and review of preserve documents and compiled by Vollmar Consulting in 2009

Table 4-7
Frequency of Management Activities Conducted on 11 Small Vernal Pool Preserves in California's Central Valley

Preserve No.	Acres	Mgmt. Plan?	Endowment or Other Funds?	Site Maintenance					Thatch Removal and Invasive Plant Control				Habitat		Education/ Outreach
				Signage Maintenance	Fence Maintenance	Trash/Debris Removal	Trespass Patrol	Feral Animal Control	Grazing	Mowing	Prescribed Burning	Invasive Species Control	Erosion Control	Habitat Restoration	
A	53	Yes	Yes	4	5	1	–	1	5	2	NR	1	NR	–	–
B	6	Yes	Yes	4	4	5	4	4	–	–	–	4	–	–	–
C	15	Yes	Yes	1	1	5	–	–	1	–	–	1	–	–	–
D	48	Yes	Yes	1	1	2	4	–	2	2	–	2	1	1	1
E	36	Yes	Yes	1	5	4	4	1	–	–	–	2	1	1	1
F	33	Yes	Yes	1	1	2	4	–	–	–	–	1	1	1	–
G	8	Yes	Yes*	1	–	5	NR	–	–	–	–	–	–	–	1
H	15	Yes	Yes*	1	–	5	NR	–	–	–	1	1	–	–	5
I	10	Yes	No	–	–	–	–	–	–	–	–	–	–	–	–
J	37	No	No	–	–	–	–	–	–	–	–	–	–	–	–
K	40	No	No	–	–	–	–	–	–	–	–	–	–	–	–
Total Preserves				**8**	**6**	**8**	**4**	**3**	**3**	**2**	**1**	**7**	**3**	**3**	**4**

Notes:
Mgmt. = management; ND = No data available—frequency of activity was not reported by manager; NR = activity not required for site management; * = no endowment but dedicated public funds available.
– = Activity is not conducted; 1 = Activity is conducted infrequently or as needed (less than once per year);
2 = Activity is conducted annually (once per year); 3 = Activity is conducted biannually;
4 = Activity is conducted quarterly; 5 = Activity is conducted continuously or at numerous times throughout the year.

Shading:
No Shading (A–C) = recently established preserves, protected by conservation easements, sizable endowments;
Light Gray (D–H) = older preserves, deed restrictions or fee simple ownership, either endowments or other funding sources;
Dark Gray (I–K) = older preserves, deed restrictions or fee simple ownership, no endowment or funding source.
Source: Data obtained from preserve managers and review of preserve documents and compiled by Vollmar Consulting in 2009

Table 4-8
Reported Monitoring Activities Conducted on 11 Small Vernal Pool Preserves in California's Central Valley

Preserve No.	Acres	Monitoring Plan?	Endowment or Other Funding Source?	Monitoring Activities Conducted?	Site Maintenance					Biological Resources							Thatch and Invasive Plants				Monitoring Results Used to Inform Site Mgmt.?
					General Site Inspections	Erosion	Fencing	Trash/Debris	Feral Animals	General Wildlife	General Vegetation	Vernal Pool Rare Plants	Vernal Pool Vegetation	Vernal Pool Listed Shrimp	Amphibians	Wetland Hydrology	Upland Plant Species	Photopoints	Residual Dry Matter	Invasive Species	
A	53	Yes	Yes	Yes	5	4	5	5	4	4	4	2	2	2	2	2	2	2	2	3	Frequently
B	6	Yes	Yes	Yes	4	4	4	4	2	4	4	2	2	2	2	2	2	2	2	2	Frequently
C	15	Yes	Yes	Yes	2	–	–	3	–	–	–	–	–	3	–	–	–	2	2	–	–
D	48	Yes	Yes	Yes	5	5	5	5	4	4	4	NA	2	2	NA	2	NA	NA	NA	4	Frequently
E	36	Yes	Yes	Yes	4	4	4	4	4	3	2	NA	NA	NA	NA	2	2	NA	NA	2	Frequently
F	33	Yes	Yes	Yes	4	4	4	4	2	2	2	NA	2	2	NA	2	NA	NA	NA	2	Frequently
G	8	Yes	Yes*	Yes	–	–	–	1	–	–	–	1	1	–	–	1	1	–	–	2	–
H	15	Yes	Yes*	Yes	–	–	–	1	–	–	–	1	1	–	–	1	1	–	–	1	–
I	10	Yes	No	No	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
J	37	No	No	No	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	NA
K	40	No	No	No	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	NA
Total Preserves		**9**	**8**	**8**	**6**	**5**	**5**	**8**	**5**	**5**	**5**	**4**	**6**	**5**	**2**	**7**	**5**	**3**	**3**	**7**	**6**

Notes:
Mgmt. = management; NA = Activity is not required for this preserve due to lack of resources or lack of monitoring requirement; ND = No data collected
– = Activity is not conducted; 1 = Activity is conducted infrequently or as needed basis (less than once per year);
2 = Activity is conducted annually (once per year); 3 = Activity is conducted biannually;
4 = Activity is conducted quarterly; 5 = Activity is conducted continuously or at numerous times throughout the year.
Shading:
No Shading (A–C) = recently established preserves, protected by conservation easements, sizable endowments;
Light Gray (D–H) = older preserves, deed restrictions or fee simple ownership, either endowments or other funding sources;
Dark Gray (I–K) = older preserves, deed restrictions or fee simple ownership, no endowment or funding source.
Source: Data obtained from preserve managers and review of preserve documents and compiled by Vollmar Consulting in 2009

Table 4-9
Preserve Establishment, Endowment, Management, and Monitoring Compared with Reported Overall Ecological Trends at 11 Small Vernal Pool Preserves in California's Central Valley

Preserve No.	Year Established	Preserve Acreage	Financial Endowment?	Management Plan?	Site Monitoring?	Monitoring Results Used?	Trend in Overall Ecological Conditions Since Preserve Establishment
A	2006	53	Yes	Yes	Yes	Frequently	Same
B	2007	6	Yes	Yes	Yes	Frequently	Decline
C	2007	15	Yes	Yes	Yes	Always	Unknown
D	1990	48	Yes	Yes	Yes	Frequently	Decline
E	1993	36	Yes	Yes	Yes	Frequently	Decline
F	1988	33	Yes	Yes	Yes	Frequently	Same
G	1979	8	No	Yes	Yes	ND	Decline
H	1979	15	No	Yes	Yes	ND	Decline
I	1998	10	No	Yes	No	ND	Decline
J	1992	37	No	No	No	ND	Unknown
K	1964	40	No	No	No	ND	Unknown

Notes:
ND = No data collected or available.
Shading:
No Shading (A–C) = recently established preserves, protected by conservation easements, sizable endowments;
Light Gray (D–H) = older preserves, deed restrictions or fee simple ownership, either endowments or other funding sources;
Dark Gray (I–K) = older preserves, deed restrictions or fee simple ownership, no endowment or funding source.
Source: Data obtained from preserve managers and compiled by Vollmar Consulting in 2009

Table 4-10
Ecological Trends within Preserved and Created Vernal Pools Since Preserve Establishment at 11 Small Vernal Pool Preserves in California's Central Valley

Preserve No.	Acres	Overall Ecological Conditions		Ponding Duration	Native Plants	Non-native Grass Cover	Invasive Species Cover	Listed Large Branchiopods	Amphibians	Preserved Pool Rare Plants
		Preserve	Vernal Pools							
Preserved Vernal Pools										
A	53	Same	Same	Constant	Constant	Constant	Constant	Constant	Constant	Constant
B	6	Decline	Same	Constant	Constant	Constant	Constant	Constant	Constant	Constant
C	15	ND	ND	ND	ND	ND	ND	ND	ND	ND
D	48	Decline	Same	Constant	Constant	Increase	Increase	Constant	Constant	Constant
E	36	Decline	ND	ND	ND	ND	ND	NA	NA	NA
F	33	Same	Same	Constant	Constant	Constant	Constant	Constant	Constant	NA
G	8	Decline	Decline	Decrease	Decrease	Increase	Increase	NA	NA	Decrease
H	15	Decline	Decline	Decrease	Decrease	Increase	Increase	NA	ND	Decrease
I	10	Decline	Decline	Decrease	Decrease	Increase	Increase	NA	NA	Decrease
J	37	ND	ND	ND	ND	ND	ND	ND	ND	ND
K	40	ND	ND	ND	ND	ND	ND	ND	ND	ND
Created Vernal Pools										
D	48	Decline	Same	Constant	Constant	Increase	Increase	Constant	Constant	Constant
E	36	Decline	ND	ND	ND	ND	ND	ND	ND	ND
F	33	Decline	Same	Constant	Constant	Constant	Constant	Constant	Constant	ND
I	10	Decline	Improvement	Constant	Increase	Constant	Constant	NA	NA	Increase
J	37	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

NA = not applicable; ND = no data available

Shading:

No Shading (A–C) = recently established preserves, protected by conservation easements, sizable endowments;
Light Gray (D–H) = older preserves, deed restrictions or fee simple ownership, either endowments or other funding sources;
Dark Gray (I–K) = older preserves, deed restrictions or fee simple ownership, no endowment or funding source.

Source: Data obtained from preserve managers and compiled by Vollmar Consulting in 2009

Table 4-11
Observed and Reported Threats to Pool Hydrology at 11 Small Vernal Pool Preserves in California's Central Valley

Preserve No.	Acres	Observed Altered Hydrology[1]	Reported Altered Hydrology[2]	High Upland Species Cover[3]	High Non–Vernal Pool Grass Cover[4]	Vandalism[5]	Residential Runoff[6]	Other Runoff[7]	Altered Drainage/ Bermed[8]	Ponding Duration[9]
A	53	•							•	Constant
B	6	•			•	•			•	Constant
C	15	NA		NA	NA	NA	NA	NA	NA	ND
D	48	•		•	•				•	Constant
E	36	•		•	•	•				ND
F	33		•		•			•		Constant
G	8		•			•	•			Decrease
H	15	•	•				•	•	•	Decrease
I	10	•			•				•	Decrease
J	37	•					•	•		ND
K	40	•		•	•				•	ND
Total Preserves		**8**	**3**	**3**	**6**	**3**	**3**	**3**	**6**	

Notes:

NA = Survey data not collected; ND = Information not provided by survey participant.

[1] Altered hydrology observed in at least one pool during site visits conducted during this study.

[2] Events reported by land managers/biologists that altered the hydrology of at least one pool since preserve establishment.

[3] High upland (Facultative Upland or Upland) species relative cover (> 50%) within pools, as observed during 2008 site visits.

[4] High (Facultative, Facultative Upland, Upland, or No Wetland Indicator status) grass relative cover (> 50%) within pools, as observed during 2008 site visits.

[5] Includes damages to pool basin and edges from roads, trails, debris, or illegal discharge.

[6] Includes disturbances caused by altering drainage and water flow from residential development.

[7] Includes water runoff from commercial and industrial development.

[8] Pool drainage enhanced by ditches or ponding duration increased by berm construction.

[9] Condition of ponding duration since preserve establishment (information supplied by survey participants).

Shading:

No Shading (A–C) = recently established preserves, protected by conservation easements, sizable endowments;
Light Gray (D–H) = older preserves, deed restrictions or fee simple ownership, either endowments or other funding sources;
Dark Gray (I–K) = older preserves, deed restrictions or fee simple ownership, no endowment or funding source.

Source: Data obtained from preserve managers, site visits, and review of preserve documents and compiled by Vollmar Consulting in 2009

Table 4-12
Occurrence, Monitoring, Management, and Reported Condition of Listed and Other Special-Status Vernal Pool Plant Occurrences at 11 Small Vernal Pool Preserves in California's Central Valley

Preserve	Acres	Listed Plants	Other Special-Status Plants	Monitoring	Management	Reported Condition Since Preserve Establishment
A	53	•	•	•	•	Same
B	6	NA	NA	NA	NA	NA
C	15	•	•		•	ND
D	48	NA	•		•	Same
E	36	NA	NA	NA	NA	NA
F	33	NA	NA	NA	NA	NA
G	8	•	•	•	•	Decline
H	15	•	•	•	•	Decline
I	10	•	NA			Decline
J	37	NA	NA	NA	NA	NA
K	40	NA	•			ND

Notes:

NA = not applicable—no plant occurrences; ND = no data available

Shading:

No Shading (A–C) = recently established preserves, protected by conservation easements, sizable endowments;
Light Gray (D–H) = older preserves, deed restrictions or fee simple ownership, either endowments or other funding sources;
Dark Gray (I–K) = older preserves, deed restrictions or fee simple ownership, no endowment or funding source.

Source: Data obtained from preserve managers and site visits and compiled by Vollmar Consulting in 2009

Table 4-13
Invasive Plant Species Observed on 11 Small Vernal Pool Preserves in California's Central Valley

Preserve Number	Acres	Species[1]										
		TACA	CESO	BRMA	LELA	AIAL	CAPY	CIVU	SIMA	GLDE	COSE	Total[2]
A	53	H	H			M			L	L		5
B	6	H										1
C	15											NA
D	48		H									1
E	36	H	H					L				3
F	33	M										1
G	8						L					1
H	15	H	H	H			L				L	5
I	10				M							1
J	37	H										1
K	40	M										1
Total Preserves		7	4	1	1	1	2	1	1	1	1	

Notes:

[1] Species: AIAL = tree of heaven (*Ailanthus altissima*); BRMA = Large quaking grass (*Briza maxima*); CAPY = Italian thistle (*Carduus pycnocephalus*); CESO = yellow star-thistle (*Centaurea solstitialis*); CIVU = bull thistle (*Cirsium vulgare*); COSE = pampas grass (*Cortaderia selloana*); GLDE = small mannagrass (*Glyceria declinata*); LELA = perennial pepperweed (*Lepidium latifolium*); SIMA = milk thistle (*Silybum marianum*); TACA = medusahead (*Taeniatherum caput-medusae*).

Abundance: L = Low; M = Moderate; H = High

[2] NA = not applicable, site not surveyed

Shading:

No Shading (A–C) = recently established preserves, protected by conservation easements, sizable endowments;
Light Gray (D–H) = older preserves, deed restrictions or fee simple ownership, either endowments or other funding sources;
Dark Gray (I–K) = older preserves, deed restrictions or fee simple ownership, no endowment or funding source.

Source: Data obtained from site visits by Vollmar Consulting in 2008 and 2009

Table 4-14
Ecological Trends of Upland Vegetation Components Since Preserve Establishment at 11 Small Vernal Pool Preserves in California's Central Valley

Preserve	Acres	Overall Upland Conditions	Specific Upland Vegetation Components				Invasive Species Management	Grazing/ Mowing
			Thatch Cover	Native Forb Cover	Native Grass Cover	Invasive Species Cover		
A	53	Improvement	Decrease	Constant	Constant	Constant	•	•
B	6	Same	Constant	Constant	Constant	Constant	•	
C	15	ND	ND	ND	ND	ND	•	•
D	48	Improvement	ND	Constant	Constant	Increase	•	•
E	36	Decline	ND	Decrease	Decrease	Increase	•	
F	33	Same	Increase	Constant	Decrease	Increase	•	
G	8	Decline	ND	Decrease	Decrease	Increase		
H	15	Decline	ND	Decrease	Decrease	Increase	•	
I	10	Decline	Increase	Decrease	Constant	Increase		
J	37	ND	ND	ND	ND	ND	ND	
K	40	ND	ND	ND	ND	ND		

Notes:
ND = No data collected.
Shading:
No Shading (A–C) = recently established preserves, protected by conservation easements, sizable endowments;
Light Gray (D–H) = older preserves, deed restrictions or fee simple ownership, either endowments or other funding sources;
Dark Gray (I–K) = older preserves, deed restrictions or fee simple ownership, no endowment or funding source.
Source: Data obtained from preserve managers and site visits and compiled by Vollmar Consulting in 2009

5.0 DISCUSSION OF KEY FINDINGS AND RECOMMENDATIONS

The eleven preserves included in this study represent a limited set of selected small vernal pool preserves. As emphasized above, both the small sample size and the selection process, which relied on voluntary participation by interested preserve managers, undoubtedly resulted in some bias and thus the preserves included in the study are not considered to be a random nor even fully representative set of small preserves. In fact, managers of poorly performing preserves may have been less likely to participate in the study. However, the selected preserves do present a substantial range of conditions and issues related to small preserves and this study provides key insights and guidance on the establishment and management of small vernal pool preserves based on lessons learned from these 11 existing preserves.

This study identifies numerous key findings and recommendations, as presented below, related to the conditions and issues that occur on small preserves. However, it is important to distinguish between those conditions and issues that are characteristic or distinctive of small preserves versus those that are more broadly characteristic of all preserves regardless of size.

Small preserves certainly share many conditions and issues relevant to all preserves. These include: the importance and value of the preserves in protecting rare and endangered habitats and species; the need to limit potential impacts from human trespassing or overuse; the importance of developing well-prepared management and monitoring plans and providing a sufficient non-wasting endowment or other funding source to ensure management and monitoring tasks are carried through; the value of including public education and outreach as a component of preserve management where appropriate to increase public appreciation and support for the protection of vernal pools and their associated native species; and the importance of having a responsive regulatory process whereby the regulatory agencies identify and notify preserves that are failing to complete management, monitoring and resource protection requirements.

Apart from these more general conditions, this study did identify several conditions and issues that are more characteristic or even distinctive of small vernal pool preserves. While no large preserves were included in this study for comparison, the study authors have extensive experience surveying and assessing large mitigation banks and other preserved lands supporting vernal pools. This experience was used as a general basis for comparing and contrasting conditions found on small versus large preserves. Of course, the 60-acre threshold used to define a ‘small’ preserve for this study is somewhat arbitrary and the differences between small and large preserves discussed below should be regarded as following a gradient as preserve size increases.

With regard to biological characteristics, some of the preserves in the study were established to protect and preserve extremely rare and highly localized plant species (slender Orcutt grass, Sacramento Orcutt grass, Contra Costa goldfields, and pincushion navarretia). The study authors are aware of numerous other small vernal pool preserves in the state that were established to protect such species, especially in highly developed or fragmented areas such as the Santa Rosa plains and San Diego County. Small preserves are important for preserving such species since frequently no other opportunities exist for their protection. This unique value of small preserves is recognized and incorporated into various regional habitat conservation plans (HCPs) and Natural Community Conservation Plans (NCCPs), such as the Solano HCP for Contra Costa goldfields and the south Sacramento County HCP for Orcutt grass species. Regulatory agencies should evaluate the available conservation opportunities for extremely rare and localized vernal pool species and consider the establishment of small preserves as perhaps the best or only means of conserving them.

The size of small preserves presents unique management challenges related to higher levels of human and domestic animal (pet) impacts as compared to larger preserves, especially when situated within heavily developed or fragmented areas. Small preserves have a much higher edge to area ratio, especially for preserves that are more linear in shape, as well as a much shorter distance into the center of the preserve. As a result, as shown in this study, small preserves, especially those in proximity to moderate to high density residential areas, are generally

prone to much higher levels of human and domestic animal impact as compared to large preserves or more remote small preserves.

The size of small preserves also presents unique management challenges related to thatch management and invasive plant control. As discussed extensively below, thatch management through regular grazing or mowing is generally critical for maintaining ecological health within pools and associated upland annual grasslands (Marty 2005, Pollak and Kan 1998; Tu et al. 2001). This is easier to achieve on large preserves where the owner or a lessee will graze the site as part of a separate, economically feasible ranching operation. Where the grazer is a lessee, the preserve owner or manager can even charge a grazing fee as a moderate income stream for the preserve. In contrast, small preserves are too small to entice ranchers to graze the sites for a fee. Instead, a small preserve generally must pay a livestock operator (either a rancher or more specialized grazing contractor) to graze the site. There are also other problems related to grazing on small preserves such as the potential lack of reliable on-site water, and objections from surrounding landowners to having livestock in close proximity to their homes. Because of these constraints, thatch management is often lacking, sporadic or otherwise highly inadequate on small preserves as clearly demonstrated by this study. The outcome is that small preserves are often prone to having declining ecological conditions, even when protected by a conservation easement and provided with a well-developed management plan and sufficient endowment or other funding source.

In combination, these unique management challenges translate into the need for much more intensive management and monitoring efforts and consequently much higher funding requirements on a per acre basis for small preserves as compared to large preserves. Preserve managers and regulatory agencies should take this into consideration when determining the size of endowments for new small preserves.

Small preserves also appear to have unique challenges in terms of regulatory oversight. This study found that there was little to no regulatory oversight of the preserves included in the study. In fact, in one preserve, a federally-listed plant species (Contra Costa goldfields) was reported to the agencies through monitoring reports as becoming extirpated from the preserve. Yet, there was no response or action on the part of the responsible agencies. Small preserves may suffer more neglect from the regulatory agencies since they are easy to overlook and may not have the same level of scrutiny as large mitigation banks. Agencies should be careful to provide oversight of small preserves, especially those that support localized occurrences of extremely rare species.

Small preserves can provide a unique public education and outreach component. In certain cases, small preserves may provide some of the only remaining open space in highly developed areas. Given their proximity to human populations, these preserves have the capacity for providing easily accessible sites for public education and appreciation regarding vernal pools and their conservation. One preserve in the study, located near dense residential development, has a well developed public use and education program that is actively used for local school field trips, illustrating this capacity. Interestingly, this preserve exhibited low levels of human impacts due to carefully facilitated access, a well designed trail system, and interesting, engaging signage. Several other small preserves in the study that were near residential areas but did not allow public access showed high levels of human impact from unplanned trails, vandalism and trash build-up. These comparisons indicate that it may be more cost-effective and beneficial in terms of both site maintenance and public appreciation of vernal pools, for small preserves to facilitate responsible and engaged public use rather than attempting to exclude public access.

Sections 5.1 through 5.8 below provide a more detailed presentation of the key findings, discussion, and recommendations related to small preserve as determined through this study, following the eight assessment categories identified in the Results section. These include:

- general physical and biological characteristics;
- infrastructure, public use and surrounding land use;
- preserve establishment and funding;
- preserve management;
- preserve monitoring;

- ecological conditions and trends;
- education and outreach; and
- regulatory compliance and oversight.

5.1 GENERAL PHYSICAL AND BIOLOGICAL CHARACTERISTICS

5.1.1 KEY FINDINGS

- The 11 preserves in the study had a cumulative area of 301 acres with a total of 50 acres of preserved, created or restored vernal pools.

- Preserves varied in shape from square or oval to linear; preserve shape is an important consideration size more linear preserves have a greater edge to area ratio and thus greater potential edge effects.

- All of the small preserves in the study support special-status species, with federal- or state-listed species documented on all but one of the preserves.

- Four of the special-status plant species documented on the preserves are extremely rare with a very limited number of highly localized occurrences indicating that small preserves may play an important role in protecting such species, especially where they occur within highly developed areas.

5.1.2 DISCUSSION

The 11 preserves included in the study ranged from 6 to 53 acres in total area (Table 4-1) with a cumulative area of 301 acres. The minimum and maximum width and overall preserve shape varied considerably. Minimum width ranged from 30 to 900 feet and maximum width ranged from 375 to 3,900 feet. Preserve shape determines edge to area ratio, which likely contributes to the level of susceptibility from edge effects (Photos 1-3, Appendix D).

The number of vernal pools in each preserve ranged from one to 128, and pool density ranged from 2% to 100%. Preserve C, with 100% wetland density, consisted of a single 15-acre restored vernal pool that was fenced around its upper margin. All of the 11 sites had preserved vernal pools; five of these sites also had created pools. Preserve C was the only site with restored pools (a single large pool). Cumulatively, these preserves support more than 50 acres of preserved, created, and restored vernal pools.

Non-native annual grasslands are the sole or primary upland habitat on most of the preserves (Photos 4-5, Appendix D). Three of the preserves also support blue oak woodland (roughly 8%, 30% and 60% of the total upland area, respectively) (Table 4-1). There are also limited riparian woodlands on preserves with stream corridors.

Data on occurrences of special-status species were available for all preserves (Table 4-2). Special-status species are documented on all of the preserves, with federal- or state-listed species reported on all but Preserve E. Vernal pool fairy shrimp (*Branchinecta lynchi*) is documented on six preserves, and vernal pool tadpole shrimp (*Lepidurus packardi*) is documented on three preserves with co-occurrence on two preserves. California fairy shrimp (*Linderiella occidentalis*) a species tracked by the California Department of Fish and Game (DFG) in the California Natural Diversity Database is documented on three preserves.

Western spadefoot (*Spea hammondii*), a native toad and California species of special concern, is documented on three of the preserves. No other special-status amphibian species, such as California tiger salamander (*Ambystoma californiense*), have been documented at any of the preserves.

Federally listed or state-listed plant species are documented at five of the preserves. Two preserves support Sacramento Orcutt grass (*Orcuttia viscida*), two support slender Orcutt grass (*O. tenuis*), one supports Boggs

Lake hedge-hyssop (*Gratiola heterosepala*), and one supports Contra Costa goldfields. All of these species occur individually at different preserves except slender Orcutt grass and Boggs Lake hedge-hyssop, both of which are present in Preserve A. All of the preserves that support listed plants also support other special-status plants (CNPS List 1B or 2 species). Two additional preserves (D and K) support special-status plants but no listed plants.

Interestingly, only one preserve (A) supports both listed large branchiopods and listed plant species. Five preserves support both special-status wildlife and plant species (including both listed and non-listed special-status species).

Ten preserves were established as mitigation to preserve or create vernal pools. However, several were also established to preserve occurrences of special-status species. Four of the preserves were established to conserve populations of listed or other special-status plant species as a priority component. These species included Sacramento Orcutt grass (two sites), pincushion navarretia (*Navarretia myersii* ssp. *myersii*), Contra Costa goldfields, Boggs Lake hedge-hyssop, and legenere (*Legenere limosa*). Of these, the first four are extremely rare species within only a limited number of highly localized occurrences. The status and trends of these populations are addressed in Section 5.2, "Ecological Conditions and Trends."

5.1.3 RECOMMENDATIONS

- Regulatory agencies should consider the potential value of small preserves in preserving occurrences of extremely rare and highly localized special-status species, especially when such species are restricted to areas subject to high development pressure and habitat fragmentation.

5.2 INFRASTRUCTURE, PUBLIC USE AND SURROUNDING LAND USE

5.2.1 KEY FINDINGS

- Only two of 10 preserves near populated areas had sufficient fencing to prevent trespass or otherwise control public access.
- Preserves with inadequate fencing or control/facilitation of public access generally had significant to extensive disturbance or damage due to unplanned trails, domestic animal (pet) use, and trash accumulation, especially those near areas with heavy residential development.
- The predominant surrounding land use type was residential development.
- Preserves adjacent to residential development were more likely to sustain high public use and associated disturbances, as well as less obvious disturbances, including altered hydrology due to run-off from adjacent yards and the spread of invasive plants from adjacent landscaping.
- The preserve with a well-developed public use program that included established trails, attractive signage, and trash containers that facilitated and directed public use and resource concern had low levels of trash, vandalism, and habitat disturbance.

5.2.2 DISCUSSION

INFRASTRUCTURE

All preserves were at least partially fenced by post-and-cable, chain-link, or barbed-wire fences. Although most fences were in good condition, only two of the 10 sites near populated areas were sufficiently fenced to effectively deter trespassing or otherwise control access (Table 4-3). The remaining site was not near a populated area, had no recreational use, and thus did not require secure fencing. Preserve fences adjacent to residential

development frequently suffered vandalism in the form of cutting or bending of fences to allow public access (Photos 6-7, Appendix D). Trespassing did not appear to have taken place frequently in preserves with high, intact fencing and cattle grazing; however, even high-quality intact fencing did not appear to dissuade domestic animals (pets) from intruding on the sites. Trails were dug under the fences by pets from adjacent backyards, and many sites had extensive trail networks leading from these openings. These trails often extended throughout the preserves.

At least nine of the sites had some form of signage, ranging from simple "no trespassing" or "preserve" signs to extensive informational signage describing the biological resources on the site. Only one site had comprehensive signage intended for public education. These signs included descriptions and photographs of the vernal pools on-site. This preserve also included extensive signage regarding appropriate animal control and designated sensitive areas. This site was open to the public, with minimal fencing, and appeared to have relatively little trash and human disturbance even though it was adjacent to heavy residential development.

Established trail systems existed on two of the preserves intended for public access. Three other sites had fairly well-established trails created by public trespassing. These unauthorized trails often cut through sensitive habitats, and in one site presented extensive threats to vernal pool hydrology and vegetation. Poorly planned trail systems can disturb the hydrologic functionality of the site, either by berming pools and increasing inundation periods or by cutting through the edge of pools and facilitating premature drainage.

Public Use (Authorized and Unauthorized)

Authorized public access is only allowed on three of the preserves, with access to two of these sites unrestricted and apparently frequent and access to the third site infrequent and by permission only (Table 4-3). Of the remaining sites, four had signs of unauthorized trespass and recreational use (trails, motorized-vehicle tracks, and trash). Sites directly adjacent to dense residential development appeared to be used especially heavily (both authorized and unauthorized access), with the exception of a well-fenced site near a large public park. Sites near residential areas appeared to be used mainly for recreational activities, such as dog-walking and biking, and to be treated to some degree as neighborhood parks. Only four sites appeared to have few to no signs of recreational public use. These sites were either well-fenced or not near populated areas.

All preserves showed some degree of human disturbance of habitat, especially sites near residential areas where trespass occurred frequently (Photos 8-9, Appendix D). The site with established trails, signage, and trash containers that facilitated and directed public use had low levels of trash, vandalism, and habitat disturbance. Sites with the highest levels of disturbance were those that were located in residential areas with inadequate fencing to prevent access but no facilitated public access. These sites had consistently vandalized fencing, which may suggest local desire for open space or parks. The most damaging types of disturbance included the creation of trail systems through pools and swales. This disturbance was mitigated on sites with authorized and facilitated public access by establishing well-marked trail systems away from sensitive resources.

The assessment of damage from public use was based on an evaluation of existing site conditions as observed during site visits. The level of observed damage did not appear to be correlated with age of the preserve (reflecting cumulative impacts). Correlations between level of damage and level of management and/or monitoring are addressed in Sections 5.4 and 5.5 below.

Surrounding Land Uses

Six different land use types were identified surrounding the preserves (within 1,000 feet) (Table 4-4). The predominant type was residential development, which averaged 38% of the acreage of land uses surrounding the preserves (Photos 10, Appendix D). Nine preserves were adjacent to residential development (many of the preserves were established as on-site mitigation for these developments). These preserves were more likely to sustain high public use and associated disturbances, as discussed above. Adjacent residential development also

facilitated less obvious disturbances, including altered hydrologic systems and the spread of invasive plants from landscaping. The four preserves surrounded by public parks also suffered from similar sorts of disturbances.

The second most predominant land use was native or naturalized habitats (e.g., grasslands, open space preserves, and riparian and creek systems), which averaged 30% of the acreage of land uses surrounding preserves. Often the preserves formed transitional areas between these large expanses of habitat and residential or commercial developments, because they were established as on-site preserves to mitigate the effects of the developments on habitat. Some of these areas were preserved open space, but many were not. Future development of these areas could further isolate these preserves from natural habitats. These open spaces connect many of the preserves to additional wildlife habitat and more intact hydrologic systems. One site is surrounded by residential development on two sides and a an open grassland that is being developed on the other two sides.

The remaining surrounding land uses included intensive agriculture (annual or perennial croplands) and commercial and industrial development (along with parks and disturbed fields, which occupied smaller amounts of acreage). Many of these preserves provide the last remaining vernal pool habitat in these areas. For example, Preserve K is 40 acres of remnant vernal pool habitat surrounded by agriculture in an area that was historically covered in extensive pools and swales. Preserve I is surrounded on three sides by commercial/industrial development and was preserved as some of the last local habitat for a very rare, listed vernal pool plant species (Photo 11, Appendix D).

Nine of the eleven preserves border a paved road (Photo 12, Appendix D). The proximity of such a road increases the ability of humans and invasive species to access the site and can decrease the site's suitability and accessibility for wildlife species. The two sites not adjacent to a paved road (but that were also remote from residential areas) showed little sign of trespassing, public use, or infrastructure vandalism.

5.2.3 RECOMMENDATIONS

- Small preserves should be provided with adequate fencing to prevent or significantly deter public access if the management goal is to exclude public access.
- Where this is not feasible or where public access is desired, preserves should be provided with appropriate fencing to control or direct access, planned trails, signage describing site resources and the importance of their protection, trash containers and other infrastructure that will promote responsible public use.
- Facilitated public use should especially be considered for preserves near dense residential development where trespass is often the most common and damaging if not controlled or directed.

5.3 PRESERVE ESTABLISHMENT AND FUNDING

5.3.1 KEY FINDINGS

- Protection of vernal pools as well as specific special-status species drove the establishment of the preserves with nine established for on-site mitigation, one for off-site mitigation and one for simple conservation.
- The preserve owners include a variety of entities including state and local government agencies (5 sites), non-profit land trusts (3 sites), and the developers responsible for site establishment (3 sites).
- For all sites except one, the owner is also the preserve manager, which is rarely the case for mitigation banks; this points to a potential vulnerability since there is no third-party oversight; the study did not, however, include enough preserves where land owners and managers differ so a comparison of the two situations cannot be made.

- Six of the preserves have endowments, four of which are considered large enough to be 'non-wasting'; two are funded through municipal sources that appear sufficient; three have no funding sources.

- Older preserves tend to be protected through deed restrictions or fee simple ownership and have insufficient funding; more recent preserves tend to be protected through permanent conservation easement and have sufficient, 'non-wasting' endowments; these conditions reflect improving regulatory guidelines and oversight related to preserve establishment and funding.

5.3.2 DISCUSSION

The preserves in the study were established between 1964 and 2007 (Table 4-5). The oldest preserve was a donation to a conservation group for conservation purposes and was established before mitigation requirements for wetlands or special-status species were developed. All the other small preserves were established to provide mitigation for development projects. Of the 10 preserves established as mitigation, nine were on-site preserves and one was an off-site preserve.

Vernal pools were a key resource driving establishment of all the preserves, but the presence of special-status species was also a key to establishment of many preserves. Five of the preserves protect occurrences of listed or very rare plant species, including Sacramento Orcutt grass, slender Orcutt grass, Contra Costa goldfields, and pincushion navarretia (Table 4-2 and Table 4-12).

The preserve owners include state and local government agencies (5 sites), non-profit land trusts (3 sites), and the developers responsible for site establishment (3 sites) (Table 4-5). For all sites except Preserve C, the owner is also the preserve manager and is responsible for the endowment or other funding source, which is rarely the case for mitigation banks. All of the sites owned and managed by state or local agencies are protected through a deed restriction or fee simple ownership rather than a conservation easement. The two preserves owned and managed by land trusts that were established as mitigation are protected through conservation easements. These preserves were both transferred to land trusts by the developers after establishment. The donated site owned and managed by a land trust (Preserve K) is owned fee simple. Of the two sites owned and managed by developers, both are under deed restrictions. The remaining site (owned by a developer, managed by a land trust) is protected by a conservation easement.

A variety of funding sources may be used to pay for the management and maintenance of habitat preserves. Possible sources of funding include: endowments; taxes, special assessments, and similar funds; and, donations. The majority of preserves examined in this study (6 of 11) relied on endowments for funding. Municipal funding sources were used to pay for maintenance and management at two preserves, and three of the study preserves had no source of funding. Endowment amounts were variable and ranged from $3,750 and $900,000.

Based on experiences of project team members managing similar vernal pool preserves, four of the six endowment-funded preserves are considered to have sufficiently large endowments to minimize erosion of the endowment principal (i.e., to use endowment interest earnings, rather than endowment principal, to pay for annual management and maintenance expenses in most years). Two endowment-funded preserves had very small endowments that would only be sufficient to pay for a minimal level of preserve oversight or that would be expected to be exhausted over time. Capitalization rates (i.e., the assumed annual rate of endowment return less inflation) for endowments associated with preserves in this study ranged from 3% to 6%, with higher rates typically associated with older preserves. Again, based on past experiences and observations of the project team, endowment capitalization rates generally exceeding 5% are uncommon and reflect a belief that either long-term inflation rates will be very low (e.g., approximately 3% annually or less) or that long-term annual endowment returns will, on average, exceed 8% or 9% of the endowment principal.

It is noteworthy that all of the preserves with conservation easements also have sufficient non-wasting endowments and are owned and/or managed by a third-party land trust. In addition, these preserves were all

established in the past few years. This reflects the evolving requirements of the regulatory agencies for preserve establishment and funding. While older preserves may have been protected through deed restrictions or fee simple ownership and provided with a minimal, often insufficient endowment, current standards generally require that preserves are protected through permanent conservation easements and are provided sufficient, non-wasting endowments or other sufficient sources of funding.

5.3.3 RECOMMENDATIONS

- As discussed in the next sections, preserves that lacked endowments or other funding sources were not managed or monitored; future small preserves should be protected through conservation easements and provided with non-wasting endowments or other sufficient funding sources to ensure permanent protection and adequate long-term management.

- Endowment amounts should be determined considering the particular management challenges and higher per acre management costs associated with small versus large preserves related to higher levels of human trespass and impacts, thatch management, and invasive plant control (see discussions in Section 5.4 below).

- Conservation easements and endowments should be held by entities approved by the regulatory agencies to ensure appropriate oversight.

- Regulatory agencies should provide clear oversight on mitigation preserves where the land owner also serves as the preserve manager and/or endowment holder to ensure some level of third-party review.

5.4 PRESERVE MANAGEMENT

5.4.1 KEY FINDINGS

- Nine of the 11 preserves have existing management plans prepared by consultants (Table 4-6); none of the plans have been updated nor are there provisions for having them updated even though some are more than 10 years old; management plans for five of the preserves were obtained and reviewed for this study and found to be adequate to robust.

- On-going management activities are being conducted on eight of the 11 preserves; the six preserves with a dedicated endowment reported moderate to robust management activities (Table 4-7); the two preserves using ‘public funds’ as the funding source reported minimal management activities; the three remaining preserves lacked endowments or other funding sources and reported no active management.

- Reported management activities included general site maintenance (infrastructure maintenance, trash removal, etc.), thatch management through grazing, invasive plant control, and habitat restoration.

- Thatch removal, through grazing or mowing, is a critical element for maintaining the ecological health of vernal pools and non-native grasslands and can also help control the infestation and spread of invasive plants (Marty 2005, Pollak and Kan 1998; Tu et al. 2001); yet, thatch removal takes place on only three sites, through grazing (1 site) or a combination of grazing and mowing (2 sites).

- Significant infestations of invasive plants were observed in eight of the preserves; efforts to control invasive plants were reported from six of these preserves and were generally conducted on a sporadic basis; there were no reported efforts to permanently remove or seriously reduce invasive plants from any of the sites.

- Minimal habitat restoration is being conducted on the preserves with only three preserves reporting any restoration activities.

5.4.2 DISCUSSION

Preserve management involves developing a management plan at the time of preserve establishment, updating the management plan periodically to address changing site conditions, and conducting the actual management activities prescribed by the management plan (Table 4-6 and 4-7). These management activities are separate from monitoring activities, which involve site inspections, assessments, and surveys used to inform the management activities. Monitoring is addressed in the next section.

DEVELOPMENT AND UPDATE OF MANAGEMENT PLANS

Nine of the 11 preserves have existing management plans. Preserve K is a donated easement established for conservation with no endowment and no management plan. Preserve J also does not have a management plan. This site had a 5-year monitoring requirement for created vernal pools with no on-going management requirement once the pools met success criteria. It is unclear why no long-term management plan was prepared for this site.

All management plans were prepared by consultants. These plans were prepared between 1999 and 2007 though several were prepared many years after the preserve was established (no information was provided to explain the delay). According to the preserve managers, none of the plans have specific requirements for updating, nor have they been updated even though some are more than 10 years old. Three of the nine plans were developed following guidelines from the DFG or USACE.

The management plans for Preserves A, B, G, H and I were obtained and reviewed for this study. In general, these plans were found to be adequate to robust, providing sufficient guidance and detail for long-term site management, maintenance, and monitoring. These plans included most or all of the following components:

- descriptions of the physical, cultural, and biological components of the preserve;
- management goals and tasks;
- provisions for monitoring and adaptive management;
- summaries of required operations and maintenance;
- descriptions of recreation, education, and habitat restoration targets;
- lists of preserve personnel;
- agency notification requirements;
- lists of prohibited activities within the preserve;
- requirements for preserve inspections and reporting; and
- ownership and funding mechanisms.

MANAGEMENT ACTIVITIES

The reported types and frequency of management activities conducted on the preserves are summarized in Table 4-7. Management activities are conducted by a range of individuals that includes staff from the agencies or land trusts responsible for managing the preserves, as well as hired consultants.

As shown, some level of management was reported from eight of the 11 preserves. Not surprisingly, all of these preserves have both a management plan and a dedicated funding source. Three of the preserves have no management. Two of these (Preserves J and K) lack both management plans and funding sources. The third, Preserve I, has a management plan but no dedicated funding source and is owned and managed by the developer that established the preserve as on-site mitigation. Upland portions of the preserve are disked annually for fire management, but this constitutes more of a disturbance than a beneficial management activity. The specific management activities conducted on the eight preserves that are managed are discussed below.

General Site Maintenance

All of the eight managed preserves reported general maintenance activities on an as-needed to regular basis. These activities included fence and sign maintenance, trash and debris removal, some trespassing patrol (four sites) and some feral animal control (three sites).

Thatch Management

Thatch removal, through grazing or mowing, is a critical element for maintaining the ecological health of vernal pools and non-native grasslands (Photo 2, Appendix D). Grazing and mowing reduce accumulated non-native grass thatch and also help maintain ponding duration in pools (Marty 2005). Grazing and mowing can also help control the infestation and spread of invasive plants (Pollak and Kan 1998; Tu et al. 2001).

Despite these benefits, thatch removal takes place on only three sites (through grazing) (Preserves A, C and D) (Table 4-14). Goats graze on one of these sites for approximately three months per year, and cow-calf pairs graze on the other two sites for approximately six months per year. The grazing rights are leased to local ranchers. Both preserves where cattle graze use monitoring data to help guide grazing intensity. The site with goat grazing reported that data were not used to determine grazing intensity. Mowing was reported from two of the preserves where grazing takes place; these sites were mowed either annually or infrequently.

Grazing operators often pay a small sum to lease the grazing rights from the preserve owner. Often an agreement will be drafted between the preserve and lessee outlining acceptable grazing practices, standards, and expectations. This agreement can also designate responsibility for infrastructure maintenance and associated grazing management activities to either party. No information was available for this study on agreements between preserve owners and lessees.

Invasive Plant Control

Invasive plant species can threaten the quality of habitat in the preserves. Significant infestations of invasive plants were observed in eight of the preserves (Table 4-8 and Table 4-13). The most common invasive species were medusahead (*Taeniatherum caput-medusae*) and yellow star-thistle (*Centaurea solstitialis*), common grassland invasive plants often established on sites with poor or inconsistent grazing or past disturbance (Photo 4, Appendix D).

Other invasive plant species noted in the information provided by preserve managers included: Himalayan blackberry (*Rubus discolor*), prickly lettuce (*Lactuca serriola*), Italian thistle (*Carduus pycnocephalus*), bull thistle (*Cirsium vulgare*), tamarisk (*Tamarix* sp.), goatgrass (*Aegilops* sp.), Chinese tallow tree (*Sapium sebiferum*), Callery pear (*Pyrus calleryana*), tree of heaven (*Ailanthus altissima*) and Catalpa tree (*Catalpa* sp). Occurrences of these species were generally sporadic or isolated, often in association with some type of disturbance, such as a road edge or graded area.

Efforts to control invasive plants were reported from seven preserves. Most of these preserves reported that invasive plant management takes place sporadically. One site reported that control measures are implemented quarterly; however, no invasive species are yet reported from this site. There did not appear to be any intensive, focused efforts to remove or seriously reduce invasive plants from any of the sites.

Methods for control that were being utilized included grazing, mowing, hand removal, prescribed burning and herbicide treatments. Goat grazing and mowing were reported from one site for removal of yellow star-thistle and medusahead. Mowing was reported from a second site as the main treatment for prickly lettuce. Hand removal of Italian thistle, bull thistle, and yellow star-thistle was reported from one site. Prescribed burning has been conducted at one site to target populations of yellow star-thistle.

Herbicide use was reported from two sites with glyphosate (Roundup or Rodeo) used in both cases. At one site, cut-stump application was used on Himalayan blackberry and tamarisk and spray application was used on yellow star-thistle, which was also manually removed. Herbicides were used at the second site on tree of heaven. Cut-stump application is planned at a third site for Chinese tallow tree, callery pear, and catalpa tree.

Habitat Restoration

Only three sites reported habitat restoration as a management activity. All three sites reported that habitat restored activities are conducted annually. One site reported rebuilding vernal pool edges by hand after they were damaged by unauthorized motorcycle trails. The other activities were not specified in the information provided by the preserve managers.

5.4.3 RECOMMENDATIONS

- Preserves should be established with a dedicated and sufficient funding source to ensure on-going site management; use of 'public funds' not specifically dedicated to the management of a specific preserve or set of preserves should be avoided since these funds may become unavailable or redirected, especially during economic downturns.

- Management plans should be carefully prepared by qualified individuals since they provide the central guidance for on-going site management and maintenance; also, management plans should include a provision for periodic review and update (every five to ten years).

- The most important components of preserve management to ensure long-term site maintenance and ecological health include thatch management, invasive plant control, prevention or minimization of destructive public use, and regular removal of trash and other debris; management plans for small preserves should specifically address these issues and endowments should be sufficient to support these activities in the context of the specific small preserve being managed.

- Some form of thatch management (grazing, mowing and/or burning) should be conducted annually and consistently on all small preserves to control thatch and reduce competition from non-native annual grasses within both the vernal pools and the adjacent uplands (the only exception may be preserves with thin or infertile soils not conducive to dense grass growth or thatch build-up); this is perhaps the single most important management activity yet, as indicated by this study, it is rarely achieved on small preserves; it is acknowledged that consistent grazing is difficult to achieve on small preserves due to the difficulty and high cost of bringing cattle into such small sites that are often bordered by residential areas and have high public use; use of goats, sheep or mowing should be considered as viable alternatives; burning is generally not an option since most small preserve are in close proximity to residential areas.

- Management plans should include clear provisions for invasive plant control and preserves should be sufficiently endowed to provide for the level of effort required to control invasive plants; invasive plant infestations, especially on sites that lack grazing or other thatch management, can significantly compromise ecological health within small preserves; small preserves may be more susceptible to invasive plant infestations due to the large edge to area ratio and frequent proximity to adjacent weedy areas that can serve as a source of infestation; eradication or even control of invasive plants within annual grasslands is difficult to achieve and generally requires a consistent, focused multi-year effort; as indicated by this study, this is rarely achieved on small preserves and more effort should be directed towards this effort.

- Public use should be controlled or facilitated as described in Section 5.2 above and Section 5.7 below.

- Management activities should include regular patrols (annually or more frequent) to remove trash and other debris and repair damage to site infrastructure or habitats from destructive public use.

5.5 PRESERVE MONITORING

5.5.1 KEY FINDINGS

- Nine of the 11 preserves have existing monitoring plans (included as part of the management plan); none of the plans have been updated nor are there provisions for having them updated even though some are more than 10 years old.

- Some level of monitoring was reported from eight of the 11 preserves (Table 4-8); the six preserves with dedicated endowments reported moderate to robust monitoring; the two preserves using 'public funds' as the funding source reported minimal (inadequate) monitoring activities; the three remaining preserves lacked endowments or other funding sources and reported no active monitoring.

- The most common types of monitoring being conducted include general site inspections (condition of infrastructure, trash/debris levels, evidence of vandalism, etc.), general wildlife and vegetation surveys, vernal pool vegetation, listed shrimp, and rare plant surveys, and invasive species surveys (Table 4-8); thatch monitoring was also commonly conducted through photopoint monitoring, RDM sampling or general vegetation or upland plant surveys.

- The types of monitoring being conducted on the six preserves with moderate to robust monitoring generally targeted the key management parameters for small vernal pool preserves including thatch level, invasive species, general site condition (trash, public use), and status of special-status species.

- Five of nine preserves indicated that monitoring results are 'frequently' used to inform management activities.

5.5.2 DISCUSSION

Preserve monitoring involves conducting site inspections, assessments, and surveys to evaluate the effectiveness of management efforts, status of sensitive resources, and overall functionality of the preserve. Nine of the 11 preserves have monitoring plans, included as part of the management plan. Preserve K is a donated easement established for conservation with no endowment and no management or monitoring plan. Preserve J also does not have a management plan. Monitoring of created vernal pools was conducted for five years following establishment but there is no on-going monitoring.

Some level of monitoring was reported from eight of the 11 preserves (Table 4-8); the six preserves with dedicated endowments reported moderate to robust monitoring; the two preserves using 'public funds' as the funding source reported minimal monitoring activities; the three remaining preserves lacked endowments or other funding sources and reported no active monitoring. The annual cost of monitoring at these preserves was reported to range from $1,900 to $6,700.

The most common types of monitoring being conducted at the preserves, as reported by the managers, are general site inspections (e.g., checks of fencing, trash/debris levels, vandalism) and general wildlife and vegetation surveys. Other monitoring is being conducted at several of the preserves for vernal pool vegetation; surveys for special-status plants, large branchiopods, and amphibians and thatch and invasive-plant assessments are also being conducted. The types and frequency of monitoring activities conducted on the preserves, as reported by managers, are summarized in Table 4-9.

Monitoring results are often compiled into annual or quarterly reports intended to inform managers, regulators, and site owners of any need to adapt current management activities to changing site conditions. Five of nine preserves responded that monitoring results are "frequently" used to inform management activities. The other four that answered the question reported that they are not used. As described above, ecological conditions were reported as declining at several of the preserves despite on-going management and monitoring activities.

Three of the preserves have no reported monitoring activities. Two of these (Preserves J and K) lack both management plans and funding sources. The third, Preserve I, has a management plan but no dedicated funding source. Preserves I and J have created vernal pools. Monitoring of the created pools was conducted for 5 years after pool creation but was discontinued after pool success criteria were met. The specific monitoring activities being conducted on the eight preserves with monitoring are discussed below.

DEVELOPMENT AND UPDATE OF MONITORING PLANS

Nine of the 11 preserves have existing management plans, each of which includes a monitoring component. The monitoring components include the required or recommended frequency and methods of monitoring activities. Many of the plans also identify remediation thresholds or monitoring results that mandate management actions. These thresholds often apply to listed or sensitive species populations targeted in preserve establishment, which are often the focus of monitoring activities. If population sizes drop below a designated critical number, the plan specifies that management actions must be taken.

All of the existing plans were prepared by consultants. According to the preserve managers, none have specific provisions for updating, nor have any been updated since originally prepared. Three of the plans were developed following guidelines from DFG or USACE.

MONITORING ACTIVITIES

Monitoring is being conducted by a variety of entities—consultants, government agency staff members, and land trust staff members. No information was provided on the qualifications of monitors.

General Site Inspections

Six of the eight monitored preserves reported conducting general site inspections annually or more frequently. General site inspections are conducted by walking the site and visually inspecting the condition of preserve infrastructure, levels of trash accumulation, and looking for indications of trespassing or vandalism, fire hazards, unauthorized use by motor vehicles, or any other signs of disturbance. In contrast to other monitoring activities, the site inspections do not have to be conducted by a specialist (e.g., biologist, range manager, or hydrologist), and inspections are less expensive than biological surveys or hydrological studies. For that reason, this monitoring activity is the one most commonly implemented at preserves.

Thatch Assessments

Thatch assessments can be made by conducting a visual inspection, establishing photopoints, or measuring RDM at specific sampling points. The assessments are generally conducted by a biologist or rangeland specialist in late summer.

Photopoints and RDM monitoring were reported from three of the preserves, two of which are actively grazed (Preserves A and C) (see Table 4-7). Preserve A is also mowed. The remaining site where grazing and mowing take place (Preserve D) is not assessed for thatch levels through photopoints or RDM monitoring but is subject to ‘general vegetation’ monitoring as are two other sites.

If thatch monitoring is not conducted, as is the case for at least six of the 11 sites, the preserve manager may be less able to gauge the risk of fire hazard, threats posed to native plants by thatch accumulation or assess the appropriateness of current grazing.

Invasive Plant Species Monitoring

Seven sites reported monitoring for invasive plant species, anywhere from infrequently to quarterly. Invasive plants were reported as observed on an additional three sites that are not currently monitored. Monitoring

activities include assessing the current extent of known infestations, evaluating the effectiveness of invasive-plant treatments on managed populations, and checking for new infestations.

Many invasive plants, such as medusahead and goatgrass, can become quickly naturalized and complete eradication is generally considered impractical. Often, monitoring for these species is designed to assess their general extent and density to ensure that populations are maintained at a reasonable level. Other species, such as many escaped ornamentals (e.g., Catalpa tree or Callery pear), can be targeted for complete eradication, and presence/absence may be implemented to ensure these species do not become reestablished after removal.

Without regular monitoring, the establishment and spread of invasives may remain undetected and pose a much greater ecological threat than a quickly detected new occurrence.

Wildlife Monitoring

Five sites reported monitoring for wildlife (Photo 13, Appendix D). These surveys are conducted annually to quarterly and consist of simply noting the presence of bird, mammal, and other easily detectable wildlife species on-site. These general surveys are conducted by biologists and do not require permitting by any regulatory agency.

Five preserves reported more specialized wildlife surveys, including annual or biannual listed large branchiopod monitoring. The two preserves with listed large branchiopods that are not monitored have no endowments and were established before the listing of the species present on the site. These surveys require authorization from USFWS, must follow USFWS survey protocols, and can only be conducted by a permitted biologist. These surveys can be more costly than more general surveys because they require the employment or contracting of a USFWS-permitted biologist.

The only special-status amphibian species reported from the preserves is western spadefoot, which has been documented at three preserves (Preserves A, H, and K) (Table 4-2). Surveys for western spadefoot and other vernal pool amphibians are conducted at two preserves (A and B). Preserve K is not monitored because of a lack of funding or monitoring plan. It is unclear why Preserve H is not monitored for amphibians.

Vegetation and Special-status Plant Monitoring

General vegetation surveys are conducted at five preserves. These surveys, consisting of general inspections of species composition and cover, are conducted annually to quarterly.

Five of the preserves (Preserves A, C, G, H, and I) support listed species (Table 4-2). All five of these preserves, plus two additional preserves (Preserves D and K), support non-listed special-status plants as well. Special-status plant monitoring is conducted at four of the preserves, with Preserves A, G and H reporting listed plants and Preserve B reporting no special-status plants. No surveys are conducted at Preserve I, which has a monitoring plan but no endowment. Surveys are conducted either as needed or annually by a botanist or personnel trained to identify target species.

Monitoring prescriptions for special-status plants, as described in two of the management plans reviewed for this study, include establishing photopoints, mapping the presence and extent of target species, estimating population size, identifying and eradicating threats from invasive plant species, noting changes or impacts on vernal pool habitats, and monitoring climate conditions that relate to populations, such as rainfall data. If an identified threshold value is reached, prescribed management actions include determining the cause of population decline and acting accordingly to address the issue (e.g., by removing invasive plant species observed in the pools).

Hydrology Monitoring

Hydrology monitoring is conducted at seven of the preserves, either infrequently or annually. The monitoring involves measuring the depth and duration of ponding in vernal pools and is typically conducted in conjunction with other surveys. This level of hydrologic monitoring can be conducted by trained personnel and does not require a hydrologist. More substantial hydrology studies have been conducted at two preserves and involve assessing the impacts of surrounding residential and recreation development and runoff on pool hydrology. These studies were conducted by hydrologists and are not repeated annually.

APPLICATION OF MONITORING TO MANAGEMENT

Preserve managers reported that monitoring results were frequently used to improve preserve management at six of the preserves. Monitoring is designed to assess the status of the preserve's general site and biological conditions. If monitoring indicates that the preserve is functioning adequately to support targeted species and habitats, management adjustments are not required. However, if monitoring indicates a declining status of targeted resources, management adjustments are required.

5.5.3 RECOMMENDATIONS

- All small preserves should have a well-conceived monitoring plan that include straightforward, easy-to-implement monitoring activities that focus on key elements important for small pool preserve management especially thatch management, invasive plant management, status of public use and general site condition, and status of the sensitive resources on the preserve; monitoring plans should be periodically reviewed and updated (every five to ten years).

- Several key monitoring activities should be conducted annually on all small preserves: general site inspections to assess levels of disturbance by humans and domestic animals and accumulation of trash and other debris; thatch assessments (through residual dry matter sampling or visual assessments) to ensure that thatch levels are being appropriately managed; invasive plant monitoring; and photopoint monitoring of key features or resources; this combination of activities is inexpensive and easy to implement (the activities can be completed together in a single day in the late spring or summer) and will provide site managers with key information on the site's ecological conditions and management requirements.

- Additional monitoring should be conducted periodically (every three to five years) for composition and cover of vernal pool and upland plant species, presence and abundance of special-status species, and other conditions relevant to management of the preserve.

- Preserve managers and management plans should ensure there is a strong link that uses monitoring results to inform and improve site management through an adaptive management process.

5.6 ECOLOGICAL CONDITIONS AND TRENDS

5.6.1 KEY FINDINGS

- No preserves were reported to have an overall improvement in ecological conditions since establishment; of the eight preserves that are actively managed and monitored, conditions were reported to be declining at five, stable at two and unknown at one; the three remaining sites likely have declining conditions due to a lack of management.

- The most common causes of reported declines in ecological conditions on the preserves appear to be no or inadequate thatch management and/or invasive plant control. Other apparent causes of decline include

disturbance from excessive, often unauthorized human and domestic animal (pet) use and lack of general site maintenance resulting in accumulation of trash and debris and other cumulative impacts.

- Managers generally reported declines or no change (but no improvement) for various individual parameters within preserved vernal pools and upland annual grasslands as summarized in the following five bullet points.

    - Of seven sites providing data, three reported a decrease in ponding duration and native plant cover and an increase in non-native grass/invasive plant cover since preserve establishment; one additional site also reported an increase in non-native grass and invasive plant cover through no decrease in ponding duration or native plant cover; the remaining sites reported no change or no data available.

    - Of five sites providing data, none reported a change in large branchiopods or special-status amphibian occurrence (presence) since preserve establishment.

    - Of six sites providing data, two reported a decrease in the abundance of special-status plants, one reported the apparent extirpation of a listed plant (Contra Costa goldfields) from the preserve, and two reported no change since preserve establishment.

    - Of the ten sites visited for the study, six were estimated to have high mean thatch levels (+2,500 lbs/acre) and four were observed to have moderate mean thatch levels (1,500–2,500 lbs/acre). The sites with moderate thatch levels were either grazed or had thin or infertile soils.

    - Of the seven sites providing data, four reported an increase in cover and three reported no change in cover of upland invasive plants since preserve establishment.

5.6.2 DISCUSSION

'Ecological conditions' refers to a broad set of habitat parameters within a preserve reflecting its overall ecological status and health. These parameters may include general site conditions in terms of accumulated trash and level of human or domestic animal impacts, general condition of site vegetation including thatch level, presence and abundance of native wildlife and plant species, status of rare wildlife or plant species, and presence and abundance of invasive weeds.

Tables 4-9 through 4-14 present information on ecological conditions and trends within the 11 preserves included in the study as reported by preserve managers. In general, these assessments should be regarded as fairly qualitative and potentially subjective in nature, based on a combination of manager review of monitoring data and general knowledge and experience of the preserve through on-going management and monitoring activities. Information was provided on overall ecological conditions and trends as well as more specific conditions and trends within vernal pools and upland vegetation, respectively, as presented below.

GENERAL SITE CONDITIONS

No preserves were reported to have overall improvement in ecological conditions since establishment (**Table 4-9**). The eight preserves that are actively managed and monitored reported declining (5 sites), stable (2 sites), or unknown change (1 site) in overall conditions. These trends (especially declining trends) are occurring in spite of the fact that six of these preserves report that monitoring results are 'frequently' or 'always' used to inform and improve site management. Preserves that are not managed or monitored are difficult to assess, although field visits indicated that these sites are subject to a variety of disturbances and neglect and are likely declining. The most common causes of reported declines in ecological conditions appear to be no or inadequate thatch management and/or invasive plant control as discussed further below. Other apparent causes of decline include disturbance from excessive, often unauthorized human and domestic animal (pet) use and lack of general site maintenance resulting in accumulation of trash and debris, and other cumulative impacts.

VERNAL POOL CONDITIONS

Preserve managers provided information on conditions and trends of various parameters related to vernal pools including hydrology, vegetation, and special-status species.

Hydrology

Fifteen of the 58 pools surveyed during the site visits for this study showed signs of decreased or increased hydrology from 'natural' conditions. These pools were present at 10 of the 11 sites visited. Signs of decreased inundation periods included a high cover (greater than 50%) of non-native annual grasses in pools and disturbed pool topography, including damage to edges or trail systems through pools. Signs of increased inundation periods included indications of runoff from adjacent areas into preserve pools and blocking of site drainage or pool berming caused by road or field edges.

Marty (2005) has shown that lack of grazing or other thatch removal from pools and pool margins allows non-native grasses to intrude into the pools and results in a significant reduction in ponding duration through increased evapotranspiration or other means. Of the seven sites with available data, three reported a decrease in ponding duration and four reported no change within preserved pools (Table 4-10). Three of these sites also had created pools, all of which reported no change in ponding duration. Grazing and mowing is not conducted at any of the sites with a decrease in ponding duration (Tables 4-7 and 4-10), but is conducted at two of the sites with stable ponding duration. The decrease in ponding duration at the three sites is likely due to a lack of thatch management and an increase in the cover of non-native annual grasses in pools. A 'high' cover of non-native grasses within vernal pools was reported or observed at six of the 10 sites with available data (Table 4-11), also indicating a general lack of adequate thatch management among the preserves. Only one of these sites (Preserve D) is grazed.

Vegetation

All of the preserves that reported a decrease in ponding duration also reported a decrease in native plants and an increase in non-native grass and invasive plant cover within vernal pools (Table 4-10). One other site (Preserve D) also reported an increase in non-native grass and invasive species cover but no decrease in native plant cover or ponding duration within both preserved and created pools. As with ponding duration, the decrease in native cover and increase in non-native cover is likely related to insufficient thatch management for the reasons discussed above (Photo 5, Appendix D). The increase in non-native cover may also be related to invasion by small mannagrass as discussed in the following paragraph.

Dominant non-native grass species observed within vernal pools during the site visits were soft chess (*Bromus hordeaceus*), Bermuda grass (*Cynodon dactylon*), Mediterranean barley (*Hordeum marinum* spp. *gussoneanum*), Italian ryegrass (*Lolium multiflorum*), rabbit's-foot grass (*Polypogon monspeliensis*), and medusahead. In addition, small mannagrass (*Glyceria declinata*) was observed or reported from four sites and observed in six of the 58 surveyed pools, ranging from 1% to 30% cover. This species is an especially problematic invasive grass for vernal pools because it is an obligate wetland plant that can occur throughout pools, unlike most other invasive species that typically inhabit only the margin.

Observations made during site visits generally corroborated the information provided by preserve managers. The two preserves with the highest levels of non-native grasses and other invasive plants in preserved pools were Preserves I and K, where neither grazing nor mowing takes place. The preserved pools at Preserves G and H (where grazing and mowing also do not take place) appeared to be in good condition despite a lack of thatch removal (Photo 15, Appendix D). This may be attributable to the soil type, which is fairly thin and infertile, characteristics that seem to discourage heavy colonization by non-native grasses and invasive plants.

As a general observation, the deeper pools at all sites better resist invasion by non-native grasses than shallow pools because they have longer ponding periods that tend to exclude non-native grasses. In general, the created

pools appeared to be more resistant to invasion by non-native grasses even when neither grazing nor mowing took place at the site. This condition is likely attributable to a combination of thinner, less well-developed soils in the pool basins and relatively deep created maximum ponding depths.

Special-status Species

Managers reported that occurrences of special-status large branchiopods and amphibians (western spadefoot) in preserved and created vernal pools have remained constant since preserve establishment for the five sites where information was provided (Photo 4-12, Appendix D). In reality, it is very difficult to detect changes in abundance of these species except when the species has become absent. The number of individuals in a given pool can fluctuate widely from year to year and during different times of the sampling season. What this information does convey is that special-status large branchiopods and amphibians are persisting on these preserves with no reported cases where they have become extirpated.

Managers reported a decrease in abundance or occurrence of special-status plants at three preserves (G, H, and I) and no change at three preserves (A, B, and D) for the six sites where information was provided. The management plans for the two preserves with Sacramento Orcutt grass (Preserves G and H) identified threats as being "primarily derived from public use in an urban setting." Listed problems include altered hydrology and water contamination from runoff, herbicide input, and foot traffic and littering from extensive public use of the one preserve that is open to the public. The second preserve is closed to the public, but reportedly is also threatened by the above-listed threats (except foot traffic). This preserve is also threatened by adjacent landowners who dispose of refuse and yard waste within the preserve. Accumulation of thatch does not appear to be a significant contributing factor to the decline of Orcutt grass in these preserves in spite of a lack of grazing or mowing. Both preserves have relatively thin or infertile soils that appear to discourage dense non-native grass growth. Preserve I, which supports Contra Costa goldfields, is not being actively managed, and the preserved pool in which the species was documented appears to be filling in with non-native grasses and other invasive plants. It appears that ponding duration has greatly declined and bare soil is reduced to less than 2% cover. Contra Costa goldfields have not been observed in this pool since 2002 or 2003.

The persistence of special-status large branchiopods, amphibians, and plant species could be affected if the ponding duration of pools were to decrease. Preserves A, C, and D are the only sites with reported grazing or mowing. Preserves G, H, I, and K all had reported or observed decreases in ponding duration, which over time may negatively affect populations of special-status species that occur at these sites.

UPLAND VEGETATION CONDITIONS

Of the 10 preserves visited for the study, six were observed to have high mean thatch levels (+2,500 lbs/acre) and four were observed to have moderate mean thatch levels (1,500-2,500 lbs/acre) The sites with moderate thatch levels were either grazed or had thin or infertile soils. These levels were visually estimated by the report authors, both of whom are experienced with measuring and estimating RDM. As described above, high thatch levels pose a threat to the biodiversity and hydrology of vernal pools (Marty 2005). Additionally, high thatch levels can increase site fire hazards and can promote an increase in invasive plants (Photo 14, Appendix D).

Of the seven preserves that provided data on upland invasive plants, four reported an increase in cover and three reported no change in cover since preserve establishment. Invasive plants pose many threats to natural communities and can alter the hydrology, stature, microclimates, and plant composition of a site. The distribution of invasive species has steadily increased throughout California. Small preserves may be especially vulnerable when subject to edge effects of adjacent development and high impacts of human use and disturbance. Active management of invasive species is often necessary to prevent population expansion. Four preserves reported that invasive species were increasing across the site despite active management.

5.6.3 RECOMMENDATIONS

- The long-term maintenance or improvement of ecological conditions within a small preserve requires focused management and monitoring efforts directed towards the specific issues or problems characteristic of the preserve; common problems with small preserve management include no or inadequate thatch management and/or invasive species control, destructive use by humans and domestic animals (pets), and lack of regular site maintenance; see Sections 5.4 and 5.5 above for more detailed discussions and recommendations related to the management and monitoring small preserves to maintain or improve long-term ecological conditions.

5.7 EDUCATION AND OUTREACH

5.7.1 KEY FINDINGS

- The majority of preserves did not have an educational or outreach component.
- The preserve with comprehensive public education and outreach showed minimal disturbance in comparison to the preserves without.

5.7.2 DISCUSSION

Four of the preserves reported conducting educational or community outreach activities, three annually and one continuously. One additional preserve is scheduled to receive funding from recently approved state propositions that will support the development of "minimal interpretive facilities, such as interior boardwalk paths [and] self-guided interactive displays." This site is already used for such activities as bird-watching and hiking.

Preserve H, the most well-developed site in terms of public education and outreach, had a large signs posted at the preserve entrance, with color photographs and descriptions of vernal pool habitats and associated species. The signs were appealing and well placed. The trails throughout the preserve were well marked, and signs were posted to remind users to keep dogs on leashes. The preserve appeared to be well used by the community but had a notably low level of apparent habitat impacts from human or pet use. It is unclear what activities were conducted on the other three sites with reported educational outreach.

As discussed in Section 5.2, "Infrastructure, Public Use and Surrounding Land Use", many preserves in populated areas have sustained minor to moderate disturbance from unauthorized public use, including recurring trespassing through pools and other sensitive habitats. It is possible that opening selected sites to public use, with an emphasis on education, might actually reduce human impacts. The site described in the preceding paragraph, which was intended for public use and featured an established trail system and educational signs, appeared to suffer relatively low levels of disturbance compared with the sites that are closed to the public.

Additionally, these preserves often represent some of the only remaining intact vernal pool habitat in highly developed, populated areas. If educating the public about vernal pools and their associated sensitive species were deemed a priority, these sites could provide a valuable, easily accessible educational resource.

5.7.3 RECOMMENDATIONS

- Preserve managers should carefully consider the value of allowing managed public access and developing an education and outreach program for small preserves; an education/outreach program can increase public appreciation of the preserve and its resources.
- Also, managed access combined with a well-designed education and outreach program may actually be more effective in protecting site resources versus attempting to exclude the public, especially on preserves near

dense residential areas with high potential public use or trespass; it also may be less expensive to develop and implement such a program than to construct and maintain fencing which effectively excludes public access.

5.8 REGULATORY COMPLIANCE AND OVERSIGHT

5.8.1 KEY FINDINGS

- Those preserves with both a management plan and funding source generally appeared to meet regulatory compliance requirements through on-going management, monitoring, and reporting.
- Little to no evidence was apparent of agency action or follow-up to ensure that required management and monitoring activities are being conducted for the preserves in this study.

5.8.2 DISCUSSION

USACE and USFWS are the two agencies most commonly involved in the permitting and oversight of small vernal pool preserves. USACE oversees impacts on vernal pools considered to be jurisdictional wetlands and determines the mitigation required for impacts, typically in the form of restored or created vernal pools. USFWS becomes involved if the affected vernal pools support federally-listed wildlife or plants and determines the required mitigation, typically in the form of a combination of both preserves and restored or created vernal pools that provide habitat for the affected species. The RWQCBs and DFG may also become involved if resources regulated by these agencies are affected (e.g., state water-quality issues or impacts to state-listed species).

Each small vernal pool preserve established as mitigation is typically required to prepare a management plan as part of the permit package and must submit on-going monitoring reports in accordance with the schedule and detail defined in the management plan. All of the small preserves participating in this study that were established as mitigation consulted with either USACE or an RWQCB as part of preserve establishment. Consultations with USFWS were completed only for those preserves established after the associated special-status species had been listed. Several of the preserves support listed species that were documented after the preserves were established and that were documented incidentally within vernal pools preserved or created in response to USACE regulations.

This study did not specifically assess the compliance of small preserves with agency reporting requirements, nor did it assess the level of agency involvement in prescribing management actions for listed species. However, through the course of this study it did become apparent that the three preserves that lack endowments or other funding sources have populations of listed species that are neither being managed nor monitored. At two of these sites, monitoring requirements for constructed pools were fulfilled within five years of preserve establishment and no additional monitoring has been conducted. This implies that USFWS is no longer involved in overseeing the status of these preserved occurrences of federally listed species, and would not be aware of any serious decline or extirpation. Also, at one of the preserves, annual monitoring reports indicating a significant decline in a listed plant population were submitted to USFWS, yet (to the knowledge of the study team) USFWS neither responded to the report nor required that site management practices be adjusted. Little or no evidence of on-going agency oversight and compliance monitoring of the small vernal pool preserves in this study was apparent.

5.8.3 RECOMMENDATIONS

- Agencies should consider strengthening their oversight to ensure that small preserves meet regulatory requirements and maintain the resources, especially listed species, that they were established to protect.

6.0 REFERENCES

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APPENDIX A

Brief Narratives of Study Preserves

PRESERVE A

Preserve A is a 53-acre on-site preserve with an extensive network of natural vernal pools and swales. This site was established in 2006 as a mitigation preserve for a large adjacent residential development. A conservation easement was placed on the site at the time and is currently held by a land trust. No vernal pools were created or restored on this site. The preserved pools at the site support several listed plant and wildlife species, including slender Orcutt grass (*Orcuttia tenuis*), vernal pool fairy shrimp, and vernal pool tadpole shrimp. The site is surrounded by residential development and a disturbed field.

Cattle graze at Preserve A, which is managed and monitored. Fences on this site are well-maintained to ensure that cattle do not disrupt the neighboring residences. Areas of historic disturbances and established populations of invasive species have been targeted for restoration and are being managed. Thus far, trespassing and vandalism appear to be minimal, although it is possible this will increase when surrounding residential developments are completed. This preserve is relatively new, but it appears that overall ecological conditions are remaining constant for the vernal pools, and may have improved in the uplands with thatch and invasive species management.

The endowment for this preserve is substantial and provides for intensive active management and monitoring. The increase in surrounding development may present additional challenges and disturbances. Despite the potential edge effects, this site represents intact vernal pool habitat with numerous occurrences of several rare species. As the surrounding area continues to develop, Preserve A will provide an opportunity for public education and preservation of remnant local populations of these species.

PRESERVE B

Preserve B is a 6-acre on-site preserve supporting approximately 0.02 acre of vernal pools. This site was preserved in 2007 as mitigation for impacts of a nearby residential development. A permanent conservation easement was placed on this site, which is now held by a land trust. Preserve B has an endowment for thorough monitoring and management. The site is surrounded by residential development and open grasslands and supports vernal pool fairy shrimp and vernal pool tadpole shrimp (*Lepidurus packardi*).

This preserve is relatively new and is currently managed and monitored. Neither grazing nor mowing takes place at this site, and dense annual grass cover was observed during the site visit. Very little bare ground was observed across the preserve; the wetlands were difficult to locate. This site is too small for grazing by cattle, and thus mowing would likely be the most appropriate management tool for thatch reduction. Invasive species are not yet an issue on the site. Signs of trespassing and vandalism were minimal, if present at all. This site is well fenced and does not appear to be accessed by the public. This preserve is slated to be surrounded by a housing development.

Thatch management and potential hydrologic runoff from current and future residential development will likely be a large management issue in the future. Additionally, trespassing and use of the site by domestic animals may increase with future development. The very small size of Preserve B makes the site highly vulnerable to edge effects. This preserve is preserved in perpetuity; monitoring is required in perpetuity as well.

PRESERVE C

Preserve C is 15 acres, with a large restored vernal pool covering the entire site. This preserve was established in 2007 as an off-site mitigation preserve for a residential development project. The site has a permanent conservation easement held by a land trust and is surrounded mainly by open grasslands and a small amount of development. The restored pool is reported to support slender Orcutt grass, legenere (*Legenere limosa*), and vernal pool tadpole shrimp.

This preserve is relatively new and was not visited during this study. This site is actively managed and monitored, and has an endowment to continue these activities. Cattle graze on the fenced preserve and in surrounding areas. Thus far, no management challenges have been reported from this site, nor are invasive species established on the preserve. Because monitoring activities have only been conducted for 1 year, no ecological trends have been reported on this site. Preserve C is located in an area that may face development pressures, which could reduce the local existing vernal pool habitat for the special-status species preserved on the site.

PRESERVE D

Preserve D is a 48-acre site with 0.87 acre of preserved pools. This site was set aside as an on-site preserve in 1990 as partial on-site mitigation for impacts on jurisdictional wetlands, including vernal pools, caused by an adjacent residential development project. Approximately 10.12 acres of vernal pools were created on-site between 1990 and 1995. Creating these pools increased the cover of vernal pools on-site to nearly 25%, a very high cover rarely observed in natural landscapes. Deed restrictions were recorded in 2000 and an endowment was established for management and monitoring. This site is surrounded by residential, commercial, and industrial development, as well as open grassland, preserved open space, and recreational areas (a golf course). Created pools were inoculated with topsoil collected from existing pools. Currently, 10 created pools on-site support vernal pool fairy shrimp or California fairy shrimp, and two support dwarf downingia (*Downingia pusilla*).

Short-term, high-intensity goat grazing is conducted at this site to control thatch and invasive species, including yellow star-thistle and medusahead. Grazing was first implemented in 2007. Areas of the preserve have also been mowed to control populations of yellow star-thistle. Mowing is also utilized to maintain a fire break between the preserve and the adjacent residential community. Permanent fencing has not yet been established around the entire site, but will be once adjacent areas are developed further. Current fences have been vandalized and trespassing takes place on the preserve. Trails, "bike jumps," and signs of domestic animals were noted throughout the site during a site visit. This site is actively managed and monitored. A management plan was developed in 2000.

The following issues were cited by the questionnaire respondent as major concerns for Preserve D:

> The primary concerns within this small Preserve are invasive non-native plant species and thatch management due to the lack [of] grazing or wildfire. However, in 2007 the Preserve was grazed, leading to a decrease in thatch and will likely result in a decrease in invasive non-native plant species. Additionally, the Preserve manager must balance the need to honor a pre-existing utility easement that transects the Preserve with the requirement to protect the created pools against accidental impacts.

PRESERVE E

Preserve E encompasses 36 acres of jurisdictional wetlands set aside in 1993 as on-site mitigation of impacts on vernal pools caused by the development of a business park and associated infrastructure in the surrounding area. As required by the Section 404 permit, six pools were created on the site in 1993, totaling 0.88 acre. No natural or restored pools are present on the site. However, 1.04 acres of seasonal, non–vernal pool wetlands were preserved. A deed restriction was recorded on the site in 1999. The site was officially established as a preserve in 2002 and began receiving funding for management through a service district, in the form of a tax dividend among participating parcels. This site is mostly surrounded by commercial and residential development and is adjacent to an approximately 160-acre open space preserve. No listed species are documented as being present on this site, although the pools were created as habitat for vernal pool fairy shrimp (*Branchinecta lynchi*). California fairy shrimp (*Linderiella occidentalis*) was documented in two of the six created pools in 1998.

Grazing and mowing do not currently take place at Preserve E, and the uplands are composed of dense non-native annual grasses, specifically medusahead (*Taeniatherum caput-medusae*) and barbed goatgrass (*Aegilops triuncialis*). Extensive populations of invasive yellow star-thistle (*Centaurea solstitialis*) also grow in these uplands. Additionally, a high cover of upland annual grass species grows in the basins of many of the created pools. This site is actively managed and monitored, and habitat restoration has been implemented to compensate for vandalism to the site. A management plan was prepared by a private consulting firm in 2000. Monitoring reports are prepared annually.

Vandalism and trespassing were reported as the major concerns for this site. Managers report a history of illegal dumping and off-highway vehicle use in the preserve. Fences around the preserve have been continuously vandalized and breached to allow access to the site by motorized vehicles. Trails developed for use by off-highway vehicles have damaged pool topography and hydrology. Restoration activities were undertaken to recontour pool topography, using hand tools. A history of illegal dumping is reported from the site and managers have conducted extensive trash cleanups. Managers identify thatch reduction and management of invasive species as integral to future management of Preserve E.

PRESERVE F

Preserve F is a 33-acre parcel that is part of a larger 135-acre preserve system. Nonetheless, this parcel is disconnected from other preserved parcels and functions as an isolated preserve. This area was set aside as an on-site mitigation preserve in 1988; a deed restriction was recorded in 2000 as part of the larger preserve system created as mitigation for impacts on 5.8 acres of jurisdictional wetlands, including vernal pools. As part of the mitigation, 211 pools totaling 0.69 acre were created on the site. An additional 0.99 acre of preserved pools exists on the preserve. Many of the pools created on-site are very small, constructed by building sets of rock berms along small swales. Management and monitoring of this site is funded through a service district. On-site mitigation was selected when this preserve was established because of the unique nature of the Mehrten Formation substrate on the site and the lack of existing mitigation banks in the area. This preserve is surrounded by commercial, residential, and recreational (golf course) development and a small area of preserved open space. This site supports vernal pool fairy shrimp; however, this species was not listed when the preserve was established and thus was not part of the mitigation agreement.

Neither grazing nor mowing takes place at this site. However, the vernal pools at Preserve F are not as heavily invaded by upland grasses as the pools at some of the other small preserves in the study (such as Preserves I and K). The pools at Preserve F are on the Mehrten Formation, with fairly thin soils underlain by volcanic lahars. These soil conditions appear to limit overgrowth and pool invasion by non-native annual grasses on the site. Invasive species, including escaped ornamentals from adjacent landscaped residential development, are present within the preserve. Treatment for invasive species has been on-going, with additional treatments scheduled. There are also problems along the preserve's perimeter with irrigation-water runoff from surrounding development. This site is actively managed and monitored. A management plan was developed for Preserve F in 1999.

The questionnaire respondent cited the following as the major concerns for Preserve F:

> The primary concerns in this particular small Preserve area are accidental impacts from adjacent uses. As the surrounding area has been in a state of construction for over 15 years, the risk of construction related impacts to the Preserve is higher. The City has attempted to minimize any unauthorized stormwater discharges from adjacent construction sites, and [e]nsure that site plans direct all post-construction runoff to pre-approved discharge locations as to not alter the hydrology of the Preserve area; however, due to the inherently lower permeability of the surrounding built-out areas, the Preserve does receive higher flows and unseasonal discharge from landscape areas. Additionally, the non-native plant species and thatch accumulation are a constant battle, and can easily threaten the ecological balance of the Preserved areas. Ultimately, an appropriate grazing regime and maintenance of hydrological integrity are integral to the long-term success of the Preserve.

PRESERVE G

Preserve G is an 8-acre on-site preserve managed in conjunction with Preserve H, although the sites are not connected and have very different histories of use and disturbance. Like Preserve H, this site was preserved as mitigation for impacts of nearby residential development in 1979. This site is currently managed by a public agency and was acquired to preserve populations of Sacramento Orcutt grass (similar to Preserve H). Preserve G is not open to the public and is completely surrounded by residential development. No endowment was established for this site, but other dedicated funding is available for some management and monitoring activities.

Disturbance from trespassing by the public was not evident at this site. The site is completely fenced on all sites and is extremely difficult to access. Even though disturbance from trespassing was not evident, other historic disturbance from the adjacent residential development has been reported since preserve establishment. This includes disturbances to site hydrology. The transformation of surrounding grasslands to paved, residential development has altered the flows of surface water and groundwater onto the site. Hydrologic studies have indicated that the pools at both Preserve H and Preserve G have been adversely affected by these changes. Additionally, it has been reported that neighboring residences have discharged water onto the site.

Grazing does not take place at Preserve G and, unlike Preserve H, the upland thatch at this site was moderate to dense. Some of the smaller, shallower pools showed moderate levels of intrusion by annual grasses. It is unclear why this site has apparently denser growth of annual grasses and pool intrusion than Preserve H. Like Preserve H, Preserve G provides an important ecological function, preserving some of the last remaining vernal pool habitats and populations of Sacramento Orcutt grass in the local area.

PRESERVE H

Preserve H is a 15-acre on-site preserve established in 1979. The preserve supports extensive natural vernal pools and swales that support multiple special-status species, including some of the only remaining occurrences of Sacramento Orcutt grass (*Orcuttia viscida*). These 15 acres are managed separately from an adjacent open-space area developed as a recreation park with high public use. The preserve was established specifically to conserve some of the last remaining vernal pool habitat in the area for public interest and to conserve Sacramento Orcutt grass. The preserve is managed by a public agency in cooperation with multiple government agencies.

A large, informative, and attractive educational sign is posted at the entrance to the preserve. The sign presents information about vernal pool ecology and protection and includes numerous photographs of vernal pool wildlife and plant species present on the site. The site also includes environmentally friendly paved public-access trails. These trails are well maintained and clearly marked. Signs indicating sensitive areas and proper etiquette for using the preserve are posted throughout the trail system. Grazing does not take place on this site; however, the pools have minimal annual grass intrusion. The site is on the Laguna Formation, with fairly thin, infertile soils that appear to discourage dense upland growth and pool invasion by annual grasses. Historically, site hydrology was significantly altered by irrigation runoff from adjacent residential development. This impact has been well studied and site managers have taken action to address this issue. Currently, populations of Sacramento Orcutt grass appear to be intact and not disturbed by public use. However, the invasive species small mannagrass (*Glyceria declinata*) was observed in pools on-site. This plant can invade the pool bottoms and lower margins, presenting a distinct threat to vernal pool plants.

Preserve H is actively managed and monitored. Although this preserve does not have an endowment, these activities are supported through dedicated public funds. Invasive species, including yellow star-thistle, are present throughout the site. Additionally, signs of runoff from neighboring residences are noticeable along portions of the perimeter. Preserve H provides an invaluable educational resource, and for 30 years has managed to preserve one of the last populations of the rare Sacramento Orcutt grass.

PRESERVE I

Preserve I is a small, 10-acre on-site preserve with six natural vernal pools and other seasonal wetlands; eight created vernal pools; an occurrence of Contra Costa goldfields, which is federally listed as endangered, and occurrences of saline clover (*Trifolium depauperatum* var. *hydrophilum*), a special-status species. The wetlands have a cumulative area of 3–4 acres. The site is protected through a deed restriction. Preserve I was established in 1998 to mitigate impacts on vernal pools, other seasonal wetlands, and a small stand of Contra Costa goldfields on adjacent lands. Saline clover was not known to occur on the site when the preserve was established but has incidentally colonized several of the created pools. This site is surrounded by industrial development and open grasslands. Additional industrial development is proposed for the site and will largely surround the site and increase threats to the preserve in the future. The landowner is attempting to develop additional land surrounding the preserve. This may adversely affect a portion of the established preserve, such as filling the pool that has supported Contra Costa goldfields. This new impact would be mitigated off-site.

This site is not being currently managed or monitored. A site management plan was prepared in 1998, and the created vernal pools were monitored for several years after construction. Monitoring was discontinued in 2003 or 2004, before the constructed pools met success criteria, because of a lack of follow-through on the part of the landowner. Since then, no monitoring has taken place. The monitoring documented a serious decline in the on-site occurrence of Contra Costa goldfields, caused by a lack of grazing or other thatch management; yet there have been no efforts by the landowner to improve the ecological conditions of the site. During the site visit, it was observed that the preserved vernal pool that has supported Contra Costa goldfields had been heavily intruded upon by non-native upland grasses and forbs, which had seriously reduced ponding depth and duration and generally eliminated suitable habitat for Contra Costa goldfields. The site management plan states that actions must be taken if there is a decline in goldfields occurrence, but the landowner has done nothing to remedy this situation. The invasive wetland species perennial pepperweed (*Lepidium latifolium*) is established in a couple of the created pools on the site. Between 1999 and 2003, efforts were made to control the pepperweed through manual removal, but the species persists. The uplands on the site are disked annually for fire management, which seriously disturbs upland habitat conditions.

The occurrence of Contra Costa goldfields at Preserve I faces a real threat of extirpation because the preserve lacks an endowment for management and monitoring, any management efforts, and a conservation easement; and because of a current proposal to fill the main pool supporting Contra Costa goldfields as part of expanded site development.

PRESERVE J

Preserve J is a 37-acre on-site mitigation preserve with approximately 14 preserved pools totaling 0.54 acre and 27 created vernal pools totaling 4.8 acres. This site was set aside in 1992 as mitigation for impacts on jurisdictional wetlands, including vernal pools, caused by the construction of residential development in adjacent areas. The created pools were constructed in 1992. These pools were inoculated from existing wetlands, and in 1997 approximately 65% of the created pools supported vernal pool fairy shrimp. California fairy shrimp was also reported to occur at this site in 1997. Preserve J is owned by a service district. All monitoring requirements of created pools were fulfilled in 1997, and no endowment or funding exists for current management or monitoring. The site is surrounded by residential development and open grasslands. It is disconnected from adjacent grasslands by a paved road. The current status of vernal pool fairy shrimp on the site is unknown.

This site is not actively managed or monitored. Grazing or other thatch management does not take place on-site. During the site visit in October 2008, the uplands appeared to be dominated by dense annual grasses. However, many of the created pools did not appear to have heavy intrusion by annual grasses. Most of the created pools are fairly deep, with fairly steep sides around their edges (steeper than most natural vernal pools). These conditions appear to limit intrusion of annual grasses into the pools by creating a fairly sharp break between upland and pool hydrology. Shallower pools, with less steep sides around their edges, appeared to be more overgrown with annual grasses and upland species. Signs of runoff from residential areas were observed in two main locations within the preserve. These areas had dense cover of perennial wetland species, including one edge pool dominated by Bermuda grass (*Cynodon dactylon*). No management plan exists for this site.

Residents surrounding the preserve reported observing (and enjoying) numerous wildlife species at the preserve, including frogs, egrets, hawks, and coyotes. Human impacts appeared relatively low on this site, with the exception of hydrologic runoff. Low levels of trash were observed, but signs of trespassing were minimal despite the lack of substantial fencing across most of the preserve. The lack of on-site monitoring greatly complicates attempts to assess the status and trends of sensitive resources and overall conditions of Preserve J.

PRESERVE K

Preserve K is a 40-acre site that was donated for conservation purposes in 1964. This site has extensive natural vernal pools and swales, as well as multiple reported occurrences of listed and other special-status plant and wildlife species: vernal pool fairy shrimp, western spadefoot (*Spea hammondii*), heartscale (*Atriplex cordulata*), vernal pool smallscale (*A. persistens*), and recurved larkspur (*Delphinium recurvatum*). The site has no created or restored pools and historical disturbance has been minimal. The surrounding area has been completely converted to agriculture (corn and other row crops). The preserve has no endowment and is not actively managed or monitored, although it is owned by a land trust.

The site does have some occurrences of invasive species, and it has been burned. Grazing does not take place on this preserve. Data collected during the site visit indicate that moderate levels of thatch occur throughout the uplands, which are dominated by annual grasses. Additionally, many of the smaller, shallower pools are significantly compromised by annual grasses. The larger and deeper pools Figured fewer signs of intrusion by annual grasses. Despite the degradation of the pools from lack of management, Preserve K provides some of the last vernal pool habitat in the region and still supports significant stands of vernal pool indicator plants (within the deeper pools). This site also has extensive mima mounds and ground-squirrel burrows, which provide important habitat for a wide variety of wildlife species.

Preserve K is an important regional preserve but could greatly benefit from thatch reduction and monitoring. The preserve also offers an important educational component to understanding vernal pool ecosystems in an area that has almost entirely lost this habitat.

APPENDIX B

Survey Questionnaire

PLACER LAND TRUST

QUESTIONNAIRE FOR SMALL VERNAL POOL EFFECTIVENESS STUDY

Placer Land Trust (PLT) is a non-profit land trust based in Auburn (Placer County), California. PLT is conducting a study of the ecological effectiveness of 'small' vernal pool preserves that are 60 acres or less in total area. The purpose of the study is to assess the particular successes and problems associated with the establishment and management of such small preserves and the ways in which management can be improved. This five-page questionnaire was developed by PLT's project team to gather the specific types of information to be assessed as part of the study. The questionnaire is for the owners or managers of small preserves and may be filled out and emailed back to PLT or completed through an interview with a PLT team member.

Please note that all information to be gathered and published through this study will remain anonymous with regards to individual preserve sites and the owners and/or managers of these preserves. While the final published report will discuss the cumulative findings and trends in small preserve effectiveness, it will not identify specific preserve locations or specific conditions on an individual preserve.

PLT thanks you in advance for your participation in this study.

PRESERVE NAME:	
NAME/TITLE OF INDIVIDUAL PROVIDING INFORMATION:	
NAME OF INTERVIEWER:	

1. PRESERVE BASICS

a. What is the name of the Preserve?

b. What is the total acreage of the Preserve?

c. When was the Preserve established?

d. In which County is the Preserve located?

e. If you wish, please provide more specific location information.

f. Can you provide a site map of the Preserve?

g. Who owns the Preserve land?

h. Who manages the Preserve?

i. What type of interest is held on the Preserve? (Fee Simple, Conservation Easement, Management Agreement, Lease, Other) Is the Preserve permanently protected? (conservation easement, deed restriction)

j. What are the surrounding land uses, by estimated percent area, of the Preserve?

Open Grassland/Grazing:	Confined Animal Pastures:	Irrigated Pasture:
Disturbed Field:	Annual Crops:	Vineyards:
Orchards:	Paved Road:	Residential:
Commercial:	Industrial:	Other (List):

k. Does the Preserve border a paved road?

l. Why was the Preserve established (Conservation or Mitigation, please provide details)?

2. SENSITIVE RESOURCES ON THE PRESERVE

a. What special-status species occur on the Preserve (please list all)?

b. What is the total acreage of preserved (existing) wetlands?

c. What is the total acreage of preserved (existing) vernal pools?

d. What is the total number of preserved (existing) vernal pools?

e. What percent (%) or number (#) of the preserved vernal pools support:

1. Federally-listed large branchiopods?

2. CTS breeding?

3. Western spadefoot breeding?

4. Special-status plants?
f. Are there any restored or created vernal pools? If yes, please answer the four questions below.
1. Total acreage of restored pools?
2. Total number of restored pools?
3. Total acreage of created pools?
4. Total number of created pools?
g. What year were the restored or created pools constructed?
h. Were the restored or created pools inoculated with cysts/seeds from an existing pool?
i. Were the restored or created pools constructed to provide habitat for special-status species? If yes, which species?
j. What percent (%) or number (#) of the restored or created pools currently support:
1. Federally-listed large branchiopods?
2. CTS breeding?
3. Western spadefoot breeding?
4. Special-status plants?
3. MITIGATION ELEMENTS OF THE PRESERVE (Complete this section if Preserve was established as mitigation for another project)
a. What was the type of project that required mitigation (residential housing, commercial development, road construction, etc.)?
b. What sensitive habitats and special-status species were involved in the Preserve mitigation agreement (please list all)?
c. Is the Preserve an on-site or off-site preserve?
d. If off-site, what is the approx. distance between the development project and the Preserve?
e. Why was a small preserve selected for mitigation rather than other options such as purchase of mitigation bank credits or payment of in-lieu fees?
4 FINANCIAL ENDOWMENT
a. Is there a financial endowment to pay for on-going management and monitoring costs?
b. Is it non-wasting?
c. What is the approximate amount?
d. What is the capitalization rate?
e. What is the approximate annual amount of available funding from the endowment?
f. What is the annual funding you feel is required for good site management and monitoring?
g. Are there other sources of funding for site management/maintenance? If yes, what are they?

5 PRESERVE MANAGEMENT

a. Is there a Management Plan for the Preserve?

b. Can we get a copy of the Plan?

c. When was it prepared?

d. Are there provisions to have it updated? How often?

e. Who prepared the Plan (in-house or subconsultant)?

f. Was the Plan prepared following any federal or state guidelines?
If yes, please list.

g. Based on 2080 work hrs/yr, how many hours on average are required per for management?

h. What is the average annual cost for Preserve management (excluding monitoring)?

i. What proportion of these costs are paid to employees rather than subconsultants?

j. Please indicate type and frequency of all management activities that occur on the Preserve.
N = Activity is not required for site management
0 = Activity is not conducted
1 = Activity occurs on an infrequent or as-needed basis (less than once per year)
2 = Activity occurs annually (once per year)
3 = Activity occurs biannually
4 = Activity occurs quarterly
5 = Activity occurs continuously or at numerous times throughout the year

Grazing:	Prescribed Burning:	Mowing:
Trash/Debris Clean Up:	Trespass Patrol:	Fence Maintenance:
Signage Maintenance:	Weed Control:	Habitat Restoration:
Erosion Control:	Feral Animal Control:	Education/Outreach:
Other (List):	Other (List):	Other (List):

k. Grazing Information:

1. Is there grazing on the Preserve?
2. What type of livestock? If cattle, cow-calf or stocker?
3. What is the typical grazing period?
4. How many animals are grazed annually (stocking rate)?
5. Is the grazing operation leased to an outside operator?
6. What is the period of the lease in years?
7. For how many years has the current lessee grazed the site?
8. Did the current lessee graze the site prior to Preserve establishment?
9. What is the typical grazing intensity on the Preserve? (1 = none; 2 = light (2,000+ RDM); 3 = moderate (1,000–2,000 RDM); 4 = heavy (500–1,000 RDM); 5 = very heavy (<500 RDM):
10. Is the grazing generally consistent from year to year?
11. Is RDM or other grazing monitoring data used to adjust grazing intensity?

l. Is the Preserve entirely fenced? What type of fencing?

m. Weed Control Information:

1. Are noxious weeds a problem on the Preserve?
   If yes, which species?

2. What are the primary control methods (herbicides, manual weeding, mechanical weeding, grazing, prescribed burning, mowing)?

3. What herbicides have been used on the Preserve?

n. What have been the primary management challenges on the Preserve? (examples: undergrazing, overgrazing, vandalism, trespass, invasive weeds, feral animals, trash dumping, collecting, wildfire, pesticide drift, water pollution):

6 PRESERVE MONITORING

a. Is monitoring conducted on the Preserve?

b. Are Monitoring Reports prepared?
   How frequently?

c. Can we get copies of past Monitoring Reports?

d. Based on 2080 work hrs/yr, how many hours on average are required per year for monitoring?

e. What is the average annual cost for Preserve monitoring?

f. What proportion of these costs are paid to employees rather than subconsultants?

g. Please indicate type and frequency of all monitoring activities that occur on the Preserve.
   N = Activity is not required for this Preserve
   0 = Activity is not conducted
   1 = Activity occurs on an infrequent or as-needed basis (less than once per year)
   2 = Activity occurs annually (once per year)
   3 = Activity occurs biannually
   4 = Activity occurs quarterly
   5 = Activity occurs continuously or at numerous times throughout the year

General Site Condition:	VP Large Branchiopods Surveys:	Photopoint:
General Wildlife:	VP Amphibians Surveys:	RDM:
General Vegetation:	VP Rare Plant Surveys:	Noxious Weeds:
Trash/Debris:	Wetland Hydrology:	Feral Animals:
Fencing:	VP Plant Spp Composition:	Other (List):
Erosion:	Upland Plant Spp Composition:	Other (List):

h. Are the results of monitoring used to improve Preserve management?
   (1 = never; 2 = infrequently; 3 = sometimes; 4 = frequently; 5 = always):

7 PRESERVE CONDITIONS AND TRENDS

a. Based on your assessment, would you say that the overall ecological conditions of the Preserve have: significantly declined (1), remained the same (2), or significantly improved (3) since the Preserve was established?

b. Please indicate the ecological trends in Preserve habitats and species.
   N = Not present or of concern on this Preserve
   0 = Previously present but now extirpated
   1 = Significantly decreased
   2 = Remained constant
   3 = Significantly increased

Overall VP Ecological Conditions:	Preserved:	Restored/Created:
VP Ponding Duration:	Preserved:	Restored/Created:
VP Native Plant Cover/Diversity:	Preserved:	Restored/Created:
VP Non-native Grass Cover:	Preserved:	Restored/Created:
VP Noxious Weed Cover:	Preserved:	Restored/Created:
VP Large Branchiopod Abundance/Diversity:	Preserved:	Restored/Created:
VP Amphibian Abundance/Diversity:	Preserved:	Restored/Created:
VP Rare Plants Abundance/Diversity:	Preserved:	Restored/Created:
Overall Upland Ecological Conditions:		
RDM Level:		
Upland Native Forb Cover/Diversity:		
Upland Native Grass Cover/Diversity:		
Upland Noxious Weed Cover/Diversity:		

8. CONCLUSION

a. What do you consider to be the biggest challenges to maintaining, in perpetuity, the conservation values that the preserve was established to protect?

b. What are your primary recommendations for insuring appropriate management and monitoring of small preserves?

c. Can we visit the Preserve to collect additional information?

d. If offered, how can we coordinate with you to obtain a site map, Management Plan, and Monitoring Reports?

Thank you for your time and interest in this project!

APPENDIX C

Site Visit Data Form

Site: **Date:** **Surveyor:**

General Preserve Characteristics:

Surrounding Land Use, Estimated % Area:

Adjacent[1]	*1,000 ft*[2]	*Adjacent*	*1,000 ft*	*Adjacent*	*1,000 ft*
Open Grassland:		Animal Pastures:		Irrigated Pasture:	
Disturbed Field:		Annual Crops:		Vineyards:	
Orchards:		Paved Road:		Residential:	
Commercial:		Industrial:		Other (List):	

Intensity Within Preserve:[3]

Paved/Non-Paved Roads: L M H	Paved/Non-Paved Trails: L M H
Trespassing/Vandalism: L M H	
Trash/Pollution: L M H	
Erosion:	Water Run-off/Hydro:
Feral/Domestic Animals:	
Fences/Gates/Signs: Type:	Condition:
Mowing/Grazing: L M H Type: Stocker/ Cow-Calf	
Bioturbation: L M H Type: Vole/ Gopher/ Ground Squirrel	
Historical Disturbance:	

Wildlife and Habitat Notes:

Community:[4]	**RDM Level**[5]	**Dominant Species (% Cover), include Bare, Thatch**
	VL L M H	
	VL L M H	
	VL L M H	
	VL L M H	
	VL L M H	
	VL L M H	
	VL L M H	

Invasive Sp	**Stand Size/% Cover**	**Location/ Disturbance/Mgt**

Geophytes	**Stand Size/% Cover**	**Tarweeds/Annuals**	**Stand Size/% Cover**

Additional Notes:

1. Adjacent Land Use: Percent area directly adjacent to Preserve
2. 1,000 ft: Percent area nonadjacent, but within 1,000 ft of Preserve
3. L=Low, M=Medium, H=High
4. Community: Vegetation type and location dominant in area of specified RDM (ex. 'Oak Woodland', 'Inter-Mound Upland')
5. RDM Level: Very Low (<600 lbs/acre), Low (600–1,000), Med (1,000–2,500), High (>2,500)

Pool #:	Location: Preserve Edge / Interior	Est. Max. Depth:	Hydrology: Intact / Altered Hydro Notes:
Dominant Sp. and % Cover:			
% Cover Bare Ground:	% Cover Litter:	% Thatch: Thatch Depth:	% Cover Bioturbation: Type:
Disturbance: Altered Hydro / Roads / Trails / Trash / Pollution / Other:			
Habitat Notes:			
Pool #:	Location: Preserve Edge / Interior	Est. Max. Depth:	Hydrology: Intact / Altered Hydro Notes:
Dominant Sp. and % Cover:			
% Cover Bare Ground:	% Cover Litter:	% Thatch: Thatch Depth:	% Cover Bioturbation: Type:
Disturbance: Altered Hydro / Roads / Trails / Trash / Pollution / Other:			
Habitat Notes:			
Pool #:	Location: Preserve Edge / Interior	Est. Max. Depth:	Hydrology: Intact / Altered Hydro Notes:
Dominant Sp. and % Cover:			
% Cover Bare Ground:	% Cover Litter:	% Thatch: Thatch Depth:	% Cover Bioturbation: Type:
Disturbance: Altered Hydro / Roads / Trails / Trash / Pollution / Other:			
Habitat Notes:			
Pool #:	Location: Preserve Edge / Interior	Est. Max. Depth:	Hydrology: Intact / Altered Hydro Notes:
Dominant Sp. and % Cover:			
% Cover Bare Ground:	% Cover Litter:	% Thatch: Thatch Depth:	% Cover Bioturbation: Type:
Disturbance: Altered Hydro / Roads / Trails / Trash / Pollution / Other:			
Habitat Notes:			
Pool #:	Location: Preserve Edge / Interior	Est. Max. Depth:	Hydrology: Intact / Altered Hydro Notes:
Dominant Sp. and % Cover:			
% Cover Bare Ground:	% Cover Litter:	% Thatch: Thatch Depth:	% Cover Bioturbation: Type:
Disturbance: Altered Hydro / Roads / Trails / Trash / Pollution / Other:			
Habitat Notes:			

Pool #:	Location: Preserve Edge / Interior	Est. Max. Depth:	Hydrology: Intact / Altered Hydro Notes:
Dominant Sp. and % Cover:			
% Cover Bare Ground:	% Cover Litter:	% Thatch: Thatch Depth:	% Cover Bioturbation: Type:
Disturbance: Altered Hydro / Roads / Trails / Trash / Pollution / Other:			
Habitat Notes:			
Pool #:	Location: Preserve Edge / Interior	Est. Max. Depth:	Hydrology: Intact / Altered Hydro Notes:
Dominant Sp. and % Cover:			
% Cover Bare Ground:	% Cover Litter:	% Thatch: Thatch Depth:	% Cover Bioturbation: Type:
Disturbance: Altered Hydro / Roads / Trails / Trash / Pollution / Other:			
Habitat Notes:			
Pool #:	Location: Preserve Edge / Interior	Est. Max. Depth:	Hydrology: Intact / Altered Hydro Notes:
Dominant Sp. and % Cover:			
% Cover Bare Ground:	% Cover Litter:	% Thatch: Thatch Depth:	% Cover Bioturbation: Type:
Disturbance: Altered Hydro / Roads / Trails / Trash / Pollution / Other:			
Habitat Notes:			
Pool #:	Location: Preserve Edge / Interior	Est. Max. Depth:	Hydrology: Intact / Altered Hydro Notes:
Dominant Sp. and % Cover:			
% Cover Bare Ground:	% Cover Litter:	% Thatch: Thatch Depth:	% Cover Bioturbation: Type:
Disturbance: Altered Hydro / Roads / Trails / Trash / Pollution / Other:			
Habitat Notes:			
Pool #:	Location: Preserve Edge / Interior	Est. Max. Depth:	Hydrology: Intact / Altered Hydro Notes:
Dominant Sp. and % Cover:			
% Cover Bare Ground:	% Cover Litter:	% Thatch: Thatch Depth:	% Cover Bioturbation: Type:
Disturbance: Altered Hydro / Roads / Trails / Trash / Pollution / Other:			
Habitat Notes:			

APPENDIX D

Representative Small Preserve Photographs



Photo 1. Example of urban interface with a vernal pool preserve
(Source: Photograph taken by Vollmar Consulting in 2009)



Photo 2. Perimeter of preserve mowed to reduce fire hazard for adjacent residential development. *(Source: Photograph taken by Vollmar Consulting in 2009)*



Photo 3. Example of ornamental plants spreading onto a preserve
(Source: Photograph taken by Vollmar Consulting in 2009)



Photo 4. Example of unmanaged upland with yellow-star thistle throughout and dense annual grasses invading pools
(Source: Photograph taken by Vollmar Consulting in 2009)



Photo 5. Preserve dominated by high levels of nonnative annual grass thatch
(Source: Photograph taken by Vollmar Consulting in 2009)



Photo 6. Vandalized fence and renegade trail on preserve not open to public
(Source: Photograph taken by Vollmar Consulting in 2009)



Photo 7. Example of damaged fencing surrounding a vernal pool preserve
(Source: Photograph taken by Vollmar Consulting in 2009)



Photo 8. Heavy pedestrian, bicycle, and domestic animal use observed within a preserve closed to public access *(Source: Photograph taken by Vollmar Consulting in 2009)*



Photo 9. Unauthorized trails and vehicle tracks through vernal pool habitat
(Source: Photograph taken by Vollmar Consulting in 2009)



Photo 10. Example of preserve adjacent to high-density development
(Source: Photograph taken by Vollmar Consulting in 2009)



Photo 11. Remnant vernal pool habitat within urban landscapes.
(Source: Photograph taken by Vollmar Consulting in 2009)



Photo 12. Nearly all preserves border a paved road
(Source: Photograph taken by Vollmar Consulting in 2009)



Photo 13. Vernal pool preserves can provide habitat for a variety of wildlife
(Source: Photograph taken by Vollmar Consulting in 2009)



Photo 14. Vernal pool dominated by upland grasses
(Source: Photograph taken by Vollmar Consulting in 2009)



Photo 15. Vernal pool with obvious transition from pool bottom to upland grasses
(Source: Photograph taken by Vollmar Consulting in 2009)

SIERRA FOOTHILLS AUDUBON SOCIETY
PO Box 1937
Grass Valley, CA 95945

August 13, 2019

Placer County Community Development Resources Agency
Environmental Coordination Services
3091 County Center Drive, Suite 190
Auburn, CA 95603 Delivered via email to: cdraecs@placer.ca.gov

Comments on the Draft PCCP/Draft EIR/EIS on behalf of the 1100 members of Sierra Foothills Audubon Society.

As someone who has served on stakeholder committees related to the development of this plan since 2000, and on the Biological Working Group since its inception, I am very pleased to see it approaching implementation. I believe this plan represents an opportunity to greatly improve the mitigation for development impacts on the natural communities of western Placer County. However, there are certain changes that need to be incorporated to ensure that the goals of this plan are reached. The most urgent changes fall into three categories:

1. Discouragement/prevention of development within the RAA
2. Limits on the use of on-site avoidance within the PFG instead of off-site preservation within the RAA
3. Strengthened requirements that preservation stay ahead of development

Rationale and specifics on each follow below.

Discouragement/prevention of development within the RAA

To the extent that development is permitted within the RAA, we lose, not only acreage that CAN be preserved, but we also degrade the quality of those preserved areas due to effects of adjacent development. Such intrusions bring a host of factors (edge effects: Brussard et al. 2004) that negatively impact plants and wildlife on nearby preserves including:

18-1

- Increasing predators which are often closely associated with developed areas (e.g. domestic cats and dogs, wild racoons, opossums, skunks) that can devastate rodents, nesting birds, and other animals;
- Attracting non-native bird species (House Sparrows, European Starlings) that compete with native birds for breeding habitat;

- Increased exposure to the unregulated uses of pesticides, herbicides, fertilizers that commonly occur in developed areas;
- Direct and indirect effects of increased human presence.

18-1 cont.

RECOMMENDATIONS (for more detail on these, see comments from Terry Davis on behalf of the Mother Lode Chapter of the Sierra Club on August 7, 2019):

1. Permittees under the PCCP (including those which apply to become permittees in the future) should adopt General Plan amendments and/or specific ordinances that preclude urban/commercial development within the RAA
2. LAFCO policies should reflect the need to preserve the RAA from development.
3. To ensure that such policies are adopted and followed, failure to adopt and adhere to such policies should result in revocation or suspension of further permits.

Limits on the use of on-site avoidance

On site mitigation and avoidance has been a common approach to mitigation, but generally does NOT actually preserve habitat values (Volmer and AECOM 2009) due to the same edge effect factors listed above.

In addition, mitigation sites avoided within a developed area cannot be managed properly for habitat values. For example, the two best methods for preserving native plant diversity and hydrology in vernal pool landscapes, cattle grazing and burning (Marty 2005 and citations therein), are often difficult or impossible to implement within or near developed areas.

As noted in a review by the agencies (Agency Review Letter 2005), even a 200 acre preserve surrounded by development may not be fully functional. Also, even if the 200-acre site is adjacent to a preserve, its shape may make it subject to excessive edge effects. Therefore, the shape (area:edge ratio) needs to be a consideration for qualifying as having avoided impacts. Also, the type of habitat in an adjacent preserve needs to be compatible with the resources within the avoided area.

18-2

Finally, because the total acreage within the PFG given credit for avoidance reduces the funding available for acquisition of the reserve system, a hard upper limit needs to be set to prevent this from impacting overall reserve system viability.

RECOMMENDATIONS (for more detail on these, see comments from Terry Davis on behalf of the Mother Lode Chapter of the Sierra Club on August 7, 2019):

1. Any application for avoidance needs to be subject to surveys to assess the claim (including any claim the area is compatible with an adjacent reserve habitat type) and **final approval by the PCA**. This needs to be explicitly stated in the final plan.
2. The overall shape of an area claimed for avoidance must be subject to a minimum area:edge ratio.
3. Excepting direct Stream System avoidance, the total acreage of on-site avoided areas should not exceed 2000 acres over the life of the permit.

Requirement that preservation stay ahead of development

The language that covers the consequences of the preservation of land falling behind development needs to be strengthened. Currently, there are means to allow development to continue even as preservation falls behind. There needs to be a "hard stop" point at which additional permits cannot continue to be issued.

18-3

RECOMMENDATION

Add language that all permitting under the plan will cease once a threshold of % discrepancy and time has been met. For example, if preservation falls more than 10% behind development for more than 3 months, all permitting should cease.

Finally, I incorporate by reference all comments submitted by Terry Davis on behalf of the Mother Lode Chapter of the Sierra Club on August 7, 2019.



Ed Pandolfino, Ph.D.
Conservation Chair, Placer County
Sierra Foothills Audubon Society

916 765-5688
erpfromca@aol.com

LITERATURE CITED:

1. Brussard, P., et al. 2004. Report of the Science Advisors - For the Placer County Natural Communities Conservation Plan and Habitat Conservation Plan - Planning Principles, Uncertainties, and Management Recommendations. https://www.placer.ca.gov/DocumentCenter/View/9329/Final-Report-of-the-Science-Advisors---January-2004-PDF

2. Vollmar Consulting and AECOM. 2009. Effectiveness of Small Vernal Pool Preserves, Placer Land Trust, Auburn, CA. https://www.vernalpools.org/vpreports/Small%20Preserves%20Report_Final.pdf

3. Marty, J. T. 2005. Effects of Cattle Grazing on Diversity in Ephemeral Wetlands. Conservation Biology 19:1523-1739. https://doi.org/10.1111/j.1523-1739.2005.00198.x

4. Agency Review 2005. Untitled multi-agency comment letter on the February 22, 2005 regarding Draft of the PCCP. Comment letter dated June 2, 2005.

19

PCCP - Comment Cards

Your comments are important to us, **please provide your comments in writing.** Please return the comment card to the workshop registration table at the end of the workshop.

You may also mail/deliver this card to Placer County Community Development Resource Agency Environmental Coordination Services at 3091 County Center Drive Suite 190, Auburn, CA 95603 or U.S. Fish and Wildlife Service at the Sacramento Office 2800 Cottage Way, W–2605, Sacramento, CA 95825.

Comments:

1. Concerns regarding fire are primary and until there is an Active Management Plan for each entity involved approval should not be granted. What is your justification? 19-1

2. Water is also important. We have irrigation water for our ten acres from Nevada Irrigation District (NID). The Placer County Water Authority is shown as one of the Resource Agencies but not NID which is a major resource for our local streams and waterways as well as Hidden Falls Regional Park. Water sources and availability are severely limited in the highly combustible lands between North Auburn and Lincoln and we do not see acceptable measures to protect us and our neighbors. Please explain: 19-2

3. The PCCP includes private, donated, easement properties, Trails, undeveloped lands, acquisitions, agricultural, farm and ranch lands that have been the focus of residents and not adequately addressed if at all. Please explain about developments. 19-3

Thank You.

Please use the back of the page if you need more space.

Contact Information: (Optional)

Name: Jim and Jean Piette

Address: 5395 Bell Road, Auburn, CA. 95602

Phone: 530-888-1340 (H) 916 539-5466 (C) Email: jean39.piette@gmail.com

PCCP - Comment Cards

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Comments: Regarding potential impacts on the North Auburn properties of Placer County were not addressed in the PCCP report. 19-4

The map of the Reserve Acquisition Area includes the proposed expansions of the Placer County Park and Trails Master Plan that currently is being implemented in part and the PCCP does not include any information as to the specific plan closely related to the Legacy program created in the year 2000. 19-5

Please explain why the plans involving the Reserve Acquisition Area currently being pursued for development were not mentioned in the report. 19-6

We are asking how our home and property are being defined.

Thank you,

Please use the back of the page if you need more space.

Contact Information: (Optional)
Name: Jim and Jean Piette
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Phone: 530-888-1340 (H) 916-539-5466 (C) Email: jean39.piette@gmail.com

PCCP - Comment Cards

AUG 13 2019 CDRA

Your comments are important to us, **please provide your comments in writing.** Please return the comment card to the workshop registration table at the end of the workshop.

You may also mail/deliver this card to Placer County Community Development Resource Agency Environmental Coordination Services at 3091 County Center Drive Suite 190, Auburn, CA 95603 or U.S. Fish and Wildlife Service at the Sacramento Office 2800 Cottage Way, W–2605, Sacramento, CA 95825.

Please refer to attached. August 12, 2019

Questions include:

19-7 Why does the PCCP only cover the areas designated on the map and not all of Placer County?

19-8 Why is the plan limited to 50 years?

19-9 What agency or entity will be responsible for determining future use and permits and the collection of fees?

19-10 Under what authority can State and Federal laws be bypassed?

19-11 Are other Supervisoral Districts included in the plan and, if so, under what authority?

19-12 How are lands in District 3 and 5 identified on the map?

19-13 What is the significance of the identified labels?

19-14 Please explain the plan to assess and collect fees and if Districts 3 and 5 will be included.

Please use the back of the page if you need more space.

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916-539-5466 (C)

20

RECEIVED
AUG 13 2019
CDRA

August 12, 2019
Placer County Board of Supervisors and Planning Commission
Placer County Government Center, Auburn, CA 95603

To: Members of the Board and Commissioners

Re: Thank you for your attention to some initial thoughts on the subject of the PCCP

20-1 The Placer County Conservation Program (PCCP) has been submitted for approval by the Supervisors of Placer County. The current public review reveals that this plan is for the Western Placer County, the City of Lincoln and projects by the Placer County Water Agency and the South Placer Regional Transportation Authority and represents a small part of the county. It is misleading to use the title Placer County Conservation Program. The maps included in the report reveal the identified lands of Placer County that are part of the 47,300 acres identified in Western Placer County to be conserved for a 50 year permit term at a cost of $1.2 billion. Fifty years is not very long and the cost does not include what has already been spent on an almost twenty year period plus expected increases.

20-2 & 3 Is it a fact that the identified lands are held under the PCCP and the partners referenced and will be under their discretion when determining future use and permits issued and have the authority to collect fees? State and Federal laws will be bypassed? The map also reveals lands in Placer County referred to as unincorporated areas of Western Placer County. Some of these lands appear to be in Supervisorial Districts 3 and 5. Does the District 2 Supervisor have the right to cross into other districts?

20-4

20-5 Supervisor Weygandt is the Placer County supervisor for District 2 which includes Lincoln, Sheridan and the western portions of Rocklin and Roseville. The map submitted with the PCCP report shows other Placer County areas and labelled as Reserve Acquisition Area and Potential Future Growth and Proposed Agricultural Conservation Easement. Also, Existing Reserve is shown on the map which includes the Hidden Falls Regional Park and other holdings described in other county documents and not currently a part of District 2 jurisdiction either. Some of the lands are held by Placer Land Trust and some under the authority of Placer Legacy and others in the general area are privately owned.

20-6 The focus on conservation is misleading as you study this plan. It is mentioned in the reporting that land development is a major part of the project and an emphasis is on the locally-approved permitting of the development projects. Conservation would no longer be under the watchful eyes of other agencies and when the PCCP and the Western Placer County program determines a development they support poses a threat in any way to the environment they can determine the necessary actions to move forward with the development and mitigate the action. The environmental impact information leaves the door wide open for any and all items listed.

20-7 This program, if approved, appears to leave total power and control in the hands of the PCCP and Supervisor Weygandt and subjects others to a permitting and fee plan that sets the stage for others to move ahead with plans and programs for other districts. It also subjects those in identified areas on the

20-8 map that would be a part of the plan to assess fees in Districts 3 and 5. This over reach is a concern.

Submitted by: Jean and Jim Piette, 5395 Bell Rd., Auburn, CA 95602 530-888-1340

CC: PCCP – Comments

21

PCCP - Comment Cards

Your comments are important to us, **please provide your comments in writing.** Please return the comment card to the workshop registration table at the end of the workshop. Page 1.

You may also mail/deliver this card to Placer County Community Development Resource Agency Environmental Coordination Services at 3091 County Center Drive Suite 190, Auburn, CA 95603 or U.S. Fish and Wildlife Service at the Sacramento Office 2800 Cottage Way, W–2605, Sacramento, CA 95825.

Comments and Questions regarding the Draft Environmental Impact Report (DEIR)

The DEIR does not adequately address the following:

21-1

Agricultural and Forestry Resources
Alternative 1, 2, 3, 4 deemed unacceptable in total

Air Quality, Greenhouse Gases and Climate Change
Alternative 1, 2, 3, 4 deemed unacceptable in total.

Biological Resources 1, 2, 3, 4 deemed unacceptable in total.

Cultural and Paleontological Resources
Alternative 1, 2, 3, 4 deemed unacceptable in total

Hydrology and Water Quality
Alternative 1, 2, 3, 4 deemed unacceptable in total

Land Use and Planning
Alternative 1, 2, 3, 4 deemed unacceptable in total

Mineral Resources
Alternative 1, 2, 3, 4 deemed unacceptable in total

Noise and Vibration
Alternative 1, 2, 3, 4 deemed unacceptable in total.

Population and Housing, Socioeconomics and Environmental Justice
Alternative 1, 2, 3, 4 deemed unacceptable in total

Recreation
Alternative 1, 2, 3, 4 deemed unacceptable in total.

Transportation and Circulation
Alternative 1, 2, 3, 4 deemed unacceptable in total.

See Over →

Please use the back of the page if you need more space.

August 15, 2019

Contact Information: (Optional)
Name: Jim and Jean Piette
Address: 5395 Bell Road, Auburn, CA. 95602
Phone: 530-885-1340 (H) Email: jean39.piette@gmail.com
916-539-5466 (C)

21-2 **21** The DEIR fails to support the conservation part of the PCCP. The reports recognizing the "most diverse and scenic landscapes"; "the oak studded savannahs, farms, and fruit orchards"; "rich and varied landscapes... home to rich bio-diversity." is taking a back seat to the "proactive" part of the plan, which is "the path toward economic growth and development...

Why are the environmental impacts found throughout the reports and in the DEIR not recognized and addressed adequately or not at all?

21-3 The importance of vernal pools, hydrologic function, and water quality cannot be overstated so why is it minimized in the DEIR? Why is the degradation of water and flooding considered LTS, SU and N/A?

21-4 Why does the DEIR not include the impact of visitor and resident use of conservation lands including the park and trails, land trust and legacy lands to wildlife, habitat, agriculture, flora and fauna and residents?

21-5 There are many more areas not adequately studied. The DEIR is not complete and needs to be revisited.

August 20, 2019

Placer County Community Development Agency

3091 County Center Drive, Auburn, CA 95603

Attention: Shirlee Herrington, Environmental Coordinator

Re: Placer County Conservation Program

Dear Ms. Herrington,

As long-time residents of Placer County and members of Protect Rural Placer we appreciate the opportunity to submit our comments regarding the proposed Placer County Conservation Plan (PCCP). We have submitted several comments and want to add the following specifically regarding the draft Environmental Impact Report DEIR).

22-1 The eleven items starting with Agricultural and Forestry Resources and ending in Transportation and Circulation including Alternative 1,2,3,4 in every case are deemed unacceptable in total. When every item is rated Less Than Significant, Significant and Unavoidable, Significant but after Mitigation Less Than Significant, No Impact and Not Applicable, we question the results. Every item under Biological Resources, for example, make us cringe when we see the blatant disregard for vernal pools, grasslands, wetlands, riparian complexes and woodlands. We see no need for us to rewrite the document as every item is objectionable in all categories.

22-2

22-3 Since there has been overlap of programs and plans being developed by Placer County as the PCCP was preparing this program, it is unclear as to why the DEIR has not included the potential impact of the Hidden Falls Regional Park Access, Park and Trails Master Plan, Hidden Falls Expansion, the Sustainability Plan. The impact of visitor and resident use of conservation lands is not adequately addressed. There are many more areas not adequately studied and the DEIR is not complete and needs to be revisited.

22-4 The PCCP misrepresent the published purpose by highlighting conservation when the primary purpose is to manage land with the intention of development at the expense of unincorporated property owners over a 50 year period and to impact the land, wildlife, flora and fauna and whatever stands in the way.

Respectfully submitted,

James and Jean Piette (5395 Bell Road, Auburn, Ca 95602)

Cc: US Fish and Wildlife Service, Sacramento, CA 95825 Attn: Mike Thomas, Chief

Placer County Board of Supervisors; Placer County Planning Commissioners:

CITY OF ROSEVILLE CALIFORNIA

Development Services Department
Planning Division
311 Vernon Street
Roseville, California 95678-2649

August 13, 2019

Ms. Shirlee Herrington
Environmental Coordination Services
Placer County Community Development Resource Agency
3091 County Center Drive, Suite 190
Auburn, CA 95603

Subject: Placer County Conservation Program Draft EIR/EIS

Dear Ms. Herrington:

Thank you for the opportunity to review the PCCP Draft EIR/EIS. The City of Roseville is supportive of the County's efforts to adopt the PCCP. This letter is in response to the County's June 21, 2019 Notice of Availability of a Draft EIR for public review. A majority of the following comments are intended to clarify the City's status in relation to the PCCP.

Understanding of Project Elements

The Plan Area of the PCCP encompasses 269,118 acres. As shown in Figure ES-1, the Plan Area encompasses a portion of western Placer County, including all unincorporated lands in western Placer County and the City of Lincoln. Within the proposed Plan Area more than 47,300 acres within the potential acquisition area, would become part of the PCCP Reserve System.

For purposes of this EIS/EIR, the proposed action consists of the following:

- Incidental Take Permit (ITP) issuance by U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS).
- Approval and execution of the implementing agreement (IA) for the Natural Community Conservation Planning (NCCP) portion of the Plan by CDFW.
- The Permit Applicants' adoption and implementation of the PCCP.
- The Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan (Plan; Appendix A), a joint habitat conservation plan and natural community conservation plan (HCP/NCCP) that would protect fish, wildlife, plants, and their habitats and fulfill the requirements of federal Endangered Species Act of 1973, as amended (ESA), and California Natural Community Conservation Planning Act (NCCPA).
- The Western Placer County Aquatic Resources Program (CARP; Appendix B) that would protect streams, wetlands, and other water resources and fulfill the requirements of the Clean Water Act (CWA) and analogous state laws and regulations.
- The Western Placer County In-Lieu Fee Program (ILF Program; Placer County 2018), to fulfill compensatory mitigation requirements under Section 404 of the CWA.

Global comments

23-1 The City has previously commented that total PCCP acreage should not include preserve areas within the City of Roseville. It should be noted that the Amoruso Ranch Specific Plan (ARSP) was annexed to the City in December 2018. While it is accurate to refer to the ARSP as a potential Participating Special Entity, it should also be stated that habitat-mitigation open space within the City may be managed and ultimately owned by the City, consistent with the *City of Roseville Open Space Preserve Overarching Management Plan*.

EIR/EIS Comments

23-2 1. The documents (DEIR/EIS, PCCP) are dated December 2018. Have there been no document updates beyond that date?

23-3 2. Figure 1-5 (PPCP map), and maps throughout the DEIR and supporting documents, need to be updated to show that the Amoruso Ranch Specific Plan is within the City of Roseville boundaries. The ARSP was annexed to the City in December 2018.

23-4 3. The EIR/EIS should include some explanatory language about the implications to the mitigation process for "participating special entities." There is the following footnote but otherwise no language in the EIR: *In addition to the Permit Applicants identified above, other parties may elect to seek coverage under the PCCP. These entities are considered Participating Special Entities and are listed in Section 8.9.4 of the Plan.*

23-5 4. Table 2-7 (Current Planned Wastewater Management Projects) identifies future Placer County/Lincoln sewer infrastructure. Extension of City of Roseville wastewater service to County projects is not included, but should be anticipated and shown as potential actions in the table for the SIA or the County's specific plan areas, and should be included in the PCCP.

23-6 5. Figure 3.1-1 (Farmland) needs to be updated to accurately identify City of Roseville boundaries, specifically to reflect annexation of the ARSP.

23-7 Additionally, the West Roseville Specific Plan Area should not be shown as grazing land, and the Sierra Vista Specific Plan Area should not be shown as farmland of local importance, as both are specific plan areas currently under development. Most of the Al Johnson Wildlife area is shown as Unique Importance. This is not currently the case. Maps should be updated to reflect current conditions. With the exception of the 217-acre onsite preserve area, the remaining approximately 1,200 acres are zoned for stormwater retention purposes and public open space uses. City boundaries should be shown in grey- as urban areas.

23-8 Some of the city's open space preserve areas located in central areas of the city are shown as grazing land, which is not accurate and would be impractical in those areas (beyond periodic goat grazing in strategic locations for thatch management and fire break purposes).

23-9 6. Table 3-1 (Important Farmland in the Project Area (2006)) should be updated so that the total PCCP acres do not include acreage within the City of Roseville as this may misrepresent the total PCCP acreage, particularly to the approving regulatory agencies.

PCCP Plan Comments

23-10 7. Figure 1-5 (PCCP Designation Map) shows green areas within the ARSP as future reserve acquisition areas (RAA). While ARSP may participate in the PCCP as a Participating Special Entity, land within the ARSP will be part of the City of Roseville's open space preserve system. Either this acreage should not count in the County's acquisition totals, or it should be noted that habitat-mitigation open space within the City may be managed and ultimately owned by the City, consistent with the *City of Roseville Open Space Preserve Overarching Management Plan*.

23-11 8. Section 8.9.4.2 of the PCCP Plan should be amended to reflect that the Amoruso Ranch Specific Plan Area is within the City of Roseville, and although the ARSP is eligible to secure incidental take coverage as a Participating Special Entity, the onsite preserve area may ultimately be owned and managed by the City of Roseville, in accordance with the *City of Roseville Open Space Preserve Overarching Management Plan*.

23-12 Of continued concern to the City is the statement regarding annexation of the ARSP into the City of Roseville, that, "…annexation would not affect the boundaries of the PFG (Potential Future Growth) or the RAA (Reserve Acquisition Area)," as this may misrepresent the total PCCP acreage, particularly to the approving regulatory agencies.

Should the County have any questions concerning these comments, please contact me at (916) 774-5536.

Sincerely,

Terri Shirhall

Terri Shirhall
Environmental Coordinator

CALIFORNIA WILDLIFE FOUNDATION
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August 16, 2019

Placer County Community Development Resource Agency
Environmental Coordination Services,
3091 County Center Drive, Suite 190
Auburn, CA 95603

Transmitted via email: cdraecs@placer.ca.gov

Re: Draft Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan

Dear Ladies and Gentlemen:

The California Oaks program of California Wildlife Foundation (CWF/CO) works to conserve oak ecosystems because of their critical role in sequestering carbon, maintaining healthy watersheds, providing wildlife habitat, and sustaining cultural values. The comments below on the Draft Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan (Placer County Conservation Plan: PCCP) focus primarily on oak ecosystems.

1. OAK IMPACTS

CWF/CO commends Placer County for recognizing the importance of oak ecosystems in the PCCP and the draft Placer County Sustainability Plan, and for the ordinance that provides protections throughout the unincorporated areas of the county. We urge the county to make the PCCP more protective of the oaks within its scope. Placer County's mature oaks provide important ecosystem services, including enhanced air quality, watershed protection, and climate resilience. Once removed, oak ecosystem services cannot be re-established for many decades. Specific recommendations will follow the discussion, below, of PCCP impacts on oak communities.

24-1

Valley oak impacts: CWF/CO understands, based on review of **Table 2-14** (page 2-46) and **Table 2-15** (page 2-47), that Plan Area A includes 1,364 acres of valley oaks. The acquisition commitment (1,900 acres), together with existing protected areas (21 acres), represents 15% of total valley oak acreage in Plan Area A.

CWF/CO also understands that implementation of the preferred alternative would convert a great number of valley oak woodland acres:

> Permanent impacts on valley oak woodland would total 140 acres (10% of this community in the Plan Area). These impacts would result primarily from urban/suburban development, rural residential development, transportation projects, and infrastructure projects. A total of 30 acres would be lost in the Valley portion of Plan Area A, 100 acres in the Foothill portion, and 10 acres in Plan Area B (page 4.3-44).

24-2

Oak woodland impacts: CWF/CO also understands, based on review of **Table 2-14** (page 2-46) and **Table 2-15** (page 2-47), that Plan Area A includes 50,870 acres of oak woodlands. The acquisition commitment (10,110 acres**)**, in combination with Existing Protected Areas (6,122 acres**),** totals 32% of the oak woodland acreage in Plan Area A.

CWF/CO also understands that implementation of the preferred alternative would result in the permanent loss of 6,210 acres (12% of this community in the plan area) and temporary disturbance of 180 acres of oak woodland (page 4.3-43).

Recommendations for valley oaks: *The Red List of US Oaks* identifies five species of California oak, including valley oak (*Quercus lobata),* which have been evaluated as threatened.[1]

24-2 cont.

Numerous studies point to the role of fragmentation in diminished oak diversity and poor regeneration. For example, the chapter on Genetic diversity in oaks authored by Deborah Rogers, Ph.D. in Costello et al. *Oaks in the Urban Landscape: Selection, Care, and Preservation* reports:

> …In a comparison of the pollination patterns of California valley oak (*Q. lobata*) in 1944 and 1999 (after considerable thinning), it was determined that the oak pollen did not travel as far as one might expect for a wind-pollinated species (average distance of 65 meters), and that the (1999) lower-density stand had fewer trees acting as pollen parents, making the resulting seeds and progeny less diverse (Sork et al. 2002). This study suggested a number of implications for this species. First, pollen flow seems to be fairly local for this species, so geographically distinct populations may be quite genetically different from one another. Second, if the remaining oak populations are isolated by intervening developments, they might experience increased inbreeding, which could result in loss of genetic diversity and potentially cause lower viability of natural regeneration.[2]

24-3

CWF/CO recommends that while the acquisition commitment of 190 acres in **Table 2-14** is a step in the right direction, that it is insufficient. Given the 396 acres available for acquisition identified in **Table 2-14**, CWF/CO suggests all of these areas need to be protected as part of an adequate plan, given the sensitivity of valley oaks and their importance to the ecosystem.

24-4

Los Angeles County had adopted a no-net-loss policy for oak ecosystems in unincorporated areas, a standard that CWF/CO urges every county to adopt.

24-5

Recommendations for oak woodlands: CWF/CO does not agree with the conclusion that "permanent loss of oak woodland under Alternative 2 would be offset by the protection and management of 10,110 acres and the restoration of 100

[1] Jerome, D, E Beckman, CS Kua, K Wenzell, L Kenny, and M Westwood. 2017. *The Red List of US Oaks*. The Morton Arboretum, Botanic Gardens Conservation International, The Global Trees Campaign, The IUCN/SSC Global Tree Specialist Group, The USDA Forest Service.

[2] University of California Agriculture and Natural Resources Publication 3518.

24-5 cont. acres of oak woodland in reserves in the Plan Area" (page 4.3-43), thereby making the impact "less than significant" under state and federal law. Additionally, the analysis discussed in chapter 4 of the environmental documentation does not include analysis of the greenhouse gas (GHG) impacts of the tree removals associated with implementation of the PCCP. The *Oaks 2040 Carbon Resources in California Oak Woodlands* report, published in 2006, estimated 675 million metric tons of carbon dioxide stored in oak trees as well as the understory in oak woodlands and forest lands.[3] California law requires the GHG impacts of proposed oak removals to be assessed.

24-6 California Environmental Quality Act § 15364.5 states that "Greenhouse gas" or "greenhouse gases" includes but is not limited to: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. California's Senate Bill 1383 (2016) designated methane, black carbon and hydrofluorocarbon short-lived climate pollutants.

Upon the disposal of impacted vegetation, the decomposition of biomass results in CO_2 and CH_4, emissions, and the combustion of biomass does in all cases result in CO_2, CH_4, N_2O, and black carbon.[4] CEQA does not differentiate between anthropogenic and biogenic GHG emissions.[5] The following 2009 Natural Resources Agency response to the California Wastewater Climate Change Group proves the point:

> Response 95-1: "Regarding the comment that the Guidelines should distinguish between anthropogenic and biogenic carbon dioxide emissions, the Natural Resources Agency notes that SB 97 did not distinguish between the sources of greenhouse gas emissions. Thus, it would not be appropriate for the Natural Resources Agency to treat the different categories of emissions differently absent a legislative intent that the Guidelines do so. Neither AB 32 nor the Air Resources Board's Scoping Plan distinguishes between biogenic and anthropogenic sources of greenhouse gas emissions. On the contrary, the Scoping Plan identifies methane from, among other sources, organic wastes decomposing in landfills as a source of emissions that should be controlled. (Scoping Plan, pages 62-63)."

24-7 The total biomass weight of the impacted overstory/understory vegetation must be known and the means of biomass disposal identified to accurately and fully

[3] Gaman, T. *An Inventory of Carbon and California Oaks*. California Oak Foundation, 2008.

[4] Decomposition: "Anaerobic digestion, chemical process in which organic matter is broken down by microorganisms in the absence of oxygen, which results in the generation of carbon dioxide (CO_2) and methane (CH_4).... Sugars, starches, and cellulose produce approximately equal amounts of methane and carbon dioxide." *Encyclopedia Britannica* (2013) www.britannica.com/EBchecked/topic/22310/anaerobic-digestion.

[5] "... the combustion of biomass does in all cases result in net additions of CH_4 and N_2O to the atmosphere, and therefore emissions of these two greenhouse gases as a result of biomass combustion should be accounted for in emission inventories under Scope 1" (at p. 11). World Resources Institute/World Business Council for Sustainable Development (2005).

account for natural land conversion GHG emissions.[6] The following questions must be addressed in order for the environmental documentation to be complete:

24-7 cont.

- What is the estimated total biomass weight of the impacted overstory and understory vegetation by 2020, 2030 and 2050?
- Due to the presumed transport of disposed biomass off-site, what are the estimated CO_2, CH_4, N_2O, and black carbon emissions?

A level of restoration far greater than 100 acres is necessary to achieve a less than significant impact. Additionally, a greater number of acres preserved would also further mitigate some of the environmental impacts of the woodland conversions. While the percentages of protection for oak woodlands under PCCP are much better than those for valley oaks, CWF/CO urges Placer County to identify a means to protect a greater portion of the 14,946 acres identified in **Table 2-46** as available for acquisition.

Lastly, CWF/CO notes that the draft PCCP's mitigation provisions are less protective than Placer County's Oak Ordinance's "inch for inch" replacement provision:

24-8

> Under the ordinance, the County may require replacement plantings that can be based on an inch for inch replacement. Replacement plantings may be planted onsite and/or other offsite locations. Maintenance and irrigation is required for 3 years. Alternatively, if the project area is not large enough to support the replacement plantings, the County may require implementation of a revegetation plan or an in-lieu payment of the installation cost into the County's Tree Preservation Fund. Since 2007, the County has also required project proponents to contribute to the conservation of land versus implementing an onsite compensatory replacement planting plan when conditions for onsite replacement are not favorable to woodland restoration (page 3.3-16).

Management recommendations: ***Management and enhancement actions for oak woodland natural communities*** include: "Implementing prescribed grazing programs" (page 2-44) and:

> Restoration of oak woodland by planting acorns and seedlings, controlling nonnative plants and animals, implementing progressive livestock management, developing or augmenting approaches to offset sudden oak death, and incorporating fire into management regimes (page 2-45).

24-9

Comment: CWF/CO recommends that the grazing be carried out with oak seedlings and acorn plantings protected by in exclosures, and ideally under the supervision of a Certified Rangeland Manager.

24-10

CWF/CO also recommends that disease and pathogen management actions associated with oaks should not be confined to Sudden Oak Death.

[6] EPA/USDA FS, 2015. Forest Biomass Components: https://cfpub.epa.gov/roe/indicator.cfm?i=86.

2. Fuel Management

CWF/CO reviewed the provisions in Appendix F, Fuel Management. The recommendations above about exclosures and grazing supervision are also applicable for grazing for fuel management in oak woodlands. Additionally, the text below, from **9.2.2 Oak Woodlands: Parcel and Landscape Scales**, raised a number of concerns:

24-11

> Slash derived from thinning may be piled for later burning, chipped and spread or lopped and scattered. Piles to be burned should be located to avoid sensitive habitat areas. Larger materials may be piled for use by wildlife. In the latter instance, slash piles should be separated from residual trees and shrubs and surrounded by 5-foot wide fuel breaks. In certain instances, there may be opportunities for materials to be transported off-site for use as biomass power feedstock or firewood.

Comments: Special protocols should be used in areas where there is risk of disease. Special protocols to halt the spread of invasives should also be employed. As discussed above, state law requires GHG analysis of tree removals.

Concluding thoughts: Thank you for the consideration of our comments. CWF/CO would be happy to provide additional input, should it be helpful in the process of improving the plan's impact on oak ecosystems.

Placer County's air quality attainment challenges outlined in the PCCP's environmental documentation, alongside the threats posed by climate change, underscore the importance of sustaining the county's arboreal heritage.

Sincerely,





Janet Cobb
Executive Officer

Angela Moskow
Manager, California Oaks Coalition

From:	Amber Beckler
To:	kellie_berry@fws.gov; Placer County Environmental Coordination Services; Gregg McKenzie (CDR)
Cc:	Amber Beckler
Subject:	Placer County Conservation Plan Draft EIR/EIS Public Comments - 8/20/19 by Amber Beckler
Date:	Tuesday, August 20, 2019 4:16:22 PM
Attachments:	August 20 2019 Draft EIR EIS Public Comment Input for the PCCP - Amber Beckler.pdf
Importance:	High

Hello,

Attached are the comments and questions that I have related to the PCCP Draft EIR/EIS and the PCCP in general.

First of all, a big thank you to Gregg and the wildlife agencies that were available to answer questions at the public workshop held in Lincoln last week. They provided a great overview and were able to respond to many of my initial questions and concerns.

I am submitting my feedback as part of the formal public comment period to receive responses in writing. I will also Fax this same document to Kellie Berry per the instructions. Please include my feedback as part of the administrative record.

Please reach out with any questions or if you need clarifications.

Thanks for considering my input.

Amber Beckler

8970 Benton Acre Rd
Granite Bay, CA 95746

August 20, 2019 Public Comments by Amber Beckler

RE: **Public Comments on the Draft EIR/EIS for the Placer County Conservation Program**

TO:

Placer County Community Development Resource Agency
Environmental Coordination Services
3091 County Center Drive, Suite 190
Auburn, CA 95603
cdraecs@placer.ca.gov

U.S. Fish and Wildlife Service
Sacramento Fish and Wildlife Office
ATTN: Kellie Berry
2800 Cottage Way, W–2605
Sacramento, CA 95825.
Phone: 916-414–6600
Fax: 916-414–6713

Gregg McKenzie
PCCP Administrator
3091 County Center Drive
Auburn, CA 95603
gamckenz@placer.ca.gov

I ask for your response to my questions/comments on the DRAFT EIR/EIS and general questions on the PCCP addressed herein.

Sincerely,
Amber Beckler

8970 Benton Acre Rd
Granite Bay, CA 95746
530-210-3787

I attended the public workshop held in Lincoln on Thursday August 15th, 2019 and had time to ask many of the questions with Gregg and The Plan team and the Wildlife Agencies. I did want to formally include my questions and comments as part of the public comment period in order to have responses in writing. The workshop and the staff were extremely helpful.

I have specific feedback on the DRAFT EIR/EIS as well as general questions/comments about the PCCP overall. Where appropriate, I included page numbers to the documents for reference.

DRAFT EIR/EIS Executive Summary questions (page numbers referenced below)

25-1 1. Alternatives pp. ES 3-4 - I do not see alternatives analysis that includes an option of attempting to acquire and preserve riparian/wetland and oak woodland corridors contained in the southeastern/eastern portion of the Plan area- this is the area identified as Potential Future Growth (including areas such as Granite Bay, Lincoln, etc.). Corridor ecology and ecosystem management practices should include conservation of the large contiguous land as laid out in the RAA conservation area in addition to conserving corridors that link the contiguous conservation area to nearby habitat such as riparian areas (eg. Strap Ravine), oak woodland to Folsom Lake as an example. Why was an alternative to evaluate inclusion of those corridors and acquisition of land in the PFG for conservation not considered?

25-2 2. P. ES 5 – from sentence *"Acquisition and enhancement of the conservation lands system would be primarily located within the Reserve Acquisition Area (RAA). However, the land acquisition criteria allow for some high-value lands to be acquired outside the RAA but within the Plan Area."*

What is the land acquisition criteria and where are the high-value lands identified in the Plan Area mentioned in this bullet? This could be a solution for the Question #1 listed above. How can the public provide input to these high value land identification based on occurrence of important plants, trees and wildlife?

25-3 3. P. ES 6 - from sentence *"Most Covered Activities would require individual permits and approvals pursuant to the local jurisdictions' general plans and land use regulations, or the requirements of the implementing agency, and would undergo subsequent project-level CEQA review and relevant NEPA review for construction and operations-related impacts; some Covered Activities, however, may be exempted from environmental review requirements due to project characteristics."*

What covered activities would or could be considered exempted from the PCCP? If they were exempted or to be considered for exemption, what is the process to identify and approve an exemption? In addition, if there are sites identified as exempt from the PCCP process, what is the process that would be used for those activities in relation to impact analysis on wildlife, oaks, riparian/wetland habitat and how would take permits be issued/filed? Does it revert back to the current system that we have today? Which agencies would be involved? Who oversees that decision making on creating exemptions and the permitting process for activities if properties were to be exempt? What is the process for public input and public transparency?

25-4 4. P. ES 18 - For the Alternative 2 - Proposed action. Overall, does this plan minimize the emphasis on "avoiding" impact due to covered activities that fall within the Proposed Growth Area? In other words, does the PCCP make it easier to issue take permits and have less rigor

25-4 cont. on the impact analysis because it can be mitigated elsewhere in the conservation area? What is the process and who is involved if the PCCP is passed for evaluating "like" habitat for mitigation?

25-5 5. General question regarding the Action alternatives and no action alternatives - For those species not listed as covered species as part of the PCCP but that are listed and receive protection either under state or federal entities, what is the process if the PCCP is approved for assessing impact and mitigation measures due to covered activities and the take permit process for those "non-covered species"? For example, the white-tailed kite. How would the impacts in the Plan area be assessed for a covered activity given it is not a covered species in this PCCP; however, it is a fully protected animal according to the CA Fish and Wildlife Service.

25-6 6. General question regarding covered species - If there are species that are not included in the covered species list, what state and federal rules and/or process would still be in place to evaluate the impacts by projects and permitted activities falling under the covered activity status? As an example, the Whitehawk II development that was approved by the Placer County BOS even though it had significant impacts to many oak trees, allowed building a bridge over a riparian/wetland complex and will impact a native grassland area in addition to affecting nesting raptors. Would the CEQA process and EIR requirement change as a result of the passage of the PCCP or would the species not covered by the PCCP still be included in that impact analysis or the existing CEQA process? Basically, how do we ensure wildlife species, oak trees, wetland areas are not ignored because of the new PCCP especially those in the southeaster/eastern sections outside the RAA (in the PFG-Potential Future Growth area)?

General PCCP questions

25-7 7. What is the % threshold that acquisition/restoration and mitigation in the conservation has to meet before covered activities are halted to ensure enough conservation land is available. In other words, the feasibility of purchasing land either outright, through conservation easements, etc will be challenging. How do we make sure that effort stays ahead of the areas being impacted. Is halting of permitting process and stopping projects an option if this threshold is exceeded?

25-8 8. What is the cut-off date and when do new permitted projects and/or covered activities begin enrolling into PCCP if it were passed.

25-9 9. What was the rationale and criteria used to mark the boundaries of the RAA in context to the PFG within the Plan Area?

25-10 10. How will the Independent Joint Powers of Authority be established? Will there be personnel with wildlife expertise to assess mitigation trade-offs and ensure we are conserving/restoring like areas if not better? How is the public expected to be involved in this process? How can the public get engaged in this process?

25-11 11. Who oversees the mitigation and take fees? Where is that decided and how is transparency given to the public. This includes the land conversion fees, special habitat fees and temporary effect fees- how are those established and what is the oversight process to govern the fee structure? Can these fees be negotiated (out or down) in the development or permitting process?

25-12 12. Has there been any research to leverage best practices from other regional conservation plans as part of this work? It would be helpful to gain insights into what works and doesn't in other regions.

PLACER COUNTY
FLOOD CONTROL AND WATER CONSERVATION DISTRICT

Ken Grehm, Executive Director
Brad Brewer, Development Coordinator

August 20, 2019

Shirlee Herrington
Placer County
Planning Services Division
Community Development Resource Agency
3091 County Center Drive
Auburn, CA 95603

RE: Placer County Conservation Program (PEIR20050226), Draft EIS/R

Shirlee:

We have reviewed the Draft Environmental Impact Statement/Report (EIS/R) dated December 2018 for the subject project and have the following comments:

26-1 a) Please have the applicant include a reference to the cited *Cross Canal Watershed Flood Control Plan* on Page 3.5-42.

26-2 b) Please have the applicant update the discussion on Page 3.5-43 for the Reason Farms Retention Basin. The facility name reference should be changed to the City of Roseville's Al Johnson Wildlife Preserve (formerly Reason Farms). The discussion should also be updated to reflect that the City of Roseville is currently in the planning stage for this retention facility.

Please call me at (530) 745-7541 if you have any questions regarding these comments.

Brad Brewer, MS, PE, CFM, QSD/P
Development Coordinator

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RMM

REMY | MOOSE | MANLEY LLP

Brian J. Plant | Of Counsel
bplant@rmmenvirolaw.com

August 20, 2019

Via Facsimile Only: (916) 414-6713
U.S. Fish and Wildlife Service
Sacramento Fish and Wildlife Office

Via Email Only: cdraecs@placer.ca.gov
Placer County Community Development Resource Agency
Environmental Coordination Services

Re: Comments on the Placer County Conservation Program Draft Environmental Impact Statement/Environmental Impact Report and Draft Placer County Conservation Program HCP/NCCP

To Whom It May Concern:

Please accept these comments on the above-entitled documents on behalf of Brookfield Sunset, LLC. Brookfield Sunset, LLC is currently working through the entitlement/permit process for the Amoruso Ranch Specific Plan which is identified as a Participating Special Entity under the PCCP.

Draft EIS/R

27-1

- Section 3.11-- It is unclear why the Placer Parkway is not described in this section. While there is a description of this project elsewhere within the draft, it seems logical to have an overview of this project described here (a section of this infrastructure project it is currently being constructed near Highway 65 and future sections are foreseeable).

Draft PCCP

27-2

- Section 2.4.6.3 "City of Roseville" -- This section needs to be updated to reflect the fact that the Amoruso Specific Plan has been approved and annexed into the City of Roseville. In addition, figures reflecting the Amoruso Ranch as a Participating Special Entity (PSE) or "Potential Roseville Annexation Area" (i.e., Figure 8-3) should be updated as appropriate.

27-3 • Section 2.7 "Non-Participating Cities" -- This section needs to integrate a discussion of Participating Special Entities as appropriate since some PSEs may be located within the jurisdiction of those cities.

27-4 • Section 9.4.1.10 "Land Provided in Lieu of Development Fees" should be clarified. Certain terms are ill-defined and vague. For instance, the term "faster" in sub-section 9.4.1.10.2 "Land Dedication Incentive" needs to be defined. In addition, conversion to approved land dedication credits should not be limited to an "entire" parcel. This ignores the fact that easements can be dedicated as portions of a parcel or over a series of parcels. Alternatively, landowners can accomplish lot splits and transfer fee title of those new lots.

27-5 • It is not clear why land dedication credits cannot be transferred to other covered activities. Further, some estimate of an appropriate timeframe for expiration date(s) should be made since some projects take many years to fully absorb. Section 9.4.1.10.1(5), (7) and 9.4.1.10.2, respectively.

27-6 • Many of the conditions related to tricolored blackbird (as described in Impact Bio-24) reference conservation measures that need to be clarified. For instance, delineated foraging habitat, definitional terms with respect to prohibited activities within buffer areas, and the width of appropriate buffer distances are unclear as currently written. Further, because of tricolored nesting behavior, the requirement to avoid foraging areas during the nesting season could unnecessarily prevent work during a large portion of the construction season for some projects. Additionally, pre-construction surveys for roosting bats should be more flexible. Please refer to comments submitted by ECORP, specifically Impact Bio-24, Species Condition 4 and Mitigation Measure Bio-3 which are incorporated by reference.

Thank you for the opportunity to comment on these important documents which support habitat and development planning in Western Placer County. If you have any questions, please call me at (916) 443-2745.

Very truly yours,



Brian J. Plant

cc: John Norman
Dave Krolick
Stacey McKinley

From: Cheryl Berkema
To: Shirlee Herrington
Subject: PCCP EIR Comments
Date: Tuesday, August 20, 2019 4:51:40 PM

Hello Shirlee,

Can you please forward my comments to CDFW?

Thank you,
Cheryl

August 20, 2019

Shirlee Herrington Environmental Coordinator Placer County Community Development Agency Auburn, CA. 95602 sherring@placer.ca.gov

US Fish and Wildlife Service Sacramento Fish and Wildlife Office 2899 Cottage Way W-2605 Sacramento, CA 95825 Attn: Mike Thomas, Chief Conservation Planning Division (FAX) 916-414-6713

Dear Ms. Herrington and Mr. Thomas,

Thank you for the opportunity to submit comments on the Placer County Conservation Program.

28-1 An important observation to tackle head on is that environmental conservation, affordable housing, and sustainability have all taken a back seat to the Sunset Area Plan/Placer Ranch business development being championed by Placer County Supervisors. The Placer County Conservation Program is being introduced AFTER the County has advanced many major development projects (The Sunset Area Plan/Placer Ranch, Regional University, and Dewitt Center to name just a few). This is an epic example of poor planning. The criteria for conservation and preservation should be established prior to the consideration of the development of regional scale projects. Placer County Planning introducing these major projects first attempting to "future defer to PCCP mitigations" is not allowed by state regulations. Mitigations must be feasible and funded. Attempts to justify poor choices for program execution as significant and unavoidable also evades accountability for the largest developers and attempts to place burden on taxpayers. Proper planning would have put good practices in place PRIOR to introduction of any projects. The criteria are clear dependencies for development.

28-2

- Placer County is not on par with other Counties in California with mitigation fees charged for trees. Placer County mitigation fees are significantly less than other Counties. This is an overly generous gift to developers, and much needed in the Tree Preservation Fund to help compensate for the negative environmental impacts produced by

28-2 cont.

development. Mitigation fees need to be updated in the PCCP to be consistent with other Counties. The goal for a conservation program should be to preserve the natural environment. The current mitigation policies promote destruction of trees rather than preservation. The PCCP EIR should update fees to be comparable with other Counties such as Marin, Sonoma, and Santa Barbara.

28-3

- The PCCP needs to permanently preserve areas, not put a timetable on how long the areas are preserved. The current preservation strategy is short sighted. As Placer County is committing generations forward to taxes they should also commit to preserving our resources. The PCCP should remove the 50 year timeframe and permanently preserve protected areas.

28-4

- Destroying vernal pools as an opening activity to a preservation program not only sounds ludicrous, the PCCP EIR fails to show how the proposed mitigation could possibly be considered reasonable. Justification for removal has also not been shown to be necessary. An alternative is required to be evaluated by CEQA. The PCCP value for vernal pools in the PCCP is extremally under valued and should be adjusted.

28-5

- The PCCP also does not adequately protect all areas of Placer County, having focused on the Western/ Sunset Area. This unfairly discriminates environmental protections in other areas of Placer County. The main area focused on in the PCCP is contrived and artificially constrained. Taxpayers in the remainder of the County are unfairly being asked to mitigate Western Placer County development. The impacts to surrounding communities have not been evaluated. The EIR is deficient in addressing all of Placer County. The PCCP EIR needs to identify preservation throughout the County.

28-6

- The PCCP pilot program was not given proper notice as a project to the public. Ads were not placed in the appropriate venues to inform the public that land use decisions were being made. The PCCP pilot program was approved while admitting the program was not even resourced exposing the county to risk. Land deals are being made without an approved PCCP EIR. This lack of transparency and program actively being executed clearly indicates a failure for adequate controls being in place for the public to be able to be confident that the PCCP program is properly being administrated and will be properly administrated if approved. Additional checks need to be in place in the PCCP EIR to protect the public's interests.

28-7

- The EIR fails to demonstrate that the public is not giving up the protections in place today for the environment by California Fish and Wildlife

28-7 cont.

oversight. Some examples of Placer Planning Department activities which the public has provided comment that require CDFW intervention - District 4 Planning Commissioner was fined by CDFW for illegally removing wetlands, applicants for WhiteHawks in District 4 received a blanket fuel reduction permit for removing trees on an a development with wetlands with an active environmental review in process (a cease and desist was needed by CDFW), the farm and winery ordinance currently being proposed by Placer Planning fails to assess environmental impacts throughout the County, Sunset Area Plan/Placer Ranch draft has identified approximately 55 pages of significant and unavoidable environmental impacts. These are only a *few* examples of current activities requiring CDFW oversight. The pendulum is moving in the wrong direction. Many public commenters regularly attend public meetings to flag violations being made by the County. Additional oversight of the environmental protections by CDFW is needed. CDFW oversight and the public avenues for adequately addressing County noncompliance in permitting process needs to be addressed in the PCCP EIR.

28-8

- The Scope of the PCCP is primarily Western Placer yet the permitting activity proposed is County wide. Permits should only be allowed to be processed by Placer Planning in the defined and protected areas.

28-9

- Multiple current environmental projects in Placer County refer to mitigations that are future facing if the PCCP is in place. Current project environmental mitigations are based upon current laws and ordinances. This misuse of the PCCP before it is even adopted again raises cause for environmental concern. Loose and convenient interpretations of the PCCP are not a substitute for precise, testable, and enforceable requirements.

28-10

- Placer County has failed to show that the monies collected for mitigation have been spent wisely to mitigate any of the existing development effects on the environment. They have also failed to show the cumulative negative effects of the many entitlements granted to developers have had on the environment. Granting an expanded scope of oversight to Placer Planning when the department has not been able to show that they have effectively managed land use is not recommended. The PCCP EIR should address these shortcomings in the current preservation efforts by adding explicit reporting requirements to the PCCP.

28-11

- Lastly, the number of land use lawsuits in Placer County is a strong

28-11 cont.

indicator of public dissatisfaction with the management of Conservation in Placer County. The PCCP is an example of volumes of complicated data. EIRs have a state mandate to be written in clear and easy to understand verbiage. The PCCP EIR has failed to communicate clearly the program objectives, environmental intents, how the program will be executed, who will have oversight of deliverables, program enforcement and environmental impacts.

Best Regards,

Cheryl Berkema

August 20, 2019

VIA Email to cdraecs@placer.ca.gov

Gregg McKenzie, PCCP Administrator
Placer County Community Development Resource Agency
3091 County Center Drive, Suite 190
Auburn, CA 95603

SUBJECT: DRAFT EIS/EIR FOR THE PLACER COUNTY CONSERVATION PROGRAM

On behalf of the West Placer Groundwater Sustainability Agency (WPGSA) comprised of Placer County, Placer County Water Agency, Nevada Irrigation District, the cities of Lincoln and Roseville, and with participation from California American Water Company, we appreciate the opportunity to comment on the Draft Environmental Impact Statement / Environmental Impact Report (EIS / EIR) for the Placer County Conservation Program (PCCP).

The WPGSA, formed in 2017 pursuant to the Sustainable Groundwater Management Act, is responsible for sustainably managing groundwater in the portion of the North American Subbasin (NASb) located in western Placer County. As such, the WPGSA supports the PCCP goals related to protecting groundwater supplies and groundwater recharge areas. By 2022, the WPGSA, in coordination with other GSAs in the NASb, must develop a Groundwater Sustainability Plan with management actions to ensure long term sustainability of the NASb.

29-1 The WPGSA agrees with the EIS / EIR findings that the PCCP conservation programs, management activities, and capital projects will help support long-term conservation and management of natural resources, including groundwater. In addition, the general plans described in the EIS / EIR include policies aimed at protecting against groundwater overdraft and protecting recharge areas. Development in the PCCP area under those general plans would have to comply with those policies as well as the Groundwater Sustainability Plan for the NASb, once adopted.

However, as the PCCP moves forward, and to ensure the PCCP conservation programs and management activities result in optimal protection and enhancement of groundwater resources, the WPGSA and its consultant staff are available to offer technical assistance. We specifically recommend the following opportunities to coordinate:

29-2 1. Since there are known, extensive clay layers in the western portion of Placer County, the PCCP administrator is encouraged to coordinate with the WPGSA on any proposed groundwater recharge/infiltration projects within the WPGSA area.

29-3 2. Understanding that all land development projects are required to design and construct low impact development features to comply with post construction stormwater standards, the PCCP administrator is encouraged to coordinate with the WPGSA on any proposed groundwater

29-3 cont. recharge/infiltration projects within the WPGSA area. The WPGSA may be able to identify opportunities for areas and methods to attenuate and infiltrate peak runoff from increased impervious areas.

29-4 3. The PCCP administrator is encouraged to coordinate with the WPGSA for deriving mitigation ratios associated with groundwater recharge areas. The mitigation ratios should be at least partially derived considering the estimated infiltration rates of the impacted wetland areas and the constructed/restored/preserved areas based on soil types from available geotechnical information.

In addition, we offer the following comments on the EIS / EIR:

29-5

1. Impact WQ-2: Substantial depletion of groundwater supplies or substantial interference with groundwater recharge (NEPA: less than significant; CEQA: less than significant).
    a. [Third paragraph] The agency will implement the state Sustainable Groundwater Management Act, which requires preparation of local groundwater ~~management~~ sustainability plans, which will ultimately supersede the WPCGMP.
    b. The agency is scheduled to adopt its GSP by January 2022.
    c. Development in the Plan Area under the Placer County and City of Lincoln general plans would be required to adhere to the WPCGMP and eventual ~~West Placer~~ NASb Groundwater Sustainability ~~Agency~~ Plans.
    d. The attached map shows the North American Subbasin (NASb) and the five Groundwater Sustainability Agencies (GSAs) within the NASb. Note that while much of the PCCP coverage area is in the South Sutter GSA area, the West Placer GSA will be working with all five GSAs to prepare one Groundwater Sustainability Plan for the entire NASb.

Thank you again for the opportunity to comment. Should you have any questions, please feel free to contact me at (530) 886-4965 or chanson@placer.ca.gov.

Sincerely~~,~~

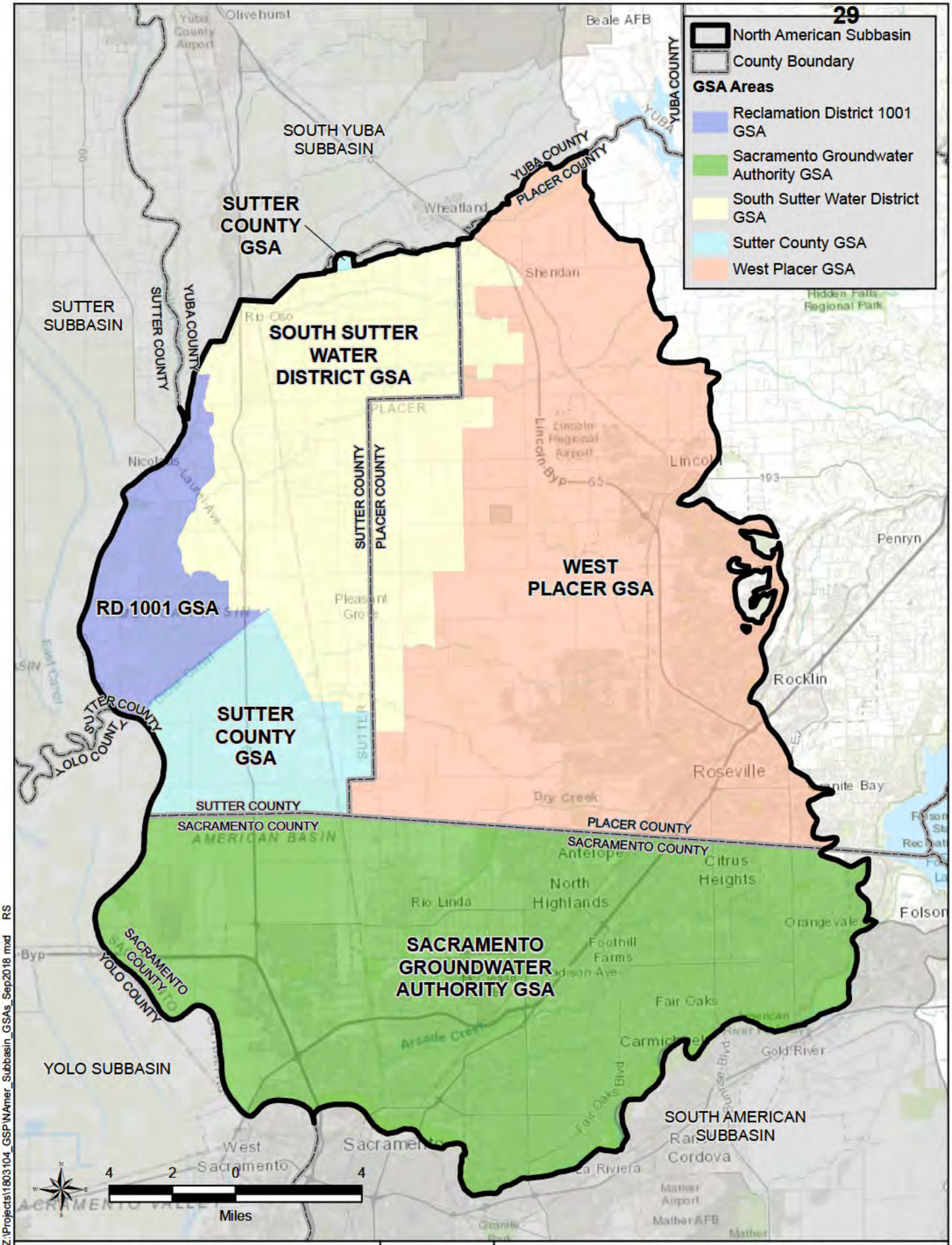


Christina Hanson, Senior Planner
Placer County Environmental Utilities Division
On behalf of the West Placer Groundwater Sustainability Agency

Attachment: WPGSA Coverage Map

CC: Tony Firenzi, Placer County Water Agency
Armon Close, Nevada Irrigation District
Trevor Joseph, City of Roseville
Ray Leftwich, City of Lincoln

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GSA and GSP Development Placer County, California	GEI Consultants	North American Subbasin Groundwater Sustainability Agencies
Placer County	SEPTEMBER 2018	FIGURE 1

20Sep2018 Z:\Projects\1803104_GSP\NAmer_Subbasin_GSAs_Sep2018.mxd RS

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

August 20, 2019

Via Facsimile Only: (916) 414-6713
U.S. Fish and Wildlife Service
Sacramento Fish and Wildlife Office
2800 Cottage Way, W-2605
Sacramento, CA 95825

Via Email Only: cdraecs@placer.ca.gov
Placer County Community Development Resource Agency
Environmental Coordination Services
3091 County Center Drive, Suite 190
Auburn, CA 95603

Re: Comments on the Placer County Conservation Program Draft Environmental Impact Statement/Environmental Impact Report and Draft Placer County Conservation Program HCP/NCCP

To Whom It May Concern:

Please accept these comments on the above-referenced documents on behalf of ECORP Consulting, Inc.

EIS/EIR Chapter 3.3 Biological Resources

30-1 ▪ p3.3-39 – Amphibian and reptile species section under emergent freshwater marsh contains incorrect species information. Please review.

30-2 ▪ p3.3-59 – Red-legged frog is highly unlikely to occur in urban riparian areas. Suggest removing and replacing with "Habitat for western pond turtle and other species."

30-3 ▪ Table 3.3-4 Valley elderberry longhorn beetle – Modify Habitat and Distribution to remove reference to 3,000-foot elevation and replace with in accordance with U.S. Fish and Wildlife guidelines. Note that text should be reviewed at well.

30-4 ▪ Table 3.3-4 California red-legged frog (CRLF) is missing from table and foothill yellow Legged-frog (FYLF) is repeated. It appears the first record for FYLF should be CRLF.

30-5 ▪ Table 3.3-4 Tri-colored blackbird (TRBL) status should be reviewed.

Impact BIO-14 Effects on Vernal Pool Branchiopods

Effects on vernal pool branchiopods references a number of conservation measures and conditions within the Plan. These comments pertain to language presented in the PCCP Public Review Habitat Conservation Plan (HCP)-Natural Community Conservation Plan (NCCP) document.

30-6 ▪ 5.3.1.6.10 Vernal Pool Branchiopods – Initial Survey Phase – The 72-acre threshold for occupancy may not provide enough data to represent an accurate representation of occupancy variability

2525 Warren Drive • Rocklin, CA 95677 • Tel: (916) 782-9100 • Fax: (916) 782-9134 • Web: www.ecorpconsulting.com

30-6 cont.

across the Potential Future Growth area. We recommend language that would allow for inclusion of additional survey data in the occupancy model if warranted to better represent shrimp populations after completion of the initial survey phase. CM1 VPB-2 requires protocol-level surveys within the watersheds adjacent to the Conservancy Fairy Shrimp. These data could be incorporated into the model.

30-7

- 5.3.1.6.10 Vernal Pool Branchiopods – Occupancy Phase – Clarify if occupancy threshold requirements refers to both area-based and pool-based requirements or just one requirement for both Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp.

Impact BIO-24 Effects on Tricolored Blackbird

Effects on TRBL references a number of conservation measures and conditions within the Plan. These comments pertain to language presented in the PCCP Public Review HCP-NCCP document.

For Species Condition 4

30-8

- 6.3.5.9.1 Survey Requirements – TRBL Measure 2 would benefit from a clarification of how the extent of foraging habitat would be delineated during preconstruction surveys (i.e., would it only be the localized area where TRBL were observed foraging, the full project site or the full 1,300-foot buffer area that is considered actively used). TRBL move from location to location depending on the availability of prey and may only use a given foraging site for a limited time period while prey are abundant. While protecting key foraging sites would benefit TRBL, it would be difficult to delineate a boundary around TRBL foraging sites in areas where foraging habitat is abundant (much of the PCCP Plan Area), and it would not be possible to determine the relative importance of a given foraging site using the survey methodology described in TRBL Measure 2. A site identified as active foraging habitat during the preconstruction survey might not be used by TRBL several weeks later. Conversely, a site where no TRBL were present during the survey might be used for foraging by TRBL later.

30-9

- 6.3.5.9.2 Applicable Measures – TRBL Measure 3 – The 1,300-foot (~0.25 mile) requirement for surveys and avoidance buffers around nesting colonies is greater than what is required by many current mitigation measures. For example, the South Sacramento HCP requires a survey and buffer area of 500 feet from the nesting colonies (with colony monitoring). A biological basis for a buffer distance of 1,300 feet (e.g., research showing that disturbance to nesting colonies occurs within this distance) should be provided to justify this distance.

30-10

- 6.3.5.9.2 Applicable Measures – TRBL Measure 3 does not define "Activity." What activities are intended to be prohibited? Any and all activities covered in the Plan? Please clarify the range of Covered Activities that are prohibited.

30-11

- 6.3.5.9.2 Applicable Measures – TRBL Measure 4 – As with Measure 3, a basis for a buffer distance of 1,300 feet (e.g., research showing that disturbance to foraging colonies occurs within this distance) should be provided to justify this distance.

30-12

- 6.3.5.9.2 Applicable Measures – TRBL Measure 4 – TRBL do not use one foraging site consistently throughout the nesting season; they move from site to site, and may even abandon one nesting

30-12 cont.

site after finishing one clutch and move to nest elsewhere for a second clutch. The requirement to avoid foraging areas during the nesting season could unnecessarily prevent work during a large portion of the construction season for some projects, and could thus prevent development of some projects entirely, even if TRBL are no longer using the foraging habitat.

30-13

- 6.3.5.9.2 Applicable Measures – TRBL Measure 4 – Measure 3 defines the nesting season as "March 15 through July 31 or until the chicks have fledged or the colony has been abandoned on its own," but Measure 4 does not contain this flexibility, and only refers to the "nesting season." Please clarify if nesting season flexibility applies to Actively Used Foraging Habitat.

30-14

- 6.3.5.9.2 Applicable Measures – TRBL Measure 4 – While implementing a sound curtain (in order to reduce the buffer to 300 feet) may be possible to avoid disturbance of nesting colonies, implementing a sound curtain to avoid disturbance of foraging habitat is likely to be impracticable in many situations due to the large areas of foraging sites and the frequent movements of foraging TRBL. This language could be improved by allowing buffer modification to include "or in consultation with agency staff."

Mitigation Measure BIO-3: Conduct Preconstruction Surveys for Roosting Bats

- It is our recommendation that the preconstruction surveys be conducted outside of the hibernation period, preceding the commencement of construction in order to detect bat activity within a project area.

30-15

- For non-maternity roosts, eviction language should only pertain to colony roosts and daytime roosts. Avoidance and eviction measures for nighttime roosts and solitary roosts should state "to the extent practical."
- For non-maternity roosts, it is unrealistic to avoid eviction before September 15 in all cases. Environmental considerations can affect timelines. Please allow for agency coordination in exclusion.

Thank you for the opportunity to comment. If you have any questions, please call me at (916) 782-9100.

Sincerely,



Dave Krolick
Vice President
ECORP Consulting, Inc.

Delana Ruud

10800 Cramer Rd.

Auburn, CA 95602

August 20, 2019

Placer County Community Development Resource Agency

Environmental Coordination Services

3091 County Center Dr, Suite 190

Auburn, CA 95603

Re: Placer County Conservation Plan Draft EIS/EIR

I concur with the statement forwarded to you today by Barton Ruud regarding this document. And I also agree with the statement made by Jane Wurst as part of the Record at the last Planning Commission Meeting.

In addition, please pay special attention to Section 3.10 Recreation – in the Placer County General Plan under Policies – 5.A.13 - The County shall ensure that recreational activity is distributed and managed according to an area's carrying capacity, with special emphasis on controlling adverse environmental impacts, conflict between uses, and trespass. At the same time, the regional importance of each area's recreation resources shall be recognized.

I am troubled by the apparent intent of the purchases of the Taylor, Kotomyan and Harvego Preserves. Placer County, Placer Legacy and Placer Land Trust seem to have delusional understanding that recreational pursuits of walkers/hikers, cyclists and horseback riders are compatible with lands that were understood by the general populace were for conservation purposes and not recreation. Did the original owners fully understand that their properties would become part of a giant 5-6 mile long trail system linked by trail easements? When the monies were cobbled together for said purchases, did they understand that a single donor could request that recreational trails with additional parking lots be mandated for public use 365 days a year, dawn to dusk?

31-1

The Placer County Parks Department in collusion with Placer Land Trust seem to have had an ulterior motive all along. That they are not that interested in conservation – that they wanted nothing more than a trail system that will bring hundreds and hundreds of hikers, cyclists and horseback riders into a rural historic ranching area, 365 days a year – dawn to dusk. The impact on neighboring properties be damned. Trespassers- you bet. They are already here. Homeless encampments- they are already here. The traffic impact on Bell, Cramer and Lone Star Roads will be insane. Would you want that in your neighborhood? I think not.

The acreage from Hidden Falls to the Bear River is an area almost overdue for a disastrous fire that under the right conditions could turn into an inferno like the decimation of Paradise. Remember, it will only take one careless person or an arsonist that could potentially wipe out the **whole** of North Auburn.

31-2

31-2 cont.

Homes, lives, and livelihoods are at stake. I hope that Placer County will be responsible and not fall into the same bad planning mode that was the real creation of the decimation of Paradise. Yes, an electrical malfunction started the fire, and the downslope winds accelerated the rapid spread, but it was years of bad planning that was the real cause.

31-3

I would like to believe that the PCCP will as Robert Weygandt stated, "conserve the natural and agricultural heritage that we are so fortunate to enjoy." I am not certain I can believe that statement, as he seems to have left out that recreation pursuits are already here and will be continued via more trails, parking lots, restrooms and perhaps more.

There is a matter of public trust that is at stake and growing. The County of Placer, Placer Legacy and Placer Land Trust need to step up and be totally honest and transparent. I hope that the intent of the PCCP is carried out. But, please, do not fall into the trap that conservation is purely a backdoor for recreational pursuits.

Respectfully,

Delana Ruud

From: Dianna Suarez
To: Placer County Environmental Coordination Services
Subject: Public Comment on the Draft Placer Co Conservation Program
Date: Tuesday, August 20, 2019 9:27:13 AM

Dear People, I would like to make the following comments on the DEIR for the PCCP:

32-1
- I am generally in support of this document and the PCCP process and would like to be updated on the DEIR process as it progresses.

32-2
- I support the reserve system and question how current landowners within designated preserve areas will be encouraged to sell their land to Placer County.

32-3
- How does the preserve system differ from developed recreational facilities and how will this land management strategy be determined?

32-4
- How is the hydrologic function of all the lands been addressed along with the Sustainable Groundwater Management Act?

32-5
- What studies have been done to determine future water needs for the expected development?

32-6
- I live outside western Placer County but am in a phase 2 area. I was very impressed with the level of environmental discussion and am hopeful that this process may come to our area sooner than another couple decades.

32-7
- Probably my main concern in looking at the map of the plan, involves analysis of Bear River as a watershed. It appears to be just the northern boundary of your study area and because this river constitutes the boundary of the county, this watershed is often fragmented during the planning process. It is imperative that the Bear River Watershed be considered and analyzed holistically and entirely for cumulative effects. Meaning that the entire watershed needs to be analyzed.

I will start reading this huge document and maybe answer some of these questions.
Thank you very much, Dianna Suarez P.O. Box 1174, Colfax, CA 95713
suareztribe@yahoo.com

The Suarez Family Cam, Dianna, Donavon, Jessie and Cruz "Walk tall as the trees, Live strong as the mountains, Be gentle as the spring winds, Keep the summer sun in your heart and the Great Spirit will always be with you."

protect american river canyons

20 August, 2019

Shirlee Herrington
Placer County Environmental Services
Placer County Resources Agency
3091 County Center Drive
Auburn, CA 95603

Regarding Placer County Conservation Plan Draft EIR/EIS

Dear Ms. Herrington,

Protect American River Canyons works to protect the natural, recreational and cultural resources of the North and Middle Forks of the American River. We are an Auburn based non-profit that seeks to build community through active stewardship and enjoyment of the American River.

33-1 We are concerned that the Placer County Conservation Plan does not assess the potential effects to the American River Watershed brought on by increased development, subsequent loss of flora and fauna wildlife habitat, pollution and recreational demands.

33-2 Much of the water for the proposed development of Western Placer County will come from an already hard-working river system, with 18 dams, diversions and multiple hydro-electric generators that produce water and electricity for millions of California residents. What will industrialized flow regimes to meet increased development demands mean for the aquatic life and riparian zones of the North and Middle Forks? How will aquatic life, mammals and avian life respond to the daily scouring rise and fall of river flows?

An increase in population translates to increased quality river recreation demands. How will these be met with facilities that are grossly inadequate especially in the American River Confluence Area and the many roads that lead to canyon-river recreation and flora and fauna wildlife viewing destinations.

Please consider the potential impacts to the conservation, natural and recreational values of the American River Watershed in your final PCCP EIR/EIS. Thank you,

Eric Peach PARC Conservation Chairman

Comments on Draft EIS-EIR for
Placer County Conservation Plan (PCCP)
August 20, 2019

Protecting Wildlife Corridors along Bear River and Camp Far West Reservoir

34-1

This specific recommendation is to highlight the potential conflict between the policies found in Goal 6.C and Goal 6.E of the Placer County General Plan and the proposed land uses found on Figure 2-2 PCCP Designation Map and Figure 2-3 Conservation Zones (Chapter 2). Of concern is the designation of lands along the south side of Camp Far West Reservoir and two large areas along the Bear River being designated as "Possible Future Growth Area (PFG)."

Placer County General Plan Policies 6.C.12, 6.C.13, 6.E.2, 6.E.3, and 6.E.4 note the importance of "wildlife corridors" and "wildlife migration corridors." The designation of lands along the Bear River and around Camp Far West Reservoir as "Possible Future Growth Area (PFG) appears to be in conflict with these policies. The priority of these lands for wildlife corridor preservation should be made clean by identifying wildlife corridors lands and to designate them as "Reserve Acquisition Area (RAA)" on Figure 2-2 and Figure 2-3.

Rational for Recommendation:

The County should protect the wildlife corridor potential for lands in the Bear River corridor and around Camp Far West Reservoir. This will help to maintain an east-west wildlife corridor to enable species to migrate in response to increased temperature due to climate change. Cooler temperature will be found by moving eastward into higher elevations in the Sierra Nevada Mountains. River corridors are natural pathways for species to use for migration and shall be provided the highest priority of land use as wildlife corridors over future growth.

Wildlife does not have the number of options which human beings have for places to live. Humans should be especially mindful of how our land use decisions impact all the other living organisms around us. We should be the stewards of the natural environment. Ensuring a sustainable environment where all life can continue to thrive is our responsibility and moral obligation. Human beings are on a path of causing the sixth mass extinction of species over the entire planet. By placing a high priority on providing wildlife corridors, we can help sustain the other species that share the planet with us.

Graphics Problems with Figure 2-3 Conservation Zones (Chapter 2)

34-2

(1) Camp Far West Reservoir is shown on Figure 2-3 in green instead of blue as on Figure 2-2. This is confusing when trying to compare the two maps.

34-3

(2) The labeling of Existing Protected Areas on the map of Figure 2-3 is done with four black circles with white letter A, B, C, or D inside the circle. The legend has four black circles with names but no letters to identify the four Existing Protected Areas by name.

Submitted by:

Gary Estes
4135 Eagles Nest
Auburn, CA 95603
Ph. 530-889-9025 (voice)
Email: gary.estes@wdlikenoname.net



Redbud Chapter – California Native Plant Society
P.O. Box 2662
Nevada City, CA 95959

August 20, 2019

Placer County Community Development Resource Agency
Environmental Coordination Services
3091 County Center Drive, Suite 190
Auburn, CA 95603

Transmitted via email to: cdraecs@placer.ca.gov

Re: Comments on the Joint Draft Environmental Impact Statement and Environmental Impact Report, Joint Draft Habitat Conservation Plan, and Natural Community Conservation Plan; Placer County, California

These comments on the Joint Draft Environmental Impact Statement and Environmental Impact Report, Joint Draft Habitat Conservation Plan, and Natural Community Conservation Plan for Placer County, California are submitted on behalf of the Redbud Chapter of the California Native Plant Society.

The California Native Plant Society ("CNPS") is a non-profit environmental organization with over 10,000 members in 35 Chapters across California and Baja California, Mexico. For over twenty-five years, the Redbud Chapter of CNPS has served Placer and Nevada Counties, which encompass the area covered by the Joint Draft Habitat Conservation Plan and Natural Community Conservation Plan.

The mission of CNPS is to protect California's native plant heritage and preserve it for future generations through the application of science, research, education, and conservation. CNPS works closely with decision-makers, scientists, and local planners to advocate for well-informed policies, regulations, and land management practices and decisions.

The Joint Draft Environmental Impact Statement and Environmental Report ("DEIR"), the Joint Draft Habitat Conservation Plan ("HCP"), and Natural Community Conservation Plan ("NCCP") resulted from and reflect a number of environmental problems and concerns. These include habitat fragmentation and degradation, and the need to protect contiguous, functional landscapes of sufficient size to sustain

natural plant and wildlife communities and habitat in the face of intense pressure to build thousands of homes, millions of square feet of commercial and industrial properties, and associated infrastructure.

The HCP and NCCP provide the framework for the Placer County Conservation Plan ("PCCP"). The PCCP is an effort by Placer County ("the County") to preserve over 47,000 acres of habitat on a landscape scape for a period of 50 years at a projected cost of $1.2 billion.

In connection with the PCCP, Placer County, the City of Lincoln, the South Placer Regional Transportation Authority, and the Placer County Water Agency (jointly, "the applicants") have applied for a 50-year "incidental take" permit (ITP) under the Endangered Species Act of 1973 ("ESA"). The application seeks authorization for "incidental take" of 14 Covered Species, of which 7 are listed as endangered or threatened under the ESA, that could result from activities covered under the draft plan, which covers approximately 260,000 acres.

As described by the County, the PCCP is intended to provide a "long-term conservation strategy to protect and contribute to the recovery of Covered Species and natural communities in the Plan Area, while streamlining development and maintenance activities that are compatible with local policies and regulations. The Plan identifies where future impacts on protected species would likely occur and includes measures to avoid, minimize, and mitigate the impacts on natural resources that would result from these activities. The Plan also goes beyond the minimum mitigation requirements of the ESA to include measures that help to conserve and contribute to the recovery of Covered Species and natural communities in the Plan Area…"

35-1 The Redbud Chapter appreciates and applauds the efforts of the County to develop and adopt the PCCP over the past 18 years. We support the goals of preserving and protecting native plants and wildlife by establishing viable natural habitat and plant and animal communities on a landscape scale and for the long-term. Our questions and comments are intended to help the PCCP achieve its goal of creating and preserving viable landscape scale habitat reserves for Placer County.

The DEIR presented and analyzed four alternatives:

1. **The No-Action Alternative** – there would be no habitat conservation plan, and projects would continue to be evaluated and assessed under applicable environmental laws on a project-by-project basis. The DEIR concluded that the "No-Action alternative" would have more severe environmental consequences than the other three alternatives, including many deemed "substantial and unavoidable." A primary basis of this finding appears to be that there would be no "comprehensive means to coordinate and standardize mitigation and compensation requirements of ESA, NCCPA, CEQA, NEPA, and the CWA within the Plan Area."

2. **The PCCP** – The proposed action described in the plan documents. The PCCP was determined to have a "Less than Substantial Impact," or a substantial impact that could be mitigated, for all biological factors.

3. The Reduced Take/Reduce Fill Alternative – Includes the same categories of covered activities, but would reduce the conversion of vernal pool complex land (including waters protected by the Clean Water Act) by 1,250 acres (approximately 10%). To maintain similar levels of development as the PCCP, more grassland and agricultural land would be developed (~4% increase). Other plan implementation and conservation measures would remain the same, and there would be no changes to other areas within the plan area.

4. The Reduced Permit Term Alternative – This alternative would include the same categories of covered activities, covered species, and plan area as the PCCP, but the permit term would be 30 years instead of 50 years. According to the DEIR, this alternative would result in lower levels of urban and suburban development because of the shorter term, with anticipated impacts on covered species estimated as 40% lower. The result would be less funding available to implement conservation measures, however, and overall fewer conservation measures (such as land acquisition, management, monitoring, and restoration) would be implemented.

Our Questions, Comments and Areas of Concern:

- **While the Redbud Chapter supports in principle the PCCP and the creation of a Reserve System, as currently proposed, the Reserve System will not adequately protect vernal pool plants, wildlife and habitats given the scientific conclusions of the County's 2004 "Report of the Science Advisors" prepared in connection with developing the PCCP.**

Vernal pools are a unique natural resource, and are among the most fragile yet biologically diverse habitats in California. Many of the plants and animals native to vernal pools are endemic to vernal pool habitat and occur nowhere else. It is estimated that in the past 150 years, over 95% of California's vernal pools have been filled and converted to agriculture, housing, and urban development. The pace and scale of vernal pool loss has accelerated in Placer County over the past two decades as the County has transitioned from rural to suburban.

35-2

In January, 2004, Science Advisors retained by Placer County in connection with the development of the PCCP submitted a science report entitled "Planning Principles, Uncertainties, and Management Recommendations" ("Science Report"). This Report stated that native plants of vernal pools "are characterized by a high proportion of plants that are endemic or regionally restricted to that habitat, and many species are of conservation concern. Studies have identified 56 genera and 200 species of vascular plants known to grow within vernal pools … more than 70% are native annuals. Nearly 70% are endemic, and 1/3 (73 taxa) are considered endangered."

The report strongly recommended the protection and preservation of existing vernal pools rather than "restoration" or "creation" of new vernal pools:

"The results of vernal pool restoration are mixed, ranging from qualified successes to dismal failures. The lack of detailed knowledge of the physical and biological attributes of natural reference pools makes the evaluation of restoration success quite difficult, and much further study is necessary. *Avoidance of disruption is clearly the preferred option for remaining vernal pools.* [Emphasis added.] While the creation of new pools may be useful in the short term for the conservation of some species of vernal pool plants, its long-term effectiveness for those species is doubtful unless the right species of

pollinating bees also have been established near the pool complex. Unless the created pools mimic the heterogeneity in predictability and duration of a natural pool complex, it seems unlikely that they will be very effective for the conservation of pool invertebrates either. It is also very hard to see how a created pool complex can provide the appropriate habitat for the vernal pool-associated vertebrates discussed above. *In any event, it should be the responsibility of those creating the pools to demonstrate their long-term effectiveness for any species before relying on created pools as a major conservation tool. Until that has been done, the conservation of existing pools and their associated catchments is a far better strategy." (*Science Report page 33). [Emphasis added.]

In contrast, while the PCCP "anticipates loss of wetlands, including vernal pool wetlands," it asserts that "[r]estoration and creation of wetlands will provide in-kind compensatory habitat." The geology, hydrology, flora, and fauna of individual Placer County vernal pools varies widely; it is critical to have specific data about each of the factors to evaluate the impact of development and the nature and costs of mitigation strategies that will work and that will provide "in-kind compensatory habitat."

35-2 cont.

The 2004 Science Report continues "Because of the complexity of vernal pool habitats and the life history requirements of their associated species, a conservation area must contain many pools of different types. The diversity of plant species is low at single pools but each pool tends to have a different complement of species. … Vernal pool invertebrates require different pool types in terms of longevity and predictability. Since tadpole shrimps and larvae of salamanders and spadefoots are predators of fairy shrimps, long-term survival of fairy shrimps requires that some of their populations are in pools free of tadpole shrimps and vertebrates." … [Further,] A vernal pool conservation area must include a significant amount of the surrounding drainage basin or sub-watershed. [Evidence] … suggest[s] that reserves of less than several thousand acres will be ineffective in conserving all the components of the vernal pool ecosystem."

In addition, it was reported that "Most vernal pool plants are pollinated by native, ground-nesting, solitary bees … Many of these bees are quite specialized and take pollen from only a single genus of plants." (Science Report, pages 30-31). In the absence of their specialized, co-evolved pollinators, vernal pool plants cannot produce seeds and will not survive. Such specialized plants and their pollinators are not fungible, and there will be an inevitable loss of diversity if their vernal pool habitats are destroyed.

The 2004 Science Advisors Report stressed that "*the creation of new vernal pools in mitigation banks is of marginal long- term conservation value at best*. [Emphasis added.] Rather, effective conservation must focus on the protection of archipelagos of pools containing [many] pools and pool types plus a substantial portion of the surrounding catchment area. … A vernal pool conservation area must include a significant amount of surrounding drainage basin or sub-watershed. … [R]eserves of less than several thousand acres will be ineffective in conserving all the components of the vernal pool ecosystem." (Science Report, page 32.)

In the absence of up-to-date surveys, there is no way to determine whether the vernal pool complexes already in or proposed to be added to the Reserves are comparable and will sustain populations of the plants, insects, and animals that currently inhabit the vernal pools that are to be destroyed.

Mitigation of vernal pools is extremely complex and difficult to achieve, and the associated costs are very high. These high costs of mitigation must be calculated and included in the "value" of vernal pools as "replacement value" as part of the mitigation fees collected. This kind of analysis and calculation is not evident in the PCCP's determination of a mitigation fee of ~ $99,000 per acre of vernal pool complex

that is destroyed, especially since that figure is intended to include both the cost of replacement value and the costs of ongoing management and preservation. For a detailed description of the complex and lengthy process of establishing viable vernal pools as mitigation for development, see *Improving Wetland Restoration Success*, 2014-15 Webinar Series of the Association of State Wetland Managers, http://www.aswm.org/pdf_lib/restoration_webinar/vernal_pool_restoration_042115.pdf

Finally, in a study of mitigation of vernal pools in Sacramento and western Placer Counties, researchers found "most development projects impacting vernal pools conduct at least a portion of their mitigation requirements at a site with similar edaphic settings. However, when examined at a landscape-scale across all development projects, the more common edaphic settings such as Northern Hardpan and Low Terrace pools are increasing while more rare types such as Northern Claypan and Volcanic Mudflow pools are decreasing. Results also show that Drainageway pools, a less-specialized pool type with generally lower species richness, are becoming more common through mitigation." *Changes in vernal pool edaphic settings through mitigation at the project and landscape scale*, Matt Wacker and Nina M. Kelly, Wetlands Ecology and Management 12: Vol. 3 pp. 165-178, 2004. (A study of vernal pool mitigation in Sacramento and western Placer Counties.)

35-2 cont.

In other words, most mitigation strategies fail in the long term, and even those with some success resulted in reduction in rarer types of vernal pool and their associated flora and fauna, and a relative increase in more common types. Mitigating with newly created "replacement" vernal pools or restoration of pools that have been seriously compromised are not viable options.

Without current, detailed understanding of the nature and inhabitants of existing vernal pools, it is impossible to evaluate whether the alternative vernal pool complexes located in existing or future Reserve areas, and especially "restored" or "created" vernal pools, provide "in-kind compensatory habitat." The scientific evidence is that they are highly unlikely to do so.

Accordingly, there appears to be no scientific basis for the DEIR's conclusion that the PCCP will protect these unique habitats and their associated plants and animals, as it is unsupported by any new or additional scientific studies, surveys, or research. Instead, this conclusion appears to be based on a simple tally of the number of acres of particular categories of habitat. There is no evaluation of the quality/value of various habitat areas, such as, for example, of the number and types of vernal pools or differences between individual vernal pool plant and animal communities. The DEIR must address and answer these issues with science, not with vague opinions or options that have no backing in science.

35-3

35-4

- **The DEIR's findings that effects of covered activities contemplated under the PCCP will have a "Less than Significant Impact" on endangered plants, animals, and their habitats are inaccurate and invalid given the lack of any scientific evidence to support these findings.**

According to the DEIR, for almost all biological resources, only the first alternative ("No Action") will have significant and unavoidable impacts. The other three options (adopting the PCCP as proposed; adopting the PCCP with a restricted scope, leaving intact an additional 1250 acres of vernal pool complex; and adopting the PCCP with a shorter duration, 30 years instead of 50 years) will either have "less than significant" impacts or impacts that can be mitigated.

35-5

Thus, for example, with respect to Alternative 2 – the proposed PCCP – the DEIR found that there are "less than significant impacts" on vernal pool complex, on aquatic/wetland complex, and other habitats. This conclusion is not supported by any scientific or factual data. And while there are found to be

"significant' impacts on special-status plants in vernal pool habitats, these impacts supposedly can be mitigated by surveying for and avoiding special status plants *in proposed restoration and enhancement areas.* [Emphasis added.] Significantly, these surveys and avoidance are only to happen after the destruction of the original habitat -- no such surveys or avoidance will be undertaken in the original habitat.

35-5 cont.

In the absence of accurate information about current conditions, a finding of "less than significant impact" is untenable, because such findings must have a basis in science and there is no way to measure the impact. Similarly, a mitigation that only applies after the original habitat has been destroyed does not provide a basis for determining that the habitat destruction caused no significant impact.

- **In light of the foregoing discussion, and with several caveats, the Redbud Chapter might be able to support the third or "Reduced Take" alternative which would preserve an additional 1250 acres of vernal pool complex in situ.**

35-6 Any support for the Reduced Take alternative of preserving an additional 1250 acres of vernal pool complex in situ would be based on the following caveats: the additional acreage of vernal pool complex lands must be of high density/high biological value; the acreage must be contiguous rather than piecemeal or comprised of "islands" surrounded by development; and that the acreage must be part of and connected to a preserve. We believe that preserving existing, functioning vernal pools in situ is far preferable to the risky (and extremely costly) process of restoring and/or creating new vernal pools.

- **Given the dearth of updated scientific studies, and the lack of current data, how will it accurately be determined that the reserve system is accomplishing its core purposes purpose and either ensuring no loss of habitat/protected species, or actually increasing the occurrence and viability of protected plant and animal species and their habitats? In addition, what will happen if insufficient numbers of property owners in the projected preserve areas are willing to sell or grant easements to their property, or if there are large breaks in the continuity of the preserve lands?**

35-7

35-8 As noted in prior points, the County has not updated its research and scientific studies of the biological resources of Placer County since 2004. Even then, there were no detailed surveys of the actual vernal pool complexes, wetlands, streams, grasslands, etc. included in the 260,000 acres encompassed by the PCCP. Without such a baseline, how can it be determined that the reserve system is fulfilling its goals? Clearly, no such determination can be made.

35-9 Further, there are risks in this strategy in that most of the projected 47,000 acres of preserve are privately owned and there is no guarantee that owners will be willing to sell or grant easements at an affordable price. How will the PCCP achieve its preservation goals if too few properties can be secured, or if there are large gaps in the preserves, private properties that the owners may decide to develop and thus adversely impact neighboring preserve lands?

Conclusion

35-10 The Redbud Chapter supports the creation of landscape-scape scale natural habitat reserves for Placer County, but key conclusions in the DEIR lack scientific basis or justification. Further, the current plan

35-11 appears to contemplate the destruction of the majority of the existing vernal pool complex within the Sunset Area Plan, without any justification for why this is cannot be avoided. We believe there are

35-12 alternatives that have not been investigated or considered that would permit development while preserving a significant portion of the vernal pool complex in situ.

Thank you for the opportunity to comment.

Sincerely,

Jeanne M. Wilson, President
Redbud Chapter – California Native Plant Society
president@redbud-cnps.org
530-570-8009

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Via E-Mail and U.S. Mail

August 20, 2019

Placer County Community Development Resource Agency
Environmental Coordination Services
3091 County Center Drive, Suite 190
Auburn, CA 95603
cdraecs@placer.ca.gov

Re: Comments on Draft Placer County Conservation Program and Environmental Impact Report/Environmental Impact Statement

To whom it may concern:

On behalf of Teichert Aggregates (Teichert), we have reviewed the Draft Placer County Conservation Plan (Draft Plan) and the associated environmental impact report/environmental impact statement (EIR/EIS). We offer one comment for the record based upon our review of the Draft Plan:

36-1 In 2003, the Placer County Board of Supervisors approved various entitlements for Teichert's Aggregate Facility (PCUP 2781; VAA 3806)—an aggregate mining, processing and reclamation project (the Project) to be located north of the City of Lincoln in the unincorporated County. The Draft Plan designates the area encompassing the Project site as "Reserve Acquisition Area" (RAA) without any depiction or mention of the County-entitled Project. Likewise, the text of the Draft Plan makes no reference to the Project. To help prevent confusion or misunderstanding about potential future uses of the Project site, Teichert requests that the Draft Plan be revised to acknowledge that the Project exists as a County-approved use within the RAA.

Thank you for the opportunity to comment on the Draft Plan. Please feel free to contact me with questions.

Very truly yours,

Kate A. Wheatley

cc: Troy Reimche, Teichert

From: Leslie Warren
To: Shirlee Herrington
Subject: Re: PCCP Comment letter
Date: Tuesday, August 20, 2019 3:15:32 PM

August 20, 2019
Comments of DEIR/DEIS on the proposed Placer County Conservation Plan/Habitat Conservation Plan

Dear Ms Herrington and Mr. Thomas

37-1 Thank you for the opportunity to provide comments on the County's proposed Placer County Conservation Plan (PCCP). Will you please make this letter available to Mr. Thomas at the US Fish and Wildlife Service.

I am a property owner in Auburn, CA who has dedicated my land to habitat purposes for native flora and fauna through a conservation easement with the Placer Land Trust. I manage my land with the Trust - bringing together science, education, conservation and gardening to increase native flora and fauna habitat and diversity. My particular interest is plants because plants are the foundation of our ecosystem.

37-2 Placer County has transitioned from a rural to a suburban County in the past two decades.The environmental problems necessitating the PCCP conservation measures are many - from habitat fragmentation to arbitrary re-zonings of agricultural lands to the need to protect areas of sufficient size to sustain life. The PCCP is an effort by the County to preserve habitat on a landscape scale in a period of 50 years at a cost of $1.2 billion. I am concerned and wish to have the DEIR/DEIS address what will take place if the management goals of the PCCP are unfinished in 50 years.

37-3 In a designated 125,000 acre PCCP fee zone, the "income" to administer and acquire properties for the PCCP will be generated. Under the PCCP fee structure, habitat that heretofore would be protected from development "in situ' will no longer be conserved unless

37-4 public pressure is exerted to conserve it. This seems to us to be an unfair burden on citizens; who heretofore relied on government agencies to execute policy for the public good - including mitigating habitat and protecting wildlife corridors. Once the PCCP is approved, i fear that but for public pressure, the local, State and Federal government agencies that are aligned with PCCP as mitigation will routinely waive on site mitigation because they are under pressure to generate funds for the PCCP.

37-5 The DEIR/DEIS is inadequate because it fails to evaluate how citizens who enjoy an environment with wildlife values will be impacted should PCCP off site mitigation measures be implemented. A recent study by the Placer Co. Bureau of Tourism found that the highest satisfaction measure for Placer County residents is the pleasure of viewing wildlife. Are we forfeiting this for the PCCP - understanding all consequences of mitigating far away from development sites? On Christian Valley Road where I live, Cal Trans acquired a "wetland mitigation site" for wetland disturbance that occurred approximately 2 miles away on Highway 49. Some years after the mitigation site because a beloved green space in the Christian Valley community, a billboard went up on the property saying "For Sale. Contact Cal Trans". Cal Trans proposed selling off the mitigation habitat in Christian Valley and

37-5 cont. substituting it for a grassland area in the west Placer community of Sheridan. As you might have imagined, citizens protested and the sale was abandoned. 30 yeas later, the wetland mitigation site still exists in Christian Valley and provides critical habitat to wildlife, a rest area and refueling area for migratory fowl and respite for human residents.

37-6 When habitat is not mitigated on site, it will be subject to a PCCP fee, the habitat will be "recreated" or similar habitat will purchased within the 42,000 acre PCCP to mitigate the loss from individual sites. For the habitat that is part of the 125,000 acre PCCP fee area, I have the following questions and concerns that we request be addressed in the DEIR/DEIS:

Will like-kind habitat be created for habitat lost? Will functioning vernal pools be replaced by other natural functioning vernal pools? Will there be latitude for agencies (like Cal Trans) to substitute say, grassland for wetland/riparian?

37-7 We know that 90% of mixed grass prairie and seasonal wetlands have disappeared from North America. This loss actually dwarfs what we see in the rainforest in the sheer scale and size and intensity of the crisis. These grass prairies represent the last large open spaces in western Placer County and we support conservation of them as proposed in the PCCP. However, the PCCP may precipitate the loss of almost 14 square miles of mixed grass prairie, vernal pools and seasonal wetlands. I am referring to the Sunset Area which including Placer Ranch currently has primarily agricultural zoning and pristine vernal pools communities across many thousands of miles of seasonal wetland. Alternative 3 in the DEIR/DEIS recognizes the important of these lands and provides that at a minimum, 1200 acres of vernal pool wetland be permanently protected. I support Alternative 3 because there is no scientific evidence that vernal pools may be replicated and therefore - where thriving vernal pools occur, they should be vigorously protected.

37-8 None of the alternatives in the DEIR consider the imposition of an Urban Limit Line as an alternative to the PCCP. Would an Urban Limit Line achieve PCCP goals at a lower cost than the PCCP and allow lands currently zoned for agriculture within the SAP also to be protected i.e. Alternative 3? An Urban Limit Line would address issues of protecting large swaths of habitat and defending against arbitrary rezonings. The County would not need to acquire lands within the Urban Limit Line. It is a matter of simple enforcing the zoning ordinance which already provides agricultural zoning on these key vernal pool and prairie lands. What is missing is Board of Supervisor resolve to enforce the County Zoning Ordinance. The Urban Limit Line would allow agricultural practices to continue as they have for many generations and avoid random rezonings, avoid the costly potential litigation that approval of the PCCP is likely cause, and achieve conservation goals

The only thing that the Urban Limit Line would not do, is avoid fragmentation of habitat as has been shown to be an ineffective conservation measure in the opinion of some. I understand that the Urban Limit Line would not address habitat fragmentation, and I address this issue below. I would like to see the DEIR/DEIS evaluate the environmental and fiscal costs and benefits of an Urban Limit Line which would include farm zoned lands in the SAP, compared to the cost of implementing and managing the PCCP.

37-9 I are concerned that the PCCP fee imposition on remaining developable properties across the 125,000 fee area, will impose hardships and increase development costs (and housing costs to future buyers) beyond the ability of small owners to pay. I would like these concerns to be addressed in the DEIR/DEIS. In order; to make this determination the DEIR must determine if

37-9 cont. the benefits of the PCCP accrue disproportionately to the four large landowners in the Sunset Plan Area who are seeking rezonings and if a disproportionate cost burden of the PCCP is being borne by small owners; who do not anticipate profit margins comparable to the four key developers in the SAP (Auburn Indian Community, Athens Partners, KS Homes, AKT Development). Will all applicants for development within the PCCP fee area be subjected to the adjusted fee assessment regardless of whether it is a public or private owner, large or small developer, institution or individual, Foundation or corporation? Are there measures in place to ensure that the process is not politicized or subject to modification for any purpose?

37-10 It is estimated that within the SAP alone would generate 68-90% of the total PCCP fees for land conservation and mitigation. I asked that the SAP EIR consultant to prepare a cumulative list of all fess associated with development of the SAP. I believe that the cumulative fee assessment to convert a 14 square mile seasonal wetland into an industrial zone housing 140,000 people will be cost prohibitive. The cost of water rain sequestration for the SAP alone is staggering; adding on PCCp fees, traffic impact fees, infrastructure costs and etc, etc, etc. - the project becomes less certain. Therefore, I do not believe that SAP PCCP fee generation should be the driving factor in the PCCP debate. In a time of climate crisis when we recognize that our seasonal wetlands (which define the SAP) are critical sequestration sources and because the SAP does not currently have the the zoning necessary for build out, would our common interests and survival be better served if policy were adopted to simply conserve grasslands and wetland through implementation of an Urban Limit Line? I would like the DEIR/DEIS to analyze/consider this as an alternative.

37-11

37-12 I am not convinced by the DEIR/DEIS argument that that islands of habitat represented within the 125,000 acre fee area are not necessary stop-over feeding and rest areas for pollinators and other species. Animal migration is phenomenon that still occurs in Placer County. Millions of birds and mammals pass through our County to nesting or wintering grounds or to follow seasonal foods. Many require specific native plants upon which to rest and refuel. Wildlife evolved with native plant species which research shows attract far greater numbers of insects - critical protein sources to many birds and mammals. I am concerned and believe that the DEIR/DEIS fails to adequately address the impact on 14 species that are listed as endangered, including the spade-foot toad, western pond turtle, Swainson's Hawk, the burrowing owl, several shrimp and bee species associated with vernal pools and the tri-colored blackbird will become locally extinct because their habitat in the Sunset Area and other sites within the 125,000 acre PCCP area will be lost with approval of the PCCP. I am also concerned that other species that are not yet listed, may be adversely impacted when wildlife corridors that they depend upon are lost because mitigation will be accomplished off site. What ecosystem services do the islands of habitat provide, even if they are not ideal habitat? As it pertains to vernal pools, I will be pleased to provide at your request scholarly papers delivered at a recent Vernal Pool Conference hosted by Aqua Alliance; wherein participating scientists unanimously conclude that vernal pools cannot be replicated to allow for species transfer between a natural pool and one that is recreated. Can the DEIR/DEIS rightly conclude that vernal pool species and the other species listed above will not suffer population collapse should their habitat in the Sunset Area and other sites within the PCCP fee zone be mitigated off-site and in the PCCP?

37-13

37-14

37-15

37-16 How will the proposed new freeway, the Placer Parkway, which traverses the PCCP impact plant communities and wildlife movement along wildlife corridors in the PCCP? How will hydrology across the PCCP be impacted by the Parkway and how will it affect native plant communities? How many strike deaths are predicted? What impact will the Placer Parkway

37-16 cont have on hydrologic function and the long-term success of PCCP vernal pool and grassland ecosystems? Should the Placer Parkway be elevated or bridged to allow wildlife passage and what is the cost of these adaptations? What are the impacts on flora and fauna of air and surface pollution from the Parkway and due to vehicular traffic - much of which will be heavy truck traffic? The DEIR fails to adequately addresses how light and noise from vehicles and

37-17 the SAP will affect migratory birds and natural life cycles of species resident and migrating through the PCCP. These issues related to the Parkway must be addressed and additionally an analysis of other transportation modes across the PCCP and their potential environmental and fiscal costs and benefits should be addressed in the DEIR/DEIS. The SAP, for example, provides no rail service to the Sacramento Airport. If indeed, the SAP builds out as an industrial city, producing manufacturing goods from a 39,000,000 square foot industrial zone, light and heavy rail connections to the Airport seem inevitable. The route would traverse the PCCP, yet this is not addressed in the PCCP DEIR/DEIS.

Thank you for the opportunity to comment on the DEIR/DEIS for the PCCP.

Sincerely,

Leslie Warren
Auburn California

From:	Gary Zimmerman
To:	Placer County Environmental Coordination Services
Cc:	Gary Zimmerman
Subject:	COMMENTS: Placer County Conservation Program - Zimmerman
Date:	Tuesday, August 20, 2019 9:33:27 AM

FROM:
Gary Zimmerman, Economist
Nevada City, CA 95959

TO:
Placer County Conservation Program
PCCP Public Comments
Placer County, California

DATE:
August 20, 2019

Thank you for the opportunity to comment on the Placer County Conservation Program (PCCP).

38-1

1. **PROTECT IMPORTANT NATURAL AREAS:** Like the free-flowing **BEAR RIVER.** Strongly recommend that the proposed PCCP create permanent protection for important natural areas, like the remaining free-flowing Bear River, that provides important habitat areas, including riparian, oak woodlands, river valley, that includes important cultural and historic sites for Native Americans, that include a variety of important flora and fauna, that has recreational value, including trails, river overviews, picnic sites, and an important California river.

   For example, this six-mile portion of the Bear River is presently threatened by the Nevada Irrigation District's proposed 275-foot high dam, that has an estimated financial cost to NID water users over $1 Billion by the time NID borrows and pays back the money to pay for the proposed construction, as well as the **large environmental cost of losing the unreplaceable Bear River**.

38-2

2. **PERMENANT MITIGATIONS as part of the PCCP MITIGATION PROCESS:** The PCCP should be designed so that the proposed mitigation process is permanent and can not be changed in the future to avoid mitigations. Moreover, the mitigation process should be designed to continue to regularly monitor and implement mitigations into the future, and be provided with a reliable funding mechanism, so that future mitigations will be funded.

38-3

3. **PLEASE REFERENCE COMMENTS** from the California Oaks Foundation, Save Auburn Ravine Salmon and Steelhead, and the Sierra Club.

38-4

4. **PLEASE NOTIFY ME** (at the email provided below) of future public comments and

38-4 cont. environmental reviews of the PCCP.

Thank You.

Gary Zimmerman

Gary.C.Zimmerman.e@gmail.com

Sent from Mail for Windows 10

Alliance for Environmental Leadership

Together we're a stronger voice

August 20, 2019

Shirlee Herrington
Environmental Coordinator
Placer County Community Development Agency
Auburn, CA. 95602
sherring@placer.ca.gov

US Fish and Wildlife Service
Sacramento Fish and Wildlife Office
2899 Cottage Way W-2605
Sacramento, CA 95825
Attn: Mike Thomas, Chief
Conservation Planning Division
(FAX) 916-414-6713

Dear Ms. Herrington and Mr. Thomas,

Thank you for the opportunity to submit comments to the County of Placer and to the US Fish and Wildlife Service regarding the proposed Placer County Conservation Plan (PCCP). These comments by the Alliance for Environmental Leadership (AEL) represent the consensus of 14 organizations aligned with the Alliance for Environmental Leadership and representing in sum, over 2500 individuals.

39-1 We understand that the PCCP is an effort by the County of Placer and associated State and Federal Agencies to preserve habitat on a landscape scale in perpetuity with buildout proposed over a period of 50 years. The County of Placer and the associated Agencies believe that the environmental problems necessitating the PCCP conservation measures are due mainly to land management decisions and development that proceed on a project by project basis.

Our comments follow:

Hydrologic Function and Vernal Pools

39-2 As a part of a Citizen Initiated Smart Growth Planning effort, AEL undertook a hydrologic analysis of the County's proposed Sunset Area Plan and the existing conservation lands, the Warm Springs Mitigation Bank, the Moore Ranch Conservancy, the Antonio Mountain Ranch and the Orchard Creek Conservation Bank (that lay on the north end of the proposed 13.9 square mile Sunset Industrial Area Plan site). We determined that build-out of the SAP would adversely affect hydrologic function and habitat values of the conservation lands. These are shown as part of the SAP but will become part of the PCCP when the

PCCP is implemented. The existing conservation lands will be adversely impacted because the Auburn Ravine watershed summit, which supports drainage into the four conservation sites and the associated soil
39-2 properties in the SAP will be leveled and eliminated when the SAP builds out. This is because the spongy
cont. wetland soils that are represented throughout the SAP are an unsuitable base for structures and parking lots. The DEIR/DEIS for the PCCP fails to address the degree to which the hydrologic function, drainage and associated wildlife values of these future PCCP conservation lands will be impacted by SAP development; nor does the DEIR/DEIS propose mitigation measures to remedy these impacts.

Two parcels of land project into the conservation lands from Athens Blvd. One of these parcels is irregularly shaped on the south Eastern end of the conservation parcels and one rectangularly shaped in the
39-3 South center of the conservation lands and both are north of Athens Blvd. Both are proposed for high density industrial development in the proposed SAP, exposing conservation parcels to interface (on three sides of each parcel) with industrial uses, chemical run-off, noise, automobile exhaust and human interface. The DEIR/DEIS does not address the potential impacts to these future PCCP lands. In addition, the
39-4 DEIR/DEIS fails to analyze how, should these parcels build out, the excavation, grading and grade changes, industrial runoff and compaction that will precede development of these parcels will impact hydrological function and wildlife values in these future PCCP lands and how potential impacts would be mitigated.
39-5 Upon build out, the DEIR/DEIS does not address impacts of light pollution, noise, bird strikes on windows and other potential hazards for wildlife survival. Please address these omissions and concerns in the FEIR/FEIS.

For the purposes of vernal pool mapping in the Sunset Area Planning Area and the PCCP, the County aggregates multiple sources, which may or may not have had a consistent research method. This aggregated map is the definitive map for the SAP, PCCP, and Placer Ranch projects. For the purposes of the Citizen Initiated Smart Growth Plan, AEL utilized a comprehensive, single-study prepared for the Department of Fish and Wildlife Services and the Bureau of Reclamation by Volmar and Associates. John
39-6 Schwetzer was used as reference. These two maps - the County's and the CISGP's, reflect significantly different information about the location and density of vernal pools in the SAP and the PCCP. The DEIR/DEIS's use of the aggregated vernal pool map is concerning because it is an aggregat- ed map and for the purpose of the DEIR/DEIS, the science behind each research method must be validated. We hereby request that the vernal pool mapping discrepancies between the CISGP and the PCCP/SAP be resolved by a neutral third party or that the mapping for the PCCP/SAP be recreated using consistent research methods to establish the veracity of vernal pool mapping and actual field conditions.

Recreation and Conservation

The SAP proposes an extensive trail network in and around these same conservation lands that are pro-
39-7 posed to become part of the approved PCCP. The SAP also proposes to attract 88,000 new workers and 17,000 new permanent residents, a 33,000 student university with 4,400 associated staff. The PCCP DEIR/DEIS does not address the wildlife impacts that will result with introduction of this urban population.
39-8 Nor does the DEIR/DEIS establish if public access to conservation lands should be permitted. The SAP will potentially be the home and working site for a permanent population of potentially 130,000 people. How will the conservation lands wildlife values be impacted by the recreational uses proposed for them? Additionally, the impact of exotic weeds displacing native forbs and grasses, the impact of pets chasing
39-9 birds and defecating, the impact of bicycles and other human intrusion into SAP "preservation lands" is not adequately addressed in the DEIR/DEIS. As noted in the Citizen Initiated Smart Growth Plan, one dog entering a habitat of grassland birds will cause them to abandon the site for 14 days. What will be impact be of constant and persistent disruption to species interfacing with the new urban/industrial population?

Are the habitat conservation goals for which we generally understand to be the purpose of the PCCP in-
39-10 vestment and program - enhanced or degraded by double-purposing the PCCP as a human recreation site and a conservation site?This pertains to the four conservation properties in the SAP and the Hidden Falls and Dideon Ranch sections of the proposed PCCP. We refer you to pp. 80-115 of AEL's Citizen Initiated Smart Growth Plan for an assessment of the Natural Systems in the Sunset Area Plan, including the four conservation areas to be absorbed into the PCCP. Each of the potential impacts analyzed there, Species

39-10 cont. Displacement and Migration, Vernal Pools, Soil Dynamics, Wildlife Corridors, and Water should be comparably analysed and addressed in the DEIRDEIS for the PCCP.

39-11 Additionally, 61 websites in the Bay Area describe recreational opportunities in the northeast areas of the PCCP (Hidden Falls and Dideon Ranch) and encourage usage there for active recreational activities like hiking, biking, running and horseback riding. The DEIR fails to evaluate the current use, resident and visitor use and how use will increase over time; especially in light of the "viral" impact of social media. What wildlife and habitat impacts will occur by these users and how will they be mitigated? How many users are anticipated in the short term and over the 50 year life of the PCCP? Should the recreation areas acquired in the County's Placer Legacy program or Placer Land Trust be part of the PCCP because of the recreational emphasis? Are recreation trails appropriate in conservation properties and what is their impact to flora and fauna, resident and migratory species? Is the intention of PCCP v Placer Legacy v Placer Land Trust acquisitions different and compatible?

39-12 The report by the Science Advisors Phase 1, "County of Placer Conservation Plan", Brassard, P. et al. January 8, 2004 discussed the need to keep conservation areas free from disturbance; but the DEIR/DEIS fails to address or adequately analyze the potential disturbances; nor establish what disturbance is for the purposes of the Science Advisors' Report and how disturbance impacts will be monitored, mitigated and monitored and evaluated in the short and long term. Nor does the DEIR/DEIS recommend methods and safeguards to ensure PCCP lands' conservation values will not be degraded if they are double-tasked as habitat and recreational use sites.

Administration of the PCCP

39-13 The PCCP implementation formulas are extremely complex. The current PCCP administrators speak the PCCP language fluently and understand the nuances of the PCCP, the fee formulae and other Plan attributes thoroughly. Over the life of the PCCP, there will naturally be successor administrators at Placer County and State and Federal Agency staff members who participated in the PCCP design will come and go. The DEIR/DEIS should consider the impact of staff change and political change and set forth a transition plan and program including mitigation measures to address staff and political change to ensure that the PCCP is implemented as intended and fairly, over time.

Thank you for the opportunity to comment on the DEIR/DEIS for the PCCP.

Sincerely,

Leslie Warren, Chair
Alliance for Environmental Leadership

Cc: Alliance for Environmental Leadership partners

PUBLIC INTEREST COALITION

August 20, 2019

Sent via email: cdraecs@placer.ca.gov to
Placer County Community
Development Resource Agency

Sent via Fax: (916) 414–6713 to
U.S. Fish and Wildlife Service

Re: Placer County Conservation Plan (PCCP) Draft EIR and EIS

The organization of the PCCP's Draft Environmental Impact Report/Statement into manageable "byte-sized" links of sections is greatly appreciated.

40-1 In general, Public Interest Coalition (PIC) supports the PCCP objectives—its success will benefit Placer County and hopefully curtail "business-as-usual" approvals of sprawling projects that have progressively destroyed agricultural land (critical for food sustainability), negatively impacted sensitive wildlife habitat and human health, exponentially exacerbated traffic problems, reduced air quality, and created a multitude of other negative impacts to natural resources that will continue for decades. If met, the PCCP's objectives will be life- and resource-saving on multiple, critical levels.

PIC offers the following comments for consideration:

40-2 The word "streamline," to a number of environmental protection activists, can raise red flags when it is perceived as code word for "grab and run." We submit that "streamline" may benefit project applicants, but timelines must always be subordinate to regulatory and public agencies' mandate to conserve and protect resources. A thorough agency review process will always take time when researched and studied adequately. When researching a proposed projects impacts, "surprises" are often revealed that may need even further examination.

40-3 Short-cutting, simplifying, and streamlining permits for approvals can easily abandon agencies' adherence to the public trust doctrine and common good principles. We are confident that the two County staff PCCP administrators and the supervising planner—who have led the PCCP to its current status—have pressed for the best, most beneficial outcomes. However, vigilant monitoring for PCCP compliance must be a high priority along with active enforcement (as opposed to "complaint driven" County policy). Strong consequences with stiff penalties for non-compliance should be well established and publicized—there should be "No Surprises" when violations are prosecuted.

40-4 The word "assurances" is another red flag. For example, assurance of decisions within six months on any one proposed project, let alone large numbers of proposed projects, may be completely unrealistic. There are too many factors that could strongly influence any regulatory agency's ability to act, or not, with a decision on any project within six months. The PCCP may aim for a six-month decision assurance, but it should never be locked into any such arbitrary timeline when flexibility for more time may conserve beneficial natural resources.

P.O. Box 671 Loomis, CA 95650 Public-Interest@live.com

40-4 cont.

Considerations must be given to agencies' workloads, adequate staffing, complexities of proposed projects, etc., before any such assurance is enacted. The same holds true for mitigation measures. A decision made under an "assurance" mandate or PCCP policy can easily destroy a viable, beneficial natural resource that has existed for 1,000's of years. The PCCP must make allowances so that an agency's due diligent proposal review is not subordinate to an arbitrary six-month review, especially when more time is justifiably called for.

40-5

"No Surprises" is another word that has been abusively enacted and used to protect private economic and profiteering interests over public good and welfare when related to environmental impacts and natural resource preservation. In a time of huge climate disruptions, and disastrous impacts due to climate extremes, to accept a "No Surprises" stipulation or policy in the PCCP is unacceptable, especially since its objective is most often meant to guarantee material wealth of development ventures. Capitalism comes with risks; regulatory and lead agencies cannot and should not be defacto "insurance" agencies by setting policies to protect against profit-reduction or loss risks—which then become losses to the public good and natural resources.

If "No Surprises" remains PCCP policy, then a parallel "No Surprises" clause should be included to protect the public from new (unknown at time of approvals) or unforeseeable impacts. The impacts may be created and/or exacerbated by a project—before or after it is approved and/or undertaken. Or new impacts may be discovered later due to climate disruptions or other conditions that create vast changes to wildlife migration (listed and non-listed species), weather-reliant vegetation (forage, crops, forests), and other elements which could border on urgent or emergency. The "No Surprises" policy must be pliable and subject to modification or abandonment whenever impacts that risk public welfare (safety, health) or natural resources become known.

40-6

With regard to streamlining, assurances, no surprises, and other development protections, we urge the PCCP to prioritize long-term public health and welfare protection to an equal or greater extent than development proposals. Related to the above comments, we urge that all aspects of the PCCP be considered first under the umbrella of the Precautionary Principle and that it be incorporated as part of the PCCP.[1]

Thank you for considering our views,



Marilyn Jasper, Chair

[1] The precautionary principle in environmental science. The precautionary principle, proposed as a new guideline in environmental decision making, has four central components: taking preventive action in the face of uncertainty; shifting the burden of proof to the proponents of an activity; exploring a wide range of alternatives to possibly harmful actions; and increasing public participation in decision making. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1240435/

From: Matt Emrick
To: Placer County Environmental Coordination Services
Subject: Comments on DRAFT EIS/R for the Placer County Conservation Program (PEIR 20050226) and PCCP
Date: Tuesday, August 20, 2019 1:07:07 PM

Dear Placer County:

Thank you for the opportunity to submit comments on the DRAFT EIS/R for the Placer County Conservation Program (PEIR 20050226)

41-1 First and foremost, the comment period should be extended at least another 30 days. The documents are voluminous and technical.

In addition, I have the following comments:

41-2 - - Groundwater levels are shown to be decreasing to the southwest of the City of Lincoln along with a cone of depression. There appears to be a lack of analysis in the PCCP FEIS/R as to what impacts the City of Lincoln's proposed triple groundwater pumping might have (proposed in the City's Village 5 Specific Plan and EIR) in connection with the implementation of the PCCP. If groundwater levels are dropping, and groundwater is flowing in the general area towards a cone of depression, what will the City's drought groundwater pumping plan have on the aquifer, groundwater recharge, and existing groundwater rights and supply.

--The FEIS/R indicates that groundwater recharge is primarily from creeks such as Auburn Ravine - and from irrigation. The expansion of the City of Lincoln will eliminate much of the present irrigation. The FEIS/R does not address the impacts of the City's expansion into the western part of the PCCP and the elimination of irrigation with respect to loss of groundwater recharge. It is important to note that stormwater basins intended for groundwater recharge would entrap runoff during winter and spring, whereas presently groundwater recharge from irrigation occurs during the summer and fall. There is no analysis as to the possible impacts of changing the season of groundwater recharge as to these different scenarios.

41-3 -- The PCCP FEIS/R improperly defers to the City's water management plan and SGMA to handle groundwater problems. But there is no present SGMA plan and the City is planning to expand groundwater pumping west of Highway 65 during drought periods. The FEIR/S fails to adequately analyze the potential impacts to the

41-3 cont. groundwater basin and existing groundwater users.

41-4 --The FEIS/R does not address the impact of lowering groundwater levels on stream flow in Auburn Ravine. There is a hydrologic connection. The PCCP will allow more development potentially along the Auburn Ravine but there appears to be an inadequate analysis of impacts on surface flow in that stream.

Thank you for your consideration.

-***MATTHEW EMRICK***
Attorney for Albert and Connie Scheiber and Scheiber Ranches.
3881 Scenic Court
El Dorado Hills CA 95762
(916) 337-0361

PLACER COUNTY TOMORROW
1725 Schellbach Drive
Lincoln, California 95648

August 20, 2019

Environmental Coordination Services
Placer County Community Development Resources Agency
3091 County Center Drive, Suite 190
Auburn
California 95603
cdraecs@placer.ca.gov
Fax (530) 745-3080

Sacramento Fish and Wildlife Office
U.S. Fish and Wildlife Service
2800 Cottage Way, W-2605
Sacramento
California 95825
By appointment (916) 414-6600
Fax (916) 414-6713

Attn: Greg McKenzie
PCCP Administrator

Re: Placer County Conservation Program (PEIR 20050226)
State Clearinghouse No. 2005032050

Dear Mr. McKenzie:

42-1 Placer County Tomorrow is a new organization based on many years of personal, community and professional experience working to continue and grow communities and renewable natural resources by extending current values into the future along with growth that protects the property rights of existing residents as well as those who want to develop.

The PCCP process from the beginning has withholding draft documents from the public. My experience is that except for a ubiquitous map, working group/advisory committee members were not allowed to and did not provide documents to members of their own organizations.

42-2 The one document I received was the PCCP Executive Summary dated September 2018. I read this document line by line with dozens of notations and noted many questions, more questions

42-2 cont.

in my view than it answers. However, it was sent out and not the subject of any input, comment, or discussion. In other words, having it was not in service to any process or purpose. It came to me and was promptly buried. It also came to me in the context that maybe it shouldn't have been sent out or circulated to others. Worst, it came out without introduction to its contents.

42-3

During this period, the Placer County Board of Supervisors has acted and made decisions based on draft PCCP documents as if the PCCP were already in existence.

One aspect of this has been Placer Legacy actions, a program that for most of its life did not have any identified person in charge of it. Its management has been illusive to the public as different staffers bring forward actions in its name, making accountability for that program illusive to the public.

Another aspect is to look at how this letter is addressed. I don't think that the public can be expected to easily meet these complex requirements. This could be a harbinger of what's to come if the PCCP is adopted.

Here are our findings and recommendations that we expect to supplement along with an improved process to come.

42-4

I. An extended comment period is needed to invigorate unmet NCCP mandated California Fish and Game Code section 2815 public participation requirements with entire PCCP area tours, guided Placer Parkway centerline walks, dividing the plan into sections with public programs on each one with videos kept online for the length of any Plan

Federal HCP public involvement requirements are more specific, for example, the 60-day notice period used here violates the federal practice of having a 90-day comment period on HCPs that require preparation of an Environmental Impact Statement.

California Fish and Game Code Section 2815

The department shall establish, in cooperation with the parties to the planning agreement, a process for public participation throughout plan development and review to ensure that interested persons, including landowners, have an adequate opportunity to provide input to lead agencies, state and federal wildlife agencies, and others involved in preparing the plan. The public participation objectives of this section may be achieved through public working groups or advisory committees, established early in the process. This process shall include all of the following:

…

(d) An outreach program to provide access to information for persons interested in the plan, including landowners, with an emphasis on obtaining input from a balanced variety of affected public and private interests, including state and local governments, county agricultural commissioners, agricultural organizations, landowners, conservation organizations, and the general public.

42-4 cont.

The viability and operation of the public involvement methods are in question.

One long term member of a stakeholder group has identified others who stopped coming for years. Another member of the same group says that they did not see the person there who said this.

The PCCP program needs to make available records of all of its meetings and the names and affiliation of those present at the meetings. This would help to alleviate or correct the impression I have from reading some documents, for example, the model local ordinance, that if they did not start out biased in favor of sprawl, they may have become this way during the process.

42-5

A six-month extension of time for comments is necessary, during which time full public engagement efforts are made. All documents leading up to and during PCCP preparation need to be assembled in a place accessible to the public during weekday work hours, on one weekday evening each week Monday through Thursday, and one Saturday each month.

42-6

The Plan, EIR and each key plan issue need to be broken down into digestible segments including videotaped workshops of each one made that are then made available online during a PCCP period no longer than 30 years.

42-7

At the Planning Commission August PCCP meeting, the Commission Chair asked how many people were going to speak to the plan. A few raised their hands and the Chair then in what seems to me to be a hostile act reflecting little interest in learning from the public to public and only cursory interest in any public participation, limited them to three minutes each. One person was clearly representing a number of people in the audience. The mismanagement of that comment opportunity demonstrates the audacity of Placer County to conduct a hearing on a 900 page DEIR and even longer Plan without having anything like meaningful information–based workshops.

42-8

At the Lincoln City Council workshop Mr. McKenzie kept pausing his presentation in order to not proceed into more detailed and complicated material that people might not be ready for. Those wanting the whole picture need to be accommodated. Members of the public were few and far between.

2. Oppose any Plan with South Placer Regional Transportation Authority (SPRTA) in it. SPRTA needs to be removed as a Plan permittee.

42-9 Pre-approval for any part of Placer Parkway is a sprawl, climate change, sustainability, CEQA and NEPA and much more community and environmental offensive. A PCCP with this suggests the that the Plan's purposes go far beyond and out of bounds of NCCP and HCP purposes. Placer County has a contract with Caltrans for the County to pay for Placer Parkway Phase 1, and earlier this year the Board of Supervisors reserved $40 million for Phase 1. Adding more County municipal services for a project that the County is paying to develop seems to have become a main purpose of the PCCP.

3. Oppose the Plan until it provides, "…(F)or the protection of habitat, natural communities, and species diversity <u>on a landscape or ecosystem level</u>.." and does not have reserve system and conservation measures, "Conserving, restoring, and managing representative natural and seminatural landscapes <u>to maintain the ecological integrity of large habitat blocks, ecosystem function, and biological diversity</u>."

42-10 F&G Code Sec. 2820 (a)(3) and (4)(A). Emphasis added.

The PCCP emphasis is on watersheds. The necessary required attention to addressing and assuring landscape or ecosystem level protection and management remain to be addressed.

The 100-foot contour line is in both ways important and insufficient to identify biomes for management purposes. It and the internal dividing lines of these two areas are likewise both at the same time too broad and too narrow. Elevation has relevance, but soils, slope, plant community, land use, and so on need to be included to meet the statutory language.

4. Oppose the County Aquatic Resources Program (CARP) component.

42-11 Under the PCCP, CARP would issue Clean Water Act and California Fish and Game Code permits. This part of the plan is novel and unproven. Granting a local agency this type of permitting power for 50 years is risky. We question that there are sufficient plans built into the PCCP for monitoring appropriate compliance with the Clean Water Act and California Fish and Game Code when issuing permits. Furthermore, what recourse is built into the PCCP if non-compliance with federal and state permit issuance happens? With the PCCP only preserving at most 50% of the County's remaining stock of vernal pool habitat, reliance on an unprecedented local issuance of permits is an unacceptable risk.

5. Placer County and its residents have far too many major, some many years pending, proposed and even recently changing plans. A time out is needed.

42-12 Accepting a so far successful apparent rush to approve changing the current Sunset Industrial Plan into a Sunset Area Plan and Placer Ranch would pre-grandfather a major development out of the PCCP. This effort is now funded by the County but as far

42-12 cont. as we know, is still in private ownership. It is a troublesome indicator of things to come for the PCCP that the County is seeking to pre-determine a potential PCCP applicant.

Pending planning efforts include:

2020 Half Cent Transportation Sales Tax Increase ballot measure that failed to pass in 2019 with a vote this time limited to Roseville, Rocklin and Lincoln. A $1.1279 billion tax increase is proposed at this time. AB 1413-A must pass the State legislature this month in order to enable a partial county voting area. This would fund and leverage funding for the $600 million 15-mile Placer Parkway and other projects. Highway expansion is a waste of public money that does not relieve congestion, and is a main cause of air pollution: https://escholarship.org/uc/item/58x8436d

Auburn State Recreation Area State and Federal plan with potential to (a) continue the second time washed out Motocross Track, including possibility of moving the track up on Castle Rock and its ridge with that has scenic views and down the Middle Fork, and (b) compromise the remote nature of the North Fork America River with increased access to upper Clementine, and a 14-mile urban trail.

42-13

Board of Supervisors Capital Improvement Planning

County Sustainability Plan

Hidden Falls Regional Park Trails Expansion Project

Placer County Government Center Master Plan Update (Dewitt Center)

Placer County Parks and Trails Master Plan

Placer Vineyards (2016 addendum to the 2006 certification adding new housing closer to high voltage power lines, and reducing park land and open space)

Sunset Area Plan/Placer Ranch Specific Plan

Winery and Farm Brewery Ordinance

42-13 cont. A moratorium on these and other new or revised plans is needed so the public can catch up with the plans and impacts on and changes in their communities, economies, and natural areas.

42-14 **6. Oppose the Western Placer County in Lieu Fee program of the PCCP.**
Placer County has a poor track record in the management of in lieu fees for affordable housing and tree preservation. The county did not adequately prepare or implement nexus studies for affordable housing and tree mitigation in lieu fees resulting in inconsistent and inadequate collection of in lieu fees for these existing programs.

7. Oppose Authority composition as proposed, define alternatives to a JPA, and how to bring alternatives about, define Authority oversight of the PCCP, provide for public appeal of local decisions to the expanded Authority, and define State and Federal PCCP oversight and revocation criteria and mechanisms.

Each oversight role needs to be defined and conducted by an unbiased entity that represents all stakeholders beyond PCWA, SPRTA, Placer County and the City of Lincoln.

42-15 The public processes of Placer County and its municipalities require improvement individually and overall. Lincoln in particular is the subject of a March 2019 state audit and its own April 2019 audit that demonstrate major insufficiencies in financials and managing growth and development.

A JPA made up only of the permittees is unacceptable for a variety of reasons. The authority needs double the proposed voting members with half the board representatives from agriculture, environmental, taxpayer, education, elderly, diversity, low income, the state and federal agencies, and so on.

Regardless if a JPA is the most expeditious way to form an authority, the alternatives to this need to be defined in detail, including the through state legislation to create what is actually needed.

8. Granting power at the local level to issue federal and state permits and collect fees is particularly problematic considering Placer County's poor track record.

42-16 How can Placer County residents be assured that the cost, funding, and implementation of the PCCP will be managed well and adequately?

42-17 **9. Costs of PCCP up to now**

42-17 cont. What is the cost so far to prepare the proposed PCC? How has it been paid? Who has paid for it?

Sincerely,

Michael Garabedian
Co-founder
916-719-7296

TAHOE CATTLEMEN'S ASSOCIATION

REPRESENTING THE STOCKGROWERS OF PLACER AND NEVADA COUNTIES

Post Office Box 1044
Lincoln, CA 95648

August 20, 2019

Placer County Community Development Resource Agency
Environmental Coordination Services
3091 County Center Drive, Suite 190
Auburn, CA 95603

VIA email: cdraecs@placer.ca.gov

Re: ***Joint Draft Environmental Impact Statement and Environmental Impact Report, Joint Draft Habitat Conservation Plan and Natural Community Conservation Plan; Placer County, California***

The Tahoe Cattlemen's Association by this letter offers its comments on the environmental impact of, and its opposition to, the Placer County Conservation Plan. Our objection is not to any particular part, but to the underlying assumptions, expectations and programmatic objectives which include the eradication of production agriculture in Placer County. In other words, the displacement of our members from their homes, the loss of their businesses, their way of life, and potentially their family heritage.

43-1

In order to meet the program's goals, virtually all privately held parcels of over 20 acres in western Placer County will have to be subjected to a conservation easement. The proposed easement language is so onerous that no farmer or rancher could long survive if called upon to perform the enumerated duties. The cost of compliance appears to stay with the easement seller in perpetuity and those costs of "maintaining" the land in conformity with the proposed easements far exceeds historic profitability of the lands. Should any ranchers be able to hold out against a forced "agricultural easement" the impact of neighboring easements could be significant.

43-2

The PCCP proposes to only take private agricultural lands from "willing sellers" yet the plan anticipates the acquisition of about 47,000 acres – almost 4 times as large as the massive Spenceville Wildlife Area across the river in Yuba County and slightly larger than the entire Napa Valley. Why will virtually all of Placer County's ranchers and farmers suddenly want to sell their family land? We have seen how government can force farmers and ranchers to become "willing" sellers. And we have seen at Spenceville how all vestiges of the past, the family homesteads and barns, memories and heritage, and agricultural use of the land, have been obliterated in the name of habitat restoration.

43-3

The PCCP was originally anticipated to take just a few years to put together under the state

and federal habitat conservation plan laws. The plan was to have segments dealing with the central valley floor, the foothills and the east side of the Sierra. We are now about 19 years into the process and the scope has been reduced to little more than the valley floor. The plan is to be implemented by a 50 year contract between some (but not all) of the state and federal agencies with oversight of environmental issues. The goal is to streamline permitting for development of an anticipated 93,000 new housing units. The development community appears to like the proposed plan because it provides a degree of certainty for their future projects; the environmental NGOs appear to like the plan because it calls for about 47,000 acres of additional "habitat" and local government appears to like the project as it will likely waive many permit requirements for infrastructure projects, will generate money for the county, promote organized growth and lots of pretty "open space." But, not everyone can win. It has been clear from the beginning of the planning that agriculture is the only thing on the menu, the only constituent group that gets no benefit, but suffers almost all of the loss.

43-3 cont.

Richard Ross has represented Tahoe Cattlemen on the biological stakeholders group since its inception and has been providing comments on the plan for 19 years. Initially the association was asked what routine permits it might like to have covered as part of the plan. There were discussions of being able to clean out around irrigation intakes at the beginning of irrigation season, and depredation permits and routine farming practices, but the agencies were unwilling to include coverage of any activities except for developers and local government. There was a suggestion by CDFG (presented more as a joke) that it "might" consider allowing a rancher to pull a down tree out of a stream if it was causing erosion. As the plan has developed, there has been no identified benefit to agriculture. Instead, it has been affirmed time and again that the plan's success depends upon virtually all agricultural parcels in the western county being subjected to the cookie cutter easement language which would effectively preclude commercial agriculture and saddle whoever sold the easement with habitat maintenance costs which would far exceed any likely income.

43-4

Over the years, the discussions at the Biological Stakeholders Working Group and apparently with the agencies have focused on such things as how many vernal pools make up a 'complex' or what habitat is best for the species being covered. The number of acres needed for mitigation of various species that might be effected appear to have been pulled out of thin air. The requirement that rice fields be maintained by tenant farmers in perpetuity (and that the county ensure the water) is based on the perceived needs of the Giant Garter Snake which has never been known to even exist in Placer County. From the standpoint of agriculture, the 19 years of discussions at the stakeholder group have been irrelevant. The presumption from the beginning has been that all of the ranches will be acquired and the parts with good habitat value for the species of the moment will be managed forever into the future by the Placer Conservation Authority.

43-5

The PCCP's function would be to eliminate the need for permits from state and federal wildlife agencies, especially as they relate to endangered species, when certain 'projects' are undertaken. The PCCP would cover specifically identified species which are currently listed as endangered and require mitigation for them into the future even if the specie is delisted. The PCCP will provide no coverage for new species listed during the 50 year PCCP contract, and for those species all current permitting activities would remain in effect. As a result, any PCCP waiver of permits and project by project negotiated mitigation would be limited.

43-6

43-7 Agricultural operations, especially in the beef industry, operate with little need for permits that would be covered by an HCP /NCCP. So, we had virtually nothing to ask for. We have hoped that the burden placed on the cattle industry would be commensurate to the threat we pose to the environment. The reality is that Placer's cattle have an extremely low impact on the environment, especially if the 'natural environment' is viewed as the pre-European period when tens of thousands of elk (a similar cloven hoofed ruminant grazer) roamed the area.

In 2013 PCCP Chapter 9 provided that:

"Over the 50-year permit term, the one-time budget for l**and acquisition and habitat restoration** would be in the range of **$1.5 billion (2008 dollars)**. This budget would enable acquisition of an approximately **50,000 acre reserve**, of which about **11,000 acres would require restoration activities.** The total includes acquisition cost of about $1.3 billion, **restoration costs of about $150 million**, and a ten percent contingency budget."

43-8

The latest version of the plan (Appendix L) has costs broken out in 67 pages of spread sheets so that the cumulative cost is hard to find, but the 2013 figures (based on 2008 dollars) have likely gone up. The anticipation is that when implemented (i.e. not 2008 dollars) BILLIONS of dollars of ranches will be acquired and taken off the tax rolls, there will be total displacement of the county's cattlemen, the annihilation of our businesses, our family homes, heritage, and hopes for the future. The food produced and dollars spent by our ranching families will no longer be available to Placer County.

43-9 With regard to the environmental impact review the agencies need to address the impact of eradicating an entire socio-economic population in the county. The group that, more than any other, has preserved the environment that the program says it wants to preserve, is targeted for elimination. In the terms of Environmental Justice, there needs to be recognition that the small, relatively less educated rural population will suffer a disproportionate impact. Those who can stay on the land as tenant farmers will suffer from the mandates that habitat for rodents and snakes will be mandated, fire threats will increase, and home improvement and maintenance will be prohibited, as anything that could result in a materialman's lien is disallowed.

Why do we think that ranchers will not continue to thrive on the land and simply comply with conservation easements? We can ask back why the plan calls for providing the water for ranchers, fencing and "maintenance" as deemed appropriate by government agents.

43-10 Initially, the PCCP anticipates spending about $1,300 per acre per year to manage the land which is anticipated to drop to about $150 / acre per year after most of the 50,000 acres is acquired. The costs vary by location. Most ranchers would be ecstatic at the prospect of making $100 per acre on grazing land. Obviously, the plan does not anticipate an economically sustainable ranch if the costs of maintaining the 'habitat' are ten times any fantasized gross income. And the income from any taken ranches will actually decline as the restrictions on agricultural activities are significant.

It is anticipated that some newly acquired land may need to be "stabilized" and that "site improvements may include demolition or repair of unsafe facilities." Many of our Placer ranch

families lived north of the Bear before WWII. Their lands were taken for Camp Beale – with a promise of return after the war. Instead, California Fish and Game acquired the surplus federal land and Spenceville Wildlife Area was born. As we all know, the old ranches were 'improved' by demolition of the farmsteads, and the heritage of many of our local families. PCCP anticipates spending nearly $14 million dollars on improvements and fences. The Plan anticipates spending another $44 million to "restore natural communities." Ostensibly, that means eradication of any vestige of agriculture and restoring some vision of pre-European or even pre-native American environment.

It is clear from the anticipated costs that the Plan anticipates a feudal system where Placer County agriculture will belong to the implementing agency and overseen by civil servants perhaps aided by some sort of sharecroppers. Serfs using a more feudal term. Were farmers and ranchers contemplated to be operating tax-paying private businesses we would not see costs like:

43-10 cont.

- Water for grazing: $2,179,748
- Fish barrier (irrigation dams?) removal: $4,524,000
- Water for rice: $2,439,898
- Agricultural Advisory Services (telling the bureaucrats how to run the confiscated ranches): $2,860,011

Most of Placer County is already controlled by the government. The government's ability to effectively manage the land it controls is being increasingly questioned. The land identified in the PCCP as the precious resource which we need to preserve is the land currently being managed by ranchers. If the ranchers are doing so well that we want to preserve what they have, WHY in the world is there a plan to take it away from the ranchers and turn it over to amateurs? Why does the government want to take the land off of the tax rolls, displace the farmers and ranchers from their occupations and homes, and cut off their family ranching heritage? The PCCP contract gives builders some freedom from agency mitigation demands for 50 years, but the elimination of our agricultural community is to be "in perpetuity" – that is forever. Placer County's ranch community does not support its own eradication and therefor opposes the Placer County Conservation Plan.

Very truly yours,



Richard M. Ross
By direction of the Board of Directors
Tahoe Cattlemen's Association

8/20/2019

Sent via email and FedEx

Placer County Community Development Resource Agency
Environmental Coordination Services
3091 County Center Drive, Suite 190
Auburn, CA 95603
cdraecs@placer.ca.gov

Re: Comments on the Draft EIS/EIR for the Placer County Conservation Plan

Dear Environmental Coordination Services:

44-1 These comments are submitted on behalf of the Center for Biological Diversity and AquAlliance (collectively "Conservation Groups") on the Draft Environmental Impact Statement/Environmental Impact Report ("EIS/EIR") for the Placer County Conservation Plan ("PCCP"). The Conservation Groups have reviewed the Draft EIS/EIR closely and are concerned that it fails to properly describe the PCCP's impacts to wildlife and habitat, while providing inadequate mitigation for those effects. The Conservation Groups urge these shortcomings be fully addressed to ensure the PCCP meets its State and Federal statutory requirements, while safeguarding the future of the Placer County ecosystems that are critical to the survival of imperiled wildlife.

The Center for Biological Diversity (the "Center") is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.6 million members and online activists throughout California and the United States. The Center has worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in Placer County.

AquAlliance is a public benefit corporation established to defend Northern California waters and to challenge threats to the hydrologic health of the northern Sacramento River

watershed to sustain family farms, communities, creeks and rivers, native flora and fauna, vernal pools and recreation.

I. The Development Allowed Under The PCCP Poses A Serious Threat To Placer County Wildlife

Western Placer County (the "County") has undergone significant population growth in the past decades, and this growth is on track to accelerate in the near future. The PCCP, if approved and implemented, would streamline the development of jobs and housing that would see Western Placer County transformed, dramatically increasing the already-stiff competition for space and resources. Despite the past decades' encroachment of sprawling suburban communities, the Western Placer County landscape still provides valuable habitat for a number of special-status plant and wildlife species. Climate change will continue to stress the ecological systems relied upon by both humans and wildlife, and the proposed PCCP will put additional pressure on these increasingly limited and vulnerable resources.

44-2 The PCCP attempts to satisfy the permitting requirements under numerous statutes and seeks approval from multiple agencies. At the heart of the PCCP's mandate is the need to ensure protections to state and federally listed species, while providing the public and decision-makers with a clear and concise analysis of the PCCP's impacts on those species and their habitat. The PCCP includes three separate components, the Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan ("HCP" or the "Plan"), the Western Placer County Aquatic Resources Plan ("CARP"), and the In-Lieu Fee Program ("ILF Program"). (DEIS/EIR at ES-1.) The Draft EIS/EIR evaluates the impacts associated with the issuance of associated permits and implementation of the PCCP. (DEIS/EIR at ES-1.) Implementation of the PCCP, specifically the HCP, would require permits for the incidental take of species listed ("Covered Species") under both the Federal Endangered Species Act ("ESA") and the California Endangered Species Act ("CESA"). (DEIS/EIR at ES-2.) As the Draft EIS/EIR is meant to o satisfy both National Environmental Policy Act ("NEPA") and California Environmental Quality Act ("CEQA"), the more rigorous of the two laws was applied in cases where the statutes differ. (DEIS/EIR at 4-1.)

The HCP covers an area of 269,118 acres in Western Placer County and portions of Sutter County (the "Plan Area"). (DEIS/EIR at ES-3.) By the end of the 50-year permit term, Western Placer County will see its number of housing units double to 250,100, while jobs will jump from 152,000 to 311,000. (HCP at 2-33.) The Plan Area will be home to approximately 358,000 people in 50 years, a three-fold increase over the 2014 population. (HCP at 2-31.) The temporal and geographic scale of the Plan requires that the utmost concern be given to the long-term survival and recovery of the Covered Species and the natural communities upon which they rely.

While the Plan may arguably be better than a project-by-project approach to endangered and threatened species conservation, granting 50-year take permits under the HCP would lock in the type of damaging development that has contributed to the imperiled status of the very natural resources the Plan seeks to protect. The population and economic growth anticipated in the general plans of the participating municipalities, Placer County and the City of Lincoln, were not drafted with a focus on either the ESA or CESA. Yet the Plan now seeks regulatory approval for 50 years of suburban growth, at a time when land use decision-making is coming under intense scrutiny throughout California and the Western U.S., as communities cope with the increasing impacts of climate change, risks of wildfire and the scarcity of natural resources. The proposed Plan ignores the need for smart growth principals that prioritize sustainable land use practices that support the health and resilience of the County's human and wildlife residents.

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II. The Plan Must Ensure Survival and Contribute to Recovery of Listed Species

Under both federal and state law, the Plan must not "appreciably reduce the likelihood of survival and recovery" of covered species in the wild. (16 U.S.C. § 1539(a)(2)(B)(iv); *see also* Cal. Fish & Game Code § 2081 [providing equivalent protections under state law].) In addition, the Plan must provide additional biological protections where feasible, such that "the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such a taking." (16 U.S.C. § 1539(a)(2)(B) (ii)); Cal. Fish & Game Code § 2081; *see also* Cal. Pub. Res. Code §§ 21002, 21002.1, 21801 [under CEQA, projects may not be approved where feasible alternatives and mitigation measures available to avoid or lessen environmental impacts].) The term "conservation plan," as used in section 1539 (Exceptions), must be consistent with the term "conservation" as described in section 1532 (Definitions), meaning "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary." (16 U.S.C. §§ 1539, 1532(3).) Regulated taking should occur only "in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved." (*Id*. at § 1532(3).)

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The Plan fails to abide by these principles, thereby undermining the survival and recovery of numerous species covered by the plan. There are feasible alternatives and mitigation measures available to ensure a more biologically robust conservation plan than the proposed Plan. The County has the opportunity – and the legal mandate under both state and federal law – to undertake such actions when feasible.

III. The Draft EIS/EIR Fails to Adequately Account for the Impacts of Climate Change

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Recent science has made clear that human-caused climate change is causing widespread harms to human society and natural systems, and climate change threats are becoming increasingly dangerous. In its 2018 *Special Report on Global Warming of 1.5°C*, the Intergovernmental Panel on Climate Change ("IPCC")—the leading international scientific body for the assessment of climate change—describes the devastating harms that would occur at 2°C warming. The report highlights the necessity of limiting warming to 1.5°C to avoid catastrophic impacts to people and life on Earth (IPCC 2018). The report also provides overwhelming evidence that climate hazards are more urgent and more severe than previously thought, and that aggressive reductions in emissions within the next decade are essential to avoid the most devastating climate change harms.

The impacts of climate change are already being felt by humans and wildlife. Thousands of studies conducted by researchers around the world have documented changes in surface, atmospheric, and oceanic temperatures; melting glaciers; diminishing snow cover; shrinking sea ice; rising sea levels; ocean acidification; and increasing atmospheric water vapor (USGCRP 2017). In California, climate change will transform our climate, resulting in impacts including, but not limited to, increased temperatures and wildfires and a reduction in snowpack and precipitation levels and water availability.

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California has taken steps through legislation and regulation to fight climate change and reduce statewide GHG emissions. Enforcement and compliance with these steps is essential to help stabilize the climate and avoid catastrophic impacts to our environment. California has a mandate under AB 32 to reach 1990 levels of GHG emissions by the year 2020, equivalent to approximately a 15 percent reduction from a business-as-usual projection. (Health & Saf. Code § 38550.) Based on the warning of the Intergovernmental panel on Climate Change and leading climate scientists, Governor Brown issued an executive order in April 2015 requiring GHG emission reduction 40 percent below 1990 levels by 2030. (Executive Order B-30-15 (2015).) The Executive Order is line with a previous Executive Order mandating the state reduce emission levels to 80 percent below 1990 levels by 2050 in order to minimize significant climate change impacts. (Executive Order S-3-05 (2005).) In enacting SB 375, the state has also recognized the critical role that land use planning plays in achieving greenhouse gas emission reductions in California.

California gives local authorities like the County significant responsibility over land use and planning decisions within their jurisdictions. But with that responsibility comes a corresponding obligation to account for the negative environmental impacts of those decisions—especially when it comes to controlling GHG emissions. As the California Air Resources Board ("CARB") explains:

> ***Essential partners in achieving California's goals to reduce GHGs, local governments have broad influence and authority over activities that contribute to significant direct and indirect GHG emissions***. Through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations many local governments have become leaders in reducing GHG emissions.

(CARB 2019.) California's Scoping Plan, which lays out the statewide blueprint for meeting the legislature's greenhouse gas reduction targets, also specifically calls out local governments as essential to meeting these targets:

> [L]ocal governments and agencies are critical leaders in reducing emissions through actions that reduce demand for electricity, transportation fuels, and natural gas, and improved natural and working lands management. . . . Over the last 60 years, development patterns have led to sprawling suburban neighborhoods, a vast highway system, growth in automobile ownership, and under-prioritization of infrastructure for public transit and active transportation. Local decisions about these policies today can establish a more sustainable built environment for the future.

44-4 cont.

(CARB 2017.) Thus, Placer County must take seriously its obligation to do its utmost to ensure that it is reducing GHG emissions and contributing to the State's achievement of its emissions reduction targets.

The development activities that are covered under the Plan will significantly undermine California's efforts to combat the climate crisis and represent a failure of the responsible agencies to incorporate climate-wise planning into long-term land use decision-making. Local land use decisions play a critical role in achieving statewide climate goals, and local jurisdictions "bear the primary burden of evaluating a land use project's impacts on greenhouse gas emissions." (*Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal.4th 204, 230.) Despite this mandate, and the Plan's recognition of the impact climate change will have on the Plan Area, the Draft EIS/EIR admits that covered activities would conflict with the emissions reductions targets set by AB 32, SB 32 and EO S-3-05. (DEIS/EIR at 4.2-27, 28.) The Plan seeks take permit coverage for activities that it acknowledges will worsen climate change, and thus increase threats to the species and habitat the Plan sets out to protect.

A. The Plan Should be Revised to Incorporate All Feasible Measures to Mitigate the Impacts of Climate Change

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The Plan fails to adopt feasible mitigation measures to account for the foreseeable effects of climate change, instead deferring action until the environmental circumstances of the Plan

area change. CEQA requires that mitigation measures be considered for significant unavoidable impacts, and that if feasible, they be adopted. (*Sierra Club v. Gilroy City Council* (1990) 222 Cal.App.3d 30, 41) CEQA's mandates are not purely procedural. It also contains an important substantive mandate: public agencies are required "to deny approval of a project with significant adverse effects when feasible alternatives or feasible mitigation measures can substantially lessen such effects." (*Ibid.*; *see also* Pub. Res. Code § 21002.) The Draft EIS/EIR identifies significant and unavoidable GHG emissions impacts associated with the development activities covered under the Plan but fails to offer mitigation measures to reduce or eliminate those impacts. Creating mitigation measures that address the type, intensity and location of the covered development activities set for the Plan Area would be a critical first step in minimizing the GHG emissions resulting from Plan implementation. The Draft EIS/EIR fails to meet CEQA's requirements for the inclusion of feasible mitigation measures and must be revised to remedy this shortcoming.

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As an initial step, the Draft EIS/EIR could look to the HCP for examples of feasible mitigation measures. When discussing the Plan's approach to foreseeable changes in the environmental circumstances of the Plan Area, as is required of HCPs, the Plan sets forth actions that will be taken if certain temperature increase thresholds are met. (HCP at 10-17.) The Plan states that any detectable change of 0.5 degrees Fahrenheit or greater over a running 10-year average will constituted a changed circumstance and trigger responsive measures. (HCP at 10-19.) The Plan's responsive measures include actions to identify species that are particularly vulnerable to climate change, more intensive monitoring programs, and changing ecological models to better address the needs of Covered Species, among other actions. (HCP at 10-19.) The Plan cites 2012 projections of California's annual mean temperature rising by as much at 5.4 degrees Fahrenheit by mid-century, which is just over halfway into the 50-year permit term. Based on these projections, which are likely underestimates given the advanced warming that has been documented since 2012 (IPCC 2018), the need for responsive measures goes beyond foreseeable, and becomes a foregone conclusion. The responsive measures represent feasible mitigation measures that would help mitigate the climate change impacts to Covered Species, and therefore must be adopted under CEQA. (*Sierra Club v. Gilroy City Council*, 222 Cal.App.3d at 41.) Instead of waiting for the seemingly inevitable impacts of climate change to trigger action, the Plan must require proactive conservation measures to safeguard Covered Species and natural communities, starting with significantly decreasing the GHG emissions allowed under the Plan's covered development activities.

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IV. The Draft EIS/EIR Fails to Analyze Feasible Alternatives that Would Significantly Lessen Plan Impacts

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The PCCP is a comprehensive conservation project that will have far-reaching consequences for the location, timing and intensity of development activities on over 260,000 acres of Western Placer County. Immense resources have already been committed to drafting the

44-8 Plan, which in many respects is thorough and detailed. It is puzzling then, that the Plan only considers two alternatives in addition to the proposed action and the no-project alternative.

44-9 The screening process for alternatives outlined in the Draft EIS/EIR eliminated the potential for serious consideration of a project with a significantly reduced development footprint, though such an alternative was never explicitly described. (see DEIS/EIR 2.2 Alternatives Screening.) Notably, the "Expanded Reserve Acquisition Area" alternative was eliminated from consideration for failing to meet project objectives. (DEIS/EIR at 2-10.) The Draft EIS/EIR does not identify which project objective the Expanded Reserve alternative ran afoul. Perhaps an expanded reserve acquisition plan would have limited the Plan's ability to allow "appropriate and compatible growth in accordance with applicable laws." (DEIS/EIR at 2-6.) The Plan and Draft EIS/EIR provide the quoted language in a broad description of the project objectives, as well as for the first-tier screening criteria (DEIS/EIR at 2-6), but the allowance of growth is not included in specific project objectives or in the statement of need (DEIS/EIR at 1-8; HCP at 1-7). The Draft EIS/EIR explains that the screening criteria assume that "allowing appropriate and compatible growth" includes "sufficient land area for development under the general plans of the City of Lincoln and Placer County." (DEIS/EIR at 2-6 referencing HCP Appendix M.) The Growth Scenario Memo acknowledges its projections may change, as it is "based on the assumption that a high quality of life continues to attract economic activity and new residents and that appropriate infrastructure and public facilities development occurs to accommodate growth. (HCP Appendix M at 7-8.) The numerous assumptions underlying the growth projections create significant uncertainty as to how much development will actually occur in Western Placer County. Therefore, the HCP should be revised to consider alternatives that vary the area committed to development, and the scale of covered activities allowed therein.

44-10 Additionally, confining the Plan's alternative analysis by the projected growth provided in the Growth Scenario Memo improperly limits the Plan's ability to assess a reasonable range of feasible alternatives. The project objective of meeting regional growth projections, particularly such significant population growth, undermines a realistic analysis of Plan alternatives. The CEQA process "is not designed to freeze the ultimate proposal in the precise mold of the initial project," it must allow for revision based on unforeseen revelations during the investigative process. (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 199.) Using a narrow project objective as a starting point for a wider proposal, one of large size in this case, frustrates CEQA's public information mandate. (*Id*. at 199-200.) "[A] potential alternative should not be excluded from consideration merely because it would impede to some degree the attainment of the project objectives, or would be more costly." (*Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal.App.4th 1437, 1456-57.) The Plan should be revised to consider alternatives that reduce the permanent, direct and indirect impacts of land conversion by shrinking the amount of land that can be developed under the plan, as well as decreasing the intensity of development permitted under the Plan.

V. The Plan Undermines the Value of Preserve Lands by Combining Conservation Uses and Recreational Uses

The immense growth the proposed Plan seeks to accommodate limits the available acreage to adequately mitigate the Plan's significant environmental impacts. The Plan approaches this issue by combining conservation and preservation land uses with agriculture and recreational uses. (see HCP at 5-3.) Permittee activities within the Plan area are governed by existing land use programs, particularly general plan policies and requirements. (HCP at 2-1.) The Placer County General Plan requires 10 acres of improved parkland per 1,000 population, which shall be comprised of 5 acres of active parkland and 5 acres of passive recreation area or open space. (HCP at 2-11.) The Plan anticipates 246,800 residents in unincorporated Plan Area A at the end of the 50-year permit, 341,500 if the Non-Participating Cities are included. (HCP App. M at 11.) At full build out this policy could require up to 3,415 acres of improved parkland.

44-11 Critically, General Plan Policy 5.A.4 directs certain open space types to be considered toward meeting the passive parkland total, these areas include protected riparian corridors and stream environmental zones, protected wildlife corridors, protected woodland areas and sensitive habitat areas for rare, threatened or endangered species. (HCP at 2-11.) Neither the Plan, nor the Placer County General Plan, defines what recreational uses are permitted within passive parkland. Opening up to 1,700 acres of these sensitive habitat areas to recreational uses poses the risk of significant impacts to the quality of those lands, and their conservation value within the context of the Plan. The Plan's failure to identify and analyze the potential impacts of recreational uses within passive parkland violates CEQA. (Guidelines § 15126.2(a) [CEQA requires that an EIR "analyze any significant environmental effects the project might cause by bringing development and people into the affected area"].) The Plan should clarify where such passive parkland will be located, and whether or not passive parkland will be additional to, or included in, the totals for conserved habitat upon which the take permits will rely. The massive increase in Western Placer population will not be confined to the growth areas, the Plan must fully account for the impacts that recreational use will have on covered natural communities and Covered Species.

VI. The Analysis of Impacts to Oak Woodlands is Inadequate

California has lost over a million acres of oak woodlands since 1950 (Bolsinger 1988),

44-12 and at least another 6,210 acres of oak woodlands throughout Placer County will be impacted by the Plan's implementation. This is alarming because oak woodlands and other wooded areas, such as pine forests and riparian woodlands, provide valuable habitat and connectivity for a wide variety of species.[1] Oak woodlands "provide important habitat to numerous common and special-status wildlife species supporting some 5,000 species of insects, over half of the state's 662

[1] Bernhardt 2001; Jedlicka 2014; Lawrence 2011; Napa County 2005; Tietje 2015

species of terrestrial vertebrates, and several thousand plant taxa." (CDFW 2015a, McCreary 2009)

Not only do oak woodlands provide important habitat for numerous species, they also play a critical role in maintaining important water resources (*i.e.*, for drinking water and agriculture). Reduced forest and woodland cover has been shown to result in increased runoff (*i.e*., pollutants such as pesticides and fertilizers flowing into groundwater and surface waterways), erosion, sedimentation, and water temperatures; changes in channel morphology; decreased soil retention and fertility; and decreased terrestrial and aquatic biodiversity.[2] In addition, forests and woodlands are important carbon sinks that can help moderate the impacts of climate change (Padilla 2010; Pan 2011), and some researchers argue that at a global scale, trees are linked to increased precipitation and water availability (Ellison 2012).

If compensatory mitigation includes enhanced or restored habitats, higher mitigation ratios coupled with extended years of effective monitoring and adaptive management strategies are needed to improve chances of establishing equivalent ecological function as the lost habitat.[3] Given the importance of oak woodlands to numerous species and ecosystem function, mitigation ratios should be, at a minimum, 3:1 for preserved oak woodlands and 5:1 for restored/enhanced oak woodlands. Santa Barbara County's Deciduous Oak Tree Protection and Regeneration Ordinance requires a 15:1 mitigation ratio (via replacement planting or protection of naturally occurring oaks between six inches and six feet tall) for removed oak trees. (County of Santa Barbara 2003) With one third of America's plant and animal species vulnerable to impacts from human activity and one fifth at risk of extinction (Stein 2018), it is crucial that strategies to prevent further degradation and loss of biodiversity are explicit and scientifically sound.

44-12 cont.

The proposed HCP simply does not do enough to protect oak woodland habitat. The Plan would result in the direct loss of 6,210 acres of oak woodland and 140 acres of valley oak woodland. (DEIS/EIR at 4.3-44.) The HCP also notes up to 6,000 acres of oak woodland and valley oak woodland that may be subject to indirect effects due to increased human activity, subdivisions, in the foothills. (HCP at 4-66.) The HCP would protect 10,110 acres of oak woodlands, and restore 100 acres; while preserving 190 acres of valley oak woodlands and restoring 225 acres. (HCP at 5-32.) The amount of mitigation, combining preservation and restoration, is woefully insufficient to offset the impacts to oak woodland communities. The Plan is also unclear what type of oak woodland will be preserved, as it only lists the types of habitat that fall within the category of oak woodlands. (HCP at 5-32.) Describing the proportions of each of the preserved habitats is vital for a clear understanding of the ecological value conserved, as

[2] Brown and Krygier 1970; Pess et al. 2002; Dahlgren et al. 2003; Houlahan and Findlay 2004; Opperman et al. 2005; Lohse et al. 2008; Elliot 2010; Lawrence et al. 2011; Moyle et al. 2011; Zhang and Hiscock 2011; Jedlicka et al. 2014

[3] Sudol & Ambrose 2002; Matthews & Endress 2008; Stein et al. 2018

canopy density less than 5% is classified as oak savanna but is apparently still considered oak woodlands for the purposes of the HCP. The HCP must be revised to better describe the type, location and quantity of habitat that will be preserved, so that the true ecological value can be assessed against the value of the areas lost to development.

44-12 cont.

The Draft EIS/EIR provides an inadequately brief description of the impacts to oak woodlands, before concluding that the impacts will be less than significant after the mitigation measures are implemented. As noted above, a less than 2:1 mitigation ratio is insufficient, the HCP should be revised to provide no less than 3:1 mitigation when preservation is utilized, and no less than 5:1 mitigation when restoration is done. Perhaps most troubling is the fact the Draft EIS/EIR fails to discuss indirect effects to oak woodlands in the foothill portion of the Plan Area. (HCP at 4-66.) There is no discussion of the intensity of the impacts from development in the foothills, nor is there a quantification of the ecological loss associated with the effects, so that mitigation might be determined. This glaring oversight deprives the public of a full understanding of the Plan's impacts, failing one of CEQA's key mandates. (*City of Santee v. Cnty. of San Diego* (1989) 214 Cal.App.3d 1438, 1454-55.) This failure renders the oak woodlands impact analysis incomplete, therefore invalidating the less-than-significant finding. The HCP and Draft EIS/EIR must be revised to remedy this failure.

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VII. Riparian Habitat Should Receive Additional Protections

It is estimated that 90-95% of historic riparian habitat in the state has been lost; Southern California and the Central Valley have already lost over 97% and 95% of its historic riparian systems, respectively. (Bowler 1989; Riparian Habitat Joint Venture 2009) Using 2002 land cover data from CalFire, the Riparian Habitat Joint Venture estimated that riparian vegetation makes up less than 0.5% of California's total land area at about 360,000 acres. (Riparian Habitat Joint Venture 2004) This is alarming because riparian habitats perform a number of biological and physical functions that benefit wildlife, plants, and humans, and loss of what little is left will have severe, harmful impacts on special-status species, overall biodiversity, and ecosystem function.

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Riparian habitats are transitional areas between terrestrial and aquatic habitats, and they support numerous special-status flora and fauna and maintain a high level of biodiversity. In fact, 60% of amphibian species, 16% of reptiles, 34% of birds and 12% of mammals in the Pacific Coast ecoregion depend on riparian-stream systems for survival. (Kelsey & West 1998) Many species, including mountain lions and bobcats, often use riparian areas and natural ridgelines as migration corridors or foraging habitat.[4] Given the potentially threatened status of mountain lions in Southern California and along the Central Coast (Yap 2019), impacts to migration corridors like riparian areas should be more closely considered. Additionally, fish rely on healthy upland

[4] Dickson 2005; Hilty & Merenlender 2004; Jennings & Lewison 2013; Jennings & Zeller 2017.

areas to influence suitable spawning habitat (Lohse 2008), and over-aggressive removal of riparian areas have been identified as a major driver of declines in freshwater and anadromous fish. (*e.g.*, Stillwater Sciences 2002; Lohse 2008; Moyle 2011) Loss of biodiversity due to lack of habitat contributes to ecosystem degradation, which will diminish a multitude of ecosystem functions and services in the long-term.

As mentioned previously, reduced forest and woodland cover, including in riparian areas, has been shown to result in increased runoff (*i.e.*, pollutants such as pesticides and fertilizers flowing into groundwater and surface waterways), erosion, sedimentation, and water temperatures; changes in channel morphology; decreased soil retention and fertility; and decreased terrestrial and aquatic biodiversity.[5] In addition, forests and woodlands are important carbon sinks that can help moderate the impacts of climate change (Padilla 2010; Pan 2011), and some researchers argue that at a global scale, trees are linked to increased precipitation and water availability. (Ellison 2012) Thus, to preserve the state's valuable biodiversity in these habitats as well as water quality, it is important to preserve existing riparian areas as well as develop and implement effective buffer widths from streams and wetlands informed by the best available science.

44-14 cont.

If compensatory mitigation includes enhanced or restored habitats, higher mitigation ratios coupled with extended years of effective monitoring and adaptive management strategies are needed to improve chances of establishing equivalent ecological function as the lost habitat.[6] With one third of America's plant and animal species vulnerable to impacts from human activity and one fifth at risk of extinction (Stein 2018), it is crucial that strategies to prevent further degradation and loss of biodiversity are explicit and scientifically sound.

Given the importance of riparian habitats to numerous species and ecosystem function, it is crucial that the Plan maximize protections for such areas and avoid impacts wherever possible. While the Plan provides significant mitigation for the riverine/riparian habitat that is permanently impacted, there is a discrepancy between the HCP and Draft EIS/EIR with regards to the exact amount impacted. The Draft EIS/EIR states that 490 acres of riverine/riparian complex will be lost, 165 acres riverine and 375 acres riparian. (DEIS/EIR at 4.3-31.) While this breakdown doesn't add up, it appears from the HCP Table 5-5 (HCP at 5-63) that only 115 acres of riverine will be impacted. This discrepancy should be cleared up so that the reader has a clear understanding of the Plan's details. (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 655 ["Only through an accurate view of the project may the public and interested parties and public agencies balance the proposed project's benefits against its environmental cost, consider appropriate mitigation measures, assess the advantages of

[5] Brown and Krygier 1970; Pess 2002; Dahlgren 2003; Houlahan and Findlay 2004; Opperman 2005; Lohse 2008; Elliot 2010; Lawrence 2011; Moyle 2011; Zhang and Hiscock 2011; Jedlicka 2014

[6] Sudol & Ambrose 2002; Matthews & Endress 2008; Stein 2018

44-14 cont. terminating the proposal and properly weigh other alternatives"].) The amount of mitigation fails to fully address the substantial impacts to riparian/riverine habitat.

VIII. Wetlands Preservation Should be Increased

Today, with climate change affecting California's water supply, there is renewed interest in protecting and maximizing the state's water supplies. Larger buffer zones along jurisdictional streams and wetlands would provide more stream bank stabilization, water quality protection, groundwater recharge, and flood control both locally and throughout the watershed.[7] They would also protect communities from impacts due to climate change by buffering them from storms, minimizing impacts of floods, and providing water storage during drought. (Environmental Law Institute 2008) Thus, the Plan should implement larger setbacks from jurisdictional streams and wetlands based on the best available science, especially if these habitats are located within designated critical habitat, support or have the potential to support special-status and/or sensitive species, or if they provide important habitat connectivity or linkages. Specifically, larger buffers connecting wetlands with upland habitats are required to effectively support sensitive species, such as state- and federally-protected California red-legged frogs (*Rana draytonii*) and western pond turtles (*Actinemys marmorata*).[8]

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IX. The Analysis of Plan Impacts on Covered Species is Inadequate

A. The HCP and Draft EIS/EIR Inaccurately Describe Effects on Western Pond Turtle

The Species Account for the western pond turtle in the HCP states the "U.S. Fish and Wildlife Service was petitioned to list the species under the Endangered Species Act in 1992 but the petition was rejected." (HCP Western Pond Turtle Species Account at 1.) This account ignores the current status of the turtle's potential for federal protections. The Center for Biological Diversity petitioned the Service to protect the western pond turtle under the Endangered Species Act in 2012 and the Service granted a positive 90-day finding for the turtle in 2015, determining that an Endangered Species Act listing may be warranted. (80 Fed. Reg. 19259 (April 10, 2015).)

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The Draft EIS/EIR fails to provide an accurate accounting of likely permanent and temporary impacts to the western pond turtle under any of the alternatives, because the potential impacts to the turtle's upland habitat are vastly underestimated in the HCP and Draft EIS/EIR. The Plan says that the habitat model for the western pond turtle assigns upland habitat within 150 feet of aquatic habitat for the turtle, with no explanation for the source of that number. (HCP at

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[7] Nieswand 1990; Norris 1993; Whipple Jr. 1993; Sabater 2000; Lovell and Sullivan 2006
[8] Semlitsch & Bodie 2003; Trenham & Shaffer 2005; Cushman 2006; Fellers & Kleeman 2007

44-17 cont.

4-84.) In fact, the western pond turtle uses upland habitat well beyond 150 feet from aquatic habitats, and the HCP itself acknowledges that there are reports of the turtle using upland habitats much further from aquatic habitat, up to 1,391 feet. (HCP at 4-84.) Yet, the HCP and the considerations of habitat impacts in the Draft EIS/EIR look only to impacts to habitat found within 150 feet of water bodies, thus underestimating the potential for impacts to the turtle.

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Western pond turtles use upland habitats for nesting, overwintering, and migration, spending as much as seven months in terrestrial habitat. (Holland 1994; Zaragoza 2015) Western pond turtles are known to nest as far as 1,312 feet from aquatic habitat and can be found overwintering up to 1640 feet from aquatic habitat, as well as migrating over 3,280 feet (1 km). (Holland 1994; Zaragoza 2015) As western pond turtles are wary and secretive, they are also likely to be disturbed by people at distances beyond the 150 foot upland habitat considered in the HCP and Draft EIS/EIR. Bury and Germano (2008) found that "most individuals rapidly depart basking sites when disturbed by either visual or auditory stimuli of people (e.g., waving an arm, shouting) at distances of over 100 m [(328 feet)." The HCP and Draft EIS/EIR did not consider the impact of this type of disturbance on western pond turtles.

B. The HCP and Draft EIS/EIR Inaccurately Describe Effects on Foothill Yellow-Legged Frog

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The presentation of information on the foothill yellow-legged frog ("FYLF") is confusing in the Draft EIS/EIR, as in Table 3.3-4 the Draft EIS/EIR lists the species twice, and each entry contains differing information about its state status, known occurrences, and habitat and distribution. (DEIS/EIR at 3.3-66.) It is possible that one of these entries was intended to be for the California red-legged frog ("CRLF"), however neither of the entries would have the correct protection status for the CRLF. This sloppiness and error makes it difficult to trust the thoroughness of the Draft EIS/EIR.

44-20

The HCP and Draft EIS/EIR underestimate the impacts to the FYLF because they look only at impacts to the riverine environment. (HCP at 4-85 ["Because the year-round habitat is constrained to the riverine environment, foothill yellow-legged frog is not dependent on movement to upland habitats, so removal of upland habitat would have minimal direct effect"].) This ignores available scientific information about the life history of FYLF. (Hayes 2016 at 11-13) While FYLF are rarely encountered far from permanent water during breeding season and summer, during the winter FYLF have been observed in abandoned rodent burrows and under logs as far as 100 m from streams. (Zeiner 1988) In addition, juvenile FYLF have been found up to 600 feet upslope from their natal stream channel. (Twitty 1967) Because the HCP and Draft EIS/EIR ignored the use of upland habitats by FYLF they underestimate the amount of impact to the species.

C. The HCP and Draft EIS/EIR Inaccurately Describe Effects on California Red-Legged Frog

While the HCP and Draft EIS/EIR considered a broader range of potential upland habitat for the California red-legged frog ("CRLF") than for the western pond turtle or foothill yellow-legged frog, their consideration of the potential for CRLF to move within a 1-mile radius from all potential breeding sites still underestimates what is known from the available scientific information for this species. Studies compiled in the Final Critical Habitat Designation for CRLF show that the frog can disperse up to 1.7 miles with the majority of California red-legged frogs in one study dispersing within a 1,640 foot buffer. (75 FR 12816 at 12817 (March 17, 2010).) By underestimating the amount of potential upland habitat the HCP and Draft EIS/EIR again fail to properly consider the potential for impacts to a sensitive species.

44-21

X. The Draft EIS/EIR's Analysis of Impacts to Habitat Connectivity is Inadequate

The Draft EIS/EIR fails to adequately assess potential impacts to habitat connectivity and wildlife movement as well as include measures to minimize such impacts at the local and regional scale. Habitat connectivity is vital for wildlife movement and biodiversity conservation. Restrictions on movement and dispersal can negatively affect animals' behavior, movement patterns, reproductive success, and physiological state, which can lead to significant impacts on individual wildlife, populations, communities, and landscapes.[9] Individuals can die off, populations can become isolated, sensitive species can become locally extinct, and important ecological processes like plant pollination and nutrient cycling can be lost. In addition, connectivity between high quality habitat areas in heterogeneous landscapes is important to allow for range shifts and species migrations as climate changes. (Heller & Zavaleta 2009; Cushman 2013; Krosby 2018) Loss of wildlife connectivity decreases biodiversity and degrades ecosystems.

44-22

The Draft EIS/EIR's conclusion that impacts to wildlife connectivity will be less than significant is not supported by substantial evidence. (Pub. Res. Code § 21082.2; CEQA Guidelines § 15384.) The Draft EIS/EIR is vague when discussing potential impacts to connectivity and offers no concrete support for its conclusion that Plan impacts will be less than significant. (DEIS/EIR at 1.3-104 [stating that residential development "could take place," and that because most of the land cover in an area is protected as part of Folsom Lake State Recreation Area, it "will likely remain" suitable for wildlife movement].) The Draft EIS/EIR also ignores the potential impacts of rural residential development in the 24,000-acre Reserve Acquisition Area ("RAA"), which would directly affect 972 acres due to "large homesteads and extensive road access need to serve very low-density growth." (HCP at 4-12.) The HCP will

[9] Ceia-Hasse 2018; Cushman 2006; Haddad 2015; Trombulak & Frissell 2000; van der Ree 2011

allow significant blocks of development over much of the Plan Area, making the quality of the RAA crucial to the wildlife that will lose existing habitat to covered development. The Draft EIS/EIR must fully identify and properly analyze all Plan impacts on wildlife connectivity, in all parts of the Plan Area.

44-22 cont.

XI. The Draft EIS/EIR Lacks Clarity in its Assessment of the Plan's Impacts to Vernal Pool Complex Natural Communities

The DEIS/EIR fails to accurate describe the extent of vernal pool impacts allowed under the Plan, provides insufficient mitigation for impacts to Vernal Pool Complex ("VPC"), and overestimates the efficacy of proposed mitigation. Vernal pool habitat has been decreasing at an alarming rate in California, despite the release in 2005 of the USFWS Vernal Pool Recovery Plan. In the seven years after recovery plan was released, 47,306 acres were lost. (Witham 2014) The Plan would allow permanent impacts on up to 12,550 acres of VPC natural communities within the plan area. (DEIS/EIR at 4.3-35.) While the Plan states that up to 20,000 acres of VPC will be conserved, 17,000 acres protected and 3,000 acres conserved, the DEIS/EIR provides an unclear description of how restoration might impact existing VPC. (DEIS/EIR at 4.3-37.) Given the ecological value of VPC, it is vital that the Plan's protection and management of VPC is clearly presented to the public and the agencies responsible for its enforcement.

44-23

The Plan should implement a higher multiplier when determining the amount of preservation required as mitigation for the VPC acreage permanently impacted by covered activities. In addition to the lack of clarity around the timing, location, type and amount of mitigation, the total acreage of VPC conserved is immensely insufficient compared to the acreage experiencing permanent impacts. The Plan, if fully and successfully implemented, would provide less than a 2:1 mitigation ratio, this is far less than ratios required by other HCPs covering vernal pool habitat. (San Diego HCP 2017) The PCCP should be revised to require no less than a 4:1 mitigation ratio for VPC habitat that is directly and indirectly impacted by covered activities and up to 8:1 for VPC when listed species of limited distribution are present. (*see* San Diego HCP 2017)

44-24

The restoration of vernal pools to areas of historic presence is difficult to achieve, while the creation of vernal pools and constituent habitats via the conversion of other land cover types is even more challenging. The Plan outlines an objective of restoring and/or creating vernal pools on as much at 6,000 acres of land currently mapped as VPC. (HCP at 5-125.) From the outset, it is unclear how these 6,000 acres factor into the 20,000 acre total that will be conserved over the life of the Plan. Furthermore, the conservation measure that dictates VPC restoration/creation (CM3 VPCG-1) doesn't indicate where the restoration will occur, nor does it specify the timing of the restoration actions. (HCP at 5-125.) This enhancement work would be directed toward VPC areas with medium and low existing vernal pool densities, so as to avoid interrupting the hydrologic profile of established vernal pools. (DEIS/EIR at 4.3-36.) Given the challenges

associated with establishing vernal pools, the potential risks to ground-nesting pollinators and upland vegetation communities, and the hydrological changes that will come with climate change, further analysis is warranted. Protection of existing VPC lands is far-and-away the preferred method to mitigate the impacts of development and land conversion. Creating new vernal pools is resource intensive and has a low probability of success. (Windmiller 2007) Instead of trying to recreate the high-density VPC habitat that will be affected by covered activities, the Plan should adjust the Valley Potential Future Growth area to avoid destroying naturally occurring, high-density VPC.

44-24 cont.

XII. The Plan Must Ensure Adequate Funding to Carry Out the Plan's Conservation Measures and Acquisition Commitments

The PCCP would have a tremendous influence on both the economic and ecological future of Western Placer County. A plan of this geographic and temporal scale requires immense sources of funding, as demonstrated by the overall Plan cost estimate being over one billion dollars. (HCP at 9-26.) The HCP must demonstrate that "the applicant will ensure that adequate funding for the plan will be provided." (16 U.S.C. 1539(a)(2)(B)(iii); *see also* Cal. Fish & Game Code § 2080.) Assured funding is critical to the success of the conservation strategy and is a mandatory requirement of any HCP. (*See, e.g., National Wildlife Federation v. Babbitt* (E.D.Cal. 2000) 128 F.Supp.2d 1274.) Securing adequate funding has proven difficult for other largescale HCPs, as the Riverside County MSHCP has been plagued by financial shortcomings, as outlined in a recent grand jury report. (Riverside Grand Jury Report 2019) Given these potential challenges, it is crucial that funding also exists to support adequate oversight by responsible agencies. Land acquisition makes up a substantial portion of Plan costs, and the variability and potential fluctuation of property values make capital projections difficult. The Plan assesses property values within the RAA based on averages across different parcel size ranges. (HCP at 9-6.) It is critical that the Plan account, to the extent possible, for market fluctuations, erring on the side of caution when estimating acquisition costs to ensure resilient funding sources over the life of the Plan.

44-25

XIII. Conclusion

Thank you for the opportunity to submit comments on the Draft EIS/EIR for the Placer County Conservation Plan. The PCCP, in its current form, will be unable to adequately offset the full extent of development impacts proposed under the take permit applications. The PCCP should be revised to decrease the amount of development allowed in the Plan Area. The Conservation Groups urge the Service, Placer County and Plan Permittees to address the concerns raised in these comments, and to incorporate additional impact analysis and mitigation into subsequent drafts of the PCCP and related impact analyses.

44-26

44-27

Given the possibility that the Conservation Groups will be required to pursue appropriate legal remedies in order to ensure enforcement of CEQA, we would like to remind the County of its duty to maintain and preserve all documents and communications that may constitute part of the "administrative record." As you may know, the administrative record encompasses any and all documents and communications which relate to any and all actions taken by the County with respect to the Project, and includes "pretty much everything that ever came near a proposed [project] or [] the agency's compliance with CEQA . . . ." (*County of Orange v. Superior Court* (2003) 113 Cal.App.4th 1, 8.) The administrative record further contains all correspondence, emails, and text messages sent to or received by the County's representatives or employees, which relate to the PCCP and Draft EIS/EIR, including any correspondence, emails, and text messages sent between the County's representatives or employees and the project proponent's representatives or employees. Maintenance and preservation of the administrative record requires that, *inter alia*, the County (1) suspend all data destruction policies; and (2) preserve all relevant hardware unless an exact replica of each file is made.

Please add the Conservation Groups to your notice list for all future updates to the PCCP and the EIS/EIR and do not hesitate to contact the Conservation Groups with any questions at the number or email listed below.

Sincerely,



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COUNTY OF PLACER

PLACER COUNTY PLANNING COMMISSION

PUBLIC HEARING

IN RE: PLACER COUNTY CONSERVATION PROGRAM

AUBURN, CALIFORNIA

THURSDAY, AUGUST 8, 2019

REPORTED BY: CARRIE HEWERDINE, RDR, CSR NO. 4579

FILE NO.: 20314

COUNTY OF PLACER

PLACER COUNTY PLANNING COMMISSION

PUBLIC HEARING

IN RE: PLACER COUNTY CONSERVATION PROGRAM

Proceedings taken at the County of Placer, Placer County Conservation Program Hearing, 3901 County Center Drive, Auburn, before the Placer County Planning Commission, commencing at 10:00 a.m., Thursday, August 8, 2019, before Carrie Hewerdine, RDR, CSR No. 4579.

A P P E A R A N C E S

PLACER COUNTY PLANNING COMMISSION:

JEFFREY MOSS, Chairman

LARRY SEVISON, Vice Chair

NATHAN HERZOG, Commissioner

RICHARD JOHNSON, Commissioner

WAYNE NADER, Commissioner

SUE COLBERT, Clerk to the Commission

CLAYTON COOK, County Counsel

E.J. IVALDI, Planning Director

I N D E X

PROCEEDINGS	PAGE
August 8, 2019	5
Pledge of Allegiance	5
Agenda Item: Placer County Conservation Program	6

PUBLIC COMMENTS	PAGE
JANE WURST (phonetic)	7
JEAN PIETTE (phonetic)	11
AMBER BECKLER (phonetic)	13
MIKE CARIBBEAN (phonetic)	15

COMMISSIONER QUESTIONS:	PAGE
COMMISSIONER NADER	18
COMMISSIONER JOHNSON	27

AUBURN, CALIFORNIA,

THURSDAY, AUGUST 8, 2019 AT 10:00 A.M.

- - -

CHAIRMAN MOSS: Good morning, everybody.

Welcome to this August 8th Planning Commission Meeting for Placer County.

If you would all please stand and join me in the salute of the flag.

(Pledge of Allegiance)

CHAIRMAN MOSS: Thank you.

Roll call, please, Sue.

THE CLERK: Mr. Herzog?

COMMISSIONER HERZOG: Here.

THE CLERK: Mr. Johnson?

COMMISSIONER JOHNSON: Here.

THE CLERK: Mr. Nader?

COMMISSIONER NADER: Here.

THE CLERK: Mr. Sevison?

COMMISSIONER SEVISON: Here.

THE CLERK: Mr. Moss?

CHAIRMAN MOSS: Here.

THE CLERK: Thank you.

(Other agenda items heard, not reported herein)

* * * * * *

(Proceedings continued and were reported as follows)

CHAIRMAN MOSS: Please call our 10:05 agenda item, the Placer County Conservation Program.

Real quick, if we could, how many people are here that would like to speak on this when time is available?

I'm not seeing a ton of hands, so we won't worry about the sign-up sheet.

Comments will be timed to three minutes.

For those of you who don't know, when you see the yellow light go on, we've got one minute left to try to wrap up your thoughts and finish up.

Other than that, we do have a court reporter here, so please keep that in that mind. If you get excited or emotional, don't start talking faster than she can keep up.

And with that, it's all yours.

(Presentations reported but not transcribed herein)

MR. McKINZIE: So with that, I will turn it back to you, Mr. Chairman, and advise to open the public comments for the public to address the Commission on the Environmental Impact Report.

CHAIRMAN MOSS: Thank you.

MR. McKINZIE: Thank you.

CHAIRMAN MOSS: How many people are

45

wanting to speak on this?

Okay. We will have the timer going. I think most of you know how this works, but three minutes. At two minutes, you will get a yellow light. It will remind you to plan to wrap your thoughts up and finish up.

These comments are on the environmental document only, not on the project itself.

With that, we'll open up for public comment.

MR. COOK: Chairman Moss, if I could also say one thing.

The staff presentation went over comments on the EIR, and there's been a couple of slides on it. I just wanted to clarify that if the Commissioners want to comment during this period, they are allowed to as well.

This item will come back before the Commission for its recommendation to the Board, but today, if you choose to comment, you can as well.

CHAIRMAN MOSS: Thank you.

JANE WURST: My name is Jane Wurst, and -- my husband, Kirk, and I are 45-year residents of the North Auburn. We are part of the grassroots organization, Protect Rural Placer.

45-1

45

The Placer County Conservation Program has many merits, but we do have some concerns.

The PCC [sic] maps identify the following properties in North Auburn as existing PCC reserves: Hidden Falls Regional Park, the Taylor, Kotomyan, Harvego, and Liberty Ranch Preserves.

Hidden Falls is a recreational park with 30 miles of multiuse trails and draws large crowds. It has some questionable conservation practices.

Racoon Creek is identified -- an identified salmon creek, yet there are horses, dogs, and people in that creek, year round. Animals that are native to the area that are deemed to be a nuance or a threat to hikers are killed, not trapped and relocated.

45-1 cont.

The well has been dry since a year ago June, which points to the depleting effect of high-volume water use on the aquifers.

When the Taylor, Kotomyan, and Harvego Preserves were purchased, the sellers and the community were led to believe that it was for conservation.

We now know that all along, they were purchased for recreation and the expansion of the Hidden Falls Park.

45

CHAIRMAN MOSS: Jane --

JANE WURST: Here are --

CHAIRMAN MOSS: -- do you want to go ahead and touch base -- are we going to tie this in?

JANE WURST: This is, right now.

CHAIRMAN MOSS: Okay.

JANE WURST: Here it is for --

CHAIRMAN MOSS: Thank you.

JANE WURST: -- these folks.

Here are our concerns: If the P -- PCCP aligns with and has their name on these preserves, we will lose our trust in the PCCP as a conservation program. The program's credibility and integrity will be questioned. 45-1 cont.

The PCCP, along with the Parks Department and Supervisors will also be responsible for putting the residents at greater risk of wildfires by allowing thousands of people into an area that is a wildlife urban interface. 45-2

The PCCP will be contributing to the dire home and fire insurance crisis. Insurance companies know that Hidden Falls will not cover homes near properties with public access.

When did conservation groups decide they were in the urban recreation business? 45-3

45

When did they decide that catering to the demands of those that feel they are entitled to more trails is more important than the protection and preservation of the environment?

Supervisor Weygandt did not mention recreation in his editorial about the PCCP, a week ago. In fact, he stated that the PCCP will conserve the natural and agricultural heritage that we are so fortunate to enjoy. 45-4

Can we trust those words that this will remain the mission and actual practice of the PCCP, or will we see urban recreation on their reserves?

You can't have it all. The only way to maintain the balance of nature and ensure public safety is through the current practice of docent-led hikes and educational opportunities on the preserves in North Auburn.

CHAIRMAN MOSS: I think we're out of time.

JANE WURST: I have two sentences.

We hope that the PCCP will make wise and responsible decisions that demonstrate that conservation is their mission or is a worthy goal in and of itself. 45-5

As Placer County residents, if we are

45-5 cont.

supposed to trust the PCCP to oversee conservation on thousands of acres, then we ask that you have the courage to speak up against open public access on the Taylor, Kotomyan, and Harvego preserves.

Thank you.

CHAIRMAN MOSS: Thank you.

I want to make sure that as we make comments here, we are making them on the environmental document and not on the merits of the project itself. That will be coming up at a different time.

But right now, it's comments on the environmental document.

Thank you.

JEAN PIETTE: Chairman and Members of the Commission, my name is Jean Piette (phonetic).

I have been asked by Leslie Warren of Auburn to read her comments. And I will try to get through these as quickly as I can.

She has questions.

45-6

Will the policies, cost formula, and procedures of the PCCP be universally applied regardless of applicant, owner, public and private?

Is the project able to be administered consistently over 50 years with staff succession?

45

Is a 50-year window sufficient for a project with such a staggering public cost?

Why is the project not perpetual?

Are the horse, bike, and hiking trails and other associated recreational uses proposed in the Hidden Falls and Trails Master Plan and in and around the Sunset Area Plan consistent with wildlife and habitat goals for the PCCP?

She says that -- I understand that over 61 websites in the Bay Area describe the northeast areas of the PCCP and encourages usage. Over time, this is going to grow, and we are prepared.

45-6 cont.

How will wildlife and habitat be impacted as a result?

Should the recreation areas acquired under the county's legacy program be part of the PCCP?

I think the intention of PCCP versus legacy acquisitions are different and possibly incompatible.

How will the proposed Placer Parkway impact wildlife movement along wildlife corridors in the PCCP?

How many strike deaths are predicted?

What impact will the Placer Parkway have

45

on hydrologic function and the long-term success of recreated vernal pool and grassland ecosystems?

Are there adequate protections in the PCCP to ensure that the plan is beyond the reach of politics?

When all agencies are looking in the same direction, as they are here, having signed off on the PCCP, we lose the insight and friction. We are neutralized by a groupthink.

Are we at risk of loss of innovation, critical analysis, and failure to act because the checks and balances that make our system strong, are not in place when all agencies line up and towing the line behind the PCCP?

45-6 cont.

I will give this to the individual.

Thank you for your attention.

CHAIRMAN MOSS: Thank you.

Anyone else?

AMBER BECKLER: Hello. My name is Amber Beckler (phonetic). I live on Benita Road (phonetic) in Granite Bay.

Thank you for hearing me out today.

I just have a procedural question and a comment regarding the Draft EIR. As was stated, it is 900 pages. I've just started to go through it,

45-7

45

myself.

So my question was: Given this has taken 18 years to get to this point, wouldn't it have been a little more useful to have both public workshops first, then hear public comment before the Planning Commission?

45-7 cont.

I personally would have had more well-informed oral comments on the Draft EIR.

Instead, I will submit them in writing.

So I just wanted to point that out, that I thought it would have been a better opportunity for the public to have both workshops first.

But, generally speaking, the things I will say, based on what I've read so far, is: I like the idea of the ecosystem approach. I think that the conservation program makes sense, conceptually.

45-8

I do have some concerns, based on what I read in the Draft EIR, on the alternatives analysis. And it doesn't seem like there was analysis done for feeder corridors in the area that's not for acquisition.

45-9

So I just had a lot of questions around the development or projects that are going to be happening in a potential future growth area on the plan versus how this will be acquired in the actual

45

45-9 cont.

conservation area.

And then one of the other concerns that was pointed out, is the actual feasibility of acquiring land by private land owners, whether it's through conservation easements or outright purchase.

45-10

So I -- I'm a little bit concerned about the program overall and the EIR in the sense of: If you are unable to do that, then you sort of still end up with a patchwork habitat, and it doesn't really achieve the goals of the plan.

So those are my comments.

Thank you.

CHAIRMAN MOSS: Thank you.

Anyone else?

Okay. Seeing none, we will close the -- oh.

MIKE CARIBBEAN: Mike Garabedian, Placer County Tomorrow.

What a shock that you just have three people testifying on this. That's not the public's fault.

I'm -- I'm going to have three brief points to make.

45-11

First of all, there's an obvious need for more time to respond to this.

Secondly, the future growth areas need adjustment and definition in terms of looking at alternatives for these broadly-defined areas for the valley and foothills. 45-12

And, secondly [sic], I'm concerned about the agriculture conservation easement con- -- content, how it actually is going to be protecting of agriculture as opposed to other values that are also very important. 45-13

I mean, there's a difference between wildlife easements, and so forth.

So on more time, we've heard the length of the environmental document. There are many other documents, too, that are part of this and need to be reviewed, and there have been very few opportunities to look at this.

This has been going on for many years -- I guess the seed for this, 20 years ago. The people who know it best, like who spoke yesterday at the Lincoln workshop, have known this project and been involved for many years. 45-14

So I think the public deserves some opportunity to be adj- -- you know, digesting this and looking at it as well. Not for 20 years, but for -- and, of course, we don't even know what all of

45

45-14 cont.

it is.

The JPA is still being negotiated or not even available. I'm not sure we know who would be on the governing authority. There's a lot of unanswered questions yet.

45-15

So the -- the boundary -- the area -- the potential growth areas are too -- are very -- one very -- two very broad categories, both the potential growth area, and then there's the valley and -- and they're two broadly defined.

45-16

There is not attention to the different environmental, natural history, soil, vegetation -- vegetation definitions, that -- that should be defining instead of these giant area -- giant future development areas. There just is not -- has not been any attention towards mapping, based on what's there, defining -- defining that broad area.

So -- and I've said a little bit about ag conservation easements, but I'm seriously concerned about -- that these would be genuine

45-17

agricultural conservation easements.

And that needs to be addressed in the EIR if they're going to protect the agricultural and other private land management values.

CHAIRMAN MOSS: Thank you.

Anyone else?

I guess, with that, we will close the public comment portion, and --

COMMISSIONER NADER: I have some questions.

CHAIRMAN MOSS: Okay. Thank you.

COMMISSIONER NADER: Technical questions if you're ready for that.

Greg, I'm -- having spent my earlier years being raised along Coon Creek, I keep hearing a reference to Racoon Creek.

Did somebody change the name along the way?

MR. McKINZIE: Yes, sir. Approximately a year, maybe two years ago -- time has tendency to go very quickly here -- the USGS made the decision to change the name of Coon Creek to Racoon Creek.

COMMISSIONER NADER: Because in the EIR, there are still references to Coon Creek as well. So I just wanted to -- I was a little confused what happened there. There was no official announcement that I saw on that. So I -- it's a minor item, but just since I have a connection to that, I wanted to know.

Having waded through a lot of this, I

have a question as to -- I was a little surprised that this comes down to and including -- not excluding -- half-acre projects. It goes down to those half-acre projects.

And having gone through -- I can give you a -- kind of a live example.

A few years back, I split a property that was a little less than one acre, and the -- it was in a community that was already developed, so there weren't any impacts to the community, really.

And so I'm trying to develop what the nexus would be for me to get a benefit out of this program because I would have been -- it would have triggered because that was over a half-acre on it. Unless there was an exemption -- and I couldn't see where there was an exemption -- that I would have to pay $25,000 towards this program, and -- which would be, from my level, what I went through, pretty onerous, unless, again, there's some real benefit for me out of it.

So I'm just asking why it went down so low to some of these smaller projects where individuals are going to get caught in this, where there may not be -- I fully understand the bigger projects because they have, obviously, tremendously

more impacts that they're making.

But on these little smaller projects -- let's -- let's take another example.

Let's say, in an estate situation, there's a 40-acre parcel and the rest of the family wants to split it up to provide it for the rest of the family to take advantage of.

And, again, they have 40 acres, let's say, and they want to split it into four.

Are they going to get assessed $25,000 per acre to go through that processor, or is there, again, something -- some exemption for that?

I just need to understand, from a technical standpoint, why you went down to that level and what the benefits are, but --

MR. McKINZIE: Yes, sir. So I'll keep my response fairly high level because we may stray into the weeds, quite frankly.

COMMISSIONER NADER: Okay.

MR. McKINZIE: But the conservations, the plan areas split in between the valleys -- the valley vernal pool; grasslands; agricultural activities predominantly; West Placer; west of about the 200-foot elevation line, which is the threshold between, basically, the valley vernal pool grasslands

and the foothill oak woodlands.

So there are different themes associated with -- depending upon where you're at. If you're in the foothills, land costs tend to be a little bit less.

We're talking about different species, different effects.

What's not mentioned in my slide presentation -- which makes me think of now -- oak woodlands, those oak trees are a component of this conservation program.

So covered activities: We had to find a floor -- or a ceiling, depending upon your perspective -- for how narrow we could go. So there are some limits to the program at the bottom level.

So a parcel that's 20,000 square feet or less, not covered activities.

So if you're an existing parcel, 20,000 square feet or less, not covered by this program, if you did have effects on wetlands or species, you would go through the status quo process.

There is potentially some ability to come and make an application to the county or the city, depending upon where you're at, to receive coverage.

There's also a small exemption for less

than 5,000 square feet of land disturbance. We can only capture so much.

But if you happen to have a grading permit and that grading permit is taking out greater than that 5,000-foot threshold, you would be subject to the plan. So we do have some floors in there.

But why not a larger parcel?

Well, those larger parcels do have effects, whether you're moving oak trees or vernal pool grasslands, you have the potential -- let's say, your neighbor has a stream, and a species that comes to mind, the Tricolored Blackbird, happens to be foraging on your property. So you could be indirectly affecting that species and subject to permits.

But a lot of cases may not get picked up now, but through monitoring and surveys and a better approach to conservation permitting, we would pick those up.

So -- also, if your small project had a wetland, and you're subject to the Clean Water Act, you're now subject to dredge and fill procedures for the State of California, subject to California Department of Fish and Wildlife 1600 Program.

This process provides that streamlined

approach to permitting for those smaller projects as well as the much larger projects.

So there are benefits. And the benefits, you know -- are there fees? Yes, there are fees.

But for most, when faced with multiple agency permitting regimes and sometimes conflicting requirements to mitigate for projects, and faced with one, three, five, seven, ten years of process, potentially litigation back end, this conservation program provides that mechanism to provide those avoidance, minimization, mitigation measures to take that time value of money.

And that is really the benefits of the program for something small.

COMMISSIONER NADER: Well, again, going back to my example of, I guess, splitting that property that was just about an acre, I didn't have any environmental issues.

So I'm just asking: Is there some -- is there a mechanism in here for exemptions if there is a determination that there aren't any issues, or am I just going to have to write a check for 25,000 regardless?

MR. McKINZIE: So the majority, be it in the foothills or the valley vernal pool grassland

complexes, whether or not, as we -- as the General Plan and public know that there are resources out there. There are -- unfortunately, most projects in Placer do have some effect, whether it's to oak woodlands -- maybe not to the individual tree itself, but by removing the grasslands around the oak trees, you are having an effects. Fragmentation of lower woodlands is an effect, whether or not you're impacting that tree itself.

Same with grasslands, wetlands, vernal pool, streams, things are connected, and --

COMMISSIONER NADER: You're not exactly answering my question.

But I'm guessing I'm going to have to write a check, regardless.

And so that's what I just wanted to determine because those are implications to me, obviously, and to anybody who's in that kind of situation where maybe they're not having an impact -- an environmental impact, but they're still going to have to write the check.

And my question, too, on the 40 acres, maybe -- or as you get bigger on the acreage, you're certainly opening yourself to a potential environmental impact, but it -- is it -- just so I

understand, because I was trying to figure out -- that was a rather long page of fees and formulas based on that. So I was trying to understand that.

Would -- if they were splitting it into four different parcels, would they have to pay $25,000 per acre to get into that program? Because that would be like a million dollars for them to split that property or to be under the PCCP.

MR. McKINZIE: It depends upon the project and where you're located, foothills fees being much less than the $25,000.

If you happen to be in the valleys affecting vernal pool grasslands, so costs associated with the land itself, how do you conserve and mitigate wetlands, vernal pools themselves? Very expensive to go acquire, to conserve, and protect, and maintain, and monitor.

So, yes, there are differences in the fees.

So we would have to look at an individual project and see, at that level -- at a project level, what are your effects? What are you impacting? How much grading are you doing?

So it largely follows the existing process for review under CEQA and projects that come

forward to you, but does normalize those fees.

So it depends on the project, the size of the parcels. Perhaps, as we come forward to the Commission, we could run you through some fee scenarios that would definitely be helpful, to speak to the generalities and why it would be difficult at this level.

COMMISSIONER NADER: Yeah. I'm just concerned, again, about the smaller -- and what the implications are. I'm just trying to grasp that, and -- because I think it could really have implications to just individuals.

I mean, typically, we're talking about developer's projects that come before us, which are much more complex.

But if this -- this could be an impediment to people who are just doing something for their own individual needs, and it could make it unfeasible for them to do that.

I'm just trying to understand that.

MR. McKINZIE: And there's actually an aside that I didn't mention before, but for projects which have already been through those processes, already have permits, not subject to the program -- so if a project comes forward and has 50 half-acre

parcels, those parcels were built and mitigated for, and subject to all those permits and processes of the state and federal agencies, there is one way out. If you already have your permits, the requirements met --

COMMISSIONER NADER: Unless -- unless you're changing, like splitting, like I did, then you open yourself to that.

MR. McKINZIE: Yes.

COMMISSIONER NADER: Okay. Thank you.

CHAIRMAN MOSS: Commissioners? Anything else?

COMMISSIONER JOHNSON: Yeah. I'm going to go at a much more naive level than the details we were discussing.

And so, as I understand it, the -- Placer County has to approve this first, and then the Fish and Wildlife Service will do it, do their work or --

MR. McKINZIE: Yes. So the process, from here, would be to finalize the Environmental Impact Report, Environmental Impact Statement, process by collecting comments, respond to those comments.

It would then come as a project, with the environmental documents, back to this Commission.

Ultimately, the Board of Supervisors

would have to adopt. They would have to adopt a new plan ordinance. They would have to approve the execution of the implementing agreement.

Once they've approved that, at that time, the agencies that are signatories to this -- U.S. Fish and Wildlife Service, National Fisheries Service, California Department of Fish and Wildlife, as wildlife agencies -- would then be able to finalize their process and issue personal take permits for the program.

So we have a bit of process to go.

COMMISSIONER JOHNSON: Okay. Good. Thank you.

And then we were using, in the alternatives, the discussion of take and fill.

And so I can kind of guess what those mean; but what do they really mean?

MR. McKINZIE: Okay. I'll take a stab at this. And if Sally wants to follow up, she can, and correct me where I've gone awry.

But so take -- "take," under the federal Endangered Species Act and the analogous acts here at the state -- and they're a little bit different, but not to harass, harm, actually kill species, that is "take."

So even if you're indirectly affecting species and their habitat, that is and falls under those take definitions. That's why we were seeking an incidental take permit.

So that's on the species side.

On the wetlands side -- so U.S. Army Corps of Engineers, State of California, and others regulate the fill of wetland and waters of the U.S. and waters of the state.

So that is the fill-triggering requirements of the Clean Water Act and now, the state's procedures.

COMMISSIONER JOHNSON: Good. Thank you.

And then maybe the area that -- I'm looking at a map that shows green and yellow, which is up on the -- I mean, you've showed me the same map. I have it right here. I'm looking at it.

But at any rate, one of the kind of puzzling things that comes up in the naive way of my thinking, is the effect on zoning. And, you know, all the community plans are zoned, land both in the yellow and the green areas.

And so what's your effect on the zoning?

MR. McKINZIE: So the conservation program does not propose to change General Plan

designations or zoning designations, but comes through other mechanisms that you all have and make recommendations to the Board of Supervisors.

So, for instance, the reserve acquisition area, that large green area, that would remain the same.

So uses allowable under agricultural and residential zoning today would still be allowable in the future.

However, if a piece of property that was Ag/Res that went forward and sought a rezone, General Plan Amendment, it would be subject to the conservation program. It may or may not be compatible with the conservation program. But the program itself does not seek to change zoning or General Plan designation.

COMMISSIONER JOHNSON: Okay. So that's in the reserve areas.

But in the nonreserve areas or the areas that are subject to development --

MR. McKINZIE: Okay. Same --

COMMISSIONER JOHNSON: -- what happens there?

MR. McKINZIE: Those remain as they do today, as proposed under the conservation program.

So we're not seeking to change anything in the future growth area, either.

COMMISSIONER JOHNSON: And so I think what you were talking about here is this subdivided, say -- I don't know if you're talking about the green area or the yellow area.

But in the yellow area, if you have sensitive resources, you still have to address them, right?

MR. McKINZIE: Yes. Future growth areas, principally, where we would expect to see growth and development and changes in General Plan and zoning.

And, yes, throughout Western Placer County, as we were discussing previously, there are resources -- sometimes unbeknownst to those who have those resources on those properties -- that are subject to all of these Acts -- federal, state Endangered Species Act; Clean Water Act; 404 Permits; 401 Certifications -- the whole slough of state and federal permits that are required beyond what the county already has for its zoning, General Plan designation.

COMMISSIONER JOHNSON: And so these would be administered by the county now, is what you're saying?

MR. McKINZIE: So the county and the city would maintain their land use jurisdiction. We're not seeking to change that. That was the direction from our ad hoc committee comprised of two board members, two Lincoln council members, two members from staff, and the boards of PCWA and SPRTA. So they maintain all the jurisdiction today.

What the Joint Power Agency ultimately would take on is the responsibility to take those fees that are collected by the city and the county, and then to go take care of the conservation actions with those fees; so mitigation, conservations, building a reserve system, all of the monitoring, reporting through that system.

COMMISSIONER JOHNSON: So this joint powers group would, in effect, deal with both the yellow and the green areas; is that correct?

MR. McKINZIE: Largely focused on the green being the reserve system, the reserve acquisition area.

The city and the county mostly -- to meet the requirements of the city and county for zoning and CEQA and all of our ordinances, that remains with the city and the county.

So resources that require permits --

wetlands, endangering species -- the city and county impose through their commissions on projects -- the avoidance, minimization, mitigation measures, conditions on covered activities.

So instead of, in the future, seeing a condition on a project that comes forward to you, it would -- instead of saying: Go talk to -- insert your applicable agency -- Corps of Engineers, CDFW -- it would say: Hey, here are a list of all the conditions, uncovered activities that are required to be met for this project. Here's how you mitigate. Here's how you pay fees. Here are the surveys that are required.

So that being the principal difference.

COMMISSIONER JOHNSON: Okay. So that, then, does do a good job of explaining it to me. Thank you.

Maybe one final question is: The way it's described in the yellow is a potential future growth area. And so I'm assuming at the county level, that doesn't mean that that's a pre transfer rezoning properties; is that correct?

MR. McKINZIE: That's correct.

So, basically, that future reserve area -- or not -- sorry -- future growth area -- make

sure I get my definitions correct here.

The future growth area is the area in which we anticipate growth and development and infrastructure to occur over the next 50 years, the term of the permits. It's also the area where we've already seen rural residential growth, subdivisions.

So those things are already occurring and will continue to occur, most likely, in the future growth areas. It's a function of the county General Plan, projects that come forward with -- compliant with General Plan zoning. So yes.

COMMISSIONER JOHNSON: I guess one of the things that comes up in my mind is -- now, you take a lot of foothill area around Auburn and around this area, and you look at it, it's -- majority of it is either five or ten acres. Some of it's less than that.

And that's -- most of it's developed through the level of the current zoning.

And so -- at any rate, I guess the reason I asked the question is just so it's clear that that doesn't really give free pass for reducing those 10-acre parcels or 5-acre parcels down to a level that you can do a four-by-four development on it.

And so it might be a little bit of a

misnomer that a lot of this area is future growth area, the way I interpret it.

MR. McKINZIE: It's still subject to General Plan zoning requirements, Subdivision Map Act, all of the things that you see today. So it's still subject to all of those requirements.

And at the back end of that process, when you all approve a project, that has that condition in it, that says: Hey, we recognize it has oak woodlands. Here's a conservation strategy and avoidance minimization measures. As a wetland, here is how you comply with the conditions on covered activities versus hunting, if you will, today, to the state and federal agencies.

That now gives the county and the city a little bit more local control to control their destiny.

As I mentioned in my presentation originally, sometimes what you get back in today's environment is that it changes the project from -- let's just say, the Corp of Engineers says: Now, we don't like how you avoided or mitigated under the proposed project. We'd like you to do something different.

That project typically ends up back in

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front of this Commission, back in front of the Board of Supervisors as a -- it's called a "specific plan amendment" to make those revisions, such that that project can hopefully be built.

That's why the development community sees the benefits of it, and I think the environmental community sees the benefits of it as well.

COMMISSIONER JOHNSON: Okay. Well, thank you. That clarifies it for me. I appreciate it.

CHAIRMAN MOSS: Anyone else?

All right. At this time, really seeing none, we will close the comments.

And I think that's it.

We'll move on.

Do we want to take a five-minute break before we go on to the 11:30 item?

Let's take five.

(Proceedings not reported further after 11:32 a.m.)

REPORTER'S CERTIFICATE

I, CARRIE HEWERDINE, RDR, California CSR No. 4579, Certified Shorthand Reporter, certify;

That the foregoing proceedings were taken before me at the time and place therein set forth;

That all proceedings and all public statements and comments made at the time of the proceedings were recorded stenographically by me and were thereafter transcribed;

That the foregoing is a true and correct transcript of my shorthand notes so taken.

I further certify that I am not a relative or employee of any attorney of the parties, nor financially interested in the action.

I declare under penalty of perjury under the laws of California that the foregoing is true and correct.

Dated this 13th day of August, 2019.

George T. Kammerer
Attorney At Law
P.O. Box 951
Rancho Murieta, CA 95683-0951

July 17, 2019

Ms. Lisa M. Gibson, Regulatory Permit Specialist **Via E-Mail: Lisa.M.Gibson@usace.army.mil**
U.S. Army Corps of Engineers, Sacramento District
1325 "J" Street, Room 1350
Sacramento, CA 95814-2992

Re: U.S. Army Corps of Engineers Clean Water Act Permitting Strategy Alignment with Placer County Conservation Plan, City of Lincoln and Portions of Placer County, CA

Dear Ms. Gibson:

We represent the Lincoln Village 3 Landowners' Association ("V-3"), comprised of the largest landholding entities within the 2,040-acre Village 3 portion of the City of Lincoln General Plan 2050 planning area. We provide these initial comments on behalf of V-3 for your review, consideration and requested modification of select provisions of the **U.S. Army Corps of Engineers (ACE) Clean Water Act Permitting Strategy Alignment with the Placer County Conservation Plan (ACE CWA PSA)** for the Placer County Conservation Plan (PCCP) / Natural Communities Conservation Program (NCCP). The V-3 is supportive of the PCCP/NCCP (hereafter, the "PCCP") and provides these comments and recommendations for the purpose of ensuring the technical, practicable, fiscal and pragmatic feasibility and viability of the ACE CWA PSA in coordination with implementation of the PCCP over the PCCP's proposed 50-year life.

I. General Comment

A. CWA 404 Permit Strategy Aligned with Placer County Conservation Plan (PCCP)

"In 2004, recognizing that many of the listed species to be covered by the HCP/NCCP spend some or all of their lifecycles in aquatic environments regulated under the Corps' Regulatory Program, the Sacramento District was invited to work with the Plan Participants and agencies. In 2006, the USEPA, Sacramento District and other agencies advanced a proposed approach to complying with the 404(b)(1) Guidelines at a regional level. In addition, in 2012 and 2014, the

Sacramento District identified principle needs for establishing a CWA 404 permitting strategy that could align with and complement the HCP/ NCCP. A CWA permitting strategy would provide for better assurances and quicker CWA 404 permit decisions for the regulated public, while protecting aquatic resources to an equal or greater level than existing regulations, policies and processes" (ACE CWA PSA, pp. 1-2).

"The Sacramento District is committed to having its CWA 404 permit strategy in place, including programmatic compliance with ESA 7, CWA 401 and NHPA 106, when USFWS and NMFS issue permits based on the HCP/NCCP" (ACE CWA PSA, p.3).

"CWA 404 Permitting Strategy

"The Sacramento District has developed a multi-tiered approach to CWA 404 permitting that would address activities which involve discharges of dredged or fill material into waters of the U.S. covered by the USFWS- and NMFS-approved PCCP. This CWA 404 Permitting Strategy consists of the use of:

• A programmatic general permit (PGP) founded on a local aquatic resources protection program and implemented by local ordinances, and designed to reduce duplication with that program, for activities with minimal individual and cumulative effects on the aquatic environment;

• A regional general permit (RGP), if needed, for activities with minimal individual and cumulative effects on the aquatic environment that do not fall under the PGP and for certain activities conducted by PCWA, and activities to implement the HCP/NCCP conservation strategy under the ILF program;

• A procedure for issuing Letters of Permission (LOPs) for activities with more than minimal but less than significant effects on the human environment, including aquatic resources; and

• An abbreviated process for issuing standard permits (SPs) for other activities consistent with the PCCP that may have a significant impact on the human environment, and require the preparation of an EIS." (ACE CWA PSA, p. 3).

"SP Abbreviated Process

"A small number of PCCP covered activities requiring CWA 404 will not fall under the PGP, RGP, or LOP procedure and will require a SP. In many cases, these activities are those that may potentially have a significant impact on the human environment and require the preparation of an EIS under NEPA. Even for activities that require a SP, the process and amount of time it takes

to reach a permit decision can be compressed significantly by relying on the avoidance, minimization and compensation and other measures required under the HCP/NCCP. For instance, the degree of analysis in the project EIS would be lessened by tiering from the PCCP EIS, and off-site alternatives analyses under Section 404(b)(1) Guidelines would not be required because avoidance has already been addressed at the regional level and compensatory mitigation requirements would align with those of the HCP/NCCP. In addition, the on-site alternatives analysis under Section 404(b)(1) would focus on evaluating alternative means of applying on-site avoidance and minimization measures required under the HCP/NCCP. Time may further be shortened through the preparation of joint EIS/EIRs for projects. In addition, the Corps would pursue programmatic compliance with ESA, NHPA 106 and CWA 401 to provide for greater assurances and further streamline the process. With reliance on the PCCP EIS and programmatic compliance with related laws, the Corps expects to complete SP decisions for activities under the PCCP within six months" (ACE CWA PSA, pp. 4-5).

46-1 Comment: We have reviewed the ACE CWA 404 Permit Strategy Aligned with the Placer County Conservation Plan and have been unable to locate an "abbreviated process for issuing standard permits (SPs)" which the ACE in 2017 indicated it would include (see 4th bullet). **Please respond to this comment to let the public know when the ACE plans to issue that "abbreviated process for issuing standard permits (SPs)" for PCCP covered activities.**

II. U.S. Army Corps of Engineers Clean Water Act Permitting Strategy Alignment with the Placer County Conservation Plan / Natural Communities Conservation Plan

A. Draft Programmatic General Permit - Minimal Impact Covered Activities - PCCP -

ACTIVITIES COVERED

46-2 Comment: It is essential that all activities described in 1. - 5. be included as covered.

6. In-Stream Activities

"Activities resulting in the discharge of dredged and/or fill material into waters of the U.S. for activities within streams, reservoirs, or on-stream ponds in Plan Area A or B . . . including, but not limited to, maintenance activities in the stream channel, along the streambank, and on adjacent waters of the U.S. within the riparian corridor" (Draft Programmatic General Permit (D-PGP) (D-PGP, p. 3).

46-3 Comment: It is essential that all of these in-stream activities be covered and included under the D-PGP authorization within all jurisdictional "streams" in the PCCP. Numerous jurisdictional and potentially-jurisdictional streams stretch for miles and miles across the breadth of Western Placer County within the Planned for Growth (PFG) area in the path of future urbanization and existing and future infrastructure, including that of the Placer County Water Agency (PCWA) and the South Placer Regional Transportation Authority (SPRTA), in addition to that planned by the City of Lincoln and Placer County. It is very important that these remain covered activities.

46-4 Comment: " '**Adjacent' waters** of the U.S. within the riparian corridor" **should be defined by an exact measureable distance** from the "streams, reservoirs, or on-stream ponds" that are to be considered jurisdictional "within the riparian corridor" in order to be considered "adjacent".

TERMS OF AUTHORIZATION

5. Avoidance and Minimization

"Impacts to waters of the U.S. shall be avoided and minimized to the maximum extent practicable. For purposes of the PGP, notwithstanding the Corps' discretionary authority described above, this term shall be considered satisfied when project applicants have designed and implemented activities to comply with all applicable avoidance and minimization measures contained in both Chapters 5 and 6 of the HCP/NCCP, the CARP, and local implementing ordinances" (D-PGP, p. 4).

46-5 Comment: The heart of the PCCP, by its very nature, is an Incidental Take Permit (ITP) issued by either the U.S. Fish and Wildlife Service (FWS) or National Marine Fisheries Service (NMFS) which legally allows the "take" (harm, harass, kill, etc.) of individual members of fourteen (14) species of plants and wildlife, including seven (7) that are federally-listed as threatened or endangered, and included as Covered Species under the PCCP, which take would occur incidental to otherwise lawful activities (i.e., real estate development, infrastructure installation and maintenance, habitat restoration and creation, etc.).

To avoid losing sight of this essential foundational concept of the PCCP, we are requesting that Provision 5 be modified to read, " . . .activities to comply with all ***incidental take***, avoidance and minimization measures contained in both Chapters 5 and 6 of the HCP/NCCP, the CARP, and local implementing ordinances ***as they apply to Covered Species and Covered Activities***." (Language to add underlined). Chapters 5, 6 and the CARP all address take of Covered Species.

6. Impact Thresholds for Losses of Waters of the U.S.

"Loss of waters of the U.S. shall be determined using the definition in Section F of the January 6, 2017, Federal Register Notice for *Issuance and Reissuance of Nationwide Permits (NWPs); Final Rule* (82 FR 1860) . . . " (D-PGP, p. 4).

46-6 Comment: This seems appropriate as the D-PGP is a permitting vehicle much akin to the NWPs.

"a. Except for as specified in 6(a)(1) through (3), 6(b), and 6(c) below, the loss of waters of the U.S. (including wetlands) resulting from authorization of a single and complete project under this PGP shall not exceed a total of 3.0 acres, and the loss of streambed shall not exceed 500 linear feet of perennial, intermittent, or ephemeral streams, and/or a total of 1,000 linear feet of irrigation or drainage ditch (provided the irrigation or drainage ditch is not a relocated or channelized stream), as verified by the Corps. The acreage of loss of streambed for streams and/or ditches shall be included in the acreage threshold for loss of waters of the U.S." (D-PGP, p. 4). (Emphasis added.)

46-7 Comment: Considering the unprecedented magnitude of the PCCP's wetland habitat mitigation, preservation, creation, restoration, rehabilitation and enhancement, the D-PGP should allow a higher threshold for loss of waters under the authorization of a single and complete project. A **loss of at least 5.0 acres of waters (including wetlands) should be allowed** for: (i) this reason above, and (ii) to ensure any possibility of achieving the 500 linear foot ephemeral stream and 1,000 linear foot ditch allowance above, since (iii) the "acreage of loss of streambed for streams and/or ditches shall be included in [count against] the acreage threshold for loss of waters of the U.S," and because, (iv) historically, the NWP which D-PGPs typically replace (NWP 26) allowed up to 10 acres of loss for decades by the ACE while fully meeting the ACE minimization standard.

"(1) The loss of vernal pool waters of the U.S., as verified in writing by the Corps, resulting from authorization of a single and complete project under this PGP shall not exceed 1.0 acre" (D-PGP, p. 5). (Emphasis added.)

46-8 Comment: This 1.0 acre limitation is unnecessarily restrictive in light of the unprecedented landscape-wide preservation, creation, restoration, rehabilitation and enhancement of vernal pool habitat which the PCCP will assure and achieve. A very large percentage of vernal pools within the PFG that will be impacted by development have already been heavily degraded by years of dry land crop cultivation on top of them, adjacent irrigation practices spilling into them, overgrazing and undergrazing of livestock, non-native species invasion and domination, having watersheds removed or cut off by ground disturbance and modification activities, etc.

The PCCP, on the other hand, will not only replace that vernal pool habitat, but result in an increase in acreage of vernal pool habitat, as well as dramatically improve and enhance the functions of existing vernal pools that are preserved - all of which result in a net increase of vernal pool acreage and vernal pool habitat functions. For all of these reasons, a **loss of at least 5.0 acres of vernal pool habitat should be allowed** for each single and complete project.

46-9 Comment: It is especially appropriate in this context to allow a loss of at least 5.0 acres of vernal pool habitat because, under the PCCP's Section 10 (a)(1)(b) ITP, incidental take of all

46-9 cont. vernal pool species contained in these pools is already authorized and already fully offset by the ITP's terms and conditions and species conservation measures.

"(2) The loss of irrigated wetlands in existing and active rice fields that are considered to be waters of the U.S., as verified in writing by the Corps, resulting from authorization of a single and complete project under this PGP shall not exceed 3.0 acres" (D-PGP, p. 5). (Emphasis added.)

46-10 Comment: There are literally hundreds of acres of "irrigated wetlands in existing and active rice fields that are considered to be waters of the U.S." within the PCCP Plan Area. In order to have a reasonable measure of utilitarian value to the regulated public, there **should be no limit upon the acreage of loss of irrigated wetlands** authorized under the D-PGP because: (i) these are manmade (artificial) wetlands that would not exist without human irrigation, (ii) which do not support vernal pool species typically, (iii) that can be readily, and relatively inexpensively, re-created elsewhere, (iv) with a high-degree of certainty their full acreage of functions will be successfully and quickly replaced (usually in one growing season).

"(3) The loss of all other waters of the U.S. not identified in 6(a)(1) and/or 6(a)(2), as verified in writing by the Corps, resulting from authorization of a single and complete project under this PGP shall not exceed 2.0 acres" (D-PGP, p. 5). (Emphasis added.)

46-11 Comment: This "all other waters of the U.S." category typically encompasses a limited subset of common and widely-distributed waters generically known as "seasonal wetlands" which (i) may, but most often do not, provide habitat for listed species, (ii) are some of the most common types of wetlands, (iii) that can be readily, and relatively inexpensively, re-created elsewhere, (iv) with a high-degree of certainty their full acreage of functions will be successfully and quickly replaced (usually in one growing season). To provide a reasonable measure of utilitarian value to the regulated public, there **should be no limit upon the acreage of loss of "all other waters"** authorized under the D-PGP.

"b. No loss of vernal pool waters of the U.S., as verified in writing by the Corps, as a result of a single and complete project, is authorized under this PGP within the Lower American River 8-digit hydrologic unit code (HUC) watershed (HUC 18020111), as identified by the U.S. Geological Survey" (D-PGP, p. 5). (Emphasis added.)

46-12 Comment: After viewing Lower American River HUC 18020111 on the USGS website, it is unclear exactly and to what extent it overlaps with the PCCP. To the extent that it does, this restriction of "no loss of vernal pool waters of the U.S." within HUC 18020111, is unnecessarily restrictive. **Some loss of vernal pool waters of the U.S. should be allowed** under the D-PGP everywhere within the PCCP Plan Area for all of the reasons listed above under 6. a. (1).

"c. The cumulative loss of waters of the U.S. authorized by this PGP shall not exceed 90 acres of waters of the U.S., including wetlands, within the Plan Area. The cumulative loss of vernal pool waters of the U.S. authorized by this PGP shall not exceed 15 acres" (D-PGP, p. 5). (Emphasis added.)

46-13 Comment: Limiting the cumulative loss of waters of the U.S. to 90 acres, and the cumulative loss of vernal pool waters of the U.S. to 15 acres, provides minimal utility to the regulated public. That is especially true if the 15 acres of vernal pools is a subset of the 90 acres, meaning that really only 75 acres of cumulative loss of non-vernal pool waters of the U.S. are authorized under the D-PGP.

46-14 Comment: In PCCP Plan Area A which contains 45,065 acres of vernal pool complex (PCCP Table 3-13, p. 3-48); 15 acres of vernal pool loss comprises 0.0003% of the resource. In PCCP Plan Area A which contains a total of 80,080 acres of all types of waters of the U.S. combined including vernal pool complex (PCCP Table 3-13, p. 3-48 to 49), 90 acres of loss of all waters comprises 0.001% of the resource of all types of waters of the U.S. combined. In both cases, the loss is virtually un-registerable at a landscape level and can be fully offset.

46-15 Comment: Within the entire Plan Area A, the loss is even less of a blip on the radar screen. Within the 209,832-acre Plan Area A (PCCP, Table 3-13, p. 3-49), 90 acres comprises 0.0004% and 15 acres comprises 0.00007% of Plan Area A. The impact upon the resource is not just minimal, it is far less than minimal; it is simply negligible.

46-16 Comment: Under the 50-year life of the PCCP (and even under the 5-year life of a PGP), in a time of average to high real estate development activity, 90 acres of loss (15 acres of vernal pool waters + 75 acres of other waters of the U.S.) would probably be exhausted in 1-3 years. **What do you do after the total allowed loss is exhausted in 1-3 years under a 50-year PCCP?**

46-17 Comment: To provide a reasonable measure of utilitarian value to the regulated public, the cumulative loss of waters of the U.S. **should allow loss up to at least 1,000 acres of all waters with at least 160 acres of vernal pool waters** (same ratio as 90/15) under the D-PGP. This is still a small fraction of the total resource of both as is explained in detail in the PCCP.

GENERAL CONDITIONS

5. Historic Properties

"No activity is authorized under the PGP if the activity may affect historic properties listed, or eligible for listing, in the National Register of Historic Places, until the requirements of Section 106 of the National Historic Preservation Act (NHPA), as amended, have been satisfied. If NHPA compliance is not addressed programmatically, (e.g., by a Programmatic Agreement (PA)), project applicants must notify the Corps if the activity may have the potential to cause effects

to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, including previously unidentified historic properties" (D-PGP, p. 6).

46-18 Comment: We understand that the ACE has been working on the Programmatic Agreement (PA) for Section 106 compliance for some time and ACE stated it would have it completed and approved prior to PCCP implementation. **Please verify when the Section 106 PA is anticipated to be completed and approved.**

PERMIT DURATION

"This PGP is valid for five (5) years from the date of issuance" (D-PGP, p. 8).

46-19 Comment: While we understand that PGP's have historically been granted by the ACE for a period of five (5) years, we request that the ACE consider issuing this PGP for a longer period of time. **Because the PCCP's ITPs are issued once by the FWS and NMFS for a period of a full fifty (50) years, precise alignment of the ACE PGP with the ITPs supports issuance of a PGP for an aligned period of fifty (50) years** to give the regulated public the regulatory certainty they deserve, and reduce administrative staff effort and costs to the ACE. However, if the ACE is unable to do that, **issuance of this PGP for a 10-year period** would have significant utilitarian value to the regulated public and would assist the ACE's workload by only requiring issuance and reissuance of the PCCP's PGP on five occasions, instead of the current ten occasions, as proposed by the ACE during the 50-year life of the PCCP. Per the ACE's terms under "Permit Duration" and under "Further Information" item # 5 herein, the ACE would at all times retain the authority to reevaluate, suspend, modify, or revoke the PGP during the life of the PGP.

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B. Draft Regional General Permit - Minimal Impact Covered Activities - PCCP -

" The U.S. Army Corps of Engineers, Sacramento District (District), hereby issues Regional General Permit (RGP) [#] for the discharge of dredged and/or fill material into waters of the U.S. associated with minimal impact activities conducted by the Placer County Water Agency [PCWA] in accordance with the under the (sic) Placer County Habitat Conservation Plan (HCP), and Placer County Aquatic Resources Program (CARP) provided the activities meet all terms and conditions of the RGP" (Draft Regional General Permit (D-RGP), p. 1).

TERMS

6. Impact Thresholds for Losses of Waters of the U.S.

"a. The loss of waters of the U.S. (including wetlands) resulting from authorization of a single and complete project under this RGP shall not exceed a total of 0.25 acres, and the loss of streambed shall not exceed 300 linear feet of perennial, intermittent, or ephemeral streams, and/or a total of 1,000 linear feet of irrigation, water supply, or drainage ditch or canal (provided the ditch or canal is not a relocated or channelized stream, as verified by the Corps) . . ." (D-RGP, P. 5). (Emphasis added.)

46-20 Comment: Considering the unprecedented magnitude of the PCCP's wetland habitat mitigation, preservation, creation, restoration, rehabilitation and enhancement, the D-RGP should allow a higher threshold for loss of waters under the authorization of a single and complete project. **Loss of at least 3.0 acres of waters (including wetlands), and the loss of streambed shall not exceed 500 linear feet of perennial, intermittent, or ephemeral streams, and/or a total of 1,000 linear feet of irrigation or drainage ditch (provided the ditch or canal is not a relocated or channelized stream, as verified by the Corps) *should be allowed*** for: (i) the sake of consistency with the terms of the Draft Programmatic General Permit (PGP) for the PCCP previously proposed by the ACE, and (ii) to ensure any possibility of achieving the ephemeral stream linear foot allowance and 1,000 linear foot ditch allowance above, since (iii) the "acreage of loss of streambed for streams and/or ditches shall be included in [count against] the acreage threshold for loss of waters of the U.S," and because, (iv) historically, the NWP which D-RGPs typically replace (NWP 26) allowed up to 10 acres of loss for decades by the USACE while fully meeting the USACE minimization standard.

46-21 Comment: Additionally, the 500-foot and 1,000-foot length limitations we have proposed under "a" above, would promote regulatory conformity and consistency with the 500-foot and 1,000-foot length limitations the ACE proposes under "b" (immediately below) for the same types of waters when conducting bank stabilization activities.

"b. Bank stabilization activities are limited to no more than 500 feet in length along the bank of perennial, intermittent, or ephemeral streams and no more than 1,000 feet in length along the bank of irrigation, water supply, or drainage ditches or canals (provided the ditch or canal is not a relocated or channelized stream, as verified by the Corps)" (D-RGP, p. 5).

46-22 Comment: We support the 500-foot and 1,000-foot length limits ACE proposes above in "b".

"c. The cumulative loss of waters of the U.S. authorized under this RGP shall not exceed 3 acres of waters of the U.S., including wetlands, in the Plan Area. The cumulative loss of vernal pool waters of the U.S. authorized by this RGP shall not exceed 1 acre. Additional restrictions are listed in the General Conditions, below" (D-RGP, P. 5). (Emphasis added.)

46-23 Comment: Consistent with our comment under the D-PGP, 6. c. (above), limiting the cumulative loss of waters of the U.S. under the D-RGP to 3.0 acres, and the cumulative loss of vernal pool waters of the U.S. to 1.0 acre, provides minimal utility to PCWA, and ultimately to its rate payers (the regulated public) whom PCWA serves. That is especially true, if the 1.0 acre of vernal pools is a subset of the 3.0 acres, meaning that really only 2.0 acres of cumulative loss of non-vernal pool waters of the U.S. are authorized under the D-RGP.

GENERAL CONDITIONS

10. Sediment Removal

"The removal of sediment shall be limited to the minimum necessary to restore the waterway in the vicinity of a structure to the approximate dimensions that existed when the structure was built, but shall not extend farther than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the Corps" (D-RGP, p. 7).

46-24 Comment: For the sake of consistency and ease of understanding and compliance by PCWA and the regulated public, we would propose that this be modified to read "250 feet in any direction from the structure." This amounts to a potential total of 500 feet and would match the 500 foot limitation of acceptable minimal impacts found elsewhere under the RGP and PGP.

17. Historic Properties

"No activity is authorized under the RGP if the activity may affect historic properties listed, or eligible for listing, in the National Register of Historic Places, until the requirements of Section 106 of the National Historic Preservation Act (NHPA), as amended, have been satisfied. If NHPA compliance is not addressed programmatically, (e.g., by a Programmatic Agreement (PA)), project applicants must notify the Corps if the activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, including previously unidentified historic properties. The notification shall consist of the application identified in General Condition 5, and two hard copies and one electronic copy of a cultural resources report meeting the Corps *Guidelines for Compliance with Section 106 of the National Historic Preservation Act of 1966* (http://www.spk.usace.army.mil/Portals/12/documents/regulatory/sec-106-tribal/FINAL_2014-03-24_Section-106-Guidelines.pdf). The Corps will consult with the State Historic Preservation Officer (SHPO), as appropriate, following the policy and procedural standards of 33 CFR Part 325 Appendix C" (D-RGP, p. 10).

46-25 Comment: We understand that the ACE has been working on the Programmatic Agreement (PA) for Section 106 compliance for some time and is supposed to have it completed and approved prior to PCCP implementation. **Please verify when the Section 106 PA is anticipated to be completed and approved.**

PERMIT DURATION: "This permit is valid for five years from issuance . . ." (D-RGP, p. 17).

46-26 Comment: While we understand that RGP's have historically been granted by the ACE for a period of five (5) years, we request that the ACE consider issuing this RGP for a longer period of time. **Because the PCCP's ITPs are issued once by the FWS and NMFS for a period of a full fifty (50) years, precise alignment of the ACE RGP with the ITPs supports issuance of this RGP for an aligned period of fifty (50) years** to give the regulated public the regulatory certainty they deserve, and reduce administrative staff effort and costs to the ACE. However, if the ACE is unable to do that, **issuance of this RGP for a 10-year period** would have significant utilitarian value to PCWA, regulated public and would assist the ACE's workload by only requiring issuance and reissuance of the PCCP's RGP on five occasions, instead of the current ten occasions, as proposed by the ACE during the 50-year life of the PCCP. Per the ACE's terms under "Permit Duration" and under "Further Information" item # 5 herein, the ACE would at all times retain the authority to reevaluate, suspend, modify, or revoke the RGP during the life of the RGP.

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C. Draft Letter of Permission -Less Than Significant Impact Covered Activities -PCCP-

PURPOSE:

"The U.S. Army Corps of Engineers, Sacramento District (Corps) is establishing a Letter of Permission (LOP) procedure to efficiently authorize HCP/NCCP Covered Activities which involve discharges of dredged or fill material into waters of the United States (U.S.) under Section 404 of the Clean Water Act (CWA 404) with more than minimal but less than significant impacts on the aquatic environment. The HCP/NCCP LOP Procedure is an optional abbreviated permit process available to all applicants for Department of the Army (DA) permits for activities meeting the criteria and conditions described in this notice. If the proposed activity does not meet LOP criteria or the applicant chooses not to use this process, the activity may be authorized under a different permit type or procedure" (Letter of Permission (LOP), p. 1).

EXCLUSIONS:

"2. The LOP procedure does not apply to any activities in waters of the U.S. that have a potential to significantly impact the human environment" (LOP, p. 4).

Comment: It would appear to be advantageous to both the ACE and to applicants if activities in waters of the U.S. that have a potential to significantly impact the human environment could still qualify for processing under LOP procedures if all impacts were mitigated to a less than significant levels during and as part of the LOP review process.

46-27

Comment: Is this determination of significance made before or after application of mitigation measures? It would be preferable to determine this afterwards.

LOP PROCEDURE:

2. **Application submittal:**

"To be considered for authorization under an LOP, the application must include . . . the following:

"I. Information, in report form, concerning on-site practicable alternatives and the relative environmental impacts of those alternatives as compared to the environmental impacts of the proposed activity, in accordance with 33 CFR 325.1 (e) and 323.6 (a). The information must address compliance with the Environmental Protection Agency's 404(b)(1) Guidelines at 40 CFR part 230" (LOP, p. 5). (Emphasis added.)

Comment: A requirement to analyze and consider on-site alternatives and the relative environmental impacts of those alternatives would appear to conflict with the PCCP/NCCP land conversion fee criteria for payment of that fee on 100% of the acreage on a site. Under the PCCP, "This fee is based on the cost of mitigating each Covered Activity's direct and indirect effects on Covered Species and natural communities as measured by acres of land conversion . . . which includes mitigation for the aggregate direct and indirect effects of Covered Activities . . . **The land conversion fee will be based on the entire subject parcel area** . . . As a result, Covered Activities will fund through the land conversion fee the mitigation of both direct and indirect effects within the Plan Area . . . **Mitigation of wetland and in-stream direct and indirect effects by protection of existing wetland and stream area** (not restoration of new areas) **is included in the overall land conversion fee, which will fund acquisition of the landscape where existing wetlands and streams are found**" (PCCP, 9.4.1.3 Land Conversion Fee, p. 9-34). Furthermore, "Mitigation of wetland direct effects by restoration or in-stream effects by enhancement are funded by separate special habitat fees (Section 9.4.1.4, *Special*

46-28

46-28 cont.

Habitat Fees)" (PCCP, p. 9-34) on top of payment of the land conversion fee. **Payment of PCCP land conversion fees "on the entire subject parcel area" would appear to be inconsistent with this ACE requirement to consider alternatives that require on-site avoidance of portions of the very same acreage upon which PCCP land conversion fees had already been paid to mitigate all wetland and waters of the U.S. direct and indirect effects for a project.**

* * * * * * * * * * * * * * *

D. Draft Regional General Permit - Minimal Impact Covered Activities - In-Lieu Fee -

ACTIVITIES COVERED:

"This RGP authorizes discharges of dredged and/or fill material into waters of the U.S. associated with establishment, re-establishment, enhancement, and rehabilitation activities, provided the activities result in a net increase in aquatic resource functions and services and are approved by the Corps under the ILF Program. The activities authorized under this RGP includes only those activities required to meet the conservation strategy identified in Chapter 7 of the HCP/NCCP" (PCCP In-Lieu Fee Program (ILF), p. 2).

46-29

PERMIT DURATION: This RGP is valid for five (5) years from the date of issuance.

Comment: If the ILF Program will continue to be available post-PCCP approval and implementation, we request that the ACE consider issuing the ILF for a longer period of time. **Because the PCCP's ITPs are issued once by the FWS and NMFS for a period of a full fifty (50) years, precise alignment of the ACE ILF with the ITPs supports issuance of an ILF for an aligned period of fifty (50) years** to give the regulated public the regulatory certainty they deserve, and reduce administrative staff effort and costs to the ACE. However, if the ACE is unable to do that, **issuance of this ILF for a 10-year period** would have significant utilitarian value to the regulated public and would assist the ACE's workload by only requiring issuance and reissuance of the PCCP's PGP on five occasions, instead of the current ten occasions, as proposed by the ACE during the 50-year life of the PCCP. Per the ACE's terms under "Permit Duration" and under "Further Information" item # 5 herein, the ACE would at all times retain the authority to reevaluate, suspend, modify, or revoke the PGP during the life of the PGP.

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Conclusion

Thank you for the opportunity to provide these comments upon the ACE's proposed **CWA 404 Permit Strategy Aligned with the Placer County Conservation Plan** on behalf of the Lincoln Village 3 Landowners' Association. We request that the **CWA 404 Permit Strategy** be revised in response to the modifications suggested herein, and that the ACE provide responses to the questions raised in this letter.

Do not hesitate to make contact if you have questions regarding any of the above comments.

Very truly yours,

George T. Kammerer

cc: Lincoln Village 3 Landowners' Association

Placer County
Community Development Resource Agency
Environmental Coordination Services
3091 County Center Drive
Auburn, CA 95603

U.S. Fish and Wildlife Service
Sacramento Fish and Wildlife Office
2800 Cottage Way
Room W-2605
Sacramento, CA 95825

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

August 20, 2019

Mr. Mike Thomas, Chief
Conservation Planning Division
U.S. Fish and Wildlife Service
Sacramento Fish and Wildlife Office
2800 Cottage Way, W-2605
Sacramento, California 95825

Subject: Draft Environmental Impact Statement for Placer County Habitat Conservation Plan, Placer County, California (EIS No. 20190134)

Dear Mr. Thomas:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

The EPA appreciates the U.S. Fish and Wildlife Service's commitment to coordination throughout the Placer County Habitat Conservation Plan NEPA process. As a cooperating agency for the development of the EIS, the EPA has participated in calls with the Service and other cooperating agencies, attended meetings, and reviewed and commented on administrative drafts of the DEIS and supporting technical documents. We value collaboration with the Service and fellow cooperating agencies, and the time and resources devoted by the Service to developing a strategy for avoidance, minimization, and mitigation of the impacts on natural resources that would result from covered activities, and crafting a comprehensive long-term conservation plan to protect and contribute to the recovery of covered species and natural communities in the plan area.

47-1

The success of the Placer County HCP and the Western Placer County Aquatic Resources Program will depend, in part, on the development and implementation of a regional species habitat and aquatic resources monitoring program to ensure that conservation objectives are being met and aquatic resource functions preserved. The Placer County HCP outlines several benchmarks that need to be achieved in the first several months of implementation. We suggest that the Service consult with the EPA, the California Wetlands Monitoring Workgroup (CWMW), and other institutions with regional expertise in aquatic resources monitoring, to achieve these implementation goals. The CWMW's efforts towards developing an integrated framework to coordinate water quality and wildlife monitoring in California HCPs/NCCPs may be of particular relevance.

We note that effective October 22, 2018, the EPA no longer includes ratings in our comment letters. Information about this change and the EPA's continued roles and responsibilities in the review of federal actions can be found on our website at: https://www.epa.gov/nepa/epa-review-process-under-section-309-clean-air-act. The EPA appreciates the opportunity to review this DEIS, and we are

47-2 available to discuss our comments. When the FEIS is released for public review, please send one hard copy and one CD to the address above (mail code: TIP-2). If you have any questions, please contact me at 415-947-4161, or contact Jason Gerdes, the lead reviewer for this project. Mr. Gerdes can be reached at 415-947-4221 or gerdes.jason@epa.gov.

Sincerely,

Connell Dunning

Connell Dunning, Acting Manager
Environmental Review Branch

From: Albert Scheiber <alberts4567@yahoo.com>
Sent: Tuesday, August 20, 2019 4:08 PM
To: Placer County Environmental Coordination Services <CDRAECS@placer.ca.gov>
Subject: Comments on PCCP EIR

Good afternoon

48-1 My name is Albert Scheiber. My family has owned property in Lincoln for over 100 years. Unfortunately, our property is within the Village 5 project which the City of Lincoln approved in December 2017. The Village 5 project/EIR, initiated by Richland Development, relies heavily on the PCCP. The PCCP EIR makes many references to Village 5 and the City of Lincoln's General Plan which, in my opinion, ties all of them together. Unfortunately, they don't all say the same thing. Please clarify the following:

Comments/questions on PCCP EIR

48-2 1. According to PCCP workshops, this document has been in the works for over 15 years. Can we have more than 60 days to review and comment on it?

48-3 2. According to PCCP workshops, this program is willing buyer- willing seller. According to the City of Lincoln's Village 5 EIR, all open space will be "dedicated" to the PCCP. The question we have asked at the PCCP workshops, and never received an answer to, is when will the people that have "open space" designation on their property be compensated for said property? If your answer is" that's a city problem ", then maybe you should talk to your "partner " for this program and get the answer

48-4 3. What happens to our water rights when the Village 5/ PCCP is forced upon us by the City of Lincoln?

48-5 4. What if our property is in the "acquisition area", but we want to develop?

48-6 5. Will there be any actual private, for profit, agricultural operations existing, whether in the PCCP or not, in the "acquisition area", when this plan is implemented?

48-7 6. Is the rice farming for snakes, that was mentioned at the PCCP workshops for profit or for the snakes?

48-8 7. Where will the water come from and who will pay for it, for the PCCP?

48-9 8. The PCCP sounds like a great deal for developers, but what about those property owners that don't want to develop and or don't want to be in the PCCP?

48-10 9. What happens if the majority of people in the "acquisition area" don't want to participate? Does it mean the environmental agency's will still be happy with hodgepodge "open space "?

48-11 10. How will this affect our ground water?

48-12 11. How will this affect our surface water?

48-13 12. How will this affect our Williamson Act?

48-14 13. Since the county has already "jump started " this program by buying land, is there really anything anyone or any group could say or do to stop it, or is it already a done deal?

48-15 14. Why did the PCCP rely on Lincoln's Village 5 project/ EIR to cover some of the necessary studies?

48-16 15. What are the affects on air quality since the PCCP promotes a large area of concentrated development inside the PCCP

48-17 16. Why is the Lincoln High School Farm-which is already in a conversation easement-being counted as Village 5 open space, used for the benefit of Richland Development, and "dedicated " to the PCCP with no compensation?

Thanks, Albert Scheiber

Barton Ruud
10800 Cramer Road
Auburn, CA 95602
August 20, 2019

Placer County Community Development Resource Agency
Environmental Coordination Services
3091 County Center Drive, Suite 190
Auburn, CA 95603

Re: Placer County Conservation Plan.

With regard to the PCCP Public Draft, Chapter 4, Pages 4-17 and 4-18, specifically the Big Hill Area, Taylor Ranch and Harvego Bear River Preserve, there are statements that should be walked back because local neighborhood consensus in the present varies greatly from the time original parameters were established. No one in the local ranching community (Bell Road, Cramer Road, Lone Star Road ranchers) could have realized at the time what the impact of the Hidden Falls Regional Park would result in regarding recreational usage and trail expansion. Realization in the present is greatly different, to wit, easements on the nearby Beard and Oest properties are substantially more restrictive because it has been realized that trail expansion and public usage of ranch lands can be extremely disruptive to ranching.

There was no local rancher realization at the time the Placer Land Trust and Placer Legacy planning began to assimilate funds for purchase that if a financial donor wanted public recreation and tied the donation to an open door 365 day per year recreational opportunity that this would prove to be a conundrum. A total breakdown in communication about the implications of that circumstance underlies current understanding and belief. The implications are far better understood today, in terms of consequences and unintended consequences. The understanding of public impact usage consequences have come about because of the impacts seen on at the Hidden Falls Regional Park.

49-1

Big Hill Area, Page 4-17: “Although a reserve unit management plan has not yet been developed for the Big Hill Area, preliminary planning shows that the Harvego Bear River Preserve portion of the Big Hill Area will include trails, a parking lot, restrooms and related facilities.”

Taylor Ranch, Page 4-18: “The Taylor Ranch site supports cattle grazing and includes a public access trail easement to be improved once additional trail connections are obtained.”

Harvego Bear River Preserve, Page 4-18: “Placer County’s conservation easement includes rights for trail construction for passive trail use and a staging area for a parking lot and restroom.”

49-1 cont. Regarding these open door policies, which were written into easement purchase agreements in bygone years, there is palpable angst and disappointment, which is exacerbated by the ongoing countywide trails development plan being developed by the Placer County Parks Department.

49-2 Area ranchers now see the referenced Big Hill Area, Taylor Ranch and Harvego Bear River Preserve language as a clandestine failure and breakdown in communication. The willing seller parties likely had no understanding of what the assimilation of funds might mean years down the road. Further, the lack of communication about implications for public use were virtually unknown by adjacent or area ranchers. As previously mentioned, easements more recently developed by the Placer Land Trust on the Beard and Oest properties specifically deny public access on a year-round basis. The lessons of reckless or uninformed planning are now realized.

49-3 Therefore, I ask the statements quoted above with regard to passive recreation, with respect to the three sites, and implied on all seven Big Hill Area sites, be stricken from the PCCP. Permitting recreationists, an apparent majority from out of county, who will utilize these sites to run wild all over these acreages is improper and will prove disruptive to ranching. Such usage will not be confined to trails said to be six feet in width within an eighteen-foot wide trail zone. Cyclists, riders and hikers will go where they want no matter what the expectation is by those who would develop a trail system across these landscapes.

Just for one minute, the principals who develop the feared open-door recreation plan for 365 days per year should try to understand the rancher's perspective and have then, an appreciation for private property needs as regards ranching. If that understanding existed, all language that opens the door to wide open passive recreation by those who have no understanding of agricultural activities and ranching, would be stricken from the PCCP.

With due respect to the ranching community, kindly see that lessons have been learned, as noticed by the comparative establishment of easements on the Beard and Oest ranches. Remove the language that opens the door to rampant passive recreation, be that language detailing trails, parking facilities or restroom facilities, et cetera. These are properties that have historically been ranched since the 1850s and 1860s; that heritage needs to be protected, and present day ranching needs to be respected and protected.

Respectfully submitted,

Signed, Bart Ruud

cc: D. Ruud

Appendix I.2

Responses to Comments

Comment Letter 1—Friends of Auburn Ravine

Response to Comment 1-1

The commenter stated that the "PCCP Designation Map" shows a stretch of land along Auburn Ravine as Existing Reserves and Other Protected Areas (EXR) but believes that area is privately held.

The commenter is referring to the Plan's Figure 1-5, which depicts the geographic boundaries of the Reserve Acquisition Area (RAA), Potential Future Growth Area (PFG), EXR, and Non-Participating Cities. The commenter referenced a specific area identified in Appendix H of the Plan as the Auburn Ravine Natural Preserve Area. The data for the map were provided by the City of Lincoln in 2007 and finalized in 2014. Per agreement with the Wildlife Agencies, the map will not be continually updated prior to the Plan's publication. Between map development and Plan publication, some small errors have been noted, and these would be addressed during implementation. A PCCP Reserve System exhibit would be produced and updated as lands are added and credited to the Reserve System.

Note that the EXR category to which the area referenced by the commenter was assigned represents natural open space, but these areas are not part of the Reserve System, and an EXR mapping discrepancy of this magnitude would not affect the conservation strategy.

Response to Comment 1-2

The commenter asked for evidence of occurrence of spring-run Chinook salmon in the streams of western Placer County.

Plan Section 2.4.2.7.2, *Auburn Ravine/Markham Ravine/Coon Creek ERP*, references spring-run Chinook salmon and an Ecosystem Restoration Plan (ERP) for Auburn Ravine, Raccoon (Coon) Creek, and Markham Ravine in western Placer County. Chapter 8 of the ERP describes the fishery resources present in Auburn Ravine and Raccoon Creek and specifically notes that spring-run Chinook "never occurred in these watersheds historically." As a conservation objective associated with watershed restoration, the ERP recommended an assessment of the upper portions of Auburn Ravine and Raccoon Creek to determine if habitat conditions were suitable for spring-run Chinook salmon. Historic distribution of spring-run Chinook salmon included the North and Middle Fork of the American River but not the streams of western Placer County.

Accordingly, revisions have been made to the Plan Section 2.4.2.7.2, *Auburn Ravine/Markham Ravine/Coon Creek ERP*, in response to this comment and are reflected in the final Plan. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 1-3

Referring to the Plan's list of stream barriers that should be removed or modified to allow fish passage or prevent entrainment, the commenter noted the following: one of the listed sites, a dam, is now owned by AKT Properties and its land has been converted to almond orchards; the New Moore Dam should be a listed site; and one listed site, Copin Dam, should be corrected to *Coppin Dam*.

The property commonly referred to as the *Lincoln Ranch Duck Club* was converted from rice to an orchard in late 2015 or early 2016. Consequently, the use of the property for a duck club may have ceased.

New Moore Dam and the diversion canal are operated by the Placer County Water Agency (PCWA) on Auburn Ravine. The facility is presently unscreened, and PCWA has applied for a state grant for fish screening. Revisions have been made to the Plan Section 2.6.7.2.1, *Stream Barrier Modification Projects*, in response to this comment and are reflected in the final Plan. This change to the Plan did not result in any revisions to the EIS/EIR.

The typographical error for Coppin Dam is noted and has been corrected in the final Plan.

Response to Comment 1-4

The commenter noted that Plan Table 3-2 incorrectly shows Auburn Ravine's stream length as 79 miles. The Auburn Ravine watershed is approximately 79 square miles in area.

Text has been added to final Plan chapter 3 that clarifies Plan Table 3-2 in response to this comment. Corresponding text was added to Table 3.5-3 of the EIS/EIR and is reflected in the final EIS/EIR. No changes to the findings of the document would result from these changes.

Response to Comment 1-5

The commenter asked where Figures 3-6 and 3-7 could be found.

They are included at the end of Chapter 3, *Physical and Biological Setting*, of the draft Plan, following page 3-126.

Response to Comment 1-6

Referring to Plan Table 3-18, the commenter cited additional sources indicating occurrence of fall-run Chinook salmon in Auburn Ravine and noted additional monitoring efforts.

In response to this comment, Plan Table 3-18 has been revised to include the anecdotal references from 1917 and 1957 as well as the data collected with the California Department of Fish and Wildlife (CDFW) in the 2016/2017 migration season. Regarding Plan Section 7.4.3.3.3, *Monitor Stream Enhancement Projects*, in the parenthetical reference to previous monitoring efforts (second bullet), the efforts of the Friends of Auburn Ravine have been added. These changes are reflected in the final Plan. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 1-7

The commenter requested that Friends of Auburn Ravine be included in the list of monitoring organizations listed in Plan Section 7.1.4.3, *Coordination with Other Programs*.

This organization has been added to the bulleted list of conservation organizations and agencies referenced in Section 7.1.4.3 of the final Plan. This change to the Plan did not result in any revisions to the EIS/EIR.

Comment Letter 2—Friends of Auburn Ravine

Response to Comment 2-1

The commenter requested information from the County regarding an area labeled B4 in Figures 3-7 and 3-12 in the Plan.

The explanation was provided by the County via email (dated July 11, 2019) and is included in the body of the comment letter. No further response to this comment is required.

Comment Letter 3—Friends of Auburn Ravine

Please note that Comment Letter 3 was submitted to USACE regarding the agency's public notice for its draft CWA Permit Strategy (file number SPK-2005-00485). The response to this comment letter is numbered sequentially and presented in chronological order (based on the date received) along with those received by USFWS and the County on their respective NOAs. USACE's public notice opened on July 8, 2019, for a 30-day comment period; this was separate from the NOAs issued by USFWS and the County that opened on June 21, 2019, for a 60-day comment period (and included the USACE's draft CWA Permit Strategy). The response provided here is not a USFWS or County response and is not in response to the USFWS or County's NOAs, USFWS's NEPA obligations, or the County's CEQA obligations for the draft EIS/EIR, draft Plan, or Section 10(a)(1)(B) incidental take permit applications. Rather, the response has been provided here by USACE as a means to consolidate all comments received by all agencies regarding their respective jurisdictions and to eliminate the need for a separate disclosure to the public for comments and responses on USACE's public notice.

Response to Comment 3-1

This commenter expressed support for the proposed project, including draft CWA Permit Strategy. No response to this comment is required.

Comment Letter 4—Jackson Shedd and Eric Olson

Response to Comment 4-1

The commenter provided information on sightings of western spadefoot from 2016.

The County and USFWS appreciate this information. Revisions have been made to the Plan in response to this comment and are reflected in Appendix C of the final Plan. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 4-2

The commenter suggested that western spadefoot should be included for coverage under the PCCP.

Appendix C of the Plan lists the species considered for coverage and the rationale for including or excluding each species. For western spadefoot, the appendix acknowledges that the species is present in the western portion of Placer County. The rationale for not including western spadefoot as a Covered Species is that the Permit Applicants do not expect the species to be state or federally listed during the permit term. Should western spadefoot be listed during the permit term, the PCCP may be amended to cover this species.

Comment Letter 5—Daryl Consulo

Response to Comment 5-1

The commenter asked whether a specific property would be designated within the PFG or RAA, and the County responded that the property was within the PFG.

The County's response is included in the body of the comment letter. No further response to this comment is required.

Comment Letter 6—Gary Barron

Response to Comment 6-1

The commenter reacted to the notification from the County regarding a Microsoft Word–generated error that omitted several pages in the draft EIS/EIR.

The omission was discovered and corrected at the beginning of the public comment period through the issuance of an errata to the draft EIS/EIR on June 25, 2019. The errata was made publicly available on the County's website. No further response to this comment is required.

Comment Letter 7—George T. Kammerer

Response to Comment 7-1

The commenter noted that the Plan draws a distinction between *restoration* and *rehabilitation/enhancement* and that the Plan states a preference for restoration. The commenter expressed an opinion that the distinction made between these terms in the Plan is unnecessary and counterproductive to the mission of the Plan.

The Plan defines and distinguishes restoration from habitat enhancement or rehabilitation consistently with USACE regulatory definitions to facilitate compatibility within the federal Endangered Species Act (ESA), California Endangered Species Act (CESA), and ESA regulatory frameworks.

Restoration and habitat rehabilitation/enhancement are both critical components of the conservation strategy. The Plan has commitments for the Permittees to restore natural communities to replace those natural communities and habitats that would be lost to Covered Activities. Defining *restoration* allows the Placer Conservation Authority (PCA) to track implementation of conservation actions to achieve the Plan's restoration objectives. Similarly, defining *habitat enhancement* allows for the tracking of conservation actions that improve the condition of existing natural communities or habitat while not increasing the area of natural communities or habitat.

The Plan does not state a preference for restoration over rehabilitation/enhancement. As noted above, both are important and different components of the conservation strategy. The Plan's habitat protection commitments are considerably larger than the Plan's restoration commitments (Table 5-5). Because the PCA would enhance all lands protected on the Reserve System (see Plan Section 5.1.2, *Definitions,* for the definition of habitat enhancement), more land would be enhanced than would be restored.

Depending on existing conditions of the habitat and outcomes of habitat enhancement or restoration, habitat enhancement may lead to greater increases in habitat function compared to restoration. Accordingly, the Plan has been edited to state that rehabilitation of vernal pools may count toward vernal pool restoration, as determined on a case-by-case basis with approval by the USFWS and CDFW. This change to the Plan did not result in any revisions to the EIS/EIR.

The PCA will have the flexibility to manage land acquired into the Reserve System as informed by professional experience, feedback from experts, and the best available science while meeting the Plan's protection, restoration, and enhancement commitments.

Response to Comment 7-2

With regard to the occupancy rate standard for vernal pools, the commenter stated that if natural, existing pools do not provide sufficient data for establishing a baseline range, then "the PCCP should embody the flexibility to allow reference to created, restored, rehabilitated or enhanced pool occupancy data to determine a reasonable range of branchiopod occupancy to establish baselines."

The intent of the occupancy rate standard is to ensure that habitat in the future Reserve System is occupied by Covered Species at a rate either equal to or greater than the estimated occupancy rate of features taken by Covered Activities. The Plan authors have found that rehabilitated, restored, and created features in the Plan Area on existing reserves and banks can have very high rates of

occupancy; levels higher than those in natural or unrehabilitated features, possibly due to a history of past inoculation of large branchiopod cysts or intensive management activities. Using rehabilitated, restored, and created features could result in an artificially high occupancy rate standard that cannot be achieved in naturally occurring basins on the Reserve System without inoculation.

Historically, created and restored vernal pools have not been used for mitigation under the ESA. As a result, many of the long-term datasets available focus on CWA Section 404/401 criteria (such as hydrologic and floristics) typically over a 10-year period. However, because less data are available on vernal pool branchiopods, there is more uncertainty in long-term occupancy of restored and created vernal pools. As a result, a 15-year monitoring period is necessary to determine long-term occupancy for created and restored pools. However, the lead agencies and Plan authors agree with the commenter that restored and created vernal pools could be included in the calculation of the percent pools occupied by vernal pool fairy shrimp and vernal pool tadpole shrimp once the 15-year monitoring period has been completed.

Response to Comment 7-3

The commenter stated that the proposed success criteria for determining vernal pool restoration/creation are too complex and that the proposed 15-year monitoring period is "lengthy and expensive."

Success criteria for vernal pool restoration have evolved over time based on lessons learned in the field. The USACE manual referenced by the commenter, for example, is from 1987. The vernal pool success criteria proposed in the Plan are similar to performance standards for other recent projects in the Plan Area and were formulated together with the Wildlife Agencies, reflecting what the Wildlife Agencies deem to be necessary. Regarding the time periods for evaluating success, there is uncertainty about the long-term success of vernal pool restoration and creation. Monitoring restored and created vernal pools for 10 years would provide time to address factors that limit success criteria.

The cost of monitoring is taken into account when determining monitoring methods. In response to this comment, the success criteria described in Section 5.3.3.3.1, *Vernal Pool and Grassland Natural Communities*, of the Plan have been clarified that constructed wetlands will be monitored for a period of 10 years, and the criteria allow for flexibility based on site-specific conditions. The cost estimate assumptions have been revised to assume a 10-year monitoring period for success of vernal pool restoration and creation. The 15-year monitoring period applies to the monitoring of restored and created vernal pools for presence of vernal pool fairy shrimp and vernal pool tadpole shrimp. While the change in assumption about duration of monitoring period reduced monitoring costs, the per-acre cost to restore vernal pools has increased to reflect current restoration costs in the area.

Response to Comment 7-4

The commenter stated that the distinction made in the Plan between surveying individual pools/swales and basins is unnecessary and, moreover, that different parties may define *basin* differently.

In response to this comment, the use of "basins" as the sampling unit for wetland occupancy of vernal pools by vernal pool fairy shrimp and vernal pool tadpole shrimp was removed from the Plan. The unit of measurement for determining the percent occupied vernal pools is now the individual vernal pool, as delineated per Section 6.2.4.4, *Item 4: Mapping HCP/NCCP Aquatic Features*, of the Plan, rather than a hydrologically connected basin. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 7-5

The commenter stated objections to two tricolored blackbird survey requirements for foraging/nesting habitat.

> The first is a requirement to conduct surveys if there is any sign of [tricolored blackbird] within three (3) miles of a project site. The second is a requirement to conduct surveys for ***nesting*** colonies within 1,300 feet of a project site if a "known" colony (translated: any colony existing anytime within the past 10 years) was documented within 3 miles of the project site …

It is not the intent of Species Condition 4, Tricolored Blackbird, that surveys of foraging be conducted within 3 miles of a project site. Rather, it is intended that if an active colony is within 3 miles of a project site, then surveys must be conducted on the project site and within 1,300 feet of the project site for foraging tricolored blackbirds. This part of Condition 4 was revised for clarity in the Plan. This change to the Plan did not result in any revisions to the EIS/EIR.

It is noted that surveys for nesting tricolored blackbird must be conducted for project sites below 300 feet elevation within aquatic/wetland complex; field agriculture when planted in wheat, grain, triticale, or similar crop; or patches of thorny or spiny vegetation such as blackberry, nettle, or thistle (blackberry is often associated with the riparian constituent habitat).

The condition allows for a qualified biologist to make a best survey effort from adjacent, safe, and legally accessible vantage points when adjacent foraging habitat is not accessible. Tricolored blackbirds often forage in flocks, and if adjacent habitat with 1,300 feet is providing important foraging habitat for tricolored blackbird, then tricolored blackbirds should be readily seen flying to and from habitat within 1,300 feet of the project site.

The condition allows the buffer to be modified to a minimum of 300 feet, with written approval from the Wildlife Agencies, in areas with dense forest, buildings, or other features between the Covered Activities and the active nest colony; where there is sufficient topographic relief to protect the colony from excessive noise or visual disturbance; or where sound curtains have been installed.

The Plan allows for impacts on tricolored blackbird nest colony sites outside of the nesting season as long as the requirements of Conservation Measure (CM) 1 TRBL-1, Reserve Design for Tricolored Blackbird, are being met.

Avoidance of take of active nest colonies and impacts on important foraging habitat being used by a nest colony is intended to avoid colony failure. Tricolored blackbird requires extensive amounts of foraging habitat relatively close to nest colony sites. It is not the intent of the Plan to avoid nest colony sites and enough surrounding foraging habitat in the PFG to sustain breeding populations of tricolored blackbird in the PFG. Rather, the conservation strategy intends to protect nest colonies and foraging habitat in the RAA (refer to Plan Section 5.3.1.6.4, *Tricolored Blackbird*).

Response to Comment 7-6

The commenter stated that land conversion fees are generally in line with acquisition costs and such fees need not be increased in the foreseeable future.

Whether or not there is a "need to increase [development fees] for the foreseeable future" will depend on the implementation of Plan Section 9.4.1.7, *Adjustment of Development Fees,* which includes both an automatic annual adjustment for land and other cost inflation based on published indices as well as a periodic 5-year adjustment based on a comprehensive assessment of all Plan costs and funding. Fees would only be increased if these sources indicated a need to increase fees to address changing conditions. It is also noted that previous case law on HCPs in the Sacramento Valley area (see *National Wildlife Federation v. Babbitt*, 2000; *National Wildlife Federation v. Norton*, 2004) have found funding assurances to be inadequate when they do not include mechanisms to adjust fees over time.

Response to Comment 7-7

The commenter stated that Special Habitat Fees generally "appear to be in line" but "some may merit review" once the PCCP is approved. Please see Response to Comment 7-6 regarding potential future adjustments to fees.

Response to Comment 7-8

This comment concerns the option for project proponents to conduct their own wetland, stream, or riparian mitigation in lieu of paying all or part of the Special Habitat Fee. The commenter stated that this option is too expensive and complicated, given the PCCP's requirements for that mitigation.

As described in Section 6.3.3, *Conditions to Avoid, Minimize, and Mitigate Effect on the Stream System*, of the Plan,"[t]the primary objective of Stream System Conditions is protection of watershed integrity (health and hydrology) by defining the extent of the Stream System and providing an incentive (in the form of a fee) for the project applicant to avoid land conversion within the Stream System boundary." The permanent conversion of the Stream System results in the permanent loss of land area contributing to the hydrology and ecology of the watershed and forecloses the ability to restore the watershed for water quality, hydrology, and habitat for Covered Species.

Fees resulting from Covered Activities occurring within the Stream System offset the cost to restore riverine/riparian constituent habitats and closely associated land cover types necessary to restore watershed function and values.

The option for project proponents to restore, manage, and monitor their own wetland, stream, or riparian mitigation site, or provide permittee-responsible mitigation, allows project proponents to reduce or avoid fees in exchange for conducting their own mitigation. This mitigation must meet the same requirements of Plan mitigation that is implemented and managed by the PCA, and it is not intended to be more complicated or expensive. However, because the project proponent would implement their own mitigation rather than paying a fee to be used by the PCA to implement mitigation, this option inherently requires more effort by the project proponent.

Response to Comment 7-9

The commenter expressed disagreement with the timeframe for the Plan's temporary effect fee, stating that the timeframe is "restrictive and self-defeating" due to the long lead times for obtaining construction permits.

Effects on sensitive habitats such as vernal pools that last longer than 1 year can prevent multiple generations from reproducing (e.g., vernal pool fairy shrimp). The temporary effect fee is primarily intended for routine maintenance activities such as maintenance activities in stream channels for flood control, maintenance along roadsides for highways, and short-term disturbance of the landscape for linear projects such as a pipeline. The definition of a temporary impact in the *Santa Clara Valley Habitat Plan* is not 18–24 months as the commenter noted; it is 1 year from the completion of construction. The commenter's opinion regarding the length of time it takes to obtain all relevant approvals for projects is correct; this is why the Plan incorporates an unprecedented level of integration with other federal, state, and local laws to allow for future streamlining that would shorten the timeline for permitting individual projects.

Response to Comment 7-10

The commenter stated that specific elements of the proposed funding mechanisms are important and states support for those elements.

No response to this comment is required.

Response to Comment 7-11

The commenter stated support for specific elements of the proposed PCCP land acquisition plan.

No response to this comment is required.

Response to Comment 7-12

The commenter stated support for retaining specific elements of local funding fees of the proposed PCCP funding strategy.

No response to this comment is required.

Response to Comment 7-13

The commenter stated support for a broad range of funding methods, several of which are already identified in the proposed Plan.

No response to this comment is required.

Comment Letter 8—George T. Kammerer

Response to Comment 8-1

The commenter stated that the Plan would not, in and of itself, cause impacts on agricultural resources. Rather, it would help implement land use changes already identified in existing County and Cities' general plans and zoning ordinances.

The commenter is correct that the Plan would not change land use designations. As described in Chapter 5, *Other Required CEQA and NEPA Analyses* of the EIS/EIR:

> Unless affected by PCCP conservation activities, impacts of Alternative 1 would also occur under Alternative 2, the proposed action. This is because Alternative 1 encompasses the same urbanization and infrastructure development activities that are identified as Covered Activities under Alternative 2. Therefore, the analysis in the EIS/EIR addresses most of the reasonably foreseeable activities in the Plan Area associated with urbanization and associated infrastructure development, operation, and maintenance.

Additionally, as described in Chapter 5, *Other Required CEQA and NEPA Analyses,* of the EIS/EIR:

> …the analysis of the PCCP focuses on the consequences of issuing the federal ITPs and the state NCCP permit. The PCCP is based on extensive consultation with the Permit Applicants and Wildlife Agencies, resulting in a detailed database of activities that allows for a quantitative analysis of anticipated changes in land uses as a result of activities under Alternative 2 (i.e., Covered Activities under the PCCP) and the conservation strategy of the PCCP. The land use changes associated with these activities would have various effects on each of the resources considered in the PCCP and this EIS/EIR, including direct and indirect effects, temporary effects associated with construction, and long-term effects of operation and maintenance.

As detailed in the EIS/EIR, the indirect effects of the Covered Activities are addressed in the impact analysis in the EIS/EIR.

The PCCP's effects on agricultural lands are described in Section 4.1, *Agricultural and Forestry Resources,* of the EIS/EIR. Regarding the commenter's statement that implementation of the conservation actions in the Plan would not result in a significant impact on farmlands, the Plan incorporates preservation, restoration, and creation of natural communities. Some of these restoration and creation actions are likely to occur in existing agricultural areas. As such, implementation of the conservation strategy would both preserve some existing agricultural areas as agriculture, but it would also potentially convert farmlands considered Prime, Unique, or of Statewide Importance.

Response to Comment 8-2

The commenter noted that the EIS/EIR should be revised to acknowledge that the PCCP protects thousands of acres of agricultural uses in perpetuity.

The commenter's assertion that the PCCP would protect thousands of acres of agricultural uses in perpetuity is not entirely correct. The commenter is correct that in addition to 2,000 acres to be preserved as rice, 6,240 acres of agricultural lands conserved for the benefit of species and habitat can remain in agricultural uses. However, they are not required to remain in agricultural use and the EIS/EIR evaluates the worst-case impact.

As noted in Response to Comment 8-1, the PCCP would not change land use designations. Land within the RAA would continue to have the same general plan designations and zoning applied by the land use authorities. The EIS/EIR describes the PCCP's impact on agricultural lands in Section 4.1, *Agricultural and Forestry Resources*. As stated in the discussion of Impact AG-1 for the proposed action, there are approximately 21,870 acres of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the RAA. Implementation of the Plan would result in acquisition of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance for habitat protection. While conversion of the agricultural land to habitat is not required, the EIS/EIR evaluates the worst-case impact and concludes that impacts to agricultural resources would be significant under NEPA and significant and unavoidable under CEQA. The actual impact could be lower if more lands that are conserved remain in agriculture.

Response to Comment 8-3

The commenter stated that the majority of Covered Activities would occur with or without the PCCP.

The commenter is correct, and it is for this reason that these impacts are identified in the EIS/EIR as a part of the no action alternative. Please see Response to Comment 8-2 regarding the EIS/EIR discussion of farmland preserved as a part of the PCCP.

Response to Comment 8-4

The commenter stated that the PCCP would "protect all 21,870 acres of farmland within the RAA from ever being developed and converted into urban uses…"

Please see Response to Comment 8-2.

Response to Comment 8-5

The commenter stated that the EIS/EIR should be revised to address Comment 8-4.

Please see Response to Comment 8-2.

Response to Comment 8-6

The commenter quoted Objective A0-1.1, which concerns protection of agricultural lands.

Please see Response to Comment 8-2 regarding the EIS/EIR assessment of impacts on farmland. While it is an objective of the PCCP to protect agricultural lands, it is possible that the overriding objectives related to species and habitat may mean that some of the lands referenced may not remain in agriculture. As noted in Response to Comment 8-2, the impact identified in the EIS/EIR is a worst-case impact, and the actual impact could be lower if more lands that are conserved remain in agriculture.

Response to Comment 8-7

The commenter cites the text of the Plan and states that the PCCP would preserve 8,240 acres of agricultural land. However, as noted on page 5-35 of the draft Plan:

> The 8,240 protected acres may consist of natural communities rather than agricultural land. If the PCA finds vernal pool complexes or other natural communities that are available for protection

beyond the acre commitments for those natural communities, the PCA may acquire and protect these lands in lieu of protecting agricultural land.

As noted in Response to Comment 8-2, the impact identified in the EIS/EIR is a worst-case scenario, and the actual impact could be lower if more lands that are conserved remain in agriculture. However, the Plan does commit to preserving 2,000 acres of rice land, as noted in Response to Comment 8-2.

Response to Comment 8-8

The commenter quoted Objective A0-1.1, which concerns achieving a sustainable balance of agriculture and conservation within the landscape, and stated that the "PCCP demonstrates a commitment to preserve and perpetuate continuing agricultural use of land within the RAA, and not to convert it to nonagricultural uses." The commenter asserted that the EIS/EIR "speculate[s]" that the PCCP could "result in conversion of up to 8,050 acres of Farmland" and that such "speculation" cannot be used to reach a "significant and unavoidable" impact conclusion.

Please see Responses to Comments 8-2, 8-5, and 8-7. While the Plan seeks to balance agriculture and conservation, as a species-driven plan it does not focus on agricultural preservation and, for this reason, the EIS/EIR cannot conclude that a specific amount of agricultural land would be preserved beyond the commitment to rice land described in Response to Comment 8-2. As noted, the impact identified in the EIS/EIR is a worst-case scenario, and the actual impact could be lower if more lands that are conserved remain in agriculture. Given the nature of the Plan's provisions, it cannot be concluded that these lands would not be converted.

Response to Comment 8-9

The commenter stated that the EIS/EIR finding for Impact AG-1 should be less than significant with mitigation rather than less than significant, because the finding is based in part on a Plan buffer requirement.

This requirement is a part of the proposed Plan and is not, therefore, considered a mitigation measure. The impact conclusion is based on the impacts of the Plan as proposed, and the buffer requirement is a part of the proposed Plan. Please see Response to Comment 8-2. No change to the EIS/EIR is required in response to this comment.

Response to Comment 8-10

The commenter stated that the PCA would purchase lands from willing sellers only, which is correct.

As stated in numerous instances throughout the Plan—including the specific references in this comment letter—all property acquired as part of the Reserve System would be acquired from willing sellers.

Response to Comment 8-11

The commenter stated that conservation easement sellers "should not have to pay for PCCP monitoring, fencing, or other requirements that are different from and/or part of their usual farming practices."

Private landowners would retain responsibility for land management when selling a conservation easement on their land. However, all management responsibilities specific to implementation of the conservation strategy would be assumed by the PCA. As described in response to Comment 8-10, the PCA would purchase conservation easements from willing sellers only. Conservation easements would be negotiated on a case-by-case basis between the landowner and the PCA (8.4.9.1, *General Conditions*). When negotiating price and other terms and conditions of the conservation easement, willing sellers would be able to consider those costs for which they would bear responsibility under conditions of the conservation easement (Plan Section 8.4.2.6, *Step 6: Purchase Offer*).

Response to Comment 8-12

The commenter requested clarification regarding the affected environment for tricolored blackbird as it relates to the definition of tricolored blackbird habitat in the Plan and the EIS/EIR.

The EIS/EIR provides an independent analysis of the effects on the human environment, including effects on species covered by the Plan. In the case of tricolored blackbird, a slightly different habitat model was used to analyze habitat effects, resulting in different estimates of impact which, notably, did not affect conclusions of significance under the EIS/EIR. The Plan estimates the maximum effects on Covered Species' modeled habitat (i.e., as modeled by the Plan) (Section 4.7, *Effects on Covered Species*) using the species model described in Appendix D, *Species Account.* Note that the Plan tracks tricolored blackbird take as acres of communities and constituent habitats that were modeled as habitat. Therefore, Covered Activities that affect the natural communities and constituent habitats used by tricolored blackbird in the foothills as modeled by the EIS/EIR and outside of the range modeled as habitat by the Plan may affect these natural communities and constituent habitats as long as the Covered Activities are implemented consistent with the Plan and adequate take allowance remains. As discussed in Plan Section 7.2.2.1.3, *Refine Management-Oriented Conceptual Ecological Models:*

> "Baseline data will be used to validate and refine species' habitat models as lands are surveyed and acquired (species models will be updated periodically, but no less frequent than every 5 years, consistent with new survey data collected from the PCA, from land-cover mapping provided by project applicants, and from other relevant sources)."

Therefore, habitat models would be re-run periodically for the purposes of better implementing conservation. The effects analysis, which is an estimate, will not be changed, even if modeled habitat shifts. In answer to the commenter's concern, impacts to the landcover types that may serve as habitat for tricolored blackbird, both inside and outside of the habitat model, would be covered.

Response to Comment 8-13

The commenter questioned why the EIS/EIR identifies permanent and temporary impacts on tricolored blackbird when the document reports that all occurrences are either in the RAA or on existing reserves.

The occurrences reported in the EIS/EIR come from the California Natural Diversity Database (CNDDB), which records observations made of nesting tricolored blackbird colonies when surveys are conducted for a given property. The CNDDB is a positive records database and does not report absence surveys. As a result, a lack of a CNDDB occurrence on a given property does not mean that a species is not there, because the property may not have ever been or not recently been surveyed. Moreover, although tricolored blackbirds can return to previous locations to nest, they do often

select different nest locations from year to year. Therefore, both the Plan and the EIS/EIR rely on modeled habitat to determine what the loss of potential habitat would be for both nesting and foraging habitat. Also, since tricolored blackbirds can forage over large distances and foraging habitat is not reported in the CNDDB, the EIS/EIR may appear to overestimate impacts on tricolored blackbird based on just CNDDB records.

Also, note that the Plan uses data on locations of tricolored blackbird colony sites from the Tricolored Blackbird Portal, a website by the U.C. Davis Information Center for the Environment. The Tricolored Blackbird Portal accumulates, standardizes, and disseminates data on colony locations and observations of breeding and non-breeding tricolored blackbirds from the triennial statewide tricolored blackbird survey and other sources. Data available on the Tricolored Blackbird Portal are not necessarily submitted to CNDDB. Based on data from the Tricolored Blackbird Portal, there are 15 active or recently active colony sites found in Plan Area A, with 6 in the RAA, 3 or 4 are protected in EXR, and 5 in the PFG. The final EIS/EIR has verified and utilized the same occurrence information presented in the final Plan.

Response to Comment 8-14

The commenter asked why the EIS/EIR concludes that direct potential injury or mortality of tricolored blackbirds could result, when known/extant populations of this species are located in areas that would be protected.

Please see Response to Comment 8-13.

Response to Comment 8-15

The commenter asserted that substantial evidence does not exist to support a "plausible conclusion that there might be 'potential mortality' or injury to tricolored blackbird," further stating that it is unclear why, if take of this species would be covered under the PCCP, the EIS/EIR would "add and require … avoidance measures" for this species.

The commenter referred specifically to Species Condition 4, Tricolored Blackbird, and six measures listed for avoiding and minimizing impacts on tricolored blackbird, which begin on draft EIS/EIR page 4.3-92. These measures are not being introduced nor added as part of the EIS/EIR; rather, they are referencing measures identified in Chapter 6, *Program Participation and Conditions on Covered Activities*, of the Plan and are highlighted merely to help demonstrate how the Plan minimizes the potential for take per the requirements of the ESA and CESA.

Please see Response to Comment 7-5 for an explanation of why the Plan includes Species Condition 4 (Plan Section 6.3.5.9, *Species Condition 4, Tricolored Blackbird*).

Response to Comment 8-16

The commenter reiterated comments and questions expressed in previous comments. Please see Response to Comment 8-15.

Response to Comment 8-17

The commenter reiterated comments and questions expressed in previous comments. Please see Response to Comments 8-13 and 8-15.

Response to Comment 8-18

The commenter reiterated comments and questions expressed in previous comments. Please see Responses to Comments 8-13 and 8-15.

Response to Comment 8-19

The commenter expressed concern over the amount of mitigation proposed in the EIS/EIR in Mitigation Measure BIO-3, *Conduct preconstruction surveys for roosting bats and implement protective measures*. The commenter stated that the measure is extensive and likely expensive and that development fees under the Plan would not cover these expenses.

Mitigation Measure BIO-3 lists several measures to avoid and minimize effects on roosting bats that includes guidance on surveys and measures to avoid and minimize effects on bridges, structures, and trees, which require different techniques and thus the measure is comprehensive. Mitigation Measure BIO-3 also includes the possibility for compensatory mitigation (i.e., replacing habitat).

As stated in the EIS/EIR, Impact BIO-25, page 4.3-96, Mitigation Measure BIO-3 has been identified to mitigate the potential effects that conservation measures "to create, restore, enhance, and manage riparian, valley oak woodland, and oak woodland habitat" could have on roosting bats, and is not being proposed to mitigate the effects that future development projects would have on roosting bats. To clarify which activities are subject to Mitigation Measure BIO-3, the title of Mitigation Measure BIO-3 of the EIS/EIR has been be amended in response to this comment to reflect that surveys and protective measures are to be conducted when implementing certain PCCP conservation measures.

Page 4-14 of the draft EIS/EIR includes the following statement on the mitigation: "Mitigation measures included in this EIS/EIR are considered to be potentially feasible by the authors of the document; however, the ultimate determination of feasibility can be made only by agency decision-makers. This EIS/EIR addresses whether mitigation presented would reduce an impact to a less-than-significant level, based on the thresholds of significance presented in each resource section."

Response to Comment 8-20

The commenter asks why American badger (*Taxidea taxus*) is included in the EIS/EIR when there are no CNDDB records of this species within the Plan Area.

The range for American badger, as described in the species account in CDFW's California Wildlife Habitat Relationships Program, covers the Plan Area; as noted in the draft EIS/EIR in Table 3.3-4 on page 3.3-72, the Plan Area is in the range of the species and contains suitable habitat for the species. A lack of CNDDB records in an area does not mean a species is not present in that area; as noted above, the CNDDB is a positive records database and does not report absence surveys. Many areas have not been surveyed specifically for American badger, or they have not been surveyed because they are privately owned. No revisions to the EIS/EIR are warranted based on this comment.

Response to Comment 8-21

The commenter stated that Mitigation Measure BIO-4, *Conduct preconstruction survey for American Badger*, appears to be unnecessary.

It is assumed that the commenter believes that the measure is unnecessary because of a lack of CNDDB records in the Plan Area. Response to Comment 8-20 addresses the issue of CNDDB records for this species, and the analysis in Impact BIO-26 addresses the impacts on the species and the need to mitigate these impacts.

Furthermore, this measure is not being proposed for future development projects—only for the Plan's future conservation actions that require ground disturbance, which is noted both in the first and last sentences of Mitigation Measure BIO-4. Notwithstanding, to clarify which activities are subject to Mitigation Measure BIO-4, the title of Mitigation Measure BIO-4 in the EIS/EIR has been be amended in response to this comment to reflect that it applies only when implementing certain PCCP conservation measures.

Response to Comment 8-22

The comment supports the findings of the EIS/EIR in concluding that Impact BIO-1 under Alternative 2, the proposed action, would be a less-than-significant impact.

No response to this comment is required.

Comment Letter 9—George T. Kammerer

Response to Comment 9-1

On behalf of a landowners' association, the commenter expressed support for the PCCP and referenced suggested changes to the Plan, EIS/EIR, and draft CWA Permit Strategy submitted separately as Comment Letters 7 and 8.

Please refer to Responses to Comment Letters 7 and 8. No response to this comment is required.

Comment Letter 10—George T. Kammerer

Response to Comment 10-1

On behalf of a landowners' association, the commenter expressed support for the PCCP and referenced suggested changes to the Plan, EIS/EIR, and draft CWA Permit Strategy submitted separately on Comment Letters 7 and 8.

Please refer to Responses to Comment Letters 7 and 8. No response to this comment is required.

Comment Letter 11—Central Valley Regional Water Quality Control Board

Response to Comment 11-1

The commenter summarized the regulatory setting for surface water and groundwater quality in California and stated its authority in these matters.

Impacts on surface and groundwater quality are addressed in Section 4.5.2, *Impacts and Mitigation Measures*, of the EIS/EIR. The commenter did not raise any questions or concerns about this analysis. No further response to this comment is required.

Response to Comment 11-2

The commenter noted that the environmental review document should evaluate potential impacts on both surface water and groundwater quality.

Impacts on surface water and groundwater quality are addressed in Section 4.5.2, *Impacts and Mitigation Measures*, of the EIS/EIR. The commenter did not raise any questions or concerns about this analysis. No further response to this comment is required.

Response to Comment 11-3

The commenter summarized permitting requirements related to water quality.

The comment does not include a question or comment about the EIS/EIR analysis. No response to this comment is required.

Comment Letter 12—Placer County Air Pollution Control District

Response to Comment 12-1

The commenter recommended revising the definition of the abbreviation *ATCM*.

The text of the EIS/EIR has been revised in response to this comment. No changes to the findings of the document would result from these changes.

Response to Comment 12-2

The commenter recommended revising the definition of the abbreviation CH_4.

The text of the EIS/EIR has been revised in response to this comment. No changes to the findings of the document would result from these changes.

Response to Comment 12-3

The commenter recommended the descriptions in two sections (District Rules 302 and 303) be switched.

The text in Section 3.2.1, *Air Quality, Greenhouse Gases, and Climate Change*, of the EIS/EIR has been revised in response to this comment. No changes to the findings of the document would result from these changes.

Response to Comment 12-4

The commenter recommended updating selected hyperlinks for sources referenced in the EIS/EIR.

Text in the following sections of the EIS/EIR has been revised in response to this comment: Section 3.2.3, *References Cited;* Section 4.2.4, *References Cited;* and Section F.3, *References Cited.* No changes to the findings of the document would result from these changes.

Comment Letter 13—Sheppard, Mullin, Richter & Hampton LLP

Please note that Comment Letter 13 was submitted to USACE regarding the agency's public notice for its draft CWA Permit Strategy (file number SPK-2005-00485). The response to this comment letter is numbered sequentially and presented in chronological order (based on the date received) along with those received by USFWS and the County on their respective NOAs. USACE's public notice opened on July 8, 2019, for a 30-day comment period; this was separate from the NOAs issued by USFWS and the County that opened on June 21, 2019, for a 60-day comment period (and included the USACE's draft CWA Permit Strategy). The response provided here is not a USFWS or County response and is not in response to the USFWS or County's NOAs, USFWS's NEPA obligations, or the County's CEQA obligations for the draft EIS/EIR, draft Plan, or Section 10(a)(1)(B) incidental take permit applications. Rather, the response has been provided here by USACE as a means to consolidate all comments received by all agencies regarding their respective jurisdictions and to eliminate the need for a separate disclosure to the public for comments and responses on USACE's public notice.

Response to Comment 13-1

The commenter stated support for USACE's efforts to streamline CWA permitting activities and to facilitate programmatic compliance with the procedural requirements of other laws.

With regard to the commenter's statement that Covered Activities that comply with PCCP requirements should not require individual, case-by-case compliance that duplicates analysis already performed at a regional level, it should be noted that under the draft CWA Permit Strategy, a case-by-case analysis of activities would still be required. However, the analysis will be streamlined with the procedures of the Programmatic General Permit (PGP), Regional General Permits (RPGs), Letters of Permission (LOP) procedures, and Standard Permit (SP) procedures. For the PGP, Placer County and the City of Lincoln will be responsible for ensuring proposed activities meet the requirements of the PCCP, including the Plan, CARP, ordinances, and the terms and conditions of the PGP. For the two RGPs (for PCWA activities and in-lieu-fee [ILF] activities), LOP procedures, and SP procedures, USACE will conduct a case-by-case analysis of these activities to ensure they meet any terms and conditions and will require information to ensure the activities are in compliance with the Plan and CARP. While USACE anticipates that the majority of proposed activities will not require additional measures, for some projects additional measures not included in the Plan or CARP may be required as special conditions to those authorizations, to ensure compliance with applicable requirements and laws.

Response to Comment 13-2

The commenter described an inconsistency between the compensatory mitigation options for impacts on aquatic resources allowed under the Plan and CARP compared to compensatory mitigation options for impacts on aquatic resources allowed under the draft CWA Permit Strategy and draft general permits. The commenter requested that USACE revise the permit strategy, draft general permits, LOP procedure, and SP process to align with compensatory mitigation options presented in the Plan and CARP. The commenter submitted a similar comment on the EIS/EIR. Please refer to Response to Comment 14-1 for the response to that comment.

Under the draft CWA Permit Strategy, USACE has identified that compensatory mitigation will be conducted using only the *Western Placer In-Lieu Fee Program* for the PGP. USACE understands that other compensatory mitigation options may be available and allowed under the Plan and CARP. However, USACE has determined that it is appropriate to allow only the purchase of ILF credits for the PGP in order to streamline the process for the evaluation of projects under the permit strategy. In addition, under the PGP, requiring only the purchase of ILF credits will eliminate the need for notification to be provided to USACE to determine whether alternative compensatory mitigation options meet the requirements of 33 Code of Federal Regulations (CFR) 332. The requirements for the purchase of ILF credits does not eliminate the ability of applicants to work with the implementing entities to utilize alternate compensatory mitigation for other resources under the PCCP. In addition, property owners may work with the ILF sponsor to incorporate compensatory mitigation projects into the ILF program. USACE has proposed to modify the proposed LOP procedures to identify that applicants may propose alternative compensatory mitigation through the purchase of credits from a USACE-approved mitigation bank, provided the applicant demonstrates the mitigation bank is consistent with the Plan and CARP, and USACE approves the purchase of the credits. USACE has also added this language into the proposed abbreviated SP process. Applicants may also apply for other types of permits not within the permit strategy (i.e., Nationwide Permit [NWP], LOP, SP), proposing alternative compensatory mitigation. While not part of the Permit Strategy, USACE expects that these permit types will still be streamlined compared to the existing processes, due to ESA compliance and compliance with applicable requirements under the Plan and CARP.

Response to Comment 13-3

The commenter summarized the intent of the draft CWA Permit Strategy and requested revisions to the permit strategy, general permits, and LOP procedure to provide additional clarification regarding the requirement for alternatives analysis.

USACE agrees with the commenter that the intent of the permit strategy is to ensure that, provided proposed activities resulting in a loss of waters of the United States are conducted within the PFG, additional evaluation of offsite alternatives will not be required under any permit type.

However, with regard to onsite alternatives, USACE does not agree with the commenter that no onsite alternatives analysis would be required under the LOP procedures. Under both the LOP and SP procedures, an evaluation of onsite alternatives will be necessary to ensure compliance with USEPA's Section 404(b)(1) Guidelines. USACE anticipates that in most cases, the only information regarding onsite alternatives that will be necessary is information to show the activity meets the avoidance and minimization measures of the Plan, CARP, and implementing ordinances. However, there may be rare instances where additional information is required. Under the LOP procedures, applicants would be required, in the permit application, to provide a description of how impacts on aquatic resources and associated functions have been avoided and minimized to the maximum extent practicable on the project site, as well as provide information, in report form, concerning onsite practicable alternatives and the relative environmental impacts of those alternatives. The information needed would be commensurate with the proposed impacts on waters of the United States. Because these instances will depend on site-specific information, it is not possible for USACE to develop a specific circumstance where the information will be required or provide a list of information specifically needed, as recommended by the commenter. However, USACE is not interested in evaluating alternatives that would result in the avoidance of isolated waters which

would be indirectly affected by surrounding development, as these avoidance areas would result in similar overall adverse effects on the aquatic ecosystem as the proposed action. USACE's focus for onsite avoidance of waters of the United States is on modifying proposed avoidance areas to minimize adverse effects on waters of the United States, and further avoiding or minimizing direct and indirect adverse effects on jurisdictional streams and their adjacent wetlands. Therefore, onsite alternatives will be limited to (1) the no action alternative, (2) alternatives that modify proposed avoidance areas to further avoid or minimize adverse effects on waters of the United States, and (3) alternatives that would result in further avoidance and/or minimization of adverse direct or indirect effects on jurisdictional streams and their adjacent wetlands. In order to ensure applicants understand USACE's intent regarding onsite alternatives for the proposed LOP, USACE has modified page 2 and Section 2(l) of the *LOP Procedure* section of the LOP procedures (page 5), to clarify expectations for onsite alternatives under the LOP procedures. USACE has also included similar language in the proposed abbreviated SP process. Applicants should work with USACE as soon as possible to identify specific waters of the United States meeting the three focus areas identified above, as well as the specific information needs for onsite alternatives under either the LOP or SP procedures. Under the draft CWA Permit Strategy, all activities must comply with the Plan and CARP. Alternatives that do not comply with the Plan or CARP would therefore not be practicable alternatives.

With regard to the commenter's recommendation that the draft CWA Permit Strategy, general permits, and LOP procedure be revised to clarify how an onsite alternatives analysis will be conducted, USACE does not believe this is necessary. The evaluation of onsite alternatives is required for the USACE public interest review and compliance with USEPA's Section 404(b)(1) Guidelines. These processes are identified in 33 CFR 325 and 40 CFR 230, respectively. Nothing in the permit strategy modifies the public interest review or requirements of the Section 404(b)(1) Guidelines.

Response to Comment 13-4

The commenter summarized the role of the EIS/EIR in providing NEPA compliance for USACE general permits. The commenter submitted a similar comment on the EIS/EIR. Please refer to Response to Comment 14-7 for the response to that comment.

USACE concurs with the commenter that additional NEPA documentation is not required under the proposed general permits. Compliance with NEPA is conducted when a general permit is issued. Authorization of activities under the general permit, therefore, do not require additional documentation under NEPA. USACE intends to adopt the EIS prepared by the USFWS, which will provide the information necessary for compliance with NEPA for the proposed general permits. It should be noted, however, that per regulation, general permits are only valid for 5 years. If USACE decides to reissue the general permits when they expire, USACE will determine whether or not any supplemental NEPA documentation is needed. While additional NEPA documentation is not required for the activities authorized under a general permit, a decision document to ensure the proposed activity complies with the terms and conditions of the general permit may be required. Under the proposed PGP, the implementing entities will determine the appropriate level of documentation required to show compliance with the PGP. For the proposed RGPs, USACE will prepare the documentation. For the PCWA RGP, this documentation will consist of a memorandum for record prepared using the most current template. For the proposed RGP for the ILF projects, this documentation will be prepared with the documentation for approval of the ILF project.

Response to Comment 13-5

The commenter stated an assumption that Covered Activities under the LOP procedure could prepare environmental assessments (EAs) that tier from the EIS/EIR. The commenter submitted a similar comment on the EIS/EIR. Please refer to Response to Comment 14-7 for the response to that comment.

As identified by USACE Regulations at 33 CFR 325, Appendix B(6)(a)(5), LOPs are a type of activity categorically excluded from NEPA documentation. Therefore, if the proposed LOP procedures are approved by USACE, individual activities under the LOP procedures will not require additional documentation for compliance with NEPA. However, even though compliance with NEPA is not required for activities being evaluated under the proposed LOP procedures, USACE must still conduct a public interest review and evaluation for compliance with USEPA's Section 404(b)(1) Guidelines. These evaluations require an analysis of the individual and cumulative effects of the proposed action on a number of resource factors. To the extent available and appropriate, USACE will utilize the information in the EIS. However, additional project specific information may be necessary to complete this evaluation. During the evaluation of the LOP, USACE will prepare a decision document using the current template in order to determine whether or not to issue the LOP.

Response to Comment 13-6

The commenter stated assumptions regarding NEPA compliance requirements for future proposed activities requiring a general permit. The commenter submitted a similar comment on the EIS/EIR. Please refer to Response to Comment 14-7 for the response to that comment.

The draft CWA Permit Strategy does not change the requirements for USACE to comply with any existing or future applicable laws, regulations, guidance or policy. The determination on whether or not an EIS is necessary will be made on a case-by-case basis, using the NEPA regulations, USACE regulations and applicable guidance. The draft CWA Permit Strategy does not change the USACE determination for the NEPA scope of analysis, which is determined using 33 CFR 325, Appendix B(7)(b), nor does it change how USACE determines whether an EIS would be necessary. USACE has determined additional clarification is not necessary to identify that USACE will follow existing laws, regulations, or guidance in making these determinations. USACE concurs that determination of the appropriate scope of analysis, using applicable regulations, guidance, and policy is essential in the determination of whether an EIS is required.

Response to Comment 13-7

The commenter requested clarification regarding any additional process that will be required to demonstrate compliance with ESA Section 7. Because USACE has not yet requested consultation under Section 7 of the ESA, USACE is unable to provide information on any additional processes that may be required. However, USACE anticipates that the biological opinions issued by USFWS and NMFS will be similar to the intra-Service biological opinions issued by USFWS and NMFS on the issuance of their incidental take permits. Once USACE receives biological opinions from USFWS and NMFS, modifications to the permit strategy may be necessary to account for any necessary processes. While USACE agrees with the commenter that processes to expedite Section 7 consultations for activities that do not comply with the Plan would be beneficial, this is outside of

the scope of the permit strategy, as only those activities that comply with the Plan and CARP would be evaluated under the permit strategy.

Response to Comment 13-8

The commenter discussed recommendations related to water quality certification and recommended that USACE and the Regional Water Quality Control Board (Regional Water Board) enter into a Memorandum of Understanding (MOU). The commenter submitted similar comments on the EIS/EIR. Please refer to Responses to Comments 14-2 and 14-4 for responses to those comments.

As identified in the draft CWA Permit Strategy, USACE intends to request programmatic Section 401 Water Quality Certification (WQC) from the Central Valley Water Board on the permit strategy. USACE has not yet requested the Section 401 WQC from the Regional Water Board and therefore is unable to anticipate the future requirements. However, USACE anticipates the Section 401 WQC for the PGP will be similar to the Section 401 WQC issued by the Regional Water Board on April 12, 2019, for the South Sacramento Habitat Conservation Plan. Because the LOP and SP are procedures—not permits—the Regional Water Board may determine issuance of a programmatic Section 401 WQC is not appropriate and may require an individual Section 401 WQC. USACE intends to coordinate with the Regional Water Board to determine whether or not programmatic Section 401 WQC may be issued for the entire permit strategy. USACE does not have any authority over requirements under the State's Dredge or Fill Material procedures. Questions related to the applicability of those procedures for PCCP Covered Activities should be directed to the Regional Water Board. USACE will consider the commenter's concerns during discussion with the Regional Water Board on the Section 401 WQC(s).

Comment Letter 14—Sheppard, Mullin, Richter & Hampton LLP

Response to Comment 14-1

The commenter described an inconsistency between the compensatory mitigation options for impacts to aquatic resources allowed under the Plan and CARP. The commenter noted similar inconsistencies with other Plan-related documents and the USACE permit strategy and draft general permits. The commenter requested that all documents be revised to present consistent compensatory mitigation options. The commenter submitted a similar comment to USACE in response to the agency's public notice for its draft CWA Permit Strategy (file number SPK-2005-00485). Please see to Response to Comment 13-2 for the response to that comment.

The commenter correctly noted that the CARP does not specifically reference "permittee-responsible mitigation" (as used here, the term *permittee-responsible mitigation* has the same meaning as used in the 2008 Final Compensatory Mitigation Rule) as an option for compliance with the CARP. Section 6.2.3, *Compensatory Mitigation within the PCCP Plan Area*, of the CARP states that use of the ILF or an agency-approved mitigation bank can be used for compliance. Section 5.2.7, *Proof of Fulfillment of Mitigation Requirements*, also states that land dedications can be used to fulfill mitigation requirements in lieu of ILF payments when the requirements of Section 8.4.13, *Land Dedication in Lieu of Land Conversion Fee*, of the Plan are met.

Permittee-responsible mitigation is not referenced in the CARP so that the CARP and the USACE Permit Strategy for waters of the United States are aligned. Similarly, the Plan does not specifically recognize Permittee-responsible mitigation because the payment of PCCP development fees and land dedications in lieu of fee payments are the primary means by which the conservation strategy is to be implemented. The PCCP's funding plan and decision-making process is predicated on the use of PCCP development fees and land dedications to build the Reserve System within the RAA and to conduct restoration on lands within the Reserve System that have the appropriate site conditions for restoration. Onsite Permittee-responsible mitigation is unlikely to meet the avoidance criteria of Plan Section 6.3.1.3.1, *Permanent Effect Avoidance in the PFG*, and would rarely apply to Covered Activities in the Foothills. Notwithstanding the above, the PCA and the Permittees may consider Permittee-responsible mitigation particularly under the circumstances described in the comment, i.e., Permittee-responsible mitigation was proposed on lands deemed to be acceptable for a dedication to the Reserve System. Under this circumstance, Permittee-responsible could be considered for those non-wetland habitats addressed by the Plan that are not subject to the requirements of the CARP. For Special Habitat Fees, Plan Section 8.7.2, *Restoration or Creation in Lieu of Special Habitat Fee*, does authorize a "Private Project Participant" to propose a restoration or creation mitigation plan. If approved by the PCA, the mitigation plan can be used for a fee credit against Special Habitat Fees (also see Plan Section 9.4.1.4.2, *Wetland Restoration or In-stream Enhancement Provided in Lieu of Fee*).

As it relates to the CARP specifically, the Executive Summary and Section 6.2.3, *Compensatory Mitigation within the PCCP Plan Area,* of the CARP will be modified to clarify that compliance with the CARP for waters of the United States can be achieved through payment to the ILF, through land dedications in lieu of ILF payments, and through the purchase of credits at an agency-approved mitigation bank. If the USACE's Permit Strategy is modified or clarified such that it specifically

allows the use of permittee-responsible mitigation additional modifications to the CARP will be made prior to adoption of the program.

Response to Comment 14-2

The commenter recommended an Implementing Agreement or MOU be developed to provide that both the Central Valley Water Board and CDFW accept PCCP mitigation for CWA Section 401 and Fish and Game Code Section 1600 requirements. The commenter submitted a similar comment to USACE in response to the agency's public notice for its draft CWA Permit Strategy (file number SPK-2005-00485). Please see to Response to Comment 13-8 for the response to that comment.

At this time, CDFW has not stated that it will sign an MOU but has instead stated an intent to sign the ILF program enabling instrument (along with the USFWS and NMFS) once the NCCP permit has been issued allowing it to be utilized for Section 1600 agreements. The Central Valley Regional Water Board previously approved and signed the current 2019 ILF Enabling Instrument.

The objective of an MOU would be to provide alignment between CWA Sections 404 and 401, NEPA, CEQA, and the conservation strategy of the PCCP and the CARP. USACE's draft CWA Permit Strategy addresses alignment with the Plan, CARP, NEPA/CEQA, and CWA Section 401. An MOU is anticipated to be finalized during early implementation addressing anything not covered by the permitting strategy including monitoring and reporting requirements. The Central Valley Water Board has proposed to be a party to an MOU, and the Permittees would also seek to address the recent State Dredge and Fill procedures and to memorialize the Plan/CARP meeting the requirements for a watershed plan.

Response to Comment 14-3

The commenter sought to tie future actions by CDFW on Lake and Streambed Alteration Agreements (LSAA) to the avoidance, minimization and mitigation measures of the CARP and Plan. The commenter recommended the use of an MOU or similar arrangement to create a linkage between the PCCP and the imposition of compliance measures in a LSAA. Such an agreement would also identify an expedited procedure for processing of an LSAA.

As noted in the CARP, CDFW can only issue an agreement to an entity as defined by Fish and Game Code 1601(d) and cannot extend its permitting authority for LSAA to the County of City. As a result, CDFW has an independent authority to issue LSAAs. It is not possible to require CDFW to use standards or procedures provided by the Plan and CARP. Notwithstanding the independent discretion of CDFW, it has been a long-standing objective of the preparers of the PCCP to ensure that CDFW's issuance of future LSAAs is tied to the avoidance, minimization, and mitigation measures of the Plan and CARP and that additional mitigation requirements not be required for issuance of a LSAA within the PCCP coverage area. The PCCP's conservation strategy, avoidance and minimization measures, conditions on Covered Activities, and conservation measures were all prepared with the assistance of CDFW with the goal of providing a conservation strategy for LSAAs within the PCCP coverage area.

In order to provide a clearer linkage between the conservation strategy in the Plan and CARP and the future issuance of LSAAs during the permit term, changes to provide clarification have been made to the CARP Executive Summary as well as Sections 1.3.1, *Covered Activities*; 2.3.2, *California Department of Fish and Game Code 1602*; 4.1, *Introduction*; 4.6, *Overview of the Western Placer County*

In-lieu Fee (ILF) Program; 4.7.3, *Mitigation Strategy*; 6.2.3, *Compensatory Mitigation within the PCCP Plan Area*; and 7.3, *CARP Authorization Process*. This change to the Plan did not result in any revisions to the EIS/EIR.

As noted in the CARP, CDFW can use the CARP and Plan for an LSAA, but there is not a mechanism in the form of an agreement or MOU that mandates the use of the CARP and Plan. Similarly, there is not a mechanism that limits CDFW's independent discretion to impose additional avoidance and minimization measures on Covered Activities through an LSAA.

Response to Comment 14-4

The commenter discussed recommendations related to water quality certification and waste discharge requirements and recommended that the Permittees, USACE, and Regional Water Board enter into an MOU. The commenter submitted a similar comment to USACE in response to the agency's public notice for its *Proposed Section 404 Clean Water Act Permit Strategy Aligned with the Placer County Conservation Program* (file number SPK-2005-00485). Please refer to Response to Comment 13-8 for the response to that comment.

Regarding the recommendations in the comment, the Central Valley Water Board has proposed to sign a joint MOU that may address several of the concerns raised. The issuance of a programmatic CWA 401 certification for the PGP will cover CARP Covered Activities permitted under the PGP. For those Covered Activities that are not covered under the PGP, and which apply for a CWA 404 permit in accordance with proposed letter of permission (LOP) procedures, must obtain a project-specific CWA 401 certification from the Central Valley Water Board. Because the CARP is designed to protect aquatic resources of Placer County, which include waters of the State, it is anticipated that the Water Board will apply CARP measures to fulfill CWA 401 certification requirements. The Water Board must review each CWA 401 application and make an individualized determination regarding certification. However, the application procedure for individual CWA 401 certifications for CARP Covered Activities will be integrated with the Plan and CARP environmental review and permitting process.

In terms of procedures, the draft CWA Permit Strategy identifies a joint permitting procedure for each CARP Covered Activity. The objective will be to integrate CWA 404/401 permitting and certification procedures with procedures for providing take authorizations under the Plan. The joint procedures could include the use of a single joint application for Plan take authorizations and CWA 404/401 permits and certifications; a consistency check to ensure that avoidance, minimization and mitigation measures are consistent for the CARP and Plan; and to issue Plan take authorizations concurrently with CWA 404/401 permits and certifications.

The lead agencies concur with the comment that the conservation strategy described in the Plan and CARP be considered a "watershed plan," as that term is used in the State's Procedures for Discharge of Dredged or Fill Material to Waters of the State (Procedures). Placer County actively participated in the preparation of the Procedures and raised the issue of integration with the PCCP conservation strategy and procedures on numerous occasions. As stated in Section V, *Definitions*, of the Procedures,

> Any NCCP approved by the California Department of Fish and Wildlife before December 31, 2020, and any regional HCP approved by the United States Fish and Wildlife Service before December 31, 2020, which includes biological goals for aquatic resources, shall be used by the permitting authority as a watershed plan for such aquatic resources, unless the permitting authority determines in writing

that the HCP or NCCP does not substantially meet the definition of a watershed plan for such aquatic resources.

It is the objective of the Permittees to have the PCCP's avoidance, minimization, and mitigation requirements meet the requirements of the Procedures and that the conservation strategy of the PCCP will serve as a watershed plan as that is described in the Procedures. Compliance with the Plan, CARP, ILF, and programmatic 401 certification will be deemed compliant with the Procedures.

Response to Comment 14-5

The commenter identified (and expressed support for) the procedure through which USFWS and NMFS will provide a programmatic Section 7 ESA consultation on all Covered Activities that require a CWA 404 permit. The commenter submitted a similar comment to USACE in response to the agency's public notice for its draft CWA Permit Strategy (file number SPK-2005-00485).

Please see Response to Comment 13-7.

Response to Comment 14-6

The commenter recommended that USFWS "clarify whether any additional process will be required to demonstrate compliance with ESA Section 7 for subsequent individual permit decisions authorizing Covered Activities, other than documentation that the activity is consistent with the Plan."

As stated in Plan Section 8.9.3, *Wildlife Agency Responsibilities in Approving Take Authorizations for Covered Activities*, the "Wildlife Agencies will not be involved in approving take authorizations for the Permittees' projects or for third-party development projects, except in limited circumstances (e.g., where Section 7 consultations are still required [see Section 10.4.2, *Federal Section 7 Consultations]*)." Consultations with the Wildlife Agencies will still be required for Participating Special Entities, land in lieu of fee proposals, and several items related to fees (see Plan Section 8.9.3, *Wildlife Agency Responsibilities in Approving Take Authorizations for Covered Activities*).

For those circumstances where a Section 7 consultation is required for a Covered Activity, USFWS and NMFS do not anticipate any additional requirements included in programmatic BOs to the USACE for impacts on biological resources, beyond those included in the intra-Service biological opinion on the issuance of the respective incidental take permits. If USFWS and NMFS determine the Plan meets the criteria for issuance for Section 10(a)(1)(B) permits, permits would be issued and the permittees and the Covered Activities would receive No Surprises Assurances with respect to those biological resources addressed by the Plan.

Regarding the final EIS/EIR supporting a programmatic consultation by the UFWS, the text in Section 6.1.1, *Federal Endangered Species Act*, and in Table 1-1, *Summary of Federal and State Permit and Approval Decisions for the PCCP*, of the EIS/EIR has been revised in response to this comment. No changes to the findings of the document would result from these changes.

Response to Comment 14-7

The commenter recommended that the "EIS/EIR clarify that, if subsequent NEPA review is required, it should focus on any potential impacts of the Covered Activity that have not been analyzed already in the EIS/EIR." The commenter further recommended that "a project-specific EIS should be

required only if the activities in question would have one or more new significant effects that were not previously analyzed in the EIS/EIR." The commenter submitted similar comments to USACE in response to the agency's public notice for its draft CWA Permit Strategy (file number SPK-2005-00485).

Please see Responses to Comments 13-4, 13-5, and 13-6.

A draft CWA Permit Strategy has been prepared by USACE (please also see Responses to Comments 14-2 and 14-4) with the objective of providing an alignment between Sections 404 and 401 of the CWA, NEPA, CEQA, and the conservation strategy of the PCCP. The Permit Strategy addresses NEPA compliance, opportunities to tier from the programmatic environmental review of the EIS/EIR and the scope of subsequent environmental review that may be required for certain projects.

CWA 404 permits for Covered Activities may require some form of subsequent environmental review under NEPA. The USACE will determine what form of additional environmental review is required for each Covered Activity on a case-by-case basis. As identified in Responses to Comments 13-4 and 13-5, additional NEPA analysis is not required for the proposed PGP, RGPs, or LOP procedures, except for potential additional NEPA analysis if USACE decides to reissue the PGP and RGPs prior to their expiration. The proposed Abbreviated SP procedures would be utilized for those rare instances where USACE determines a proposed activity may have the potential for significant impacts on the human environment requiring the preparation of an EIS. The NEPA analysis under the abbreviated SP process would be accomplished as a result of tiering from the PCCP EIS.

USACE will determine the scope of its environmental review under NEPA based on its jurisdiction over the Covered Activity. The scope of USACE review under NEPA will not necessarily encompass the entire project as defined and analyzed for purposes of CEQA. For example, where impacts on waters of the United States are limited to a portion of a proposed Covered Activity's site, the environmental analysis under NEPA would likely be limited to the effects of only that portion of the Covered Activity. Ordinarily, the NEPA analysis is limited to the effects that are caused by activities that occur within jurisdictional waters and result from the permit action, and do not encompass the effects of the entire proposed project.

Response to Comment 14-8

The commenter stated assumptions regarding procedures for CEQA compliance.

The County or the City would be the lead agency for discretionary land development and infrastructure projects within its jurisdiction. Those discretionary projects that are considered Covered Activities by the PCCP may be subject to environmental review under CEQA. Consistent with the CEQA Guidelines (Section 15152) and Chapter 18 of Placer County Code (Section 18.20.120), the County and City will tier, whenever possible, the environmental analyses of discretionary Covered Activities from the PCCP EIS/EIR. Tiering from a program-level EIR for subsequent environmental review is a common practice particularly for the project-specific environmental review of discretionary projects that are consistent with general plans and community plans. This practice would continue with the PCCP including the use of the subsequent environmental review by responsible and trustee agencies who will rely upon the lead agency's environmental documents for their own regulatory actions.

Comment Letter 15—Cox, Castle & Nicholson

Please note that Comment Letter 15 was submitted to USACE regarding the agency's public notice for its draft CWA Permit Strategy (file number SPK-2005-00485). The response to this comment letter is numbered sequentially and presented in chronological order (based on the date received) along with those received by USFWS and the County on their respective NOAs. USACE's public notice opened on July 8, 2019, for a 30-day comment period; this was separate from the NOAs issued by USFWS and the County that opened on June 21, 2019, for a 60-day comment period (and included the USACE's draft CWA Permit Strategy). The response provided here is not a USFWS or County response and is not in response to the USFWS or County's NOAs, USFWS's NEPA obligations, or the County's CEQA obligations for the draft EIS/EIR, draft Plan, or Section 10(a)(1)(B) incidental take permit applications. Rather, the response has been provided here by USACE as a means to consolidate all comments received by all agencies regarding their respective jurisdictions and to eliminate the need for a separate disclosure to the public for comments and responses on USACE's public notice.

Response to Comment 15-1

The commenter noted that they intend to submit separate comments on the PCCP and CARP and requested that USACE consider those comments in the context of the draft CWA Permit Strategy. The commenter submitted those comments on August 20, 2019, and they are included as Comment Letter 16. Please refer to Response to Comment Letter 16.

Response to Comment 15-2

The commenter expressed concern that the Draft PGP does not authorize the loss of vernal pool waters of the United States within the Lower American 8-digit Hydrologic Unit Code (HUC, 18020111). In January 2016, USACE completed an *Assessment of Cumulative Impacts to Waters of the United States within the Placer County Conservation Plan - HCP/404 Project*. As a result of the cumulative impact assessment, USACE estimated that past, present, and reasonably foreseeable actions requiring a USACE permit have and would result in a loss of approximately 82% of vernal pools within the Lower American 8-digit HUC watershed. This loss of vernal pools included the loss of up to 27.7 acres of vernal pools associated with development of the Placer Vineyards Specific Plan Area (PVSP). On January 12, 2017, USACE issued RGP 14 for the construction of backbone infrastructure associated with development of the PVSP. USACE determined, with the issuance of the RGP, that construction of the PVSP backbone infrastructure, resulting in a loss of up to 34.93 acres of waters of the United States, including an estimated 9.20 acres of vernal pools, would result in no more than minimal individual or cumulative adverse effects. USACE has conducted an assessment of the properties within the PVSP area, including the backbone infrastructure area, to determine the total loss of waters of the United States, including vernal pools that may be associated with development of the PVSP, and, without the restriction on loss of vernal pools within the Lower American watershed, would qualify for authorization under the proposed PGP. Based on USACE's assessment, up to 50 acres of waters of the United States—including 15 acres of vernal pools—could be authorized under the proposed PGP within the PVSP and backbone infrastructure area, if the proposed PGP did not restrict the discharge into vernal pools within the Lower American River watershed within this area. USACE has always intended that development of the PVSP could proceed under the permit strategy once the Plan, CARP, and permit strategy are approved and implemented. With the restriction on the loss of vernal pools under the PGP, projects within the PVSP and

backbone infrastructure areas that meet the requirements of the Plan and CARP would have to be evaluated under the LOP or SP procedures in order to be covered under the permit strategy, even if the proposed actions would result in minimal adverse effects. USACE has determined that, because the effects on the human environment resulting from development of the entire PVSP, including backbone infrastructure, have been evaluated and disclosed within the EIS prepared for the PVSP, it is not appropriate to restrict the use of the PGP to only those PVSP projects that do not result in a discharge of fill material into vernal pools. Therefore, USACE has modified the proposed PGP to exclude projects within the PVSP and backbone infrastructure areas from the restriction on the discharge of fill material into vernal pools within the Lower American watershed. Under the modified PGP, proposed activities within the PVSP and backbone infrastructure area that result in a discharge of fill material into vernal pools within the Lower American River watershed could be authorized under the PGP, provided those activities meet all other terms and conditions of the PGP, and result in no more than minimal individual or cumulative adverse effects.

In addition, USACE has identified that the cumulative discharge of fill material into up to 15 acres of vernal pools and 50 acres of total waters of the United States within the PVSP and backbone infrastructure area could affect the utility of the proposed PGP for its 5-year duration. Currently, the proposed PGP contains a maximum threshold of 90 acres of loss of waters of the United States, including 15 acres of vernal pools. Projects under the PVSP and backbone infrastructure area could then use up to 55% of the overall limit and 93% of the vernal pool limit in the PGP. Very few other projects with no more than minimal individual and cumulative adverse effects could then be authorized under the PGP. In order to ensure the proposed PGP has sufficient utility for proposed activities that comply with the Plan and CARP, USACE has modified the thresholds on the cumulative limitation of the PGP. The proposed modification excludes PVSP and backbone infrastructure from the 90-acre/15-acre maximum loss, and includes a specific limitation on PVSP and backbone infrastructure projects, allowing for the loss of up to 50 acres of waters of the U.S., including up to 15 acres of loss of vernal pool waters of the United States. This change will allow development of some of the properties within the PVSP and backbone infrastructure area, while also allowing other proposed activities with minimal individual or cumulative adverse effects to be authorized under the PGP.

Comment Letter 16—Cox, Castle & Nicholson LLP

Response to Comment 16-1

Comment 16-1 summarizes Section 8.9.5 of the Plan and describes how projects with the PVSP will be permitted through the Plan. The commenter is correct in this summary of the Plan's approach for the PVSP.

The *Background* section of Comment Letter 16 includes a statement that projects within the PVSP will mitigate at the CARP ratio of 1.5:1 upon adoption of the Plan rather than at the additional 0.5:1 required by the Record of Decision prior to adoption of the Plan. It is agreed that the Plan's conservation strategy and cost and funding program is fundamentally based on implementation of the CARP ratio at 1.5:1 (and 1.52:1 for Riverine/Riparian) and that for PVSP projects seeking coverage under the Plan as Covered Activities, mitigating at the ratios identified in the Plan and CARP would fulfill the requirements for coverage under the Plan. For PVSP projects that have not been authorized by USACE, the applicant would generally request authorization through the USACE Permit Strategy, proposing compensatory mitigation consistent with the Plan and CARP. This would include either submittal of an application to the County for authorization under the PGP, or submittal of an application to USACE for authorization under the RGPs, LOP, or SP. For PVSP projects that have been authorized by USACE and for which Plan and CARP compensation ratios are intended to be used, the permittees may request a modification to their permit (for LOPs or SPs) or a new authorization (for RGPs and NWPs) under the USACE Permit Strategy. This request should identify the amount and type of compensatory mitigation being proposed, and it presumes the permittees haven not already completed their compensatory mitigation and have not completed the authorized discharge into waters of the United States.

Response to Comment 16-2

The commenter stated that the 1,800-acre (with 80 wetted acres) cap on loss of vernal pool complexes until advance acquisition goals are met is too restrictive, and recommended greater flexibility be written into this requirement.

The Wildlife Agencies require assurance that early conservation commitments will occur prior to allowing irreversible loss of vernal pool complexes. Placer County negotiated this requirement with the USFWS based on reasonable expectations for early Plan implementation, the anticipated timeframe for securing advanced mitigation, and the expected rate of development. These expectations have not changed, and given current conditions, it is not anticipated that this cap would impair the Permittee's ability to issue permits. In addition, the County, acting in good faith, has acquired the first 400 acres of high density vernal pool grasslands that would contribute toward advanced acquisition requirements such that progress towards meeting these requirements is already being made.

Response to Comment 16-3

The commenter expressed concern that, given the construction schedule for projects in the PVSP, there will not be sufficient time to complete protocol-level vernal pool branchiopod surveys.

Projects that have already completed vernal pool surveys or obtained incidental take coverage prior to the adoption and issuance of the incidental take permits for the Plan would not be required to conduct additional surveys.

Also, please see Response to Comment 30-6 for proposed revisions to survey requirements.

Response to Comment 16-4

The commenter expressed concern that the success criteria and performance standards for vernal pool restoration do not provide enough flexibility to account for site-by-site variation.

Text addressing site-by-site variation and flexibility has been included in Section 5.3.3.3.1 of the Plan under the *Success Criteria for Vernal Pool Restoration* heading. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 16-5

The commenter expressed concern that a waiver of the required 1,320-foot buffer from active Swainson's hawk nests can only be sought if the nest site is shielded from view and noise from the project site by other development, topography, or other features. The commenter stated that Swainson's hawks thrive in farmlands and urban areas where noise is always present.

While Swainson's hawks may become habituated to ongoing disturbances, it is the introduction of new disturbances that present the risk of Swainson's hawks abandoning nests. The CDFW guidelines stipulate that the 1,320-foot (0.25-mile) buffer is appropriate for urban areas and that a 0.5-mile buffer should be applied in areas where disturbance is not a normal occurrence during the breeding season (California Department of Fish and Game 1994). The 1,320-foot buffer is therefore appropriate for urbanizing portions of Placer County. In most cases, trees, buildings, or other features will shield active nests from developed areas; in such cases, the applicant may seek a waiver. In cases where there is no such visual barrier, the nest will normally be in close proximity to the development, in which case a non-disturbance buffer would be appropriate while the nest is active to avoid nest abandonment.

Response to Comment 16-6

The commenter questioned why early, monthly tricolored blackbird surveys are needed if three additional preconstruction surveys are required within 15 days of initiating Covered Activities during the nesting season.

In response to this comment, Plan Section 6.3.5.9.1, *Survey Requirements,* has been revised to clarify that if project work is conducted during the nesting season (March 15 to July 31), three surveys shall be conducted within 15 days of the start of the Covered Activity, with one of the surveys occurring within 5 days of the start of the Covered Activity. This change to the Plan did not result in any revisions to the EIS/EIR.

The commenter also stated that the tricolored blackbird measure should clarify no additional surveys will be needed after the first survey if the survey indicates that the site does not support suitable tricolored blackbird habitat.

Text was added to the tricolored blackbird condition to state that if the first survey indicates that suitable nesting habitat is not present on the project site or within 1,300 feet of project work areas, additional surveys for nest colonies are not required. The text further states that preconstruction surveys are still required, however, as described in Tricolored Blackbird 2. This change to the Plan did not result in any revisions to the EIS/EIR.

Please also see Response to Comment 30-8, Response to Comment 30-9, and Response to Comment 30-11.

Response to Comment 16-7

The commenter pointed out that Section 8.9.5.1 of the Plan states, "take authorization for the PVSP will expire" for any PVSP project that has not already been appended to the programmatic biological opinion (PBO), and that this statement is inaccurate because the PBO does not authorize take.

The commenter is partially correct: the PVSP PBO does not include incidental take statement; however, each project that has been appended to the PBO does have its own incidental take statement. The County has revised this language to reflect that once the PCCP is in place, the PBO will expire so that no additional projects can be appended to the PBO. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 16-8

The commenter pointed out that Sections 8.9.5.2 and 8.9.5.7 of the Plan need to be updated to reflect the in-lieu payment structure that the County, USACE, and USFWS developed for use by PVSP interim projects. These sections have been revised as needed to reflect the process described.

This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 16-9

The commenter requested that the County revise Appendix N of the Plan to reference Figures N-1 and N-2 and state that revisions to the map will not require an amendment to the Plan.

This revision has been made to Appendix N. The commenter also stated and requested confirmation that the specific list of infrastructure projects described in Appendix N are examples and not an exhaustive list. The lead agencies confirm this statement. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 16-10

The commenter requested that the County add information clarifying that for PVSP projects, where the avoidance and minimization measures in Appendix N of the Plan differ from those in Chapter 6 of the Plan, Appendix N will control avoidance requirements for the PVSP.

This clarification has been made in Appendix N. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 16-11

The commenter requested a revision to Appendix N of the Plan to clarify that projects covered under the PVSP RGP will comply with the minimization measures of the RGP.

Appendix N has been revised to include this clarification. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 16-12

The commenter requested clarification in Section 2.6.1 of the Plan that the PVSP is consistent with the goals of the Plan.

Clarification has been added. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 16-13

The commenter noted that Item 8 under Section 2.7 of the Plan should include a notation that PVSP coverage will be as provided in Sections 8.9.5 and Appendix N.

This clarification has been added. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 16-14

The commenter requested a link between the CARP and Plan Section 8.9.5, *Placer Vineyards Specific Plan*, and Plan Appendix N, *Placer Vineyards Specific Plan*.

A new section has been added to the CARP—Section 9, *Placer Vineyards Specific Plan*—that will link the CARP to the Plan provisions for PVSP for aquatic resources of Placer County. The new section will include the following subsections:

9.1 **Overview of Avoidance, Minimization and Mitigation Requirements**. This section recognizes Section 8.9.5 and Appendix N of the Plan and how they apply to aquatic resources of Placer County.

9.2 **Applicability of the CARP Stream System Requirements**. This section recognizes that the PCA, in consultation with the USACE, CDFW, or the RWQCB, can authorize Stream System avoidance requirements that differ from Section 6.3.2, *Avoidance within the Stream System*, of the CARP.

9.3 **Onsite Avoidance within the Placer Vineyards Specific Plan.** This section recognizes that the USACE's Record of Decision (ROD) and the Programmatic Biological Opinion established avoidance criteria that differ from the Plan and CARP and how these differences are referenced in Section 8.9.5 and Appendix N of the Plan.

This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 16-15

The commenter referred to a statement in the CARP Executive Summary about the review of delineations for CARP authorizations.

The narrative in the Executive Summary is described in greater detail in CARP Section 7.3, *CARP Authorization Process*. As noted in that section, the role of the Program Biologist (PB) is to aid

applicants, particularly those with very small wetland impacts, with the processing of a CARP authorization. In some instances, the PB would actually prepare the delineation for the project proponent. The objective is not to provide two levels of review for all delineations; one by the PB and another by the USACE; the lead agencies agree with the commenter that two levels of review would potentially create a duplication in the regulatory process and lead to project delays. Instead, the objective is one of quality control, particularly for small projects. If inadequate delineations are submitted to the USACE there will be delays for those projects that will need to correct the delineations. Revisions have been made to Section 7.3 of the CARP to clarify the purpose of this review. This change to the CARP did not result in any revisions to the EIS/EIR.

Response to Comment 16-16

The commenter asserted that "Section 6 of the CARP should explicitly acknowledge the provisions of the ROD with respect to PVSP avoidance and minimization under the Section 404(b)(1) Guidelines."

Please see Response to Comment 16-14.

Response to Comment 16-17

The commenter requested confirmation that the LIDs and best management practices (BMPs) required by the CARP would not conflict or duplicate those already incorporated into the PVSP.

This comment is noted. The water quality provisions required by the CARP (e.g., low impact development requirements) would be those imposed by Placer County consistent with their regulatory requirements under the CWA (e.g., the National Pollutant Discharge Elimination System), CEQA, and local ordinances, and those mitigation requirements would be used in CARP authorizations. For example, the use of the *West Placer Storm Water Quality Design Manual* (or any successor of this manual during the buildout of PVSP) for compliance with NPDES would also serve to comply with the CARP.

Response to Comment 16-18

The commenter requested that the CARP acknowledge that the additional 0.5:1 ratio included in the USACE's ROD for the PVSP is not required for PVSP projects whose impacts are mitigated through the PCCP. This comment is noted. No changes are required in the CARP. The ROD specified additional mitigation requirements for individual PVSP applicants who implement permittee responsible mitigation projects or pay in lieu fees outside of the CARP's procedures. When a PVSP applicant applies for an authorization through the CARP, the compensatory mitigation requirements described in CARP Section 6.2.3, *Compensatory Mitigation within the PCCP Plan Area*, would apply to those projects. Notably, Section 6.2.3 requires the payment of a PCCP Special Habitat Fee to the Western Placer County In Lieu Fee program at a ratio of 1.5:1 for all wetland types described in CARP Chapter 3, *Placer County Aquatic Resources Protected by the CARP*. Also please see Response to Comment 13-2.

Additionally, the USFWS PBO acknowledges that the PCCP mitigation requirements will take precedence once the PCCP is approved for Covered Species: "After the PCCP Section 10 take permit is issued by Service, all remaining PVSP projects will receive take exemption through the PCCP. At that time, the PVSP PBO will be replaced by the biological opinion for the PCCP". The USACE ROD for PVSP would not be applicable to projects applying for authorization under the USACE Permit

Strategy, and it is assumed that applicants would request CARP authorizations for impacts to waters of the Unite States after the PCCP is adopted.

Also please see Response to Comment 16-1.

Response to Comment 16-19

The commenter requested the CARP acknowledge that the RGP for the PVSP's backbone infrastructure will continue to be in effect.

The USACE issued a RGP for PVSP infrastructure on January 12, 2017. The RGP will expire on January 11, 2022 (RGP 14, SPK-1999-00737). The RGP specifically states that it authorizes, "permanent and temporary discharges of fill material into waters of the U.S. associated with construction and/or maintenance of the backbone infrastructure for the PVSP project, as well as construction of permittee-responsible compensatory mitigation required for unavoidable direct and indirect adverse effects associated with construction of the backbone infrastructure." The RGP provides sufficient clarity on its applicability to PVSP infrastructure projects, and a change to the CARP would not be necessary.

Additionally, because the CARP is likely to be approved in early 2020, the RGP will expire within 2 years of its approval. Having a statement in the CARP about an RGP that may not exist as of January 2022 would be inappropriate. Lastly, the RGP recognizes that permittee-responsible mitigation is allowed for compensatory mitigation projects. The USACE did not include permittee-responsible mitigation in its Permit Strategy for the PCCP. Also please see Response to Comment 13-2.

Response to Comment 16-20

The commenter requested CARP Section 5.2, *Application Requirements*, allow use of existing PVSP studies and information to satisfy the requirements of the CARP.

CARP Section 5.2.2, *Site Assessment*, and Section 5.2.3, *Further Studies as Deemed Necessary*, provide guidance on the materials that need to be submitted to initiate a CARP authorization. Because the CARP assessment procedures are integrated with the Local Jurisdiction's CEQA and land development review processes, it is anticipated that documentation would be prepared that satisfies several site assessment requirements. Some of these documents may be developed specifically for the CARP authorization, and others may be prepared for multiple purposes.

As stated in Section 5.2.2, *Site Assessment*, the Local Jurisdiction would prepare a site assessment based upon its review of the project site and any relevant supplemental information. This supplemental information can include "CEQA documents previously prepared for the site of the project." This sentence has been amended to include NEPA and other documents that the PB considers current that were previously prepared for the site or in the vicinity of the project. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 16-21

The commenter stated that Mitigation Measure BIO-3, *Conduct preconstruction surveys for roosting bats and implement protection measures*, has inconsistencies and questions some of the specific measures. The commenter stated that no explanation is provided for the measure that "trees will be removed in pieces, rather than felling the entire tree."

The intent of this measure is to create some amount of disturbance that will rouse the bats and allow them time to exit/leave a tree before the entire tree is cut down.

The commenter also questioned the use of night-vision goggles for species identification. The use of night-vision is primarily for identifying a specific location where bats are emerging from a roost and not for identification in flight. Using them in combination with acoustic detectors allows one to note the time at which emergence was observed with the time stamp on the calls that were recorded, thereby allowing one to assign a greater likelihood of a species being tied to a specific roost site. Knowing the species can change how and when an avoidance and minimization measure is implemented and what, if any, compensatory mitigation is appropriate. The measure has been revised in the EIS/EIR to clarify these points. No changes to the findings of the document would result from these changes.

Also note that this mitigation measure is intended to mitigate the potential effects that conservation measures "to create, restore, enhance, and manage riparian, valley oak woodland, and oak woodland habitat" could have on roosting bats, and is not being proposed to mitigate the effects that future development projects would have on roosting bats.

Comment Letter 17—Sierra Club, Mother Lode Chapter

Response to Comments 17-1 through 17-4

The commenter expressed concerns about the potential for urban development within the RAA and such development negatively affecting the formation of the Reserve System. The lead agencies agree that urban development within the RAA could impair PCCP goals. However, current land use plans and zoning designations in the RAA do not allow dense urban uses. Some limited rural residential development may occur—but not urban development. An application seeking a general plan amendment or zoning change to increase density/intensity beyond what is allowed by existing designations in the RAA would be inconsistent with and would not be covered by the Plan. In addition, the County is preparing an amendment to the Land Use Element of the *Placer County General Plan* for consideration by the Board of Supervisors; this amendment would provide a consistency review for projects within the Plan Area (see Response to Comment 18-1).

Furthermore, Appendix G (IV. Biological Resources; Section F) of the CEQA Guidelines requires a determination to be made as to whether a project would conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state conservation plan. This requirement serves as another separate consistency check and findings for projects proposed in the RAA.

Regarding edge effects and connectivity, urban development could contribute to these negative outcomes. However, urban development in the RAA is not anticipated for the reasons stated above. Nonetheless, it should be noted that Conservation Measure 1 L-2 (*Reserve Acquisition Strategy*) includes the following criteria for land acquisitions:

> "Acquire parcels with less edge (i.e., length of boundary, perimeter) in proportion to total habitat over parcels with large amount of edge in proportion to total habitat. For example, given the same type of habitat, a large, square-shaped parcel is preferable to a long, narrow parcel of the same total area. These criteria may not apply to riverine/riparian, which are naturally more linear and narrower (i.e., have more edge) than other natural communities in the Plan Area."

In addition, the commenter stated: "Almost 96 percent of the RAA needs to be acquired through fee title or conservation easement to meet conservation goals" and cited page 5-68 of the draft Plan. This misinterprets the text in the Plan, which states the following:

> "The entirety of the RAA is approximately 69,000 acres, largely in private ownership and primarily in agricultural use. Approximately 45,300 acres (approximately 96 percent of the Reserve System) of the RAA will be acquired through fee title or easement for inclusion into the Reserve System."

More specifically, the RAA in Plan Area A is 68,325 acres in size (see Table 1-2 of the Plan). If the entire 47,300-acre Reserve System is acquired only within the RAA boundary (i.e., no acquisitions within the PFG including Stream System acquisitions), it would be necessary to acquire 69% of the RAA. Because it is likely that portions of the Stream System and other areas of the PFG with important habitat values would be added to the Reserve System, the percentage of land acquired in the RAA would be reduced. The *proposed* 45,300 acres of acquisition within the RAA is 66% of the RAA.

Regarding real estate speculation within the RAA, it is unlikely land uses in the RAA would be designated for more intensive land uses and lead to real estate price inflation. In addition, development fees imposed on Covered Activities are designed to increase if Plan costs (such as land acquisition costs) increase. Plan Chapter 9, *Costs and Funding,* and related appendices (Appendix M,

Growth Scenario Memo, and Appendix L, *Cost Model and Assumptions*) provide a detailed cost analysis and funding plan for the Plan. Development fees would provide approximately 68% of total funding, with most of the remaining funding coming from state and federal grant programs for habitat conservation. The PCA would annually adjust development fees for inflation based on established indices for land and other costs. Every 5 years or more often as needed, the PCA would conduct a comprehensive assessment of all Plan costs and revenues based on actual experience to date and make necessary adjustments to the development fees (see Plan Section 9.4.1.7, *Adjustment of Development Fees*). These requirements ensure that funding is adjusted to reflect market fluctuations in land values.

Regarding the commenter's recommended changes numbered 1–4, please consider the following.

1. **Re: Permittees should adopt amendments to their general plans or adopt policies consistent with the Plan**. The County and City would each adopt an ordinance that incorporates relevant Plan requirements into their project review and approval processes, and they may consider adopting general plan policies or provisions consistent with the Plan.
2. **Re: the City of Roseville's participation as a participating special entity should be conditional, and it should be required "to forego any annexation in the RAA for the term of the permit."** The PCA (and the Plan) cannot control what non-participating Cities do adjacent to the RAA inside or outside of Placer County. However, non-participating Cities cannot approve urban development within the RAA, as it is not within the city limits of those cities, and any proposal by such Cities to annex or otherwise assert land use authority within the RAA would have to comply with state environmental and planning and zoning laws regarding such changes. The potential for such changes to occur and for non-participating Cities to authorize land uses in the RAA that conflict with the Plan is speculative. Furthermore, it would be necessary for Placer County and the PCA to coordinate with the Local Agency Formation Commission (LAFCO) for any annexations by a non-participating City that could impact the RAA or a property already enrolled in the Reserve System.
3. **Re: Permittees with land use authority should request that LAFCO adopt policies in support of the Plan**. The Placer County LAFCO is not participating in the development of the Plan and exercises its own independent authority. Please see the Response to Comment 18-1 regarding the suggestion for LAFCO policies.
4. **Re: the Plan's *Permit Suspension or Revocation* section should be revised**. USFWS and NMFS's authority to administer and enforce the ESA, and CDFW's authority to administer and enforce CESA and the NCCPA, include the authority to suspend or revoke permits issued for the Plan. USFWS and NMFS only have the legal authority to suspend or revoke incidental take permits for reasons specified in federal regulation, which are cited on page 8-13 of the Plan. USFWS's criteria for a general permit suspension are as follows:

> "the privileges of exercising some or all of the permit authority may be suspended at any time if the permittee is not in compliance with the conditions of the permit, or with any applicable laws or regulations governing the conduct of the permitted activity. The issuing officer may also suspend all or part of the privileges authorized by a permit if the permittee fails to pay any fees, penalties or costs owed to the Government."

The USFWS's criteria for a general permit revocation are as follows:

> (1) The permittee willfully violates any Federal or State statute or regulation, or any Indian tribal law or regulation, or any law or regulation of any foreign country, which involves a violation of the conditions of the permit or of the laws or regulations governing the permitted activity; or (2) The permittee fails within 60 days to correct deficiencies that were the cause of a permit suspension; or (3) The permittee becomes disqualified under §13.21(c) of this part; or (4) A change occurs in the statute or regulation authorizing the permit that prohibits the continuation of a permit issued by the Service.

USFWS also has criteria for revocation at 50 CFR 17.22(b)(8), stating that if continuation of a permit would be inconsistent with 16 U.S.C. 1539(a)(2)(B)(iv)—meaning the taking may appreciably reduce the likelihood of the survival and recovery of the species in the wild—a permit maybe revoked. USFWS, NMFS, and CDFW have the authority to enforce the terms and conditions of the permits and the Plan with regard to any actions by the County, the City, or the other Permittees that violate those terms and conditions whether or not that authority is described in the Plan.

To further clarify this, language has be added to the implementing agreement stating that authorization of more intensive land uses in the RAA such that the Permittees are unable to fulfill their commitments to create and manage the Reserve System would be grounds for permit suspension or revocation. However, if any issues arise regarding implementation of the Plan or the actions of the Permittees, the Wildlife Agencies and the PCA expect to address those issues well before they become points of non-compliance that might lead to permit suspension or revocation. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 17-5

The commenter described the policy of effect avoidance as inadequate and referred the reader to Plan Section 6.3.1.3.1, *Permanent Effect Avoidance in the PFG,* where permanent effects avoidance criteria are described. The commenter also provided recommendations for changes to the Plan.

The commenter expressed concern with a minimum avoidance area of 200 acres being too small. The Science Advisor recommendations referenced in the comment pertain to the size of parcels that may contribute to the Reserve System. This is distinct from criteria for being considered "avoided," and avoided areas may or may not be included in the Reserve System as determined appropriate by the PCA. Section 10 of the ESA requires that the Permittees minimize and mitigate the impacts of the taking to the maximum extent practicable, and this condition supports this requirement.

Regarding the addition of shape as a criterion for permanent effect avoidance, some linear parcels (e.g., those containing streams) with high edge:area ratios may have important benefits for Covered Species. Adding criteria that would preclude avoidance of these areas would be inconsistent with the goals and objectives of the Plan. However, the edge:area ratio of an avoidance area may be taken into consideration when determining whether a proposed avoidance area meets avoidance criteria. Text clarifying this has been added to Plan Section 6.3.1.3.1, *Permanent Effect Avoidance in the PFG*. This change to the Plan did not result in any revisions to the EIS/EIR.

Regarding "linkages to other protected areas," the Plan uses the term "adjacent to" rather than "linkages." Avoided land that is adjacent to an existing reserve can increase the value of that reserve and should therefore be maintained as a criterion for avoided lands.

The commenter noted the complexity of Plan Section 6.3.2, *Conditions to Avoid and Minimize Effects on Specific Natural Communities*, and Section 6.3.5, *Conditions to Minimize Effects on Covered Species,*

and expressed concern that determination of effects avoidance would not be reviewed by the PCA. Each Permittee would be responsible for implementing the Plan for their own public projects and for private applicants under their jurisdiction. The PCA would be available to provide technical support to each Permittee should they need it since, as noted, the avoidance criteria in Sections 6.3.2 and 6.3.5 may benefit from the input of a biologist or other technical expert. In addition, the phrase "in consultation with the PCA" has been added to the process for determining avoidance in Plan Section 6.3.1.3.1, *Permanent Effect Avoidance in the PFG*.

Regarding quantifying avoided effects, as noted there is no reliable way to predict the acres of future avoided effects, and any proposed methodology would be highly speculative. It is possible that reduced revenue over the life of the Plan (including collection of fees) could hamper implementation of the Plan. However, the Plan includes Periodic Assessments and adjustment of fees (Plan Section 9.4.1.7.2, *Periodic Assessment and Adjustment of Fees*) every 5 years that would account for if there were reduced revenue resulting from a substantial number of avoided areas.

Regarding the addition of PFG lands to the Reserve System, Section 8.2.6.5, *Review of Pre-Acquisition Assessments for Reserve Land Acquisitions*, requires the Wildlife Agencies to review "all pre-acquisition assessments" for all properties proposed for the Reserve System (also see Section 8.4.2.2). Section 8.4.2.4, *Step 4: Wildlife Agency Concurrence*, states that CDFW and the USFWS must provide their concurrence "for all land acquisitions" and NMFS must concur for habitat for covered salmonid species. Additionally, for lands that are to be dedicated to the Reserve System, the PCA must approve the acquisition and a Land Dedication Agreement must be prepared between the PCA and project proponent (see Sections 8.4.13.4, *Land Dedication Agreement*, and 9.4.1.10, *Land Provided in Lieu of Development Fees*). Altogether, these provisions provide considerable oversight and discretion by the Wildlife Agencies and the PCA on all land acquisitions and, in particular, those that would be potentially dedicated by project proponents to the PCA on lands within the PFG.

The Plan Applicants and Wildlife Agencies discussed whether to retain the option to include lands in the PFG as potentially being added to the Reserve System a number of times over Plan development. The decision to retain the option to include PFG areas within the Reserve System was to ensure that if biological resources of unusually high value (such as new occurrences of Conservancy fairy shrimp) were discovered in the PFG, there was a mechanism in the Plan that could allow for acquisition of these resources. While the commenter is correct—there is not a cap on the number of acres that could be included in the Reserve System within the PFG—the likelihood is low that there are substantial areas of unknown conservation values within the PFG, as much of the PFG has been reviewed extensively. As a result, the Plan retains the concept of including PFG sites in the Reserve System if the PCA and the Wildlife Agencies agree. However, other Reserve System criteria would still need to be met.

Regarding the commenter's recommended changes numbered 5–8, please consider the following.

5. **Re: the PCA should conduct needed surveys and analysis pertaining to permanent effects avoidance**. The PCA would be available to provide technical input but not to conduct the needed surveys. As described above, text has been added to Plan Section 6.3.1.3.1, *Permanent Effect Avoidance in the Valley PFG,* to state that avoidance of effects will be determined in consultation with the PCA.
6. **Re: Plan text should be added regarding consideration of an avoidance area's shape and edge:area ratio**. Standardizing an edge:area ratio would be restrictive as discussed above. Key habitats in western Placer County are within a mosaic of natural, semi-natural, agricultural, and

low-density residential landscapes. Having a fixed standard for an edge:area ratio would potentially preclude avoidance of an important areas. However, as described above, text has been added to Section 6.3.1.3.1, *Permanent Effect Avoidance in the Valley PFG,* of the Plan noting that the edge:area ratio of a proposed avoidance area may be taken into consideration.

7. **Re: a requirement should be added for demonstrating that avoided habitat is "linked habitat" that is "compatible or sufficiently similar so that it provides interpopulation dispersal for covered species."** As discussed above, the term used in the Plan to indicate qualification for avoidance is "adjacent to" the Reserve System (not "linkage"). A specific requirement to demonstrate interpopulation dispersal would not be practicable administratively or biologically. However, new text has been added to the Plan that the determination for avoided effects would be done "in consultation with the PCA."

8. **Re: 2,000 acres should be set as the maximum number of acres that can be added to the Reserve System over the term of the permit**. Providing a limit of 2,000 acres as a maximum limit for acquisitions within the PFG (outside the Stream System) would unnecessarily limit the ability of the PCA and Wildlife Agencies to consider valuable conservation lands in the PFG that may support other existing reserves by reducing edge effects. Adhering to the requirements of Plan Section 6.3.1.3.1, *Permanent Effect Avoidance in the Valley PFG,* in addition to the oversight and discretion of the PCA and Wildlife Agencies, would ensure that only viable lands are acquired for additions to the Reserve System. Much of the interface between the PFG and the RAA in the Valley portion of the Plan Area has viable lands suitable for inclusion in the Reserve System.

Comment Letter 18—Sierra Foothills Audubon Society

Response to Comment 18-1

The commenter raised concerns that development within the RAA could degrade the quality of preserved areas. Please see Responses to Comments 17-1 through 17-4 for a discussion of urban development in the RAA.

The commenter listed three recommendations.

1. Re: "Permittees under the PCCP (including those which apply to become permittees in the future) should adopt General Plan amendments and/or specific ordinances that preclude urban/commercial development within the RAA." Urban development within the RAA would have negative consequences on the assembly of the Reserve System. However, as described in Responses to Comments 17-1 through 17-4, such impacts are not anticipated for a number of reasons.
2. Re: "LAFCO policies should reflect the need to preserve the RAA from development." Because LAFCO is not a Plan participant and has independent authority, it is not possible to require LAFCO to adopt policies that would limit annexations in the RAA. On a case-by-case basis, it will be necessary for the County and City of Lincoln to coordinate future annexations into the city of Lincoln to ensure that such annexations are consistent with the biological goals and objectives of the PCCP. Furthermore, it would be necessary for Placer County and the PCA to coordinate with LAFCO for any annexations by a non-participating City that could impact the RAA or a property already enrolled in the Reserve System.
3. Re: "To ensure that such policies are adopted and followed, failure to adopt and adhere to such policies should result in revocation or suspension of further permits." Section 8.2.6 of the Plan describes the Wildlife Agencies' responsibilities and oversight during the permit term. Section 8.2.6.8 specifically describes the authority to suspend or revoke all or part of the permits issued to the Permittees if "any of the Permittees are out of compliance with the HCP/NCCP or the permits." The authority to suspend or revoke is also described in the Implementing Agreement (Appendix B of the Plan). For additional information please see Response to Comment 17-4. Notwithstanding the oversight and protection that is already provided by the PCA and Wildlife Agencies, the County is preparing an amendment to the Land Use Element of the *Placer County General Plan* for consideration by the Board of Supervisors that would provide a consistency review for projects within the Plan Area. These goals and policies, if adopted, would provide additional protection for the RAA through the general plan. Because the RAA is located almost entirely within the unincorporated area, amendments to the *City of Lincoln General Plan* would not be necessary.

Response to Comment 18-2

The commenter identified several issues associated with onsite avoidance.

The premise of the Plan is to move away from site-specific mitigation and avoidance and focus instead on larger, more connected, and better functioning reserves. However, Section 10 of the ESA requires that the Permittees minimize and mitigate impacts of the taking to the maximum extent practicable. Onsite, project-specific avoidance and minimization of impacts are required in the Plan under the ESA and the NCCPA and are required in the CARP for purposes of supporting the draft

CWA Permit Strategy pursuant to the federal CWA. Avoidance in areas within the PFG would be limited to what is biologically necessary and appropriate for Covered Species and habitat and what is necessary and appropriate from a scientific perspective for aquatic resources. The Plan conservation strategy and funding strategy were developed to balance onsite avoidance and minimization with offsite compensatory mitigation and were designed to establish, restore, and manage the Reserve System based on development fees collected for unavoidable impacts resulting from Covered Activities.

Regarding the commenter's specific recommendation for PCA approval of avoidance areas, the phrase "in consultation with the PCA" has been added to the process for determining avoidance in Section 6.3.1.3.1 of the Plan. Regarding the commenter's recommendation to add shape as a criterion for effect avoidance, text has been added to Section 6.3.1.3.1 noting that the edge:area ratio of an avoidance area may be taken into consideration. Please see Response to Comment 17-5 for additional detail regarding these two recommendations.

Regarding specifically limiting onsite avoided areas to 2,000 acres, this would be unnecessarily limiting to the PCA. For additional detail, please see Responses to Comments 17-1 through 17-5.

Response to Comment 18-3

The commenter suggested establishing a threshold for halting permitting under the Plan should land preservation fall behind development.

The Stay Ahead provision in Section 8.4.3 of the Plan is designed to meet the rough proportionality requirement of the NCCP that requires mitigation and conservation measures to be roughly proportional in time and extent to the impacts of Covered Activities. In addition, progress toward assembling the Reserve System must stay ahead of progress toward total take allowed under the permit. This Stay-Ahead provision applies for each community (see Section 8.4.3, *Stay-Ahead Provision)*. Also see Section 5.3.1.5.2, *Vernal Pool Complexes and Grassland Natural Communities*, of the Plan, which states that no more than 1,800 acres of vernal pool complex and 80 wetted acres of vernal pool constituent habitats would be authorized for take under the Plan until an advance acquisition goal of 160 acres of vernal pool constituent habitat is met. If the PCA cannot acquire lands for the Reserve System fast enough to keep pace with the impacts of Covered Activities, then the Permittees risk suspension or revocation of the permit unless they either slow or stop development to allow land acquisitions to catch up, or they require developers to provide appropriate lands to add to the Reserve System that would maintain rough proportionality. However, suspension based on an inflexible requirement regarding rough proportionality would constrain implementation of the Plan and prohibit additional Covered Activities from paying development fees, thus precluding important funding needed for land acquisitions and stalling land acquisition and habitat restoration efforts in process at that time. The Stay Ahead provision is designed to be strict enough to ensure that development does not proceed without mitigation and that land acquisitions and habitat restoration for the Reserve System are roughly proportional to the impacts of Covered Activities.

Comment Letter 19—Jim and Jean Piette

Response to Comment 19-1

The commenters expressed concerns regarding fire and stated that until there is an active management plan for "each entity involved," approval should not be granted.

Appendix F of the Plan is a Fuel Management Plan prepared specifically for the management of wildland fire concerns in the PCCP Reserve System. In addition to Appendix F, Plan Section 5.3.2.1.2, *Reserve Unit Management Plans*, requires that each acquisition incorporated into the Reserve System includes a reserve unit management plan that addresses how the property is to be managed to meet the biological goals and objectives of the plan. Each reserve unit management plan has a long list of mandatory elements including a discussion on fire management (e.g., minimum impact suppression techniques, BMPs for wildfire management, fuel management methods, and other information).

In addition to the information contained in the Plan, Placer County prepared a Community Wildlife Protection Plan in 2012 (Placer County 2012). This plan includes wildfire protection measures for the Plan Area. (In the Community Wildlife Protection Plan, see the discussion on the Greater Auburn Area Fire Safe Council and the Greater Lincoln Fire Safe Council for more information on wildlife protection in the PCCP region).

Response to Comment 19-2

The commenters expressed concern about water sources and availability and the water authorities cited in the Plan.

The Permit Applicants are those agencies who have voluntarily applied for incidental take permits under the ESA and CESA. PCWA is one of those agencies; Nevada Irrigation District (NID) is not. During the early years of program preparation, several agencies were contacted to determine who would want coverage by the PCCP and who would not, and a number of agencies (including NID) elected not to participate. NID's decision not to seek coverage through the Plan does not affect the availability of water to NID.

Should NID choose to seek incidental take coverage through the Plan, NID can request participation as a Participating Special Entity (Section 8.9.4, *Take Authorization for Participating Special Entities*, in the Plan).

In terms of water management in the Reserve System, Plan Section 5.3.2.1, *Reserve Unit Management Plans*, requires each acquisition to include a discussion on water management including the use of water for restoration and enhancement, a long-term water management strategy, the volume of water, where water will be provided, and the timing of water provisioning.

Response to Comment 19-3

The commenters stated that details regarding "private, donated easement properties, trails, undeveloped lands, acquisitions, agricultural, farm and ranch lands" are "not adequately addressed." It is unclear which details are not adequately addressed. Section 8.4, *Establishing the Reserve System*, of the Plan describes various aspects of the process for acquiring natural and agricultural lands and/or conservation easements to incorporate into the PCCP Reserve System.

It is also not clear what is meant by the term "developments." Chapter 2, *Covered Activities*, of the Plan describes the Covered Activities addressed by the PCCP including a range of land use activities associated with land development. The activities described in Chapter 2 are broadly discussed and are not assigned to any particular project. Development can be as limited as the construction of a new home on a lot greater than 20,000 square feet or as large as a specific plan with thousands of dwelling units.

Response to Comment 19-4

The commenters stated that the potential impacts on the North Auburn properties of Placer County were not addressed in the Plan.

It is not clear from the comment what potential impacts the commenter is referring to that may occur on North Auburn properties that result from the implementation of the PCCP. Land use activities in the North Auburn area are governed by the *Placer County General Plan* (2013), the *Auburn/Bowman Community Plan* (1994), and various codes and ordinances of Placer County (e.g., the Zoning Ordinance and Building and Development Ordinance). North Auburn is in the unincorporated area of the county. The impacts of growth associated with the general plan and the *Auburn/Bowman Community Plan* were addressed in the respective environmental impact reports prepared for those long-range plans.

Response to Comment 19-5

The commenter describes areas within the RAA and states that the Plan does not include any information about the "Legacy program." The Placer Legacy Open Space and Agricultural Conservation Program (Placer Legacy) is a program of Placer County that implements the open space and conservation goals of the *Placer County General Plan* (2013). Placer Legacy has specific objectives that focus on outdoor recreation, including the acquisition of land for development into passive recreation areas. One of the outdoor recreation objectives Placer Legacy was to create a large regional park and nature reserve near the Bear River west of Auburn, primarily for passive uses such as equestrian use, hiking, biking and picnicking. This objective was met when two properties were acquired and developed as a passive public park along Raccoon Creek and Deadman's Creek (Hidden Falls Regional Park).

Placer Legacy and Hidden Falls Regional Park are discussed a number of times in the Plan, including Section 2.4.2.4, *Placer Legacy*; Section 2.6.7.3.1 *Placer Legacy and Resource Management Plans*; Section 4.4.5.3.5, *Public Recreation Serving Activities*; Section 5.3.1.3.5, *The Role of Existing Protected Areas in the Conservation Strategy*; and Section 8.4.4, *Jump Start*. Collectively, these discussions describe the role of Placer Legacy and the Hidden Falls Regional Park in the PCCP.

Response to Comment 19-6

The comment asks why currently pursued development in the RAA are not mentioned in the Plan. The reference to development in this comment is assumed to apply to the expansion of the Hidden Falls Regional Park and its related facilities including a potential new parking facility. Any proposed new facilities (e.g., a new parking area) for Hidden Falls would not be a part of the PCCP Reserve System because of the lack of conservation value for such areas. However, the construction of a parking lot and related facilities would be considered a Covered Activity and subject to the PCCP requirements. There is no specific reference to such facilities for Hidden Falls because these types of

Covered Activities are broadly defined in Section 2.6.5.5, *Public Recreation-Serving Activities*, for all new recreational developments in the unincorporated area of western Placer County.

The commenters also asked how their property is identified under the PCCP. Regarding designation of the property, the *Placer County General Plan* identifies the property at the address identified on the comment card as Agricultural 10-acre minimum. Similarly, the zoning on the property is Farm with a minimum building site of 10-acre minimum (F-B-X-10-acre minimum). The PCCP has multiple definitions for this area, including its location in Plan Area A—Foothills, its location in the RAA, and its location in Plan Area A4—Foothills Conservation and Rural Development. The PCCP designations are not land use designations and do not change or affect the General Plan and Zoning designations on the property.

Response to Comment 19-7

The commenters asked why the PCCP only covers the areas designated on the map and not all of Placer County.

Placer County originally envisioned that the PCCP would be completed in three phases, with western Placer County being the first phase. The second phase would be the upper foothills of the Sierra Nevada and the Martis Valley area. The third phase would be the forested areas of the county. The decision to prioritize the western portion of the county is due to the number of sensitive species that could be impacted by changes in land use that are forecasted for the region. By far the most significant amount of land use change will occur in western Placer County as a result of growth in the unincorporated area and City of Lincoln. The Board of Supervisors will determine whether additional phases will be implemented.

Response to Comment 19-8

The commenters asked why the Plan is limited to 50 years.

The 50-year permit term was selected to allow for sufficient time to develop a cohesive Reserve System as well as the need to accommodate the majority of the land use changes that have been forecasted for the region over the next 50 years. The County and City of Lincoln are the two Permittees with land use authority who would receive coverage under the PCCP. The economic forecast prepared for the PCCP shows that the unincorporated county and city of Lincoln will see a significant amount development over the next 50 years. Residential development will be near buildout over the permit term based upon the current land use designations in the County and City general plans. Non-residential development (e.g., commercial and industrial) is projected to have a significant holding capacity at the end of the permit term. However, a longer permit term would rely upon economic forecasts that are unreliable due to the number of assumptions that would have to be made about future conditions. It is also difficult for the Wildlife Agencies to analyze impacts on species into the more distant future.

Management of the Reserve System would continue in perpetuity after the permit term expires. For additional information, see Plan Appendix M, *Growth Scenario Memo,* which provides the details on the population and employment forecast that support the 50-year permit term. Also see Section 1.2.7, *Permit Term*, in Chapter 1 of the Plan.

Response to Comment 19-9

The commenters asked what agency or entity would be responsible for determining future use and permits and the collection of fees.

The County and City of Lincoln have land use authority over future land uses for both ministerial and discretionary permits during the permit term and after the permits expire. That authority of local government would be unchanged after the PCCP is adopted. The County and City of Lincoln would collect the PCCP Development Fees for those projects under their jurisdiction. The PCA, a joint exercise of powers agency created by the County and the City, would be the entity who would receive fee revenues collected by the County and City and be responsible for the costs associated with the implementation of the Plan including land acquisitions, restoration, monitoring, and land stewardship.

Response to Comment 19-10

The commenters asked, "under what authority can State and Federal laws be bypassed?"

No State or Federal laws are being bypassed by the PCCP. The Plan is a long-term HCP/NCCP that is prepared in compliance with numerous state and federal statutes for activities that have the potential to impact listed species, their habitat, or other habitats regulated by state and federal law. These laws include the NCCPA (Sections 2800–2835 of the Fish and Game Code), federal ESA (Section 10) and the federal CWA (Sections 401 and 404). See Plan Section 1.5, *Regulatory Setting*, for additional information on the state and federal laws that apply to the PCCP.

Response to Comment 19-11

The commenters asked whether other Supervisorial Districts are included in the Plan and, if so, under what authority.

The Plan Area covers all of Districts 1–4 and the westernmost portion of District 5 for the Board of Supervisors. The boundary of the Plan Area was determined by the Placer County Board of Supervisors in consultation with the state and federal agencies who are involved in the preparation of the PCCP. The current boundary of the Plan Area was established on January 12, 2010, when the Board of Supervisors directed staff to make modifications on the eastern edge of the Plan Area, which determined how much of District 5 would be included in the Plan Area boundary.

Response to Comment 19-12

The commenters asked how lands in Districts 3 and 5 are identified on the map.

An overlay of Board of Supervisors District boundaries is not included in Plan maps since District Boundaries can and will change during the 50-year permit term as a result of the U.S. Census. Please see Responses to Comments 19-11 and 19-14 regarding the Board of Supervisors District boundaries in the Plan Area.

Response to Comment 19-13

The commenters asked, "what is the significance of the identified labels?"

The comment does not specify which figure or figures are associated with the question about the "identified labels." As a result, it is not possible to specifically respond to the comment. All of the information that is depicted on the figures in the PCCP is defined in the figure legend or within the narrative of the Plan documents.

Response to Comment 19-14

The commenters requested an explanation of the plan to assess and collect fees and if Districts 3 and 5 would be included.

Development fees are assessed on those projects which have Covered Activities subject to review by Placer County or the City of Lincoln (e.g., tentative maps, conditional use permits, some building permits and other local government permits, and land use entitlements). The fees cover the costs to mitigate the effects of the Covered Activity on Covered Species impacted by the project. A Covered Activity is any action undertaken in the Plan Area by or under the authority of the Permittees that may affect Covered Species or covered natural communities. Covered activities may be projects, programs, or operations and maintenance.

All of District 3 is within the Plan Area, and only the westernmost portion of District 5 is included. Those portions of Districts 3 and 5 that are in the incorporated cities of Rocklin and Auburn and the Town of Loomis would not be assessed fees because those communities are not Plan participants. Permitting and mitigation for impacts on endangered species and wetlands in those communities would continue to be determined on a project-by-project basis.

Comment Letter 20—Jean and Jim Piette

Response to Comment 20-1

The commenters stated that "It is misleading to use the title Placer County Conservation Program" and "Fifty years is not very long and the cost does not include what has already been spent on an almost twenty year period plus expected increases."

It is correct that the Plan refers to Placer County generally because the program originally envisioned three phases covering all of the unincorporated area of the County. The actual titles of the three primary PCCP components reference western Placer County specifically:

1. *Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan.*
2. *Western Placer County Aquatic Resources Program.*
3. *Western Placer County In-Lieu Fee Program.*

In terms of the cost of the program, the PCCP funding plan does include the costs incurred during Plan development; those costs are reimbursed through payment of PCCP Development Fees for Covered Activities. The funding plan also accounts for expected increases in costs over the permit term by requiring an annual update to the fees and a requirement for a comprehensive review of all Development Fees every 5 years or more often as needed.

Please see also Response to Comment 19-8 regarding the 50-year term.

Response to Comments 20-2 and 20-3

The commenters asked, "Is it a fact that the identified lands are held under the PCCP and the partners referenced and will be under their discretion when determining future use and permits issued and have the authority to collects fees?"

The PCA would be the entity that would hold lands in the PCCP Reserve System through acquisitions of fee title or conservation easements.

The discretion for determining future land uses and the issuance of ministerial and discretionary permits is with Placer County and the City of Lincoln, and that authority is unchanged by the PCCP.

The authority to collect fees would be with Placer County and the City of Lincoln following the adoption of ordinances and resolutions by the Board of Supervisors and City Council. There are specific provisions for the PCA to collect fees from non-permittees who seek to use the PCCP for regulatory coverage (e.g., participating special entities). Please see Response to Comment 19-9 for more detail.

Response to Comment 20-4

The commenters asked if the District 2 Supervisor has "the right to cross into other districts." Regarding Supervisorial District boundaries, all decisions on the PCCP are made by the entire Board of Supervisors, including the final decision to approve the Plan and its implementation. Please see Response to Comment 19-11 for more detail.

Response to Comment 20-5

The commenters stated a series of facts about various designations on figures associated with the Plan and/or the EIS/EIR. As noted in Response to Comment 19-11 and Response to Comment 20-4, all decisions on the PCCP are made by the entire Board of Supervisors.

Response to Comment 20-6

The commenters expressed concern that under the PCCP, oversight of conservation would change.

PCCP addresses impacts resulting from Covered Activities in western Placer County. By far the greatest amount of impact on endangered species and their habitat and wetlands would result from the new land development that is forecasted to occur over the next 50 years. The majority of the Covered Activities causing an impact would be new urban and suburban residential land uses. Although the Permittees would have responsibility to implement the PCCP and related permits, all of the state and federal Wildlife Agencies involved in Plan preparation would monitor compliance with permits. Chapter 8, *Plan Implementation*, of the Plan explains the role of each of the Wildlife Agencies and describes the requirements for compliance tracking (Section 8.10, *Compliance Tracking and Data Management*), reporting (Section 8.11, *Reporting*), and the implementation schedule and milestones (Section 8.12, *Schedule and Milestones*). If there is a failure to comply on the part of the Permittees with the PCCP's requirements, permit suspension or revocation can be considered by the Wildlife Agencies (see Plan Section 8.2.6.8, *Permit Suspension or Revocation*).

Please see also Response to Comment 17-4.

Response to Comment 20-7

The commenters expressed an opinion regarding the implementation of the Plan. As noted in Response to Comment 20-4, the authority to implement the PCCP lies with the entire Placer County Board of Supervisors for the unincorporated area of the County and with the City Council of the City of Lincoln.

Response to Comment 20-8

The commenters expressed an opinion regarding the implementation of the Plan.

Development fees would apply to all Supervisorial Districts and the City of Lincoln within the Plan Area boundary when a project proponent has an activity that is covered by the Plan. Fees are used to implement streamlined permitting and mitigation that would otherwise need to be done on a project-by project basis. Please see also the Responses to Comments 19-11 and 20-4 related to decision-making authority.

Comment Letter 21—Jim and Jean Piette

Response to Comment 21-1

The commenters listed sections of the EIS/EIR and stated opinions that those sections are unacceptable. No specific comments were made. The commenters do provide specific comments in other portions of this comment letter as well as in Comment Letters 19, 20, and 22. Please see the responses to those comments.

Response to Comment 21-2

The commenters stated that the environmental document fails "to support the Conservation part of the PCCP." It is unclear from this comment what specifically the commenters are referring to. Please see Response to Comment 22-4, which responds to what appears to be a similar comment from the same commenters.

With regard to recognizing the environmental impacts found in the EIS/EIR, it is the purpose of the EIS/EIR to present the environmental impacts of the proposed action and alternatives to the public and decision-makers. It is not clear what further recognition the commenters wish to occur.

Response to Comment 21-3

The commenters asked, "why is the degradation of water and flooding considered LTS, SU and N/A?" The findings of the EIS/EIR are explained in detail in the document itself. This comment appears to reference the Table ES-3 in the Executive Summary of the EIS/EIR. The LTS code notes impacts found to be Less than Significant. The SU code notes impacts found to be Significant and Unavoidable. The N/A code in this table is in the "Significance after Mitigation" column, and notes that no mitigation measures were identified in the EIS/EIR for those impacts. The text of Section 4.5, *Hydrology and Water Quality*, of the EIS/EIR contains the explanation of the basis for these findings.

Response to Comment 21-4

The commenters asked why the EIS/EIR does not include impacts from recreational uses such as parks and trails. The EIS/EIR does evaluate the environmental impacts associated with the implementation of the PCCP including the effects of recreational use of reserve lands (see Section 4.10, *Recreation*, of the EIS/EIR).

Recreational use of conservation lands that have been protected through the initiatives of the Placer Land Trust, non-participating cities, or conservation organizations with no affiliation to the PCCP are not subject to review by this EIS/EIR. The exception is for those lands that are held by Placer Land Trust that are proposed for enrollment into the Reserve System (e.g., Harvego Bear River Preserve owned by Placer Land Trust). Also, separate from the PCCP, the Placer County Parks Division is preparing a parks and trails master plan (the public draft was released in March 2019) and is also preparing an EIR for the expansion of the Hidden Falls Regional Park.

The majority of the Reserve System would have no public access for recreational purposes. The total amount of new trail construction that could be accommodated within the entire 47,300 acres would be 70 miles of new trails. These trails would be subject to site-specific CEQA review; Plan avoidance, minimization, and mitigation measures; as well as other applicable land use permits and approvals.

All new trail construction and/or recreational uses are subject to the review and approval of the Wildlife Agencies. The Plan includes specific standards to ensure that any recreational use has minimal effects on biological resources (see Section 6.3.6.1.1, *Restrictions on Recreational Uses in the Future Reserves Acquired during Plan Implementation*).

Regarding the use of "conservation lands" for recreational purposes, it is necessary to address the comment in two ways: 1) the effects of recreational development on conservation lands that are included in the Reserve System and 2) the effects of recreational development on other conservation lands that are not included in the Reserve System.

Reserve Lands. The EIS/EIR evaluates the proposed action (Alternative 2), including the construction or expansion of recreational facilities (see Impact REC-2 in Section 4.10, *Recreation*) on lands acquired for the PCCP. The EIS/EIR correctly notes that "Limited public access and some types of recreation may be allowed on some reserve lands so long as public access and use does not conflict with the biological objectives of the Plan."

The EIS/EIR also points out that the proposed action does not authorize the construction of new or expanded facilities on reserve lands. The authorization for new recreational uses on reserve lands would require approval by the County/City, the PCA, and the Wildlife Agencies. A subsequent environmental review may be necessary for the development of recreational facilities on reserve lands when such projects meet the requirements for environmental review in CEQA/NEPA. Additionally, any new or expanded facilities within the Plan Area on PCCP reserve lands are Covered Activities subject to the conditions on the Plan including the requirements described in the following sections from the Plan: Section 6.3.6.1.1, *Restrictions on Recreational Uses in Future Reserves Acquired during Plan Implementation*; Section 6.3.6.1.2, *New Trail Design and Use Standards for Future Reserves*; and Section 6.3.6.2, *Reserve Management Condition 2, Recreation Component of Reserve Unit Management Plans*. These three sections, in addition to the other conditions on Covered Activities, provide a comprehensive set of standards that would limit the effects of the limited amount of recreational activities that are allowed in the Reserve System. Additional mitigation requirements may be imposed through any discretionary approval by the County/City, PCA, or Wildlife Agencies for a wide range of environmental effects unrelated to the PCCP (e.g., traffic, noise, land use compatibility, etc.). No additional mitigation measures are identified in the EIS/EIR.

Recreational Development on lands outside the Reserve System. Chapter 2 of the Plan describes the activities covered by the PCCP. Section 2.6.5.5, *Public Recreation-Serving Activities*, describes how new public parks and park maintenance are considered a Covered Activity, and Tables 2-6 and 2-7 list a range of private recreational facilities that are also covered by the Plan. Any public or private recreational development outside of reserve lands by a non-profit land trust organization (or similar non-governmental organization) or government-sponsored land conservation project (e.g., Placer Legacy through the County of Placer) would be subject to the Conditions on Covered Activities described in Chapter 6 of the Plan. Additionally, new or expanded recreational uses outside the Reserve System could require a discretionary approval by a Permittee resulting in a requirement for a project-specific environmental review. Additional mitigation requirements could be imposed on discretionary approvals by the County/City for a wide range of environmental effects unrelated to the PCCP (e.g., traffic, noise, land use compatibility, etc.).

Lastly, to evaluate the effect of recreational uses authorized by the County and City, it is also necessary to review the environmental documents that supported the adoption of the *Placer County General Plan* and the *City of Lincoln General Plan*. The EIS/EIR specifically refers to the County

General Plan EIR and the City of Lincoln EIR for the effects that result from recreational uses that are authorized by those general plans. The general plan EIRs concluded that increased use of existing recreational facilities had a less than significant effect on the environment.

Response to Comment 21-5

The commenters stated that the environmental document is not complete and needs to be revisited but does not provide any specific comments. The commenters do provide specific comments in other portions of this comment letter and in Comment Letters 19, 20, and 22. Please see the responses to those comments.

Comment Letter 22—James and Jean Piette

Response to Comment 22-1

The commenters listed sections of the EIS/EIR and stated opinions that those sections are unacceptable. This comment is similar to comments received in Comment Letters 19, 20 and 21. Please see the responses to those comments.

Response to Comment 22-2

The commenters stated that they object to the biological resources chapter of the EIS/EIR, but did not include specific comments about the analysis. Therefore, it is not possible to provide a response.

Response to Comment 22-3

The commenters stated that the EIS/EIR did not address the Hidden Falls Regional Park Access, Park and Trails Master Plan, Hidden Falls Expansion, and the Sustainability Plan, and that the impact of visitor and resident use of conservation lands is not adequately addressed. Please see Response to Comment 21-4.

Response to Comment 22-4

The commenters stated:

> The PCCP misrepresent[s] the public purpose by highlighting conservation when the primary purpose is to manage land with the intention of development at the expense of unincorporated property owners over a 50 year period and to impact the land, wildlife, flora and fauna and whatever stands in the way.

Section 1.1.2, *Guiding Principles*, of the Plan lists the guiding principles that underlie the public purpose for the development and implementation of the PCCP, and Section 1.1.4, *Purpose*, of the Plan states that the purpose of the PCCP "is to protect and enhance ecological diversity and function, including aquatic resource functions and values, in the greater portion of western Placer County while allowing appropriate and compatible growth in accordance with applicable laws." It should also be noted that federal law stipulates that applications to incidentally take federally listed species must include a conservation plan. Similarly, California's NCCPA stipulates that take of state-listed species may be authorized upon CDFW's approval of an NCCP. The focus of the Plan is to respond to the effects of Covered Activities, which include land development, on the Covered Species and their habitat (e.g., "Address cumulative impacts of intensive land use and urbanization in Placer County"). The guiding principles also include broader conservation goals that support ecological functions and services irrespective of the effects of growth (e.g., "Sustain all natural communities that are currently present in the western Placer County landscape"). The Plan does not authorize any specific land development activity or infrastructure project. The Plan does not provide a long-range plan to govern growth. The Plan responds to growth as it occurs, consistent with the legislative actions of Placer County and the City of Lincoln on general plans, zoning decisions, and infrastructure development and the actions of the other Permittees.

Goals and policies related to land development are not included in the Plan's guiding principles because the State Government Code (Sections 65300–65303.4) identifies a County/City General Plan as the appropriate means to address "the physical development of the county or city." As stated in the purpose and nature of the *Placer County General Plan*, it is intended to serve "as a community's "constitution" for land use and development" (Placer County 2013). Similarly, the City of Lincoln's general plan states that the general plan "has been called the "constitution" for land use development to emphasize its importance to land use decisions" (City of Lincoln 2008). The Conditions on Covered Activities in Chapter 6 of the Plan respond to the potential effects of growth as outlined in the County/City general plans.

Lastly, the Plan is linked to the County and City general plans through implementation of general plan programs and policies. Program 6.11 of the County's general plan requires to the County to, "develop, adopt, and implement a Countywide National Communities Conservation Plan (NCCP) (Fish and Game Code Sections 2800–2840), and Habitat Conservation Plan (HCP) (Section 10 of the Federal Endangered Species Act [FESA]) to address the long-term conservation and maintenance of sufficient natural habitat to support indefinitely the diversity of plants and wildlife species currently represented in Placer County" (Placer County 2013). Policy OSC-5.3 of the City's general plan calls for the City to "continue to coordinate with Placer County and the Placer Legacy Open Space and [Agricultural] Conservation Program to protect habitat areas that support endangered species and other special-status species" (City of Lincoln 2008). Together, these and other general plan policies depict the County and City commitment to conserving lands for special-status species while at the same time planning for economic development activities.

Comment Letter 23—City of Roseville Development Services Department

Response to Comment 23-1

The commenter recommended the acreages for the PCCP should not include preserve areas within the city of Roseville and also recommended stating that any habitat mitigation for the *Amoruso Ranch Specific Plan* (ARSP) would need to be managed and owned by the City.

The ARSP was adopted by the City Council of Roseville on June 15, 2016. The LAFCO approved the annexation on November 14, 2018. Because the ARSP is a potential Participating Special Entity, it would be premature to change acreages for the RAA. Furthermore, the data for the Plan and EIS/EIR, including figures, were produced in 2014 and, per agreement with the Wildlife Agencies, will not be continually updated prior to implementation. During implementation a Reserve System exhibit would be produced and kept up-to-date as lands are added and credited to the Reserve System.

If the ARSP becomes a Participating Special Entity and land within the ARSP becomes part of the City of Roseville's open space preserve system, it would not be included in the Plan's Reserve System unless the project proponent of ARSP or the City of Roseville proposes that it is included in the Reserve System and it meets all applicable Plan land acquisition criteria including management and monitoring consistent with the Plan. This could occur if, for example, land was dedicated in lieu of the land conversion fee (Section 8.4.13, *Land Dedication in Lieu of Land Conversion Fee*, of the Plan), if it is accepted by the PCA as suitable mitigation consistent with the criteria for establishing the Reserve System (Section 8.4, *Establishing the Reserve System*, of the Plan) and approved by the state and federal wildlife agencies.

Response to Comment 23-2

The commenter noted that the draft Plan and draft EIS/EIR were dated 2018 and asked if any updates had been made since.

The December 2018 versions were the documents circulated for public comment; there were no revisions to either document between December 2018 and June 2019 when the NOAs were circulated. The draft EIS/EIR has been revised and a final EIS/EIR has been issued, dated March 2020. Similarly, the draft Plan has been revised and a final Plan issued, dated February 2020.

Response to Comment 23-3

The commenter recommended that figures should be updated to reflect that the ARSP has been annexed. Please see Response to Comment 23-1.

Response to Comment 23-4

The commenter recommended the EIS/EIR be updated to further explain Participating Special Entities.

Section 2.7, *Activities Not Covered by this Plan*, of the Plan notes it is not the intent to cover non-participating city projects as Participating Special Entities. The potential exception to this is the City of Roseville's annexation project (see Plan Figure 8-3, *Potential Roseville Annexation Area)* as it was included in the Plan as a Covered Activity, including the Take Limits and Cost and Funding Plan. Also as noted in the EIS/EIR, Participating Special Entities are included in Chapter 1, *Introduction*, and in Section 2.4.2, *Alternative 2—Proposed Action (Proposed Placer County Conservation Program)*.

Response to Comment 23-5

The commenter recommended adding the City of Roseville wastewater service to Table 2-7 of the Plan.

If the project is undertaken by the City of Roseville, it would not be covered under the Plan unless the City of Roseville chooses to become a Participating Special Entity as described in Plan Section 8.9.2, *Take Authorization for Participating Special Entities,* and the project is determined to be eligible for coverage as a Participating Special Entity. Wastewater is included in Plan Section 2.6.5, *Regional Public Programs*. If wastewater lines, lift stations, or other related infrastructure are constructed as part of a Covered Activity, such as a development project in the Plan Area and under the authority of a Permittee, it would be a Covered Activity similar to roads, waterlines, and other connected infrastructure.

Response to Comment 23-6

The commenter recommended updates to figures based on the ARSP annexation. Please see Response to Comment 23-1.

Response to Comment 23-7

The commenter recommended updating information regarding areas that are no longer in agriculture with respect to two specific plans.

As stated on page 3-3 of Chapter 3, *Affected Environment*, of the draft EIS/EIR, "the baseline for the analysis in this EIS/EIR is the date of the release of the notice of intent/NOP, which is March 10, 2005, for data in all environmental topics." Since areas within the city limits of Roseville are not in the Plan Area, the items listed in this comment would not affect the analysis in the EIS/EIR.

Response to Comment 23-8

The commenter recommended updating information regarding areas that are no longer in agriculture. Please see Response to Comment 23-7 regarding mapping of farmlands.

Response to Comment 23-9

The commenter recommended updating information regarding areas that are no longer in agriculture. Please see Response to Comment 23-7 regarding mapping of farmlands.

Response to Comment 23-10

The commenter recommended edits similar to those in Comment 23-1. Please see Response to Comment 23-1.

Response to Comment 23-11

The commenter again recommended updates to Plan Section 8.9.4.2, *Potential Roseville Annexation Area*, based on the ARSP annexation. Please see Response to Comment 23-1.

Response to Comment 23-12

The commenter expressed concern regarding how the ARSP annexation is characterized in the Plan. Please see Response to Comment 23-1.

Comment Letter 24—California Wildlife Foundation

Response to Comment 24-1

The commenters urged the County to make the PCCP more protective of the oaks within its scope.

The Permittees believe that the current conservation strategy, which emphasizes the preservation of the large areas of unfragmented oak woodlands, is appropriate for the scope and purpose of the Plan and is sufficient to mitigate losses to a level that is less than significant.

Response to Comment 24-2

The commenters stated, "…Based on review of Table 2-14 (page 2-46) and Table 2-15 (page 2-47), that Plan Area A includes 1,364 acres of valley oaks. The acquisition commitment (1,900 acres), together with existing protected areas (21 acres), represents 15% of total valley oak acreage in Plan Area A."

A clarification is warranted for the assumption about the acquisition commitment. The comment appears to have a typographical error in that 190 acres is the conservation commitment, not 1,900 acres. The overall amount of valley oak woodland conserved through the PCCP in addition to current conservation is correctly stated at 15% of the total.

Response to Comment 24-3

The commenters stated the acquisition commitment for valley oaks (Table 2-14) is insufficient and suggest "…all of these areas need to be protected as part of an adequate plan, given the sensitivity of valley oaks and their importance to the ecosystem."

Valley oak woodland represents a relatively small percentage (0.65%) of the total area of Plan Area A which includes the City of Lincoln and all of the unincorporated lands in western Placer County within the PCCP Plan Area boundary (Table 3-13 of the Plan). Figure 3-12 of the Plan depicts the location of valley oak woodland as it was mapped as a distinct natural community throughout the Plan Area.

Valley oaks are also commonly found in riparian habitat throughout western Placer County. The individual trees and stands that are found in the riparian natural community are not distinctly identifiable as valley oak woodland but instead are mapped as part of the riparian/riverine natural community. The permanent protection of 2,200 acres of riverine/riparian complex (of which 1,410 acres would be riparian habitat) would result in additional conservation of trees and stands of valley oaks avoided within the PFG or conserved in the RAA where a willing seller is receptive to a fee title purchase or conservation easement.

Over 28% or 382 acres of valley oak woodland is located within the broader corridor defined as the Stream System; most of which is in the PFG. Because Stream System avoidance applies equally to the RAA and PFG, it would be possible to protect most of the valley oak woodland located within the Stream System boundary through the Stream System avoidance and minimization requirements (see Plan Section 6.3.3.1 *Stream System Condition 1, Stream System Avoidance and Minimization*).

When avoidance of the majority of the Stream System is combined with 190 acres of fee title or conservation easement acquisitions for permanent protection, 225 acres of restoration independent

of effects, and mitigation for losses at a 1.5:1 ratio, there would be more valley oak woodlands in the Plan Area at the end of the permit term than there would be under baseline conditions.

In summary, the assertion that the acquisition commitment of 190 acres of valley oak woodland is insufficient does not take into consideration the additional valley oak woodland that would be avoided and preserved by avoidance of the stream system, restoration of 225 acres of valley oak woodland, and additional conservation and restoration of valley oak woodland as mitigation for losses of valley oak woodland at a 1.5:1 ratio.

Response to Comment 24-4

The commenters suggest the County adopt a no-net-loss policy for oak ecosystems in unincorporated areas, similar to one adopted in Los Angeles County.

The *Los Angeles County Oak Woodlands Management Plan* (OWCMP; Los Angeles County Oak Woodlands Habitat Conservation Strategic Alliance 2011) and the PCCP have long-term conservation objectives that are very similar and take a similar approach to mitigating oak woodland losses. Examples are listed below.

- The PCCP and the OWCMP both prioritize the preservation of oak woodlands at the landscape scale to ensure that ecosystem functions and services can be conserved in perpetuity.
- The OWCMP states multiple times that "preservation is the preferred strategy" for the oak woodlands that remain in Los Angeles County; this is the same strategy that is taken with the PCCP.
- The OWCMP allows offsite preservation as a "mitigation measure" for oak impacts even though preservation results in a net loss of oak woodlands; this is the same approach that is taken by the PCCP.
- The OWCMP states that priority should be given to restoring moderately or severely degraded oak woodlands; this conclusion was also reached by Placer County through the 2013 assessment of restorable woodlands.
- Similar to the PCCP, the OWCMP states that regeneration and restoration are an appropriate mitigation strategy but only in locations where success can be reasonably predicted. The "costly and long-term effort to develop successfully restored oak woodlands should be undertaken only as a last resort to mitigate for removing oak woodlands."

The OWCMP concedes that there has not been a single documented example of a successful oak woodland restoration project in Los Angeles County and concludes that the limited success is a "sobering reminder of the limitations of restoration planting," underscoring "the need to retain existing functional oak woodlands" and that restoration "should be the last mitigation strategy to be considered."

While the OWCMP states that Los Angeles County has a no-net-loss policy, the emphasis on preservation as the preferred approach for mitigation and the use of restoration/compensatory replacement as a mitigation measure of "last resort" demonstrates that the no-net-loss objective will be very difficult to achieve over time.

The PCCP proposes a three-pronged approach: 1) commitment to preservation; 2) implementation of avoidance and minimization measures in conjunction with stream system protection; and 3)

restoration. This comprehensive approach is superior to one based solely on preservation and restoration and may produce results close to no-net-loss. The Permit Applicants, with the affirmation of the Wildlife Agencies, and consistent with CEQA (PRC 21083.4(b)), have concluded that preservation is the priority with restoration limited to those areas that have been deemed suitable for active re-plantings.

Response to Comment 24-5

The commenters stated that they do not agree that the impact to permanent loss of oak woodland under Alternative 2 is "less than significant" but did not provide specific reasons for this assertion.

Most oak losses would occur within existing highly fragmented rural residential properties in the Foothills PFG. Oaks in this portion of Placer County largely consist of individual trees and fragmented single-aged stands that have regenerated naturally after the loss of orchard fruit production in the foothills that began in the 1950s when Central Valley growers began to produce fruit earlier in the season. This was further exacerbated by pear decline in the 1960s. Once orchard production was no longer viable, the land use and zoning designations of the County allowed for the subdivision of large production farms into smaller residential properties. This 60-year old rural residential land use pattern continues today. As the orchard trees were removed, the oaks slowly regenerated. While there are conservation values associated with the trees and stands in these rural residential areas that are forecasted to be impacted during the permit term, the ecosystem functions and services of large-scale oak woodlands are largely absent in this highly fragmented landscape.

The 10,110-acre acquisition objective within the RAA pertains to the area of western Placer County with the fewest roads, the largest parcels, and the largest assemblage of un-fragmented oak woodlands. It is also in the area where there is connectivity to the Sierra Nevada along the Bear River and along Raccoon Creek, which is one of three salmonid streams in western Placer County. Rural residential land uses in this area are largely absent and where they do exist, they are on parcels greater than 10 acres in size. This portion of the RAA also has connectivity with conservation initiatives in Nevada County (Bear Yuba Land Trust) and with the Spenceville Wildlife Area. The viability of this area for in-perpetuity conservation has been acknowledged by CDFW Region 2 and has been identified as a priority area for conservation by the State Wildlife Conservation Board separate and apart from the Plan.

A finding of less than significant can be supported because of the following.

- CEQA acknowledges the value of conservation of oak woodlands as a viable means of mitigating effects.
- The geographic area where impacts are to occur already has significantly reduced ecosystem functions and services.
- The preservation of significantly better ecosystem functions and services can be achieved in the Raccoon Creek and Bear River watersheds.
- The area of conservation has large areas of un-fragmented oak woodlands and is recognized by the State of California has a priority for conservation because of these values.

Response to Comment 24-6

The commenters stated that the environmental document does not address greenhouse gas (GHG) impact of tree removals resulting from implementation of the PCCP.

Section 4.2, *Air Quality, Greenhouse Gases, and Climate Change*, analyzes GHG impacts from implementation of the PCCP, including during construction and operation and maintenance activities. Removal of trees may result in a one-time loss of carbon sequestration capacity. In addition, stored carbon that has accumulated in the mature trees would be released back to the atmosphere as the trees decompose over time or are used for firewood, chips, or biomass. The PCCP's active restoration objective and passive regeneration that results from management activities would result in new oak woodlands but not to the level that no net loss of trees would be achieved. However, the long-term sequestration of carbon in preserved, growing oak woodlands must be taken into account. Impact AQ-6 acknowledges that construction and operation of the Covered Activities would result in the generation of GHG emissions and a significant and unavoidable GHG impact. This impact is from the cumulative generation of GHGs resulting from all construction and operational emission sources, including any removal of trees. Accordingly, the EIS/EIR accounts for potential GHG impacts from tree removals as part of the larger GHG analysis and significance determination for the Covered Activities.

The text in the *Greenhouse Gases* discussion in Section 3.2.2, *Environmental Setting*, of the EIS/EIR has been revised in response to this comment. No changes to the findings of the document would result from these changes.

Response to Comment 24-7

The commenters stated that the total biomass weight of the impacted overstory/understory vegetation "…must be known…" in order to account for GHG emissions from land conversion. The commenters requested an estimation of the total biomass weight of the impacted overstory and understory vegetation by 2020, 2030 and 2050, as well as any resulting GHG emissions from the transport of removed biomass.

As noted in Response to Comment 24-6, potential GHG emissions resulting from the removal of trees and vegetation from development of the Covered Activities is assessed in Impact AQ-6. Impact AQ-6 acknowledges that construction and operation of the Covered Activities would result in the generation of GHG emissions and a significant and unavoidable GHG impact. This impact is from the cumulative generation of GHGs resulting from all construction and operational emission sources, including mobile and transportation sources. As discussed in Chapter 4.0, *Environmental Consequences*, the GHG analyses for the Covered Activities from the general plan EIRs are incorporated by reference. These analyses are qualitative, consistent with the level of detail available for programmatic documents. An explicit quantification of GHG emissions resulting from land use change and vegetation removal from the Covered Activities is not required.

Response to Comment 24-8

This comment pertains to the level of oak woodlands protection proposed under the PCCP.

In February 2013 Placer County completed an assessment of the restoration potential of the PCCP Plan Area with the preparation of a document known as *Oak Woodland Restoration Potential: Placer*

County Conservation Plan (Harris 2013). The objective of the study was to determine the potential scope and scale of oak woodland restoration in western Placer County. The study was not focused on compensatory mitigation.

The analysis concluded that there was approximately 1,000 acres of land that met the criteria as restorable mainly for blue oak and secondarily for black oak and valley oak. The study also considered the numerous constraints that apply to restoration sites including soil and site conditions, water availability, interspecific competition, grazing/browsing impacts, climate change, and restoration costs.

The decision to propose 100 acres of active blue and black oak restoration in addition to 225 acres of valley oak restoration was based upon this 2013 assessment, subsequent discussions with the Wildlife Agencies, and the costs associated with restoration activities. There was consideration given to the limited benefits of restoration (including temporal losses) compared to the preservation of in situ habitat. As a result, the Plan's landscape-level conservation strategy emphasizes the preservation of large areas of unfragmented oak woodlands funded through the application of land conversion fees at a woodland community–scale versus the status quo inch-for-inch mitigation approach with project-by-project consideration to canopy. Collection of inch-for-inch oak impact fees mitigates for the loss of individual trees, whereas the Plan's approach better reflects and mitigates for the loss of the functions and values of the woodland and biodiversity of the natural community. Combined with existing protected areas, the oak woodland reserve represents the protection of 24% and 35% of oak and valley oak woodlands available in the Plan Area, respectively. In addition, conservation above mitigation would result in the restoration of 100 acres of oak woodlands and 225 acres of valley oak woodlands independent of effects.

The amount of passive regeneration that would occur within the actively managed 10,100-acre oak woodland reserve would exceed the 100 acres of active restoration over the permit term and in perpetuity as the lands are adaptively managed for ecosystem functions. The management of grazing, fuels/wildfire, invasive species, and hydrology would optimize the conditions for regeneration. In addition, each reserve unit management plan (Plan Section 5.3.2.1.2, *Content of Reserve Unit Management Plans*) must include a discussion on enhancement and restoration measures which would include passive regeneration of oak woodland functions and services.

While it is not possible to predict the exact number of acres of regenerated oak woodland, it is anticipated that it would exceed the 1,000 acres of restorable land that was previously identified in the 2013 report because of the type of management activities introduced through the Plan.

Lastly, in response to the comment that the PCCP mitigation strategy is less protective than the County's "Oak Ordinance" (Article 12.16, *Tree Preservation Generally*), it is important to note several differences between the Ordinance and the PCCP's conservation strategy.

- The County's ordinance is focused on losses to existing trees and does not account for the habitat value of dead/dying trees and other vegetation found in western Placer woodlands including grasses and shrubs. Removal of such trees is not subject to any mitigation requirement. The PCCP strategy is focused on all woodland functions and services—not just the value of healthy trees.
- The County's ordinance is largely limited to discretionary projects. The County's ordinance also has a provision for the removal of up to 50%of a site's trees without a tree permit. The PCCP's requirements apply equally to discretionary and non-discretionary projects that are Covered

Activities and are focused on the loss of all woodland functions and services—not just the loss of individual healthy trees.

- The County's mitigation standards vary considerably from project-to-project. The current ordinance provides several mitigation options that are applied at the discretion of the approving body (Section 12.16.080), and inch-for-inch replacement is one of many options available. The PCCP provides a conservation approach that must be consistently implemented over 50 years for all Covered Activities.

Response to Comment 24-9

The commenters recommended "that the grazing be carried out with oak seedlings and acorn plantings protected by in exclosures."

In situations where grazing is proposed within conservation reserve units where oak woodland restoration is also occurring, provisions for preventing grazing impacts on planted oaks or natural regeneration would be implemented. These requirements would be incorporated into the reserve unit management plans prepared for each unit. They may include exclusionary fencing or individual tree shelters. This is standard practice in existing conservation reserves in Placer County such as Doty Ravine Preserve. Guidelines for oak restoration prepared in support of the PCCP by a team of oak restoration specialists would inform development of reserve management practices (Harris 2013).

Response to Comment 24-10

The commenters recommended that "…recommend[s] that disease and pathogen management actions associated with oaks should not be confined to Sudden Oak Death."

The Plan includes procedures for preventing the spread of sudden oak death and other diseases associated with oaks, including proper disposal of materials derived from infected stands and guidelines on transport of firewood from areas infested with disease or insects. There are additional standard operating procedures controlling the propagation and distribution of seedlings and avoidance of contaminated soils. Any oak planting stock proposed for use in restoration projects must be certified disease-free. In addition, there are measures to prevent in situ propagation of disease in oaks such as limitations on irrigation in natural or planted stands to prevent spread of root disease (Armellaria).

Response to Comment 24-11

This comment pertains to fuel management provisions described in Plan Appendix F, *Fuel Management*, related to Section 9.2.2. *Oak Woodlands*.

The Plan includes procedures for preventing the spread of invasive plants in oak woodlands (see Conservation Measure CM2 OW-1) and requires standard operating procedures such as washing down equipment to remove exotic plant propagules before allowing the equipment access to a site to prevent the introduction of invasive plants.

Please also see Responses to Comments 24-9 and 24-10.

Comment Letter 25—Amber Beckler

Response to Comment 25-1

The commenter asked why an alternative was not considered in the EIS/EIR that would include acquisition and preservation of riparian/wetland and oak woodland corridors in the PFG. The Plan provides a regional conservation strategy that minimizes habitat fragmentation by concentrating impacts in some areas and providing large, contiguous blocks of protected habitat in other areas. The PFG is a more urbanized area. In general, relative to the RAA, habitat values are lower within the PFG. Thus, as a regional conservation strategy, the Plan prioritizes reserve acquisition in the RAA. One of the primary purposes of alternatives analysis in the EIS/EIR, as described in Chapter 2, *Proposed Action and Alternatives,* is to identify alternatives that would address impacts of the proposed action while meeting most of the basic project objectives. An alternative that focused on acquisition and preservation of riparian/wetland and oak woodland corridors in the PFG area would not address the landscape-level conservation goals of the PCCP and would not address impacts associated with the proposed PCCP. Please see also Response to Comment 25-4.

Response to Comment 25-2

The commenter asked for clarification on the location of the land acquisition criteria and the location of the "high-value" lands identified in the Plan's executive summary. Please see Section 5.3.1.4, *Landscape-level Reserve Design,* in Chapter 5, *Conservation Strategy*, of the Plan for reserve design criteria and for details about the reserve assembly process. This section also contains information about how high-value lands would be identified for acquisition. It is estimated that up to 2,000 acres of land outside the RAA would be acquired as part of the Reserve System. These lands would be likely to include high-value riparian or riverine areas or lands otherwise part of the stream system that contribute to the biological goals and objectives of the Plan in support of corridor ecology as referenced in Comment 25-1.

Section 8.2.8, *Public Input,* in Chapter 8, *Plan Implementation*, of the Plan provides a description of the ways in which members of the public can provide input on Plan implementation.

Response to Comment 25-3

The commenter requested clarification on activities that would be considered exempt from the PCCP.

Please see Section 6.2.1.2, *CEQA-exempt Permittee Projects,* in Chapter 6, *Program Participation and Conditions on Covered Activities,* of the Plan for a description of the types of Covered Activities that may be exempted from environmental review, as mentioned on page ES-6 of the Plan and quoted in Comment 25-3. When an application for a project approval is filed, the public agency must conduct a preliminary review to ascertain whether the application is complete and whether the activity is exempt from environmental review. The agency may choose to issue a notice of exemption. The agency's determination that a project is exempt should be supported by evidence in the record.

Please see Section 2.7, *Activities not Covered by this Plan,* in Chapter 2, *Covered Activities*, of the Plan for a description of activities not covered by the Plan. Item number 11 in Section 2.7 describes how a proponent of a project under the jurisdiction of a Permittee may elect to forego coverage under the

Plan. Section 1.2.1, *Plan Area,* in Chapter 1, *Introduction*, of the Plan describes where "Covered Activities would be implemented and take resulting from such activities would be covered under the permit or take authorization granted to the Permittees." The Plan does not identify sites within the Plan Area that are exempt from the "PCCP process."

Response to Comment 25-4

The commenter asked whether the Plan de-emphasizes avoidance of impact in the PFG and whether the Plan results in a less rigorous impact analysis because impacts can be mitigated elsewhere in the Plan Area.

The Plan does provide a regional conservation strategy that minimizes habitat fragmentation by concentrating impacts in some areas and providing large, contiguous blocks of protected habitat in other areas (see Response to Comment 25-1). Therefore, the Plan does de-emphasize project-by-project avoidance in the PFG in favor of mitigating and conserving larger intact and functional natural and semi-natural areas in the RAA. This approach minimizes the creation of a patchwork of small, isolated avoided areas throughout the Plan Area. The effects of development in these areas are fully analyzed in the EIS/EIR.

Response to Comment 25-5

The commenter asked about protections for and analysis of impacts on non-covered species with completion of the Plan.

The EIS/EIR analyzes the Plan's impacts on non-covered species, including white-tailed kite. Effects on non-covered species would also be assessed by individual projects covered under the Plan. As noted on page 4-23 of the draft EIS/EIR, most Covered Activities would require individual permits and approval pursuant to Placer County and the City of Lincoln's general plans and land use regulations, or the requirements of the implementing agency, and would undergo subsequent project-level CEQA review and relevant NEPA review for construction and operations-related impacts. Non-covered species would receive the same protections as they do without the Plan. For example, white-tailed kite would retain its fully protected status when the Plan is in place.

Response to Comment 25-6

The commenter inquired as to how impacts on non-covered species would be evaluated after the Plan is permitted by USFWS and CDFW.

These species would be evaluated through CEQA in the same manner that they were evaluated prior to completion of the Plan, although CEQA documents may rely on information available in the Plan for the CEQA analysis.

Response to Comment 25-7

The commenter inquired as to how conservation stays ahead of impacts and whether there are thresholds at which Covered Activities are stopped.

Section 8.4.3, *Stay Ahead Provision,* of the Plan describes requirements to ensure conservation stays ahead of impacts. The Plan states the following:

> "The Stay Ahead provision requires that the amount of each natural community and constituent habitat protected, restored, or created by the PCA as a proportion of the total requirement for each natural community and constituent habitat (Table 5-6 and Table 5-7) must be equal to or greater than the take impacts on that community and constituent habitat as a proportion of the total take impacts authorized for all Covered Activities (Table 5-3). "

Please see Response to Comment 18-3 for additional details on the Stay Ahead provision and on the applicability of a firm percentage threshold for stopping Covered Activities.

Response to Comment 25-8

The commenter asked when projects would begin seeking coverage under the PCCP, should it be approved. Any projects that meet the criteria for Covered Activities at the time that the Plan is permitted and adopted would be covered through the Plan. This would also be when Participating Special Entities could request coverage. A summary description of the types of projects and entities that can receive coverage is provided in Section 2.5.1, *Entities Conducting Activities,* of the Plan.

Response to Comment 25-9

The commenter requested clarification on how the RAA and PFG were determined. The overarching goal for identifying the boundaries of the RAA was to achieve a balance between general plans for the County of Placer and the City of Lincoln and a need to develop a conservation strategy (Section 1.4.1, *Background,* of the Plan). The RAA needs to be large and contiguous enough to allow for the establishment of an interconnected Reserve System that would benefit the Covered Species, natural communities, and ecosystems of the Plan Area. See Section 5.3.1.3.1, *The Reserve System, Reserve Acquisition Area, and Potential Future Growth Area,* of the Plan for details about the rationale and process for determining the boundaries of the RAA.

Response to Comment 25-10

The commenter requested clarification on how the Joint Powers Authority (JPA) would be formed. The PCA would be a joint exercise of powers agency created by the County and the City to implement the Plan on behalf of the Permittees (Section 8.2.2, *Placer Conservation Authority,* of the Plan). Regarding personnel with expertise to assess mitigation tradeoffs:

> "The PCA will also coordinate with science advisors, outside consultants, and land management agencies as needed to ensure adequate and coordinated Plan implementation. The PCA will include, as part of staff or contract resources, scientists, administrators, and other specialists as needed to oversee and carry out planning and design, habitat restoration, monitoring, and adaptive management programs. These roles may be filled by PCA staff, or their functions may contracted out to existing local agencies, non-profit organizations, or private consultants. The PCA will also coordinate with Wildlife Agencies on a regular basis, at least monthly in the first 2 years of implementation, and provide the Wildlife Agencies with annual reports."

Section 8.3, *Responsibilities of the Placer Conservation Authority,* of the Plan describes the responsibilities of the PCA, including responsibilities for implementing the conservation measures (Section 8.3.1, *Implementation of Conservation Measures*). Section 8.2.8, *Public Input*, describes how the public can engage with Plan implementation.

Response to Comment 25-11

The commenter requested clarification regarding who would oversee the setting and collecting of the various fees in the PCCP and whether or not the fees could be negotiated.

The County and the City of Lincoln would require private and public project proponents to pay Plan fees to the PCA as specified in their local implementing ordinances (Section 8.2.3.1, *Implementation Ordinances,* of the Plan) and as described in Plan Chapter 9, *Costs and Funding*.

The PCA would be responsible for developing and monitoring budgets, processing invoices, managing financial reserves, identifying cost savings, and managing administrative contracts (e.g., liability insurance). The PCA would be responsible for recalculating the fees annually and providing the new fees to the Permittees, as described in Plan Chapter 9, *Costs and Funding.* The PCA would notify each Permittee of the new fees. The PCA would also determine fees to be paid by Participating Special Entities (Section 8.9.2, *PCA Responsibilities,* of the Plan).

Annual reports prepared by the PCA would be available to the public (Plan Section 8.11, *Reporting*). These reports would include an accounting of all revenues received, by type (e.g., Plan fees, grants), and an assessment of progress toward total revenue goals. The annual report would also include any fee adjustments. The annual report would provide a summary of Plan costs and expenditures for the reporting period and a summary of the last fee assessment performed (see Section 9.4.1.7.2, *Periodic Assessment and Adjustment of Fees,* of the Plan).

Project proponents may provide land in lieu of a portion of the Plan fees (Section 8.4.13, *Land Dedication in Lieu of Land Conversion Fee and Section,* of the Plan). See Plan Section 9.4.1.10, *Land Provided in Lieu of Development Fees,* for details on how fees may be reduced through the land dedication process.

Response to Comment 25-12

The commenter asked if any research into "best practices" from other HCPs was incorporated into the PCCP.

This Plan was developed by consultants and Wildlife Agency staff with extensive experience developing and implementing other HCPs (both within California as well as other states) and NCCPs or other regional conservation plans in Northern California. The Plan development team relied heavily on their experiences authoring and implementing these plans, including the *East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan* (prepared in 2006), the *Santa Clara Valley Habitat Plan* (an HCP/NCCP) (prepared in 2012), and the *Yolo Habitat Conservation Plan/Natural Community Conservation Plan* (prepared in 2018), among many other HCPs and NCCPs (see Plan Section 1.4, *Overview of HCP/NCCP Planning Process,* for a description of entities involved in Plan development). For example, many of the conditions on Covered Activities, including BMPs and avoidance and minimization measures, are drawn largely from Wildlife Agency guidance documents, conditions applied to other conservation plans or prior Wildlife Agency permits, and the Permit Applicants' own BMPs, plans, ordinances, or policies (Section 6.3, *Conditions on Covered Activities,* of the Plan).

Comment Letter 26—Placer County Flood Control and Water Conservation District

Response to Comment 26-1

The commenter requested a reference be added for the *Cross Canal Watershed Flood Control Plan*.

The text in Section 3.5.2, *Environmental Setting*, of the EIS/EIR has been revised in response to this comment. No changes to the findings of the document would result from these changes.

Response to Comment 26-2

The commenter provided updated information about the Reason Farms Retention Basin, now called the City of Roseville's Al Johnson Wildlife Preserve.

The text in Section 3.5.2, *Environmental Setting*, of the EIS/EIR has been revised in response to this comment. No changes to the findings of the document would result from these changes.

Comment Letter 27—Remy, Moose, Manley

Response to Comment 27-1

The commenter questioned why Placer Parkway is not included in Section 3.11.2, *Environmental Setting, Highway System,* of the EIS/EIR.

Placer Parkway is not an existing highway facility for the purposes of describing the existing environmental setting. Rather, it is included in the analysis as a Covered Activity. This is discussed on page 2-26 of the draft EIS/EIR. While the first phase of the Placer Parkway is under construction, full buildout of the Placer Parkway is anticipated to occur during the permit term.

Response to Comment 27-2

The commenter stated that Plan Section 2.4.6.3, *City of Roseville*, and Plan figures need to be updated to reflect the fact that the ARSP has been approved and annexed into the city of Roseville.

Please see Response to Comment 23-1.

Response to Comment 27-3

The commenter requested that provisions be added to Plan Section 2.7, *Activities Not Covered by this Plan*, to integrate Participating Special Entities as appropriate non-participating city projects.

Section 2.7, *Activities Not Covered by this Plan*, of the Plan states that it is not the intent to cover non-participating city projects as Participating Special Entities. The potential exception to this is the City of Roseville's annexation project (see Figure 8-3 *Potential Roseville Annexation Area),* as it was included in the Plan as a Covered Activity, including the Take Limits and Cost and Funding Plan.

Response to Comment 27-4

The commenter recommended additional clarification and definitions be added to Section 9.4.1.10, *Land Provided in Lieu of Development Fees,* of the Plan. The term "faster" in the first bulleted paragraph in Plan Section 9.4.1.10.2, *Land Dedication Incentive Policy*, refers to the ability of the PCA to allow the project proponent to activate credits at a rate greater than 35% of the land conversion fee obligation, thus enabling the project proponent to use their credits at a "faster" rate than as described in Section 9.4.1.10.1, *Basic Land Dedication Policy*; it is not meant to refer to a specific duration of time. The Basic Policy limits credits to 35% of the fee obligation (this percentage may change over the life of the Plan) to offset only that share of fee revenue required for land acquisition purposes and ensure that the PCA receives sufficient funding for other costs besides land acquisition. The Incentive Policy allows the PCA to increase this percentage as an incentive to project proponents that have land with particularly high conservation value for dedication to the Reserve System.

The County agrees with the concern expressed about the need to transfer the entire parcel to the PCA to receive land dedication credit and appreciates that there may situations where easements on a portion of a larger parcel would qualify for inclusion in the Reserve System. Section 9.4.1.10.1, *Basic Land Dedication Policy,* of the Plan has been revised in response to this comment.

The entire area subject to the Land Dedication Agreement must be transferred by fee title or conservation easement to the PCA to convert credits. The area that is transferred may consist of a single separately saleable parcel, multiple parcels, a conservation easement on a single parcel, or a conservation easement over multiple parcels.

Response to Comment 27-5

The commenter stated that it is not clear why land dedication credits cannot be transferred and that some appropriate timeframe should be included. Item 5 under Plan Section 9.4.1.10.1, *Basic Land Dedication Policy*, limits the use of land dedication credits to those Covered Activities that would be described in a Land Dedication Agreement. The limitation is necessary because of the numerous types of Land Conversion fees that are described in Plan Chapter 9, *Costs and Funding*. The Land Conversion fees for Covered Activities in one geographic area of the Plan may be very different from other areas (e.g., the Valley versus the Foothill fees). Notwithstanding the limitation described in Section 9.4.1.10(5), Section 9.4.1.10.2 (second bullet) gives the PCA the discretion to allow a project proponent to transfer their land dedication credits to activities not listed in the Land Dedication Agreement particularly when there are credits in excess of what is necessary to mitigate a project's effects.

With respect to the comment regarding a timeframe or expiration date, this would be at the discretion of the PCA weighing factors of construction cost increases, inflation, and related administrative costs for tracking credits.

Response to Comment 27-6

The commenter requested clarification on a number of terms related to tricolored blackbird conservation measures and Mitigation Measure BIO-3 for roosting bats and refers to Comment Letter 30 for details. Please see Responses to Comments 30-8 through 30-15 for responses pertaining to this comment.

Comment Letter 28—Cheryl Berkema

Response to Comment 28-1

The commenter expressed concern about the timing of the PCCP, stating that it should have been approved by the County prior to certain development projects being approved.

The planning process for the PCCP began in 2001. While the projects referenced in this comment are moving through the approval process ahead of the PCCP, the PCCP anticipates and includes the land conversion and effects associated with the development of these and other projects within the 50-year permit term. In addition, the Sunset/Placer Ranch, Regional University, Placer Vineyards and other projects include specific provisions for permitting and mitigation consistent with the PCCP, and these projects would be required to obtain relevant state and federal regulatory permits through the PCCP if the PCCP is adopted at the time these projects seek permits.

The commenter also expressed concern that use of the PCCP to address impacts could result in deferral of mitigation.

CEQA specifically requires lead agencies to inform public agency decision-makers and the public generally of possible ways to minimize significant effects and reasonable alternatives for a project. Since most discretionary projects within the Plan Area would be subject to the requirements of the PCCP upon adoption, any separate and future CEQA analyses should identify the PCCP as a possible means of permitting and mitigating for effects consistent with the PCCP's Conditions on Covered Activities and Conservation Strategy. Therefore, ensuring these projects' mitigation measures include requirements to comply with the PCCP and its avoidance, minimization, and mitigation measures has been included at the discretion of the lead agency.

Response to Comment 28-2

The commenter stated that Placer County is not on par with other counties in California in terms of mitigation fees charged for trees. Placer County's Plan, however, is a comprehensive conservation plan rather than a tree preservation program and includes conservation above and beyond mitigation requirements. The commenter is comparing Placer County with other counties that do not have comparable regional conservation plans, and a direct comparison to these other counties is not possible or appropriate. The Plan has a funding plan that is based upon land costs in Placer County for fee title and conservation easements. Using cost estimates from other jurisdictions would result in fee payments that are likely to be over or under what is necessary to complete the Plan. Any overpayment would be inconsistent with the Mitigation Fee Act (Government Code § 66000 et seq.) and is expressly prohibited by state law. The three jurisdictions referenced in the comment do not have landscape-level HCP/NCCPs, and they have landscapes that are significantly different from those found in the west slope of the Sierra Nevada and Central Valley. The costs that are summarized in Table 9-1 in Section 9.1, *Cost to Implement*, of the Plan and described in detail in Appendix L were vetted through a stakeholder Finance Committee, an Ad Hoc Committee comprised of two members of the Board of Supervisors and two Council members of the City of Lincoln and through numerous public hearings with the Board of Supervisors. They were also subject to an independent peer review and analyzed in a nexus study to comply with the Mitigation Fee Act. All of these actions were taken before the cost estimates were released for public review.

Response to Comment 28-3

The commenter stated that the PCCP needs to permanently preserve lands.

All areas preserved under the Plan would be preserved in perpetuity. Sections 8.4.1, *Criteria for Reserve System Lands*, and 8.4.9, *Conservation Easements,* of the Plan describe how Reserve System lands would be permanently protected under conservation easements. Also see Section 5.3.1.4, *Landscape Level Reserve Design,* of the Plan describing reserve design criteria including, "Ability to be suitably managed in perpetuity in a manner consistent with other Reserve System lands and consistent with the adaptive management requirements described in the PCCP." Specifically, for vernal pools, Section 5.4.11, *Vernal Pool Branchiopods,* of the Plan requires that areas to be protected or incorporated in the Reserve System would have onsite and offsite hydrological conditions that ensure that vernal pool resources can be maintained, enhanced, and/or restored to function in perpetuity.

Furthermore, the Plan requires adequate funding for these obligations in perpetuity. See Section 9.3.8, *Costs in Perpetuity,* of the Plan for detailed estimates of annual costs in perpetuity after the end of the permit term. See Section 9.3.8, *Funding for Post Permit Management & Monitoring,* of the Plan for a description of how these costs would be funded with a permanent endowment to be built during the permit term from an allocation of development fee revenue and interest earnings on the growing endowment fund. At the end of the permit term, the endowment must be large enough to continue in perpetuity while using a portion of investment earnings to fund post-permit costs, adjusted for inflation. The periodic review of development fees every 5 years would ensure that fees are adjusted to adequately fund the endowment by the end of the permit term (see Section 9.4.1.7.2, *Periodic Assessment and Adjustment of Fees,* of the Plan.)

With regard to removing the 50-year permit term, 50 years refers to the length of time the incidental take permits would be valid, and a permit term is required under state and federal regulations and policies. The 50-year permit term does not refer to how long mitigation lands would be protected.

Response to Comment 28-4

The commenter expressed concern regarding impacts on vernal pools and the adequacy of mitigation.

Please see Responses to Comments 15-1, 35-2, and 35-3.

Response to Comment 28-5

The commenter expressed concern that the PCCP does not adequately protect all areas of Placer County.

The Plan uses a regional approach. Its focus is to conserve and manage areas with the highest quality natural communities and Covered Species habitat in the Plan Area at the landscape level (see Plan Objective L-1.1) while directing impacts to areas considered lower quality (at the landscape level). As such, it is not the intent of the Plan to preserve habitat evenly throughout the Plan Area. This approach is consistent with the principles of HCPs and is a common approach taken in many programmatic regional HCPs that have been permitted.

The commenter also expressed concern that taxpayers outside of western Placer County are unfairly being taxed for development in western Placer County. The PCCP would be funded predominately by development fees paid by Covered Activities (private development and public infrastructure projects) and not by taxes. Although no funding is required from General Funds of either Placer County or the City of Lincoln, development fees would be required for public projects such as roadway, bridge, and water infrastructure construction activities undertaken by local permittees and covered by the Plan. In addition to development fees, funding from other sources would contribute to habitat preservation. The state and federal governments have determined that conserving species and their habitat are of both national and state importance and are anticipated to assist with conservation grant funding to acquire and protect habitat through a variety of sources administered by the California Wildlife Conservation Board and USFWS (see Table 9-9 in the Plan for additional information).

Response to Comment 28-6

The commenter expressed concern regarding the level of public involvement and refers to a "PCCP Pilot Program." The PCCP would implement the goals and objectives of the adopted *Placer County General Plan* including Placer Legacy (Placer County 2000), all of which conducted extensive public outreach, included stakeholder committee input, met all public notice requirements, and specifically included considerable long-term support and feedback from its stakeholder committee, the PCCP Biological Working Group. In addition, the Board of Supervisors adopted and the USACE, USEPA, and the Regional Water Board approved and signed the agreement establishing the Western Placer County In Lieu Fee Program (public notice occurred through the development of the In Lieu Fee with USACE). Lands acquired pursuant to the terms of Placer Legacy and/or the Western Placer In Lieu Fee Program may be counted toward meeting the acquisition commitments of the PCCP in accordance with NCCPA Section 2810(b)(8) and the PCCP Planning Agreement. In addition to meeting the goals and objectives of Placer Legacy, the acquisition of open space and habitat in advance of the adoption of the PCCP and issuance of state and federal permits help to ensure the program can be successfully implemented once it is adopted because timely assembly of the Reserve System relative to impacts of Covered Activities is critical to the success of the Plan (Section 8.4.3, *Stay Ahead Provision*). All public acquisitions of land and implementation programs have and will be conducted pursuant to local ordinance and California Government Code.

Response to Comment 28-7

The commenter expressed concerns that the PCCP will result in the elimination of current environmental protections. The PCCP will not change the requirements for protection of the environment that exist today but will streamline the process for evaluation and permitting for Covered Activities. The PCCP is a long-term HCP that is prepared in compliance with numerous state and federal statutes for activities that have the potential to impact listed species, their habitat, or other habitats regulated by state and federal law. These laws include the California NCCPA (Sections 2800–2835 of the Fish and Game Code), federal ESA (Section 10) and the federal CWA (Sections 401 and 404). Under the PCCP, the state and federal permitting agencies will still be responsible for monitoring compliance with these laws. See Section 1.5, *Regulatory Setting*, of the Plan for additional information on the state and federal laws that apply to the PCCP.

Response to Comment 28-8

The commenter expressed concerns regarding the scope of the PCCP and stated that permitting activity is occurring County-wide. The scope of the PCCP (Plan Area) is limited to western Placer County, as this area is projected to be subject to the majority of the anticipated growth in the County over the 50-year permit term (see description of the Plan Area in Plan Section 1.2, *Scope of the Western Placer County HCP/NCCP*). Plan Area A is the main focus of the Plan and where all future growth and most habitat preservation and Covered Activities will take place. Plan Area B constitutes a minority of the Plan Area both in terms of acreage (less than one quarter) and where activities or actions take place. Plan Area B (where limited Covered Activities and mitigation may occur) is defined as follows:

a. B1, Permittee Activity in Non-participating City Jurisdiction
b. B2, PCWA Zone 1 Operations and Maintenance
c. B3, Raccoon Creek Floodplain Conservation
d. B4, Fish Passage Channel Improvement
e. B5, Big Gun Conservation Bank

Plan Area B was designed primarily to accommodate additional conservation opportunities, as well as limited actions associated with the PCWA operations and maintenance and some permissible activities led by the Plan Permittees but within the non-participating cities of Roseville, Rocklin, Auburn, and Town of Loomis.

Response to Comment 28-9

The commenter expressed concern with early implementation of elements of the PCCP. CEQA requires lead agencies to inform public agency decision-makers and the public generally of possible ways to minimize significant effects and reasonable alternatives for a project. Since discretionary projects within the Plan Area may be subject to the requirements of the PCCP upon adoption, those separate CEQA analyses should identify the PCCP as a possible means of mitigating for effects consistent with the PCCP's Conservation Strategy. Therefore, ensuring these projects' mitigation include requirements to comply with the PCCP and its avoidance, minimization, and mitigation measures has been included at the discretion of the lead agency.

Response to Comment 28-10

The commenter expressed concern with Placer County's oversight of environmental programs; this comment is not related specifically to the PCCP or its Covered Species and habitats. The PCCP would add a new comprehensive program with consistent conditions and avoidance, minimization, and mitigation measures required for all Covered Activities overseen by a new JPA comprised of more than just the County, meaning the County alone would not have sole oversight.

Sections 8.10, *Compliance Tracking and Data Management*, and 8.11, *Reporting*, of Chapter 8, *Plan Implementation*, of the Plan describe the substantial reporting requirements that need to be tracked by the Permittees and reported to the PCA and the Wildlife Agencies who provide oversight during the permit term.

Response to Comment 28-11

The commenter expressed concerns with the clarity of the EIS/EIR. The PCCP provides the opportunity to establish a comprehensive habitat conservation program with a standard set of avoidance, minimization, and mitigation measures/fees included that have been developed by the Permit Applicants in cooperation with the state and federal agencies with jurisdiction over these resources. The EIS/EIR explicitly presents the program objectives in Section 1.3.3, *Statement of Project Objectives*, of the EIS/EIR. Program execution and enforcement are discussed in the *PCCP Implementation* section of Section 2.4.2, *Alternative 2—Proposed Action (Proposed Placer County Conservation Program)*, of the EIS/EIR. The environmental impacts of the PCCP are extensively presented in the whole of Chapter 4, *Environmental Consequences*, of the EIS/EIR and summarized in the Executive Summary.

Comment Letter 29—West Placer Groundwater Sustainability Agency

Response to Comment 29-1

The commenter expressed agreement with the findings of the EIS/EIR as stated in the comment.

No response to this comment is required.

Responses to Comments 29-2 and 29-3

The commenter encouraged coordination with the West Placer Groundwater Sustainability Agency (WPGSA) on its proposed groundwater recharge/infiltration projects.

No response to these comments is required.

Response to Comment 29-4

The commenter encouraged coordination with WPGSA when determining mitigation ratios associated with groundwater recharge areas.

The PCCP special habitat mitigation ratios are set to conform with USACE and State of California compensatory mitigation requirements and federal no net loss policy. In addition to the special habitat mitigation ratio, the Plan provides avoidance and minimization and the protection, enhancement, restoration, and creation of wetlands through the conservation measures providing for the protection of uplands necessary to sustain the hydrological function. Soil types are critical to the design and function of wetland restoration projects necessary to meet hydrologic standards within a reasonable range of depth and duration of natural reference wetlands.

Response to Comment 29-5

The commenter identified some specific wording changes in the discussion of compliance with the Sustainable Groundwater Management Act (SGMA).

The text in Section 4.5.2, *Impacts and Mitigation Measures*, under Impact WQ-2 of Alternative 1 of the EIS/EIR has been revised in response to this comment. No changes to the findings of the document would result from these changes.

Comment Letter 30—ECORP Consulting, Inc.

Response to Comment 30-1

The commenter stated that the EIS/EIR discussion of amphibians and reptiles that occur in freshwater marsh in Placer County contains incorrect species.

Section 3.4.4.4.1, *Fresh Emergent Marsh,* of the Plan and the *Fresh Emergent Marsh* discussion under Section 3.3.2, *Environmental Setting,* of the EIS/EIR have been revised in response to this comment. No changes to the findings of the EIS/EIR would result from these changes.

Response to Comment 30-2

The commenter stated that the California red-legged frog is highly unlikely to occur in urban riparian areas.

The EIS/EIR states that urban riparian areas constitute potential habitat but does not assign a likelihood of presence. Although California red-legged frog is much less common in the Sierra Nevada foothills, according to CNDDB records, the species has been found in riparian areas within developed areas in the Bay Area and Coast Range.

The text in Section 3.3.2, *Land Cover Type – Urban Riparian,* of the EIS/EIR has been revised in response to this comment. No changes to the findings of the document would result from these changes.

Response to Comment 30-3

The commenter noted that the elevational range described for valley elderberry longhorn beetle in the EIS/EIR needs to be revised to be consistent with the current USFWS guidelines.

This section was drafted before the USFWS's 2017 framework was published. Table 3.3-4 of the EIS/EIR has been revised in response to this comment. No changes to the findings of this document would result from these changes.

Response to Comment 30-4

The commenter noted that there is an error in EIS/EIR Table 3.3-4: California red-legged frog is missing, and foothill yellow-legged frog is repeated.

Table 3.3-4 of the EIS/EIR has been revised in response to this comment. No changes to the findings of the document would result from these changes.

Response to Comment 30-5

The commenter noted that the status for tricolored blackbird in EIS/EIR Table 3.3-4 is outdated.

Table 3.3-4 of the EIS/EIR was finalized before the listing of tricolored blackbird was finalized. It has been revised in response to this comment. No changes to the findings of the document would result from these changes.

Response to Comment 30-6

The commenter noted that the 72-acre threshold for the Initial Survey Phase that would be used to establish the Occupancy Rate Standard may not provide enough data to represent the variability in occupancy in vernal pool fairy shrimp and vernal pool tadpole shrimp across the PFG and recommends that additional survey data be used, if warranted, after the end of the Initial Survey Phase.

A significant amount of current and historic occupancy data exists and have been reviewed by the County and USFWS in the process of developing the occupancy standard. Based on this review, the Occupancy Rate Standard has been revised to include survey data only from vernal pools as opposed to including both vernal pools and seasonal swales. To account for the removal of seasonal swales from calculation of the Occupancy Rate Standard, the threshold for the duration of the Initial Survey Phase has been revised from a minimum of 72 acres of vernal pools and seasonal swales (20% of the 357 acres of the maximum estimated direct effects to vernal pools and seasonal swales) to a minimum of 37 acres of vernal pools (20% of the 185 acres of the maximum estimated direct effects to vernal pools over the permit term). Seasonal swales were removed from the vernal pool occupancy requirement for the covered vernal pool branchiopods because seasonal swales generally do not retain water long enough for the covered vernal pool branchiopods to complete a life cycle. These revisions will focus the Occupancy Rate Standard on the highest value habitat for vernal pool branchiopods and support the establishment of a meaningful Occupancy Rate Standard. This change to the Plan did not result in any revisions to the EIS/EIR.

The Plan requires a minimum of 37 acres of vernal pools to calculate the Occupancy Rate Standards, so more than 37 acres of vernal pools may be included in the calculation of Occupancy Rate Standards if additional data are available during the Initial Survey Phase. However, the Plan does not include language allowing for additional survey data to be used to revise the Occupancy Rate Standards after the Initial Survey Phase because allowing revisions to the Occupancy Rate Standard could result in a variable Occupancy Rate Standard over time. A changing Occupancy Rate Standard could unnecessarily complicate tracking of compliance with the Occupancy Rate Standard. A changing Occupancy Rate Standard would also add unnecessary uncertainty to how the PCA makes land acquisition and management decisions.

Response to Comment 30-7

The commenter requested clarification about whether there are separate occupancy standards for vernal pool fairy shrimp and vernal pool tadpole shrimp.

The Occupancy Rate Standards (both pool-based and area-based) would apply to vernal pool fairy shrimp and vernal pool tadpole shrimp. Each species would have its own pool-based and area-based Occupancy Rate Standard. This clarification was added to Section 5.3.1.6.10, *Vernal Pool Branchiopods*, of the Plan. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 30-8

The commenter requested clarification of how to delineate foraging habitat for tricolored blackbird.

Text was added to Species Condition 4, Tricolored Blackbird 2, *Preconstruction Surveys – Foraging Habitat,* to clarify how foraging habitat would be delineated during preconstruction surveys. The

revised text states that if an active colony is known to occur within 3 miles of the project site, a qualified biologist will conduct two surveys of foraging habitat within the project site and within a 1,300-foot radius around the project site to determine whether foraging habitat is being actively used by foraging tricolored blackbirds. The qualified biologist will map foraging habitat, as defined by the land cover types listed above, within a 1,300-foot radius around the project site to delineate foraging habitat that will be surveyed. This change to the Plan did not result in any revisions to the EIS/EIR.

Note that Species Condition 4, Tricolored Blackbird 4, *Actively used Foraging Habitat – Avoidance and Minimization,* does not require the qualified biologist to determine the relative importance of a given foraging site; rather, Tricolored Blackbird 4 requires the qualified biologist to determine whether foraging habitat is being actively used for foraging by a tricolored blackbird colony. Because the value of a foraging site to tricolored blackbird may be difficult to assess, Species Condition 4, Tricolored Blackbird 4, allows for the qualified biologist to determine, in consultation with the Wildlife Agencies, that the site or foraging habitat within 1,300 feet of a project site provides only marginal foraging habitat. If it is determined that the site or foraging habitat within 1,300 feet of a project site provides only marginal foraging habitat, then a reduced buffer may be appropriate, or the project may not need to avoid the foraging habitat. The 1,300-foot buffer may be modified to a minimum of 300 feet, with written approval from the Wildlife Agencies.

As the commenter noted, use of foraging habitat by tricolored blackbird varies temporally and avoided foraging habitat identified as active during preconstruction surveys may not be used by tricolored blackbird several weeks later when the buffer is in effect. The Plan acknowledges this possibility; however, there is no way to know whether the habitat will be used again during the duration of the Covered Activity, so the measure was deemed necessary to reduce risk of colony failure.

Response to Comment 30-9

The commenter requested justification for the 1,300-foot buffer around tricolored blackbird nesting colonies. The 1,300-foot buffer used in the Plan is consistent with the Yolo HCP/NCCP, which also requires a 1,300-foot buffer. This distance was deemed necessary by CDFW biologists to provide sufficient protection from construction-related disturbances for active nest colonies. Note that Species Condition 4, Tricolored Blackbird 3 allows that the buffer may be modified to a minimum of 300 feet, with written approval from the Wildlife Agencies, in areas with dense forest, buildings, or other features between the Covered Activities and the active nest colony; where there is sufficient topographic relief to protect the colony from excessive noise or visual disturbance; or where sound curtains have been installed.

Response to Comment 30-10

The commenter requested clarification of the term “activity” in Species Condition 4, Tricolored Blackbird 3 *Nesting Colony – Avoidance and Minimization,* in Section 6.3.5.9.2, *Applicable Measures*, of the Plan.

This condition was revised to clarify what *activity* means. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 30-11

The commenter requested justification for the 1,300-foot buffer around foraging habitat.

The 1,300-foot buffer distance was deemed necessary by CDFW to provide sufficient protection from construction-related disturbances for foraging tricolored blackbirds. Also see Response to Comment 30-8, and note that the 1,300-foot buffer may be modified to a minimum of 300 feet, with written approval from the Wildlife Agencies.

Response to Comment 30-12

The commenter noted that foraging tricolored blackbirds do not use one foraging site consistently throughout the nesting season.

As described in Response to Comment 30-8, use of foraging habitat by tricolored blackbird varies temporally throughout the nesting season, and avoided foraging habitat identified as active during preconstruction surveys may not be used by tricolored blackbird several weeks later when the buffer is in effect. The Plan acknowledges this possibility; however, there is no way to know whether the habitat will be used again during the duration of the Covered Activity, so the measure was deemed necessary to reduce risk of colony failure.

Note that Species Condition 4, Tricolored Blackbird 4, *Actively used Foraging Habitat – Avoidance and Minimization,* allows that the buffer may be modified to a minimum of 300 feet, with written approval from the Wildlife Agencies, in areas with dense forest, buildings, or other features between the Covered Activities and the active nest colony; where there is sufficient topographic relief to protect the colony from excessive noise or visual disturbance; or where sound curtains have been installed.

Response to Comment 30-13

The commenter noted inconsistencies between Tricolored Blackbird Species Conditions 3 and 4.

Text was added to Species Condition 4, Tricolored Blackbird 4, *Actively used Foraging Habitat – Avoidance and Minimization,* to provide the same flexibility as the commenter referenced in Tricolored Blackbird 3. This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 30-14

The commenter suggested edits to Species Condition 4, Tricolored Blackbird 4, *Actively used Foraging Habitat – Avoidance and Minimization,* of the Plan.

The following text was added to replace installation of sound curtains: “or in consultation with the Wildlife Agencies if other conditions warrant reduction of the buffer distance.” This change to the Plan did not result in any revisions to the EIS/EIR.

Response to Comment 30-15

The commenter stated several recommendations and concerns about Mitigation Measure BIO-3, *Conduct preconstruction surveys for roosting bats and implement protection measures* in the EIS/EIR.

Note that, as stated in the draft EIS/EIR, Impact BIO-25, page 4.3-96, Mitigation Measure BIO-3 has been identified to mitigate the potential effects that conservation measures "to create, restore, enhance, and manage riparian, valley oak woodland, and oak woodland habitat" could have on roosting bats, and is not being proposed to mitigate the effects that future development projects would have on roosting bats.

The first recommendation is that preconstruction surveys be conducted outside of the hibernation period in order to detect bat activity. The measure has been revised with this recommendation.

The commenter asked that eviction measures only apply to colony roosts and daytime roosts and that measures for nighttime roosts and solitary roosts be required to the extent practical. Exclusion of night roosts from this requirement can be warranted depending on the nature of the activity taking place and on site-specific conditions. The measures written are options and are to be implemented on an as needed basis. The language in Mitigation Measure BIO-3 has been modified.

Some bat species roost solitarily in tree cavities and structures, and avoidance strategies can be applied if surveys determine occupancy. However, exclusion measures would not be implemented for foliage roosting bats (e.g., netting) because exclusion of such roosting habitat is not possible without incurring impacts on other wildlife, such as birds and other small mammals. The measure has been revised to clarify the application of this measure for tree roosting bat species.

The commenter stated that it is unrealistic to avoid eviction of non-maternity roosts before September 15 in all cases and suggests that it could affect timelines and to allow for agency coordination on exclusion. The measure already includes coordination with CDFW on eviction, but the language has been modified to allow for evictions prior to September 15 if approved by CDFW. However, as noted above this mitigation measure applies to habitat restoration activities and is not being proposed to apply to future development projects and therefore is unlikely to affect project timelines.

No changes to the findings of the document would result from these changes.

Comment Letter 31—Delana Ruud

Responses to Comments 31-1, 31-2, and 31-3

The commenter expressed concern that the level of recreation within the Plan Area is in conflict with the PCCP and that the PCCP itself might facilitate the expansion or intensification of recreation.

Community concerns about the recreational usage on existing reserves are understood by the County. The existing protected areas that are to be enrolled in the Reserve System are important to the Plan for a number of reasons including (1) conservation of oak woodlands, stream systems, and known occurrences of Covered Species (e.g., Chinook salmon, western pond turtle and California black rail); (2) establishment of a foundation of existing conservation and wildlife corridors that would be built on over time through the Plan; and (3) contribution to the Jump Start and Stay Ahead requirements of the Plan. See Section 6.3.6.3, *Reserve Management Condition 3, Jump Start Lands*, of the Plan for a description of conditions on recreation in Jump Start lands and Responses to Comments 21-4 and 44-11 regarding extensive limitations on recreation within Reserve System lands.

In an area where conservation opportunities, including known occurrences of rare species, are limited, these existing reserve areas have relevant value for conservation (e.g., oak woodlands), even though they also accommodate recreational activities. In order to qualify for enrollment in the Reserve System, existing protected areas must meet criteria as outlined in Section 8.4.1, *Criteria for Reserve System Lands,* of the Plan*.* The recreational activities must be consistent with the management of the land for the rare species that are present or likely to be present.

Recreation on future reserve lands would be minimal. The Plan states:

> Any recreational use on future reserves will be limited to outdoor education, docent lead tours, and hiking, biking, and horseback riding on peripheral trails and trails along creek corridors. Many future reserves may have no recreational access. Any allowed recreational uses on Reserve System lands will be outlined in the reserve unit management plan and approved by the Placer County Authority (PCA) and the Wildlife Agencies. Recreational use on reserve lands will be designed to minimize effects on biological resources. [draft Plan, page 6-79]

A cap of 70 miles of new trails has been included. Section 6.3.6.1, *Reserve Management Condition 1, Public Access and Recreation on Future Reserve Lands,* of the Plan contains the details of the reserve management conditions. Each new reserve property must have a reserve unit management plan (see Section 5.3.2.1.2, *Content of Reserve Unit Management Plans*, of the Plan) prepared. These reserve unit management plans are required to identify "management and maintenance actions necessary to ensure that desired ecosystem characteristics and functions are maintained and enhanced" (draft Plan, page 5-96). This requirement is intended to ensure that the acquisition of a property for the protection of rare species and their habitat is the primary purpose for which land is conserved. Future recreational uses must be managed in manner that they are compatible with the desired ecosystem characteristics and functions and "will be allowed only where it is compatible with the biological goals and objectives of the Plan and where it is explicitly approved by the Wildlife Agencies" (draft Plan, page 6-79).

With respect to wildfire, it is a risk that is actively and aggressively managed within Placer County. The Plan would create minimal opportunities for recreation and access, and thus the threat of wildfire is not anticipated to increase as a result of the Plan. Appendix F, *Fuel Management*, of the

Plan provides specific guidelines for fuel management, and each new reserve unit management plan must also address the wildfire management issues that are unique to each new acquisition.

Comment Letter 32—Dianna Suarez

Response to Comment 32-1

The commenter expressed support for the PCCP and asked to be updated on EIS/EIR development.

The comment is noted for the record, and the commenter has been added to the EIS/EIR notification list.

Response to Comment 32-2

The commenter expressed support for the Reserve System and asked how owners of land within this area would be encouraged to sell that land.

There would be no active process "encouraging" landowners to sell land within the RAA. However, a market for the sale of their properties to the PCA would exist. Furthermore, owners of specific parcels believed to be of value to the Reserve System may be contacted individually to gauge interest. Please refer to Chapter 8, *Plan Implementation,* of the Plan.

Response to Comment 32-3

The commenter asked how the Reserve System would differ from developed recreational facilities and how the land management strategy would be determined.

With the exception of existing reserves to be enrolled in the Reserve System (Hidden Falls, Big Hill Area, Doty Ravine, and Swainson's Grassland Reserve), which already have varying degrees of recreation, new reserves would have limited recreation only, as specified in Section 6.3.6, *Reserve Management Conditions,* of the Plan. Also please see Response to Comment 44-11.

Response to Comment 32-4

The commenter asked if the EIS/EIR addresses the hydrologic function of the Plan Area and the SGMA.

The EIS/EIR addresses hydrology impacts in Section 4.5, *Hydrology and Water Quality*, of Chapter 4, *Environmental Consequences.* In 2017, Placer County, the Cities of Lincoln and Roseville, NID, PCWA, and California American Water Company agreed to form the WPGSA. The agency will implement the state SGMA, which requires preparation of local groundwater management plans. In addition, the *Western Placer County Groundwater Management Plan* (WPCGMP) is a planning tool with the objectives of maintaining safe, sustainable, and high-quality groundwater resources. The WPCGMP is intended to be a living document that will be updated in the future to account for progress and changing conditions. See discussion of Impact WQ-2 in EIS/EIR Section 4.5, *Hydrology and Water Quality.*

Response to Comment 32-5

The commenter asked what studies have been conducted to determine future water needs for the expected development.

Impacts to water supply are addressed in Table 5-1 in Section 5.8, *Public Interest Review Special Topics,* of the EIS/EIR, which concludes that impacts from Plan implementation would be less than significant.

Response to Comment 32-6

The commenter expressed a desire for an HCP to be developed in the "Phase 2 area" soon.

The comment does not include a question or comment on the draft EIS/EIR. No response to this comment is required.

Response to Comment 32-7

The commenter expressed concern that the Bear River watershed is not adequately evaluated in the EIS/EIR.

A description of the Bear River watershed is provided on pages 3.5-30 and 3.5-31 of the draft EIS/EIR. The EIS/EIR evaluates the environmental impacts of Plan Area elements that are located within the Bear River watershed. An analysis of the entire Bear River watershed, which spans several hundred miles, is beyond the scope of the EIS/EIR analysis.

Comment Letter 33—Protect American River Canyons

Response to Comment 33-1

The commenter expressed concern that the Plan does not assess all potential effects on the American River Watershed that could result from development.

The Plan Area is approximately 269,000 acres. A small portion of the American River watershed is located within the Plan Area, and the watershed defines the Plan's eastern boundary. Overall the American River watershed consists of 3.8% of the total area of the Plan. Of this area, 5,795 acres are managed by state or federal agencies (e.g., Bureau of Reclamation or California State Parks). These agencies are not receiving coverage through the PCCP, and any development by those agencies for recreation or infrastructure is not a Covered Activity under the Plan.

The small percentage of the watershed that is located within the Plan Area on lands that are regulated by a Permittee represents around 1.6% of the total (any portion of the watershed in the City of Auburn is not covered, as the City of Auburn is not a Permit Applicant). There are Covered Activities that would occur within this portion of the American River watershed, but the amount of growth is limited due to the nature of the land use designations that apply and the degree to which the area has been developed in the past (i.e., it has a limited holding capacity for new growth). The EIS/EIR addresses the environmental effects associated with the implementation of the PCCP for this limited area of the watershed since it is part of the Plan Area.

The potential effects of growth in this area noted as a concern by the commenter are addressed by the EIR for the *Placer County General Plan* and/or any community plan EIR that is within the watershed.

Response to Comment 33-2

The commenter expressed concern regarding changes in flows and increased recreational demands along the North and Middle Forks and American River that could result from increased development.

The growth-related issues expressed in the comment are beyond the scope of the PCCP environmental analysis and geographic scope of the Plan Area. The growth in demand for a variety of environmental and recreational services provided by public lands in the American River watershed affects an area much larger than the Plan Area and extends outside the boundary of Placer County. A number of agencies manage the American River watershed that would not receive coverage through the PCCP, including the U.S. Forest Service, U.S. Bureau of Reclamation, the Bureau of Land Management, and California State Parks. The limited amount of Covered Activities that would occur within the watershed within the boundary of a Permittee is addressed in the EIS/EIR.

The interface between the Plan Area and the American River watershed is primarily along the Auburn State Recreation Area and the Folsom Lake Recreation Area.

For information on the *Auburn State Recreation Area Preliminary General Plan and Auburn Project Lands Draft Resource Management Plan* and EIS/EIR please refer to the following.

- https://www.parks.ca.gov/?page_id=24325

For information on the *Folsom Lake State Recreation Area Final General Plan/Resource Management Plan* and EIS/EIR, please refer to the following.

- http://www.parks.ca.gov/pages/21299/files/FLSRA_GP_RMP_Vol1_Final_Plan.pdf
  http://www.parks.ca.gov/pages/21299/files/FLSRA_GP_RMP_Vol2_EIR_EIS.pdf

Comment Letter 34—Gary Estes

Response to Comment 34-1

Two goals stated in the *Placer County General Plan* are as follows.

6.C. To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.

6.E. To preserve and enhance open space lands to maintain the natural resources of the County.

The commenter stated that certain designations depicted in Figures 2-2 and 2-3 in the EIS/EIR would conflict with these goals.

The PFG depicted in Figure 2-2 is not a land use designation. The area is designated Agricultural 10-acre minimum in the *Placer County General Plan,* and the general plan's land use designations and its implementing zoning are unchanged by the PCCP.

The term *Potential Future Growth Area (PFG)* is intended to describe where forecasted growth is likely to occur. The area referenced by the commenter near Camp Far West Reservoir was identified as being in the PFG because of the large amount of rural residential fragmentation that already exists in this area. This area, generally known as the *Thermalands*, was established in the late 1800s and saw significant subdivision activity in the 1920s. The degree to which the area has been fragmented into small farms and rural residential homesites largely precludes the area for conservation. Similar regions of PFG are found in the Plan Area, including the Sheridan Colony Estates, the Amoruso Tract, and the Big Hill area around Auburn Valley Country Club. Even though these areas are surrounded by the RAA or are adjacent to the RAA, they are unsuitable candidates for conservation due to their size and existing incompatible activities.

Response to Comment 34-2

The commenter noted that Camp Far West Reservoir is shown in Figure 2-3 in green instead of blue as in Figure 2-2.

Figure 2-3 of the EIS/EIR has been revised in response to this comment; has been modified to reflect the high water mark of Camp Far West Reservoir in the same way that it is depicted in Figure 2-2. No changes to the findings of the document would result from these changes.

Response to Comment 34-3

Referring to Figure 2-3, the commenter noted a discrepancy between symbology in the legend and corresponding labels in the map.

Figure 2-3 of the EIS/EIR has been revised in response to this comment. No changes to the findings of the document would result from these changes.

Comment Letter 35—California Native Plant Society, Redbud Chapter

Response to Comment 35-1

The commenter expressed the organization's support for the goals of the PCCP.

No response to this comment is required.

Response to Comment 35-2

The commenter cited language in the Plan Science Advisor's *Planning Principles, Uncertainties, and Management Recommendations* describing the limitations of vernal pool restoration and encouraging protection of existing vernal pools over vernal pool restoration.

As described in Chapter 5, *Conservation Strategy*, of the Plan, vernal pool complexes have been degraded in western Placer County by direct disturbance, invasion of nonnative species, and by alteration of hydrological patterns. USFWS acknowledges in the *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* that habitat restoration may be necessary to regain a properly functioning vernal pool ecosystem (U.S. Fish and Wildlife Service 2005). This recovery plan recognizes that vernal pool restoration and creation may be valuable recovery tools for some vernal pool species.

The Plan acknowledges that although vernal pool fairy shrimp and vernal pool tadpole shrimp are known to occupy restored and created pools, data on long-term persistence of these species in restored and created pools are lacking. For this reason, the recovery plan states that the order of preference for recovery of vernal pool species is, first, protection of existing habitat, followed by restoration of former or degraded habitat, and lastly, creation of vernal pools if necessary to maintain the range of vernal pool habitat. The Plan therefore relies primarily on protection of existing vernal pool complexes, but includes a restoration and creation component to supplement the vernal pool complex protection and to expand and connect existing vernal pool complexes in the Plan Area.

The commenter stated that in the absence of up-to-date surveys, there is no way to determine whether the vernal pool complexes already in or proposed to be added to the Reserves are comparable and would sustain populations that currently inhabit the vernal pools that are to be destroyed. The Plan addresses this issue by requiring vernal pool surveys to assess the occupancy by the covered vernal pool crustaceans of vernal pools to be lost, and requiring that the protected and restored vernal pool complexes have an occupancy rate greater than or equal to the assessed occupancy rate of the affected vernal pool complexes.

The commenter also expressed concern that the vernal pool complexes with the more common edaphic characteristics are increasing while more rare types such as Northern Claypan and Volcanic Mudflow pools are decreasing. The few Volcanic Mudflow pools remaining in the Plan Area, however, are already conserved in the Reserve System. The Reserve System would be well distributed throughout the Plan Area to include a diversity of pools. The comments also expressed concern that pools with generally lower species richness are becoming more common through mitigation. The Plan would adaptively manage and enhance vernal pools in the Reserve System, however, to promote native biodiversity. Management actions would be monitored to evaluate the

effectiveness of management and enhancement actions, and management and enhancement strategies would be adjusted as needed to promote biodiversity in the Plan Area.

Response to Comment 35-3

The commenter stated that "there appears to be no scientific basis for the DEIR's conclusion that the HCP/NCCP will protect these unique habitats and their associated plants and animals, as it is unsupported by any new or additional scientific studies, surveys, or research."

It is appropriate for an EIS/EIR for a large plan or program to rely on landscape-scale data and mapping for impact analysis. The impacts in a programmatic document are not for any one location but the Plan Area overall. The EIS/EIR based the vernal pool impact conclusions on an assessment of existing (2009 and 2012) vernal pool mapping in the Plan Area and analysis of the Plan conservation measures. The conclusion that the loss of vernal pool complex would be less-than-significant is based on the implementation of Objective VPCG-1.1 and 10 conservation measures described in the Plan, including CM 1 L-2 and CM1 VPCG-1, which have requirements for connectivity and field verification of habitat quality prior to acquisition for the reserve. As discussed in Impact BIO-1, the vernal pool restoration proposed in the Plan could potentially affect the hydrologic balance of existing pools, but CM1 VPCG-2 requires that sufficient land in the restoration/creation area is available to ensure the watershed can sustain the vernal pool hydrology, that the vernal pool density is less than 10%, and that created vernal pools would be hydrologically isolated from existing pools.

The qualitative biological goals and quantitative biological objectives in the Plan are at three planning levels: landscape, natural community, and species. Conservation measures for the protection of vernal pool complex include requirements for the amount, location, and quality of habitat. The Plan would ultimately protect 17,000 acres of existing vernal pool complex, spanning the north-south axis of the reserve area in the valley. The geographic extent and large acreage of protection would target occurrences of species covered by the Plan. The conservation measures were developed based on best available information that were reviewed and approved by USFWS, CDFW, and the Science Advisors, including Covered Species accounts, species distribution models, inventory of existing conditions, and numerous general sources, such as species recovery plans, species occurrence data, scientific literature, and others listed in Section 5.2.3, *Data Sources*, of the Plan. The Plan, which is an appendix to the EIS/EIR, contains substantial data not repeated in the body of the EIS/EIR and describes in greater detail how the Plan would protect, restore, and create vernal pool habitats in reserves.

Response to Comment 35-4

This comment is a summary of Comment 35-3. Please see Response to Comment 35-3.

Response to Comment 35-5

The commenter stated their opinion that the conclusions of the EIS/EIR under Alternative 2 for vernal pool complex and aquatic/wetland complex were not supported by scientific or factual data. The EIS/EIR and the Plan are relying on the best available information for interpreting land cover within the Plan Area, which is described in Plan Section 3.3.1.2, *Mapping*. This information is factual in nature and included reviews and approvals by USFWS, CDFW, and the Plan's Science Advisors, which is an independent group of scientists convened as required under the NCCPA. This group was selected by Placer County and approved by CDFW. Both the impact analysis in the EIS/EIR (i.e., the

acres impacted) and the conservation strategy (i.e., the acres to be conserved) in the Plan were conducted based on the land cover mapping developed for the Plan and therefore, comparing the impacts on these natural communities to the amounts committed to for conservation, which is based on an assessment of their being enough of these natural communities to protect and sufficient lands for restoration, is considered to be a sufficient level of detail for quantitatively assessing whether there would be enough to offset the effects. In making determinations, the EIS/EIR also considered how the Plan would implement their conservation strategy, which includes long-term management, monitoring, and adaptive management that are intended to maintain and improve the functions and services of the protected natural communities.

The commenter also disagreed with the finding of a less-than-significant impacts after mitigation for special-status plants in vernal pool habitats, and stated that the impacts are mitigated by surveying and avoiding the plants in proposed restoration areas after the impact has occurred, and no surveys or avoidance would occur in the original habitat.

As discussed in Response to Comment 35-3, the EIS/EIR impact conclusions are based on an assessment of existing vernal pool mapping in the Plan Area and analysis of the Plan conservation measures. The finding for impacts on special-status plants after mitigation was based on several factors. One is that there are known occurrences of special-status plant species in the proposed Reserve Area, as well as within existing reserves. Another is that surveys and avoidance of special-status plants within restoration areas acquired under the Plan are required by the mitigation included in the EIS/EIR. These surveys would be required prior to any restoration activities. Additionally, discretionary projects in the Plan Area would be subject to CEQA and the Plan requirements, including evaluation of the proposed project for impacts on special-status plants prior to project approval. These assessments would necessarily include surveys of each project area to identify vernal pool habitats and any suitable special-status plant habitat to determine required mitigation. Finally, the Plan requires acquisition and protection of existing vernal pool complexes prior to the loss of vernal pool habitat identified in the Plan Area (“Stay Ahead Provision”).

Response to Comment 35-6

The commenter stated that the California Native Plant Society (CNPS) Redbud Chapter might support the Reduced Take Alternative (Alternative 3) with caveats.

This is not a comment on the adequacy of the EIS/EIR but on the selection of the preferred alternative. No response to this comment is required.

Response to Comment 35-7

The commenter expressed concern over the ability to determine whether the Plan is accomplishing its purposes and either ensuring no loss of habitat/protected species or increasing the occurrence and viability of protected plant and animal species and their habitats.

The monitoring and adaptive management strategy in Chapter 7, *Monitoring and Adaptive Management Program*, of the Plan describes the process by which the Implementing Entity in conjunction with the Wildlife Agencies would monitor impacts and conservation efforts to ensure the Plan biological goals and objectives are met.

The commenter further expressed concern that there would not be enough willing property owners to ensure a contiguous Reserve System consistent with the Plan commitments. Please see Response to Comment 17-2.

Response to Comment 35-8

The commenter expressed concern that the research and studies used to develop the Plan may be outdated and that there were never detailed surveys conducted for the Plan that would be needed to determine whether the Reserve System is meeting its biological goals and objectives.

For large-scale conservation plans, however, detailed data collection and updating of existing data occurs during plan implementation, at which time site-specific surveys occur at both impact and conservation sites to inform conservation actions under the regional conservation framework and ensure the biological goals and objectives are met. Additionally, it should be noted that the Plan has incorporated new research and survey data since 2004, such as incorporation of Light Detection and Ranging (LIDAR) data in 2009, and a characterization of density and disturbance for vernal pool grassland complexes below 200 feet above mean seal level in 2012. A list of data sources used in Plan can be found in Plan Section 3.3.1.2.1, *Data Sources*.

Response to Comment 35-9

The commenter further expressed concern that there would not be enough willing property owners to ensure a contiguous Reserve System consistent with the Plan commitments.

Please see Response to Comment 17-2.

Response to Comment 35-10

The commenter reiterated the commenter's opinion as stated in Comment 35-3 that there is a lack of scientific basis for the EIS/EIR conclusions.

Please see Response to Comment 35-3.

Response to Comment 35-11

The commenter asked why the Plan did not consider greater avoidance of vernal pool complex in the Sunset Area Plan area.

The *Sunset Area Plan* is a planning document adopted by Placer County under its land use authority. The Plan does not affect land use designations. The EIR for the Sunset Area Plan (SCH 2016112012) did consider alternatives that would involve greater avoidance of vernal pool complex.

Response to Comment 35-12

As noted by the commenter in Comment 35-6, the EIS/EIR considered an alternative that reduced fill: Alternative 3—Reduced Take/Reduced Fill.

As described in Chapter 2, *Proposed Action and Alternatives*, of the EIS/EIR, Alternative 3 "would entail either increased onsite avoidance of vernal pool complex and other wetlands and waters,

increased acquisition of reserve lands in the PFG, and/or reduced development footprint in the Valley PFG."

Comment Letter 36—Taylor & Wiley

Response to Comment 36-1

The commenter noted that Teichert's Aggregate Facility is within the RAA but is not identified as an entitled land use within this area.

The Teichert entitlement for mining and related activities will exist as an exercised project for a significant portion of the permit term. The project is not specifically noted in the Plan or EIS/EIR because doing so would single out the project from other similar entitlements in the RAA, including another mining project. To create a list of entitlements that are vested or have exercised their permits in the RAA would be an exhaustive effort with limited value, because the RAA designation does not alter any vested right. Such a list would only represent a "snapshot" in time, as other entitlements may be granted and others may expire—including Teichert's entitlements—during the permit term.

On December 18, 2013, the County determined that Teichert's project had satisfied "… the vesting requirement of Condition 200 of Conditional Use Permit PCUP 2781 and Variance 3806." This determination allows the project to commence mining once all of the necessary conditions of approval have been met (see Section 17.58.160(B)(1)(a) of the Zoning Ordinance Permit time limits, exercising of permits, and extensions for additional information on the exercising of a permit). In addition to the 2013 determination, the project has a development agreement that specifically describes the entitlements and the vested rights. Providing a description of the project in the Plan does not alter the status of the vested rights.

Lastly, several elements of the Teichert entitlements are consistent with the Plan conservation objectives including the potential dedication of the reclaimed mining site and several conservation-related land dedications (see Section 3.3.1 of the development agreement), including the dedication of a 200-acre conservation easement along Raccoon Creek (formerly Coon Creek), which must occur concurrently with the commencement of mining.

Comment Letter 37—Leslie Warren

Response to Comment 37-1

The commenter requested the commenter's letter be made available to Mike Thomas at USFWS.

All comments, including this one, have been distributed to the Wildlife Agencies including Mike Thomas at USFWS.

Response to Comment 37-2

The commenter requested that the EIS/EIR evaluate the potential for the PCCP to not meet its "management goals" after 50 years. For purposes of this response, the term *management goal* is assumed to also mean the conservation objectives of the Plan.

One of the chief reasons the Permit Applicants have requested a 50-year permit term is to allow enough time to assemble a viable Reserve System. A shorter permit term had the potential to create a Reserve System that lacked both cohesiveness and an interconnected assemblage of properties. The assessment of a shorter permit term under Alternative 4—Reduced Permit Term gives a good indication of the consequences of failing to meet the proposed project's objectives by the end of the permit term.

In addition to the EIS/EIR assessment of Alternative 4, the Plan provides additional information on several issues related to Plan implementation and factors that can influence a successful outcome at the end of the permit term. Chapter 10, *Assurances*, provides a discussion on changed circumstances (e.g., climate change or wildfire) and the subsequent response that would be required (see Table 10-1). Any failure by the Permittees to meet the Plan's requirements are subject review by the Wildlife Agencies and can be considered grounds for permit suspension or revocation (Plan Section 8.2.6.8, *Permit Suspension or Revocation*). Even if permits were revoked, the Permittees must fulfill all outstanding mitigation requirements including land acquisitions, restoration/enhancement actions, and management and monitoring of the Reserve System lands in perpetuity.

Lastly, it is difficult to assess exactly what will occur over the next 50 years. There are several unpredictable influences on the ability of the Plan to be successfully implemented, including the amount of growth that will occur and changed circumstances. Nevertheless, the Plan includes several measures including Wildlife Agency oversight, response to changed circumstances, amendment procedures, criteria for the successful establishment of a Reserve System and others that provide assurances that the Reserve System and funding plan would successfully implement the Plan's objectives at the end of the permit term. None of these assurances are provided under the no action alternative.

Response to Comment 37-3

The commenter incorrectly referred to a 125,000-acre "PCCP fee zone." PCCP Development Fees apply to Covered Activities throughout the Plan Area—not just within certain areas or zones. The PFG, where most of the Covered Activities would occur, is 125,799 acres in area.

In situ preservation is still considered an objective of the Plan and is particularly important for the application of the Plan's numerous avoidance and minimization measures. Stream System

preservation is particularly dependent upon in situ avoidance. The Plan includes several standards for in situ avoidance including Section 6.3.1.3.1, *Permanent Effect Avoidance in the PFG*, and Section 6.3.1.3.2, *Permanent Effect Avoidance for Low Density*. For individual natural communities, see Section 6.3.2, *Conditions to Avoid and Minimize Effects on Specific Natural Communities*, which includes avoidance criteria for vernal pool complexes, aquatic/wetland complexes, riverine/riparian, and valley oak. Section 6.3.3, *Conditions to Avoid, Minimize, and Mitigate Effects on the Stream System*, also provides avoidance criteria for the Stream System.

The commenter is correct in assuming that the Plan seeks to limit the amount of small, patchy, disconnected habitats that have significant edge effects and are difficult to monitor and manage in perpetuity.

Response to Comment 37-4

The commenter expressed concerns that following PCCP approval, the local, State, and federal government agencies "that are aligned with PCCP as mitigation will routinely waive on site mitigation because they are under pressure to generate funds for the PCCP."

Successful implementation of the PCCP would be based upon the assemblage of a Reserve System and restoration of habitats mostly within the Reserve System. PCCP Development Fees would fund the acquisition and restoration of those properties including in perpetuity monitoring and land stewardship. Consistent with the avoidance criteria described in Response to Comment 37-3, there are numerous instances where avoidance of habitat would be important. When applicants avoid resources onsite there is a potential to avoid the payment of fees and in some the avoided area can be used for credit against their land conversion fees (see Plan Section 8.4.13, *Land Dedication in Lieu of Land Conversion Fee*). Overall, the Plan recognizes that lands would be preserved within the PFG (approximately 2,000 acres) provided that such areas meet the avoidance criteria and biological goals and objectives of the Plan.

The public policy that underlies the development of the PCCP is found in the CWA, the CESA and ESA, the NCCPA, and the general plans of Placer County and the City of Lincoln. The implementation of this public policy is further supported by guidance including the USFWS *Habitat Conservation Planning and Incidental Take Permit Processing Handbook* and conservation biology through the Science Advisors Report (January 8, 2004) prepared for the PCCP specifically. Numerous principles outlined in the Science Advisors Report support the strategy that has been prepared, including the principles listed below.

- Large conservation areas containing large populations of the target species are superior to small conservation areas containing small populations.
- Conservation areas that are close together are better than those far apart.
- Interconnected conservation areas are far better than isolated ones.
- Landscape linkages wide enough to contain resident individuals of target species must be established to connect conservation areas farther apart than the species' normal dispersal distances.
- Habitat for a particular species within a conservation area that occurs in less fragmented, contiguous blocks is preferable to habitat that is fragmented.

- Blocks of habitat that are roadless or otherwise inaccessible to humans serve better to conserve target species than do roaded and accessible habitat blocks.

The decision to require PCCP Development Fees for offsite mitigation is not a "waiver" of onsite mitigation. Instead, the payment of these fees would implement a conservation strategy that was prepared with input from the Wildlife Agencies, stakeholders, and science advisors and is considered a superior approach to mitigation that occurs under the status quo.

Response to Comment 37-5

The commenter stated that the EIS/EIR is "inadequate because it fails to evaluate how citizens who enjoy an environment with wildlife values will be impacted should PCCP off site mitigation measures be implemented."

There is no environmental impact associated with the success or failure of the PCCP to provide wildlife viewing or other similar recreational pursuits on development sites with avoided habitat. The objective of the PCCP is associated with the conservation and restoration of land for the recovery of the Covered Species and the conservation and restoration of aquatic resources of Placer County. There is a secondary benefit associated with the establishment of the Reserve System in that it provides open space, agriculturally productive land, scenic resources, and a limited amount of passive recreation. However, there is not an environmental impact associated with reduced opportunities for wildlife viewing or passive recreation at a development site when compared to status quo. Individual projects would still need to meet community design requirements for open space not associated with habitat including park and recreation standards, cultural resource protection, floodplain protection, hillside development standards, scenic corridors, and others. These areas would continue to be set aside as open space with or without the PCCP.

The potential for environmental effects with passive recreation on reserve lands was analyzed in the EIS/EIR.

Response to Comment 37-6

Regarding the requirement for in-kind habitat restoration within the Reserve System, Table 9-5 of the Plan identifies each Development Fee and how the fee is to be used. Additionally, Table 5-4 of the Plan describes each natural community and its constituent habitats, an applicable ratio for restoration, and the number of acres to be restored for each habitat type. The in-kind restoration activities of the Plan are funded through the Special Habitat Fees for vernal pools, vernal pool indirect effects, aquatic/wetland, riverine/riparian, riverine/riparian buffers, Stream System encroachment, and salmonid stream channels. Foothill oak woodland, valley oak, and grassland restoration would be funded by land conversion fees. Lastly, Plan Section 6.3.2.3.2, *Community Condition 3.2, Valley Oak Woodland and Individual Valley Oak Trees Restoration*, requires that land conversion fees for projects with valley oaks must use those funds for in-kind mitigation.

Regarding vernal pool restoration, it is a requirement of the PCCP to require in-kind restoration for effects on vernal pools, seasonal wetlands in a vernal pool complex, and seasonal swales in a vernal pool complex (see Plan Table 5-4). Additionally, impacts on the upland micro watershed of individual vernal pools must also pay for in-kind restoration.

Regarding use of the PCCP by the California Department of Transportation (Caltrans), Caltrans is not a Participating Agency and impacts on endangered species and/or wetlands would be subject to

independent review by the Wildlife Agencies and USACE. For Covered Activities authorized by the Permittees, the PCA must have rough proportionality between the lands being converted and the lands being preserved and restored. Chapter 8, *Plan Implementation*, of the Plan has a section dedicated to ensuring that the rough proportionality standard is met. As stated in Section 8.4.3, *Stay Ahead Provision*, of the Plan,

> The NCCP Act requires that implementation of mitigation and conservation measures be "roughly proportional in time and extent to the impact on habitat or Covered Species authorized under the plan" (California Fish and Game Code Section 2820(b)(9)). To meet the requirements of this section, CDFW requires that NCCPs make progress toward the final conservation goals (e.g., the ultimate size and configuration of a plan's reserve system) in proportion to the impacts of Covered Activities. The Stay Ahead provision addresses this requirement.

The amount of each natural community conserved, restored, or created as a proportion of the total requirement by natural community must be equal to or greater than the impact on the natural community as a proportion of the total impact expected by all Covered Activities.

Response to Comment 37-7

The commenter noted being in favor of Alternative 3 "because there is no scientific evidence that vernal pools may be replicated."

Alternative 3 would reduce the level of take authorized by the Plan consistent with the adjustments described in Table 2-17 of the EIS/EIR. To implement this alternative and still meet the housing and employment demand that was forecasted for 50 years, it would be necessary to increase onsite avoidance of vernal pool complexes and other aquatic habitats, increase acquisition of reserve lands within the PFG, and/or reduce the development footprint in the Valley portion of the PFG. None of the attributes of Alternative 3 would specifically preclude or reduce the amount or type of Covered Activities in the Sunset Area. For more on the Sunset Area Plan (SAP), please see Responses to Comments 39-2 through 39-6.

Regarding the science behind restoration and creation of habitat, there is a long history of restoring and creating vernal pools associated with mitigation under the CWA administered by USACE. Further, USFWS acknowledges in the *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* that habitat restoration may be necessary to regain proper functioning of a vernal pool ecosystem (U.S. Fish and Wildlife Service 2005). This recovery plan recognizes that vernal pool restoration and creation may be valuable recovery tools for some vernal pool species. For additional information regarding vernal pool restoration, please see Response to Comment 35-2.

Response to Comment 37-8

The commenter requested consideration of an urban limit line to assist with the implementation of the PCCP. Typically, an urban limit line is imposed by an entity with local land use authority (e.g., a City or County). Urban limit lines are established through a legislative decision that defines the limits of urban growth and identifies those areas that are not designated for future urban development. While an urban line might provide a less-than-permanent limitation on urban development, such an approach would not meet the PCCP objectives and minimum standards for several reasons.

- Urban limit lines are not permanent. As the result of a legislative act, urban limit lines can be moved, modified, or eliminated by the legislative body that imposed them.

- The lands that are not designated for urban development are not protected. The use of zoning as a tool for land conservation is not acceptable to the Wildlife Agencies.
- There is no compensatory mitigation. No restoration activities for the compensatory replacement of habitat would be funded.
- The land outside the urban limit line is not managed by a conservation organization or agency acceptable to the Wildlife Agencies.
- The lands outside the urban limit line either remain in the private sector or are managed in the public sector for purposes that may have no conservation purpose (e.g., a landfill).
- There is no monitoring or in perpetuity land stewardship.
- Biological objectives cannot be measured because there is no monitoring.
- There are no limitations on land use activities that could further degrade the environmental condition that supports Covered Species in the area outside the urban limit line.
- There is no fee revenue collected to conduct any implementation activity (e.g., monitoring, land stewardship, restoration, adaptive management, administration, and in perpetuity costs).

For the reasons described above, the EIS/EIR did not evaluate an alternative consisting of establishment of an urban limit line instead of an HCP/NCCP because the use of such land use control would not meet any of the objectives of the project.

Response to Comment 37-9

The commenter expresses concern that Plan fees would impose hardships on small land owners. The cost to implement the PCCP is borne by individuals and organizations undertaking Covered Activities that impact Covered Species and their habitat in the Plan Area. The nexus relationship between the cost of implementation and the fee schedule described in Tables 9-6 and 9-7 is evaluated in the *Development Fee Nexus Study for the Western Placer County HCP/NCCP* (Nexus Study; Urban Economics 2020).

In the absence of the PCCP, the cost associated with mitigation for endangered species and wetlands is determined on a case-by-case basis. While no direct comparison can be made because each individual project's mitigation is separately determined, it is appropriate to conclude that mitigation would occur and that mitigation costs would be similar in nature to those imposed by the PCCP.

The cost of mitigation is not an environmental effect that needs to be evaluated in the EIS/EIR. The fees that support the Plan's mitigation activities must be evaluated pursuant to the Mitigation Fee Act (California Government Code Section 66000–60025), and the above Nexus Study was prepared to meet the State's requirements.

Mitigation fees were developed through the preparation of the following steps.

- Preparation of an economic forecast.
- Preparation of a land conversion estimate based upon the economic forecast and foreseeable land use development trends.
- Preparation of a conservation strategy and attendant costs to mitigate the effects of the land conversion.

- Preparation of a cost model to implement the conservation strategy.
- Nexus-based distribution of projected costs on the forecasted development.

Specific properties or individual landowners were not identified during the preparation of the funding plan other than to compare the draft PCCP Development Fees against projects that were already approved. This was done to understand the relationship between costs associated with status quo and use of the PCCP Development Fees. There is considerable variability in the fee schedule (Tables 9-6 and 9-7) to account for the variability in parcel size, project type (residential vs. non-residential) and location (Foothill vs. Valley). Fees would be adjusted annually and go through a comprehensive nexus review every 5 years. The fee program was developed with the assistance of a finance committee comprised of a range of stakeholders and the cost model was peer reviewed by Economic Planning Systems.

Response to Comment 37-10

The commenter asserted that implementation of the SAP would represent 68–90% of all PCCP fees.

The SAP comprises three major elements:

1. Preserve/Mitigation Reserve—1,943 acres.
2. Various employment generating land uses—3,946 acres.
3. Placer Ranch Specific Plan—2,213 acres (Table 1-1 of the draft SAP; Placer County Community Development Resource Agency 2018).

Based upon these acreages, the SAP would include approximately 6,159 acres of urban land uses once fully built-out.

Table 5-5 of the Plan describes the breakdown of the 30,100 acres of effect that would be covered by the Plan over the 50-year permit term. The urban areas of the SAP represent around 20% of the 30,100-acre total if the SAP were 100% built-out at the end of the permit term. As noted in Plan Appendix M, *Growth Scenario Memo*, it is anticipated that there is a residual holding capacity of 30% for residential land uses and 30% for non-residential land uses at the end of the permit term. Therefore, it is reasonable to assume that not all 6,159 acres of urban land uses in the SAP will be built out at the end of the permit term.

The actual percentage of fees paid for by developers in the SAP is difficult to predict because numerous issues such as market forces, infrastructure capacity, and regulatory issues unrelated to the PCCP will have a significant bearing on buildout of the SAP and whether or not there is a residual holding capacity at the end of the permit term. If 30% of the SAP remains undeveloped at the end of the permit term, the total amount of take authorized by the Plan for urban land uses would be about 4,300 acres or 14% of the Plan Area total.

Response to Comment 37-11

The commenter asserted that the percentage of fees paid by developers in the SAP are a “driving factor in the PCCP debate” and that alternatives to the PCCP should be considered. In particular, the commenter sought to use an urban limit line to “conserve grasslands and wetland[s].”

Please see Response to Comment 37-8 regarding urban limit lines and landscape-scale conservation plans.

Response to Comment 37-12

The commenter stated that they are not convinced by "the DEIR/DEIS argument that that islands of habitat represented within the 125,000-acre fee area are not necessary stop-over feeding and rest areas for pollinators and other species." The commenter did not specify which section or impact number they believe the EIS/EIR made this claim.

The EIS/EIR does not specifically address impacts on pollinators and does not address areas as being necessary stopover feeding and rest areas though it does address effects on the movement of native resident or migratory fish or wildlife and migratory wildlife corridors in Impact BIO-28, *Effects on fish and wildlife corridors*. This analysis relied on a statewide map developed by CDFW and the Caltrans, the California Essential Habitat Connectivity Project (CEHC), that identified large remaining blocks of intact habitat or natural landscape and model linkages between them that can be used as corridors for wildlife. Impact BIO-28 identifies the corridors that would be affected by development covered under the Plan and considers the Plan's goals and objectives for regional conservation and conservation measures in determining that the impact would be less than significant. However, the Plan does address pollinators and notes the conservation strategy was developed with pollinators in mind, as explained in *Objective VPCG-1.1 Rationale* that "protecting large, interconnected vernal pool landscapes will provide sufficient upland habitat for the protection of vernal pool plant pollinators, provide for dispersal of vernal pool plants and animals, and sustain important predators, such as raptors that prey on rodents and rabbits (U.S. Fish and Wildlife Service 2005)." The Plan also notes loss of pollinator species as a threat in Section 5.4.11.3, *Conservation Summary* (5)(d).

Response to Comment 37-13

The commenter asserted that the EIS/EIR failed to adequately address the impact on "14 species that are listed as endangered," which they believe will become "locally extinct because their habitat in the Sunset Area and other sites within the 125,000 acre PCCP will be lost."

Several species the commenter identified are not currently listed under the ESA or CESA (such as spade-foot toad, western pond turtle, burrowing owl, and the bee species), and some are not listed as endangered (e.g., vernal pool fairy shrimp is not state listed, but is federally listed as threatened). The EIS/EIR does address the Plan's potential impacts on state- and federally listed species, as well as non-listed special-status species, in Impacts BIO-7 through BIO-26, and quantitatively evaluates the loss of habitat for these species. The analysis also considered the amount of habitat in Placer County that would be restored, enhanced, and managed in perpetuity for the benefit of the species covered under the Plan when making the effects determinations. The commenter does not provide any further specific comments on what they believe to be inadequate in the analysis of impacts on listed species. No revisions to the EIS/EIR are required based on this comment.

Response to Comment 37-14

The commenter shared a concern that "other species that are not yet listed, may be adversely impacted when wildlife corridors that they depend upon are lost because mitigation will be accomplished off site."

The EIS/EIR does address effects on non-listed special-status species in Impacts BIO-7 through BIO-12, BIO-17, BIO-19, BIO-20, BIO-23, BIO-25, and BIO-26; and addresses impacts on wildlife corridors in Impact BIO-28. Also, the Plan would result in the protection and long-term management of large blocks of land that would be managed specifically for species and natural communities covered by the Plan. No revisions to the EIS/EIR are required based on this comment.

Response to Comment 37-15

The commenter stated that based on presentations at a recent conference the commenter attended that "vernal pools cannot be replicated to allow for species transfer between a natural pool and one that is recreated." The commenter then questioned whether the EIS/EIR can "rightly conclude that vernal pool species and the other species listed above will not suffer population collapse should their habitat in the Sunset Area and other sites within the PCCP be mitigated off-site and in the PCCP."

All conservation actions under the Plan would take place within the Plan Area and within large, interconnected blocks of land. In making the NEPA and CEQA determinations, the EIS/EIR took into consideration the amount of acreage restored and preserved, the locations of the reserve areas, and the actions to manage these lands in perpetuity for the benefit of the covered Species and natural communities. No revisions to the EIS/EIR are required based on this comment.

Response to Comment 37-16

The commenter posed several questions concerning the Placer Parkway.

The EIS/EIR analyzes the issuance of incidental take permits and related actions by the Permit Applicants and state and federal agencies. The EIS/EIR for the PCCP does not review project-level effects of specific projects, such as the Placer Parkway or the SAP. Instead, the EIS/EIR analyzes the impacts of implementing the PCCP as a program to offset impacts associated with the Covered Activities and does not replace or eliminate the need for project-level compliance with CEQA. Further, issuance of the permits and implementation of the program does not confer or imply approval to implement any Covered Activity, including Placer Parkway. In order to receive coverage, the project would be required to follow a formal process for analysis and inclusion described in Plan Chapter 6, *Program Participation and Conditions on Covered Activities*, Section 6.2 *Program Participation: Receiving Take Authorization under the Plan*. The Placer Parkway project was previously subject to a County/Caltrans Tier 1 analysis in 2008, which reviewed potential effects and identified a 500- to 1,000-foot-wide corridor in which the future four- or six-lane project would be constructed. The analysis included a letter from USEPA and USACE to the Federal Highway Administration with a statement of concurrence that the corridor was likely to contain the least environmentally damaging practicable alternative. Future project-level analyses are anticipated to occur to identify the specific location and effects of the project likely including noise, light, pollution, and other effects noted by the comment.

The EIS/EIR does not provide project-specific detailed analyses necessary to predict strike deaths nor does the comment address which Covered Species could be affected.

For the purposes of the Plan and the EIS/EIR analysis, the effects of the project on Covered Species and Constituent Habitats were analyzed. The Plan does not include native plant communities as Covered Species. However, the EIS/EIR does address effects on non-listed special-status species in

Impacts BIO-7 through BIO-12 (Special-Status Plants), BIO-17, BIO-19, BIO-20, BIO-23, BIO-25, and BIO-26; and addresses impacts on wildlife corridors in Impact BIO-28. Also, the Plan would result in the protection and long-term management of large connected blocks of land that would be managed specifically for species and natural communities covered by the Plan. No revisions to the EIS/EIR are required based on this comment.

Response to Comment 37-17

The commenter is concerned that there is a potential for a new route for light and/or heavy rail within the Plan Area as a result of growth in the SAP.

The development of such facilities is not contemplated by the County's general plan or the SAP. The draft circulation diagram for the SAP (Figure 2-1) only depicts the existing rail facilities in the area. No new rail facilities are proposed. Similarly, the Placer County General Plan Circulation Plan Diagram (Figure 1-8) does not depict any new rail facilities. The *Placer County General Plan* does describe the potential for new "Transit Development Corridors" along Interstate 80 and/or State Route 65. The type of transit is not specifically described but could include rail or arterials that link major activity centers (Figure 1-9). The transit development corridors are included in the general plan in order to consider high density residential development and employment centers within or adjacent to these corridors and access to future transit opportunities. The objective of these corridors is to provide mass transit, not support the movement of goods and services to and from major employment centers.

Because the type of high-capacity transit is unknown (arterial, rail, or other) and because the location is within existing major transportation corridors, it would be inappropriate to assume that a new light or heavy rail route would be established to serve the movement of goods and services to and from the SAP. Because such a project is not a reasonably foreseeable project, and because it is beyond the scope of the environmental review for the proposed project, the effects of new light or heavy rail to serve the SAP does not need to be assessed in the EIS/EIR.

Comment Letter 38—Gary Zimmerman

Response to Comment 38-1

The commenter suggested that the Bear River be permanently protected by the PCCP including the portion of the Bear River affected by NID's Centennial Water Supply Project, which includes a 110,000-acre-foot reservoir on the Bear River.

Within the Plan Area, the Bear River is a high a priority for in-perpetuity conservation. The conservation strategy in Chapter 5, *Conservation Strategy*, of the Plan has numerous references to the Bear River and its importance to the future Reserve System. CM 1 L-3 seeks to connect the Reserve System with other conservation areas in the region, and the Bear River corridor is one of the areas where that is prioritized. CM 1 L-4 recognizes the importance of the Bear River to protect and increase connectivity between natural communities within the Plan Area. CM 1 RAR-1 prioritizes the protection of the Bear River for both riverine and riparian habitats. Objective OW-1.1 sets a goal of protecting 10,100 acres of oak woodland in the Raccoon Creek and Bear River watersheds.

The portion of the Bear River that includes the footprint of the Centennial Water Supply Project is several miles outside the Plan Area boundary. Consequently, the implementation of the PCCP would have no effect on that project.

Response to Comment 38-2

The commenter requested that the PCCP include the implementation of mitigation measures that are permanent and regularly monitored and include a reliable funding mechanism. The Plan includes these features.

Section 8.4.1, *Criteria for Reserve System Lands,* and Section 8.4.9, *Conservation Easements,* of the Plan describe how lands incorporated into the Reserve System "…must be permanently protected" and that permanent protection, "…must be ensured by a conservation easement." Conservation easements are the chief means of permanent conservation for local, state, and federal agencies and non-governmental organizations involved in in-perpetuity land conservation. The PCCP's conservation easement templates (Appendix K, *Conservation and Agriculture Easement Templates*) are based upon standards set by the Wildlife Agencies and are consistent with easements used in other landscape-scale conservation programs throughout the United States.

Monitoring requirements are described in Chapter 7, *Monitoring and Adaptive Management Program*, of the Plan, with the specific monitoring objectives listed in Section 7.1.3, *Program Objectives*. A more detailed monitoring and adaptive management program would be established during the first 5 years of implementation and as individual parcels are acquired, per Plan requirements. Section 5.3.2.2, *Reserve Management Plans,* of the Plan provides additional detail on the monitoring requirements for each reserve acquisition.

Chapter 9, *Costs and Funding*, of the Plan provides details on the funding plan that include land stewardship and monitoring costs during the permit term and post-permit term including in-perpetuity funding through an endowment account.

Response to Comment 38-3

The commenter referenced comments in other comment letters. Please see Responses to Comment Letters 1, 17, 18, and 24.

Response to Comment 38-4

The commenter requested notification of any future public inspections of the PCCP. All parties who provided a comment on the EIS/EIR or Plan, including the commenter, have been placed on a mailing and distribution list.

Comment Letter 39—Alliance for Environmental Leadership

Response to Comment 39-1

The commenter expressed an opinion regarding the reason the PCCP has been prepared.

One of the main goals of the PCCP is to move away from project-by-project permitting that leads to piecemeal/disjointed conservation efforts within the County. The conservation strategy established in the PCCP would create a Reserve System designed to ensure viability of Covered Species and their habitat. Existing protected areas would be integrated into a large landscape-scale Reserve System of lands acquired under the Plan. The Reserve System's aim would be to preserve large, intact habitats that are well connected with one another. Ultimately, the Reserve System would reflect scientifically sound principles of conservation biology, incorporating known biological information as well as new information as it becomes available through implementation of the PCCP.

Response to Comment 39-2

The commenter stated the EIS/EIR "fails to address" how hydrologic function to wildlife would be impacted by a specific project (the Sunset Area Plan or SAP).

The EIS/EIR for the PCCP does not review project-level effects of specific projects such as the SAP. Instead, the EIS/EIR analyzes the impacts of implementing the PCCP as a program to offset impacts associated with the Covered Activities and does not replace or eliminate the need for project-level compliance with CEQA. The EIR for the SAP (SCH 2016112012) and any subsequent or supplemental project-level analyses would evaluate the project level impacts to hydrologic function and vernal pool complex. The Plan includes conditions on Covered Activities and avoidance, minimization, and mitigation measures specific to vernal pool complex (see Chapter 6, *Conditions on Covered Activities,* of the Plan).

Response to Comment 39-3

The commenter referenced two parcels and stated that the EIS/EIR does not address impacts on these lands. As noted in Response to Comment 39-2, the EIS/EIR for the PCCP does not review project-level effects of specific projects. However, the parcels referenced in the comment contain existing industrial uses (e.g., concrete batch plant, wood pallet recycling, sand/gravel operation, and the Thunder Valley Casino) and are adjacent to existing mitigation banks (Orchard Creek and Antonio Mountain Ranch Mitigation Banks) approved by the USFWS, California Department of Fish and Game (now CDFW), and USACE and its Interagency Review Team. The existing industrial uses would only be subject to the Plan if additional Covered Activities were proposed that resulted in additional conversion of natural or semi-natural habitat types to urban uses.

Response to Comment 39-4

The commenter stated that the EIS/EIR fails to analyze effects from developing the two parcels noted in Comment 39-3 on the hydrologic function of those parcels.

Please see Responses to Comment 39-3 and 39-2.

Response to Comment 39-5

The commenter noted that the EIS/EIR fails to address impacts "of light pollution, noise, bird strikes on windows, and other potential hazards for wildlife survival."

Please see Response to Comment 39-2.

Additionally, it should be noted that the EIS/EIR does include discussion of impacts from light and noise to sensitive biological resources (for example see *Protective Measures for Bats using Bridges, Structures, or Trees*). The Plan also addresses impacts on Covered Species from light and noise in Chapter 4, *Effects of Covered Activities* (see, for example, Plan Sections 4.4.3.1, 4.4.5.1, 4.4.5.3.6, 4.4.7.3.3, 4.7.1—these are a few locations where impacts from light pollution and noise are discussed).

Response to Comment 39-6

The commenter noted concerns with the vernal pool mapping and noted they differed from the commenter's own vernal pool mapping effort.

The land cover data used in the Plan were developed for regional planning. As described in Plan Chapter 3, *Environmental Setting*, Section 3.3, *Biological Setting Methodology*, at the scale of the Plan Area, certain habitat elements important to the Covered Species, such as vernal pools and seasonal swales, occur at too fine a scale to map programmatically, so their extent was estimated (in acres) as a percentage of a land cover type. The Plan describes the limitations of the land cover mapping in Section 3.3.1.4, *Limitations of Data*:

> [a]lthough the mapping data are sufficient for the regional scale analysis, implementation must be supported by in-field surveys at a later date. At the scale of any individual project site, mapping errors may be appreciable. Chapter 6, *Program Participation and Conditions on Covered Activities*, Section 6.2, *Program Participation: Receiving Take Authorization under the Plan*, describes the process whereby individual projects will be covered by the Plan. Part of the Plan participation process involves site-specific mapping and wetland delineation where necessary. Except where future conditions fail consistency with the baseline, as described in Section 6.2.4.3, *Item 3: Community and Constituent Habitat Types on Site and Baseline Land-cover Map Consistency*, it is expected that the field survey results will replace the regional scale estimates.

As such, any discrepancies between the Plan's land cover data on vernal pools complexes and actual field conditions for projects applying for take authorization under the Plan would be resolved with field surveys and wetland delineations by qualified biologists (Plan Section 6.2.4, *HCP/NCCP Participation Package*).

Response to Comment 39-7

The commenter stated that the EIS/EIR does not address wildlife impacts associated with the SAP.

As noted in Response to Comment 39-2, the EIR for the SAP (SCH 2016112012) evaluated the impacts of that project, which included impacts related to biological resources. Also please see Responses to Comments 31-1, 31-2, and 31-3.

Response to Comment 39-8

The commenter stated that the EIS/EIR does not establish if access to conservation lands should be allowed.

Please see Responses to Comments 31-1, 31-2, and 31-3 regarding recreational use of conservation lands.

Response to Comment 39-9

The commenter asked about analysis of effects associated with the SAP.

As noted in Response to Comment 39-2, the EIR for the SAP (SCH 2016112012) evaluated the impacts of that project, which included impacts related to biological resources. Also please see Responses to Comments 31-1, 31-2, and 31-3 regarding recreational use of conservation lands.

Additionally, impacts for the proposed action related to invasive weeds are addressed in Impact BIO-29 in the EIS/EIR.

Response to Comment 39-10

The commenter questioned the goals of the Plan and referenced the SAP.

Please see Responses to Comments 39-1 and 39-7.

Response to Comment 39-11

The commenter stated that the EIS/EIR fails to accurately evaluate recreational use of conservation lands.

Please see Responses to Comments 31-1, 31-2, and 31-3 regarding recreational use of conservation lands.

Response to Comment 39-12

The commenter stated that the EIS/EIR fails to accurately evaluate disturbance associated with recreational use of conservation lands. Please see Responses to Comments 31-1, 31-2, and 31-3 regarding recreational use of conservation lands.

The Plan would establish a monitoring program, which includes both short-and long-term compliance monitoring and effectiveness monitoring. Compliance monitoring (also known as implementation monitoring) tracks the status of Plan implementation and documents that the requirements of the Plan are being met. Compliance monitoring verifies that the Permittees are carrying out the terms of the Plan, permits, and Implementing Agreement. The PCA would track compliance monitoring internally to ensure the Plan is working as planned and would provide the monitoring results to the Wildlife Agencies who would verify the Plan remains in compliance. Effectiveness monitoring assesses the biological success of the Plan. Effectiveness monitoring evaluates whether the effects of implementing the conservation strategy described in Chapter 5, *Conservation Strategy*, are consistent with the assumptions and predictions made during development of the conservation strategy. Effectiveness monitoring is used to assess whether implementation of the conservation strategy is achieving the Plan's biological goals and objectives.

Effectiveness monitoring typically measures the effects of management actions on targeted communities (e.g., cover of invasive plants in vernal pools before and after grazing treatment) and Covered Species (e.g., status of overwintering and breeding western burrowing owl on the Reserve System), status and trends in resources (e.g., percent cover of land-cover types), and status and trends of stressors to the biological resources (e.g., distribution of invasive species).

Response to Comment 39-13

The commenter stated that the EIS/EIR should consider the effect of "staff and political change" over the life of the PCCP.

Once the Plan is finalized, should permits from the USFWS, NMFS, and CDFW be approved, the Plan must be implemented as established in the permits, regardless of staff or political changes, or the Permittees risk being out of compliance and therefore subject to any penalties that might result from that non-compliance.

Comment Letter 40—Public Interest Coalition

Response to Comment 40-1

The commenter expressed support for the PCCP objectives.

No response to this comment is required.

Response to Comment 40-2

The commenter expressed concern about the use of the word *streamline* in the description of the proposed action.

It should be noted that the streamlining referenced is in the resource permitting process. This would not affect mandated review periods.

Response to Comment 40-3

The commenter expressed concern regarding monitoring for compliance with the Plan.

The PCCP establishes a rigorous short- and long-term monitoring program that includes both compliance monitoring and effectiveness monitoring (see Chapter 7, *Monitoring and Adaptive Management*). The overarching objective of the monitoring and adaptive management program is to ensure that the biological goals and objectives are being achieved.

Compliance monitoring (also known as implementation monitoring) tracks the status of Plan implementation and documents that the requirements of the Plan are being met. Compliance monitoring verifies that the Permittees are carrying out the terms of the Plan, permits, and Implementation Agreement. The PCA would track compliance monitoring to ensure the PCCP is working as planned and would provide the monitoring results to the Wildlife Agencies who would verify the Plan remains in compliance. Section 7.2.1.1, *Compliance Monitoring,* of the Plan describes the components of compliance monitoring that the PCA is obligated to track.

Response to Comment 40-4

The commenter expressed concern over "assurances of decisions within six months of any proposed project" provided in the Plan; however, the location within the document or the context for this concern was not provided.

The draft Programmatic Section 404 permits and draft CWA Permit Strategy from the USACE do include goals for permit decisions within 30–90 days generally. Otherwise it is necessary for this comment response to focus on regulatory assurances provided by the Plan. On February 23, 1998, the Services codified a final rule (63 FR 8859) to provide certain regulatory assurances to permittees under Section 10(a)(1)(B). These assurances are called No Surprises assurances and essentially mean that "a deal is a deal." Similarly, Section 2820(f) of the NCCPA, initially authorized in 2003, also provides similar assurances. As long as the permittee is properly implementing the Plan, the Wildlife Agencies would not impose additional requirements or restrictions. If an unforeseen circumstance occurs, unless the permittee consents, the Wildlife Agencies will not require the permittee to commit additional land, water, or financial compensation or impose

additional restrictions on the use of land, water, or other natural resources beyond the level agreed to in the HCP. The Wildlife Agencies will honor these assurances as long as a permittee is implementing the requirements of the plan, permit, and other associated documents in good faith, and their permitted activities will not jeopardize the species. No Surprises assurances and the regulatory certainty they provide permittees are a critical incentive to Plan development.

Response to Comment 40-5

The commenter expressed concern about the term "No Surprises."

Please see Response to Comment 40-4 for a partial response to this comment. Regarding the commenter's statement that a similar "no surprises" should be provided to address unforeseeable impacts, the Plan—pursuant to both state and federal statutes and regulations—includes a changed and unforeseen circumstances section that address circumstances reasonably likely to occur over the proposed 50-year permit term and could affect the operating conservation strategy. The Plan also includes adaptive management provisions.

Response to Comment 40-6

The commenter urged the PCCP to prioritize public health and welfare over or the same as development proposals.

The ultimate purpose of the PCCP is to protect and enhance ecological diversity and function, including aquatic resource functions and values, in the greater portion of western Placer County while allowing appropriate and compatible growth in accordance with applicable laws. To this end, the Plan describes how to avoid, minimize, and mitigate effects on endangered and threatened species, and addresses the permitting requirements relevant to these species for activities conducted in the Plan Area by the Permittees.

The commenter urged that "all aspects of the PCCP be considered first under the umbrella of the Precautionary Principle and that it be incorporated as part of the PCCP." The conservation strategy was designed in accordance with principles of conservation biology and reflects the recommendations of a group of local Science Advisors convened at the beginning of the planning process (Brussard et al. 2004). For the Plan, adaptive management is the decision-making process that would be used to examine alternative strategies (e.g., conservation measures) to meet the biological goals and objectives and, if necessary, adjust future management actions based on new information (U.S. Fish and Wildlife Service 2000). Adaptive management is based on a flexible approach whereby actions can be adjusted as uncertainties become better understood or as conditions change. Monitoring the outcomes of management actions is the foundation of an adaptive approach, and thoughtful monitoring can guide how management actions are modified iteratively (Williams et al. 2007).

Comment Letter 41—Matthew Emrick

Response to Comment 41-1

The commenter stated that the comment period should be extended.

Please see Response to Comment 42-4 regarding the comment period length and Response to Comment 42-2 for additional detail regarding the public comment period.

Responses to Comments 41-2, 41-3, and 41-4

The commenter presented specific concerns regarding groundwater impacts of the development within the city of Lincoln (Village 5 Specific Plan) and potential expansion of the Lincoln city limits. As discussed in detail in Section 1.2, *Overview of NEPA and CEQA*, of the EIS/EIR:

> Approval of the proposed HCP/NCCP would not confer or imply approval to implement the Covered Activities. Rather, as part of the standard approval process, individual projects would be considered for further environmental analysis and generally would receive separate, project-level environmental analysis under CEQA and, in some cases, NEPA for those projects involving federal agencies.

The effects of development approved by the City of Lincoln would occur with or without the PCCP. The effects of the Lincoln Village 5 Specific Plan were addressed in the EIR for the Lincoln Village 5 Specific Plan (SCH 2014052071), in which groundwater levels, supply, and recharge were addressed in detail. Also please see Response to Comment Letter 29.

Comment Letter 42—Placer County Tomorrow

Response to Comment 42-1

The commenter stated that "PCCP process from the beginning has withholding draft documents from the public" and that with the exception of one map, "working group/advisory committee members were not allowed to and did not provide documents to members of their own organizations."

Pursuant to the terms of the Natural Community Conservation PCCP Planning Agreement between the County and state/federal wildlife agencies, a Stakeholder Working Group (Biological Working Group) composed of designated representatives from environmental, development, agriculture, land trusts, and other groups formed in 2001. This committee participated in the development of the Plan and comprehensively reviewed the drafts, section by section, providing feedback and edits. Prior to the public review draft documents being made available on June 21, 2019, earlier versions were available on the County's website. In addition to the Biological Working Group's review of numerous drafts, public hearing presentations, public interest meetings, and meetings at the request of individuals have been ongoing and routine over the history of the PCCP planning process.

Because CEQA and NEPA require lead agencies to exercise independent judgement and because the federal NEPA lead agency required the environmental consultant to independently review and assess the significance of effects, prior administrative drafts of the EIS/EIR were not available to the Biological Working Group. Access was provided to the Biological Working Group concurrent with the general public during the public review/comment period for the draft EIS/EIR. PCCP documents that serve as a public record pursuant to the requirements of the California Public Records Act are available pursuant to the requirements of the act.

Response to Comment 42-2

The commenter stated they only received one document, the Executive Summary, and that they had dozens of questions on it. The comment is unclear, making it difficult to provide a specific response. Complete sets of all the documents were not sent to individual members of the public. However, the Executive Summary was intentionally made available on the PCCP website and to stakeholders and other interested parties in advance of the public review and comment period. The Executive Summary provides a broad overview of the Plan and CARP. It is intended to be an introduction to the Plan. All three elements of the entire PCCP program and EIS/EIR documents were made available to the public on the County's website, at the Community Development Resource agency, on the USFWS's Sacramento Field Office website, at public libraries, and other open and accessible locations as stated in the NOA between June 21, 2019, and August 20, 2019. The purpose of the public noticing period was to solicit and gather input from the public. These documents remain available for public review and inspection in addition to being available online.

Response to Comment 42-3

The commenter stated that "the Placer County Board of Supervisors has acted and made decisions based on draft PCCP documents as if the PCCP were already in existence," and expressed disagreement with "how this letter is addressed."

It is not clear what Placer County Board of Supervisors' actions the commenter has referred to. The Board has not approved the PCCP nor taken actions based on an approved PCCP. The Placer Legacy Program includes broad objectives addressing open space, agriculture, natural resources, recreation, and other ongoing actions implemented by multiple County departments that would complement and facilitate successful implementation if and when the PCCP is adopted. The PCCP would implement the goals and objectives of the adopted *Placer County General Plan* (Placer County 2013) including the adopted Placer Legacy (2000).

The commenter's concern about how the comment letter is addressed and the complexity of the program is not clear and therefore cannot be directly responded to. However, all public comments received during the comment period have been included and responded to in the final EIS/EIR.

With regard to meeting notes, County records meeting the requirements of the California Public Records Act are available pursuant to the terms of the act.

Response to Comment 42-4

The commenter asserted that an "extended comment period is needed to invigorate unmet NCCP mandated California Fish and Game Code section 2815 public participation requirements…" and cited subsection (d) referencing an outreach program. Copies of the public review draft Plan, CARP, EIS/EIR, and all appendices were made available for 60 days (and still are available for public review and inspection) online at the County's website and print copies during normal business hours at the Placer County Community Development Resource Agency, public libraries, and other locations identified in the NOA. The NOA for a final EIS/EIR will be posted in the Federal Register and with the State Clearinghouse, and the final documents will be available electronically and locally for public inspection for an additional 30 days prior to consideration for adoption. In addition, the Plan and CARP will continue to be open to public review and comment through the public hearing and adoption process that will conclude once a decision is rendered by the Board of Supervisors, as well as other Permit Applicants (City of Lincoln, PCWA, and South Placer Regional Transportation Authority), and a Record of Decision is issued by the applicable state/federal agencies.

The commenter also incorrectly stated that a 60-day notice "violates federal practice of having a 90-day comment period on HCPs that require preparation" of an EIS. The USFWS revised the minimum number of days for different levels of HCPs in the revised *Habitat Conservation Planning and Incidental Take Permit Processing Handbook* in 2016. A period of 60 days is the correct comment period for a HCP that requires and EIS.

The commenter made several statements regarding what other stakeholders may have said to the commenter. These statements cannot be verified and therefore cannot be directly responded to. The commenter also stated that "The PCCP Program needs to make available…" various records relevant to Plan preparation. All records are being maintained by each agency as mandated by their respective statues and regulations.

Responses to Comments 42-5 and 42-6

The commenter appeared to have requested videotaped workshops of each key Plan issue maintained online for up to 30 years as well as a 6-month extension to the public comment period. This is neither a reasonable request nor required pursuant to any of the applicable state or federal

acts. This would also violate U.S. Department of Interior Secretarial Order 3355 with respect to the USFWS's NEPA timelines.

The Plan and EIS/EIR are organized into chapters and sections set forth in the table of contents for each. An executive summary of the EIS/EIR is also provided.

Workshops, with representatives of the County and state and federal agencies available to answer questions, were provided at both Placer County (August 1, 2018) and City of Lincoln (August 15, 2019), at which time the documents, comment periods, and methods of providing comments were reviewed. In addition, the Placer County Planning Commission conducted a noticed public hearing to receive public comments on August 8, 2019. Public hearing meeting minutes are published by the respective public agencies, and public meetings are normally recorded and available online. There is no requirement for or plan to prepare videotaped non-public hearing workshops.

Response to Comment 42-7

The commenter expressed disagreement with the manner in which the August 8th Planning Commission meeting for the EIS/EIR was conducted. A record of the Planning Commission meeting and minutes will be available as part of the final EIS/EIR. The Chair of the Planning Commission has the discretion to place reasonable time restrictions on public comment during an open meeting pursuant to the Ralph M. Brown Act (Govt. Code 54950) and Placer County policies and procedures. One factor considered in setting time restrictions is the number of individuals in attendance wishing to speak on a particular item. All speakers who requested to speak were allowed to speak. The commenter also appeared to assert there were no workshops based on the Plan or EIS/EIR (although they go on to reference a Lincoln workshop in their next comment). The "Lincoln workshop" the commenter referenced was actually a Lincoln City Council special meeting that included an overview of the PCCP on August 7, 2019. Nonetheless, two additional workshops were also held, as noticed in the NOA, one on August 1 (at the Placer County Community Development Resource Agency) and one on August 15 (at Lincoln City Hall). The Placer County Planning Commission also met to hear public comments on the EIS/EIR along with the Plan and CARP at its regularly scheduled meeting of August 8, 2019.

Response to Comment 42-8

The commenter expressed disagreement with the manner in which the City of Lincoln's City Council Work Session of August 7, 2019, was conducted. The work session was provided and conducted at the direction of the Mayor and City Council members pursuant to the agenda item. The scope and breadth of information provided was at the Council's direction. Staff conducted its presentation, including the scope and breadth, at the direction of the Council.

Response to Comment 42-9

The commenter requested that the South Placer Regional Transportation Authority be removed as a Permittee under the PCCP and that that the Placer Parkway project be removed as a Covered Activity under the PCCP. The South Placer Regional Transportation Authority is designated as a Permittee under the PCCP. SPRTA's Placer Parkway project is proposed as a Covered Activity subject to the Federal Highway Administration, Caltrans, and SPRTA's authority. The PCCP cannot pre-approve projects subject to the authority of other local, state, and federal agencies. On May 7, 2010, the Federal Highway Administration completed its record of decision for the Placer Parkway Project.

Based upon the completed Tier 1 EIS/Program EIR these agencies are subject to a Tier 2 environmental review. If the PCCP is adopted and permits issued, the Tier 2 analysis would likely identify the PCCP and its conservation strategy as a mechanism for covering the activities, permits, and effects associated with the project on Covered Species and habitats. If the PCCP is approved and permitted, the project could apply for coverage under the PCCP. Should the project receive take coverage, it would be conditioned to be consistent with the adopted PCCP Conditions on Covered Activities and avoidance, minimization, and mitigation measures. Otherwise, the project would likely follow the existing status-quo state and federal permitting and mitigation processes.

Regarding adding of county municipal services, the goal of the PCCP is to provide an effective framework to protect, enhance, and restore the natural resources in specific areas of western Placer County while streamlining environmental permitting for Covered Activities. Placer Parkway is a proposed Covered Activity subject to the Conditions on Covered Activities, permits, and fees necessary to comply with state and federal environmental regulations. While providing municipal services for a project is not the main purpose of the PCCP, proposed Covered Activities include transportation programs, including the Placer Parkway project should it be authorized by local, state, and federal agencies with authority and meet the conditions of the PCCP within the term of the permit.

Response to Comment 42-10

The commenter stated that the scope of the PCCP should be opposed until it provides "for the protection of habitat, natural communities, and species diversity on a landscape or ecosystem level," among other things. The commenter then cited California Fish and Game Code 2820.

The meaning of the comment is unclear. The conservation strategy is described in Plan Chapter 5, *Conservation Strategy*. This conservation strategy provides biological goals and objectives at three levels: 1) landscape, 2) community, and 3) species. Additionally, the conservation strategy is implemented through four components: 1) establishment of an interconnected Reserve System, 2) protection, enhancement of streams and avoidance of effects on streams, 3) conservation of wetlands and no net loss of wetland functions and services, and 4) specific avoidance and minimization standards for individual communities and species. This conservation strategy takes into consideration the value of watershed integrity partly because 2 of the 14 covered species are salmonids that rely upon watershed functions for their life cycle. Watersheds are also important because of the valley floor to foothill to Sierra Nevada connectivity that is difficult to achieve on the west slope of the Sierra Nevada. Lastly, the Science Advisors, Wildlife Agencies, and USACE all support the conservation, restoration, and enhancement of streams as a high priority for a landscape-level plan in Placer County and it is not possible to consider the protection of streams without taking into consideration what is occurring within each stream's watershed.

The commenter stated the 100-foot contour line is important yet insufficient and too broad yet too narrow. The comment appears to be directed to the decision to establish two principal analysis zones: Valley and Foothills. These zones are approximately delineated along the 200-foot contour elevation. Plan Section 3.2, *Physical Setting*; Section 3.3, *Biological Setting Methodology*; and Section 3.4, *Plan Area Communities,* provide a substantive description of how a number of physical and biological factors were considered when developing the conservation strategy. The 200-foot contour elevation is largely used to simply create a means by which data can be organized and categorized. By itself it does not direct how the conservation strategy was developed or how it would be implemented.

Response to Comment 42-11

The commenter stated that the "CARP would issue Clean Water Act and California Fish and Game Code permits." Neither the PCCP nor CARP would issue CWA or California Fish and Game Code permits. The CARP is a program proposed to be adopted by the Permittees to protect aquatic resources by establishing avoidance, minimization, and mitigation requirements for projects that have the potential to impact such resources. It also provides a means to fulfill the requirements of federal, state, and local laws that protect aquatic resources by extending programmatic permit coverage for a duration of 5 years (CWA Section 404 PGP and Section 401 Programmatic WQC) to projects consistent with the PCCP and CARP. CDFW would continue to issue agreements under its jurisdiction for Covered Activities. Regarding the commenter's question about non-compliance, each regulatory agency has the authority to suspend or revoke a permit under their respective statues and regulations. Suspension and revocation is described in Section 8.2.6.8, *Permit Suspension or Revocation.*

Response to Comment 42-12

The commenter expressed disagreement with the County's planning practices. In the 1970s (and affirmed again in 1994 and 2013) Placer County made the decision to implement land use policy through the adoption of a County-wide general plan and numerous community plans. The use of community plans is not required by state law, but they are used in Placer County because of the diverse geography of the County and the wide range of socioeconomic interests between the Central Valley to the west and the Tahoe area to the east. As a result of this approach, the County's advance planning program is dynamic and requires constant action. In addition, the requirements of state law for land use and environmental policies are constantly changing and require action by local government.

If the County was to stop updating its various land use programs (including the general plan and the community plans) and all of their inter-related programs (e.g., capital improvement programs), policies, and programs, the County's land use policies would quickly be out of date and out of compliance with state requirements.

The update to the 1997 Sunset Industrial Area Plan was initiated in 2014 and on December 17, 2019, the Board of Supervisors approved the Sunset Area Plan update. The SAP boundary is included within the land use and economic forecasts for the PCCP. The buildout of the Sunset Area will likely result in the incidental take of Covered Species. The Sunset Area is no different from any other area of the PCCP where anticipated growth has yet to occur. A level of take is forecasted based upon future economic development activities, and the conservation strategy is prepared in response to that level of take.

Response to Comment 42-13

The commenter listed several ongoing and unrelated public policy and other land use planning projects, some of which were previously approved, and others which are outside the purview of the County and state and federal permitting agencies and would not be Covered Activities under the Plan. The commenter also requested a moratorium on these and other related programs "so the public can catch up with [these] plans."

This comment is not relevant to the EIS/EIR, Plan, or related documents nor is a comment on these documents the venue in which to make such a request. Further, whether or not a legislative body decides to impose a development moratorium under California Government Code Section 65858 is based on the particular proposal or permit and requires a finding of a current and immediate threat to public health, safety, or welfare and whether the approval of a proposed land use would result in that threat to public health, safety and welfare. There is nothing in the comment to suggest that the EIS/EIR, Plan, or related documents fall into such criteria, nor does the PCCP propose land use changes.

Response to Comment 42-14

The commenter expressed generalized concerns about in lieu fees for affordable housing and tree mitigation unrelated to the PCCP and EIS/EIR.

No response to this comment is required.

Response to Comment 42-15

The commenter disagreed with the proposed authority mechanism for the PCCP. As far back as 2002, the County began the evaluation of numerous governance options including a JPA, the formation of a special district, the establishment of a private non-profit tax exempt corporation, or a state-chartered conservancy. It was determined that the use of a JPA would be the best option for the PCCP because it would provide the powers, credibility, and stability of a government agency and has been successfully used for other similar programs.

The authority assigned to the PCA is described in Plan Section 8.2.2, *Placer Conservation Authority*.

Should the PCCP be adopted, any land use decision-making authority would continue to reside with local government. The various authorities who make these decisions may have their decisions appealed consistent with procedures described in Placer County Code or the City of Lincoln Municipal Code.

Actions and decisions made by the PCA are subject to the oversight and review of the Wildlife Agencies.

The oversight responsibilities of the various state and federal agencies (the Wildlife Agencies, and the USACE, USEPA, and Central Valley Regional Water Board for the CARP) is described in Plan Section 8.2.6, *Wildlife Agencies*.

Suspension and revocation is described in Plan Section 8.2.6.8, *Permit Suspension or Revocation.*

The commenter also objected to the makeup of the JPA Pursuant to Article I (commencing with Section 6500) of Chapter 5 of Division 7 of Title I of the Government Code of the State of California that authorizes the Parties to create a joint exercise of powers entity with the power to exercise jointly the powers common to the Parties. The parties must each be empowered by law to undertake these authorities. Therefore, the JPA cannot add voting members nor individuals unless they have powers common to the other JPA members. The draft JPA formation documents do include a Public Advisory Committee consisting of 12 members to advise the JPA regarding aspects of the PCCP including costs/funding, conservation actions/mitigation projects, Reserve System management, and permit compliance. In addition, the state and federal agencies would form an Interagency

Working Group to provide advice, recommendations, proposals, and review and approval of required implementation actions (Plan Section 8.2.6.4, *The Interagency Working Group*).

Response to Comment 42-16

The commenter stated opposition to granting the County the power to implement the PCCP and collect fees and asked how residents can be assured these efforts would be well managed and adequate.

Plan Chapter 9, *Costs and Funding*, and Appendix L*, Cost Model and Assumptions*, provide estimates to establish a comprehensive fee program designed to generate reasonable estimates of Plan-related costs over the permit term and in perpetuity to allow the Permittees to determine funding needs and develop an appropriate fee structure. Section 9.4.1.7.1*, Automatic Adjustment of Fees*, and 9.4.1.7.2, *Periodic Assessment and Adjustment of Fees*, provide further assurances that the fees would keep pace with inflation and other influences in the real estate market, and other costs for administration and managing, operating, restoring, and maintaining the Reserve System. Adjustments would occur annually based upon market indices and a comprehensive review of costs and funding adequacy would occur every 5 years. Further, as noted above, oversight by the Wildlife Agencies and other federal agencies is described in Plan Section 8.2.6, *Wildlife Agencies*.

Response to Comment 42-17

The commenter noted "Costs of PCCP up to now" and requested the "cost so far to prepare the proposed PCC, how is it paid, and who has paid for it?"

The total cost of the PCCP from 2001 until present is approximately $14.3 million including all direct and indirect staff and consultant costs. The County has received approximately $2.1 million in federal Section 6 Planning Assistance Grants and other funds from the Department of Interior and CDFW. The cost of the PCCP has been funded at the discretion of the Board of Supervisors through the Community Development and Resource Agency Budget. The cost/funding program includes a reimbursement provision whereby the cost of Plan preparation would be reimbursed by Covered Activities through the fee program.

Comment Letter 43—Tahoe Cattlemen's Association

Response to Comment 43-1

The commenter incorrectly asserted that one of the objectives of the Plan is the "…eradication of production agriculture in Placer County."

Please refer to Plan Chapter 5, *Conservation Strategy*, Section 5.2.6.5*, Agriculture and Other Open Space Objective,* AO1.1: "Since agriculture is an important component of the economy and cultural of Placer County, the Plan seeks to achieve a sustainable balance of agriculture and conservation within the landscape." The Plan includes provisions to conserve agriculture independent of the effects of Covered Activities: "Protect at least 8,240 acres of agricultural lands, at least 2,000 acres of the 8,240 acres will be rice, the remaining 6,240 acres will not be required to be maintained in any particular crop type, and therefore will not count toward meeting the USFWS federal permit requirements."

The commenter also incorrectly asserted that "…virtually all privately held parcels of over 20 acres in Western Placer County…" would have a conservation easement recorded.

The amount of land necessary to meet the Plan's goals and be included in the Reserve System would be based on the amount of impact that occurs (dependent on effect) over the permit term in order to meet the mitigation requirements of the Plan and CARP. The Reserve System that is assembled from mitigation would be supplemented by additional acquisitions (independent of effect) irrespective of the levels of impact. The overall predictions for the size of the Reserve System are based upon economic forecasts of how much growth would occur and what form that growth would take over the proposed 50-year permit term. If growth occurs exactly as forecasted, 47,300 acres of land would be acquired in fee title or placed under conservation easement within the RAA by the end of the permit term. The RAA in Plan Area A is 68,325 acres (see Plan Table 1-2) in size. If the 47,300-acre Reserve System was acquired only within the RAA boundary, it would be necessary to acquire 69% of the RAA. However, because it is likely that portions of the Stream System and potentially other areas of the PFG would be added to the Reserve System (estimated by the Plan to include 2,000 acres), the percentage of land acquired in the RAA would be reduced.

The commenter noted that the terms of conservation easement are onerous.

However, the proposed Plan includes two template easements: a conservation easement and a separate agricultural conservation easement to be negotiated with the landowner and approved by the state/federal agencies on a case-by-case basis. In addition, the conservation easement requires the terms of a management plan would need to be negotiated with the landowner prior to recording the easement, thereby ensuring that the management of the land is agreed to by the landowner prior to entering into a contract. The agricultural conservation easement has notably fewer restrictions—see Section 8.4.9.3, *Conservation Easements on Agricultural Lands*, of the Plan and Appendix K, *Easement Templates*. As stated in Plan Section 8.4.9.3, agricultural conservation easements are "expected to protect working landscapes in the Plan Area and allow farms and ranches to thrive." Grazing practices will need to continue both under agricultural easements and conservation easements including lands with restored grasslands, wetlands, and other habitat types to reduce thatch and for fuel load reduction. Continued grazing is an important component of both fuel management and restoration in that it aides in maintaining native plant, aquatic organism diversity, exotic species, and hydrologic integrity (see Appendix F, *Fuel Management*).

The cost of compliance with the terms, conditions, and requirements of the Plan would be borne by the fee program, not the landowner. Landowners would be responsible for their own ongoing normal operations and maintenance. Plan Section 9.3.3, *Manage and Enhance the Reserve System*, outlines the management cost obligations for reserve lands held in fee title and those protected by easements, and has been amended in response to this comment in order to provide additional clarity.

Note especially that the land management duties of the landowner entering into a conservation easement with the PCA (for which the landowner is fairly compensated) would be limited to those reached in agreement on easement terms and any necessary management objectives prior to purchase. In addition, see Plan Section 8.4.2.6, *Step 6: Purchase Offer*.

Response to Comment 43-2

The commenter suggested the willing buyer/seller provisions of the PCCP would result in the "taking of private agricultural land" as a function of its size/acreage.

Plan Section 8.4.9.1, *General Guidelines*, states that all conservation easements would "be voluntarily offered by the fee title owner" and "be negotiated on a case-by-case basis between the landowner and the PCA." Eminent domain is not proposed nor included in the authorities of the proposed Joint Powers Formation documents or the Plan. Section 8.4 identifies "Purchase of land (fee title or conservation easement) from willing sellers" as one of six means of assembling the Reserve System. Section 8.4.2.6, *Step 6: Purchase Offer*, states, "The PCA will develop purchase offers and negotiate price and other terms and conditions with property owners. For conservation easements, the PCA will reach agreement on easement terms and any necessary management objectives prior to purchase."

The size of the PCCP is in direct proportion to the amount of growth that is anticipated in western Placer County over the next 50 years. Without the PCCP it is reasonable to assume that land would be placed into conservation in response to growth without the participation of local government in determining where the conservation would occur. The size of the Spenceville Wildlife Area is solely determined by management objectives of CDFW irrespective of growth and is not located within Placer County. The size of Napa Valley or any other geographic feature in California has no relationship to the PCCP.

Response to Comment 43-3

The commenter stated that the Plan Area is limited.

The Plan Area covers approximately 269,000 acres in western Placer County from the westerly Sutter/Placer County border in the Valley portion of the Plan Area east to and including the northern Foothills including the unincorporated Auburn area.

The overall goals of the Plan as defined by the Permit Applicants and key stakeholders, with input from the scientific community, include the following (see Plan Section 1.1.2, *Guiding Principles*):

- Protect and enhance ecological diversity and function in the greater portion of western Placer County, while allowing appropriate and compatible growth in accordance with applicable laws.
- Sustain all natural communities that are currently present in the western Placer County landscape.

- Partially restore or enhance certain natural communities and ecosystem processes and functions.
- Ensure population stability and sustainability of Covered Species and contribute to the species' recovery.
- Maintain connectivity between habitats across the landscape.
- Address cumulative impacts of intensive land use and urbanization in Placer County.

The commenter stated their opinion that the project would waive permit requirements for infrastructure projects.

There is no waiver for infrastructure projects. All public project Covered Activities would be required to comply with the requirements of the Plan in the same manner as private-sector projects, and in some cases there are specific requirements for ongoing maintenance of current infrastructure and the construction and ongoing maintenance of planned public infrastructure (see Plan Section 2.6.5, *Regional Public Programs*).

The commenter stated that agriculture is "the only constituent group that gets no benefit, but suffers almost all of the loss."

At the request of the agricultural stakeholders, agricultural activities are not a Covered Activity under the Plan. The Plan does include provisions to balance and conserve agriculture as described in Response to Comment 43-1. However, this does not exempt agricultural activities from state and federal regulatory requirements. The agricultural stakeholders also requested that no neighboring landowner assurances provisions be included in the Plan; such requests date back to the early stakeholder discussions and later as part of meetings with the agricultural stakeholder group in September 2010.

Response to Comment 43-4

The commenter stated that the "agencies were unwilling to include coverage for any activities except for developers and local government."

This is inaccurate, and, as noted in the response to Comment 43-3, the agricultural stakeholders requested that agricultural activities not be included as Covered Activities.

Response to Comment 43-5

The commenter stated that the "number of acres needed for mitigation of various species that might be effected appear to have been pulled out of thin air" and once again asserted that "…all of the ranches will be acquired…"

Both are inaccurate, and a description of the approach to developing conservation commitments is included in Chapter 5, *Conservation Strategy,* Section 5.2.1, including species habitat/distribution models necessary to provide for restoration and creation to mitigate for effects of Covered Activities. This information and the conservation outcomes were reviewed by the independent Science Advisors' Committee as well as the state and federal wildlife agencies, and the Conservation Strategy was revised to meet the requirements for findings associated with the adoption and permitting of the Plan.

The Plan defines rice as a semi-natural community (page 3-28 of the draft Plan) that has been intensively managed for agricultural uses with soil disturbance and planting that may retain habitat

values for native wildlife. Rice cultivation with flood irrigation provides an important substitute for wetlands during the summer and provides habitat for many aquatic plants, insect, crustaceans, small mammals, and waterfowl. On September 28, 2017, USFWS approved the *Recovery Plan for the Giant Garter Snake* designating areas west of Highway 65 within the American Basin Recovery Unit essential to the recovery of the species.

Response to Comment 43-6

The commenter stated the PCCP's function is to eliminate the need for state or federal permits.

The Plan does not eliminate the need for state/federal permits. It implements a conservation strategy that has been prepared in cooperation with the Wildlife Agencies in order to support the issuance of permits by USFWS, NMFS, CDFW, and USACE. Incidental take and wetland authorizations are still required even though they may not be in the form of an actual "permit." Because the Plan is intended to contribute to recovery, a failure to support the recovery of the species could result in its decline. The commenter asserted that the "PCCP will provide no coverage for new species listed during the 50-year PCCP contract and that for those species all current permitting activities would remain in effect." The statement is inaccurate. The Plan includes species that are not currently listed but could be listed in the future, including western pond turtle, western burrowing owl, and foothill yellow-legged frog, as well as some species that are only listed by one Wildlife Agency. USFWS's No Surprises Policy will ensure that regulatory coverage is extended to these species if they are listed in the future via the assurances laid out in the Plan and not through new or different requirements of a recovery plan or other agency requirements. The landscape-level conservation strategy is also likely to benefit other listed and non-listed species through the conservation and restoration/enhancement actions that could aid in recovery and offset the need for additional state or federal listings.

Response to Comment 43-7

The commenter asserted that "Agricultural operations, especially in the beef industry, operate with little need for permits that would be covered by an HCP/NCCP. So, we have virtually nothing to ask for."

The Plan acknowledges the value of grazing and finds it a necessary tool for land management, fuel load reduction, and for the management of vernal pools and grasslands.

Response to Comment 43-8

The commenter expressed concern about the costs associated with the PCCP and stated that "BILLIONS of dollars of ranches will be acquired and taken off the tax rolls, there will be total displacement of the county's cattlemen, the annihilation of our businesses, our family homes, heritage, and hopes for the future."

Plan Table 9-1 identifies the capital costs to establish the Reserve System including land acquisition to be $474 million in 2019 dollars as updated in the final draft. The same table shows restoration capital costs of $238 million in 2019 dollars. These are the two largest single components of a total capital and operating cost budget of $1.097 billion in 2019 dollars over the 50-year permit term (Table 9-1). With this funding, the Plan establishes a 47,300-acre Reserve System that includes

6,200 acres of restored/created habitat and other conservation lands that remain largely as working landscapes permanently protected from urbanization.

The current version of Plan Appendix L*, Cost Model and Assumptions,* is 64 pages long and provides the details behind these summary conclusions. The total Plan cost estimates have in fact been reduced since 2008, as a result of cost refinements, stakeholder review and input, and changes in the conservation strategy. Compared to the estimates in the 2008 draft referenced by the commenter, land acquisition costs have gone down, not up. Overall total Plan implementation costs are lower than those from early versions of the Plan because lower acquisition costs more than offset increases in restoration and operating costs.

Some lands would be acquired in fee. Some of the lands acquired in fee would be returned to the private sector with a conservation easement. Other lands would have a conservation easement. The exact relationship between public vs. private sector ownership would evolve during the permit term and post permit term and cannot be precisely predicted.

It is not true that billions of dollars of ranches would be acquired and taken off the tax rolls. In the Valley subarea, about 75% of the reserve land may be acquired in fee title, with the balance protected by conservation easements, leaving the underlying fee value on the tax rolls. In the Foothills subarea, more land is likely to be protected with conservation easements, leaving the majority of the Foothills reserve (about 70% for the current estimates) with fee interests remaining on the tax rolls. Furthermore, income-producing activities such as rice farming and grazing on lands held in fee title by the PCA would be subject to the possessory interest tax.

The Plan would not displace or annihilate ranching in western Placer County. Under current assumptions, about 12,000 acres of grassland and woodlands would be protected by conservation easements allowing grazing as a management tool and another 10,000 acres of the Reserve System held in fee title is conservatively assumed to depend on commercial grazing in perpetuity. In fact, the Plan needs ranching to continue because of the numerous management requirements of the Plan that require grazing. Furthermore, permanent protection of these ranchland resources, ensuring that they are not converted for urban/suburban development, has benefit to ongoing ranchland and other agricultural operations by eliminating potential land use conflicts.

Response to Comment 43-9

The commenter stated that effects on agriculture that the commenter believes would occur would result in socioeconomic impacts that are not addressed in the EIS/EIR.

As described in Response to Comment 43-10, the proposed PCCP would not result in "eradicating" the agricultural industry. Socioeconomic impacts are addressed in Impacts SOC-4, SOC-5, and SOC-6 of the EIS/EIR.

Grazing practices would need to continue both under agricultural easements and conservation easements including lands with restored grasslands, wetlands, and other habitat types to reduce thatch and for fuel load reduction. Continued grazing is an important component of both fuel management and restoration in that it aides in maintaining native plant, aquatic organism diversity, exotic species, and hydrologic integrity (see Plan Appendix F, *Fuel Management*).

Regarding the commenter's concern related to increasing fire threats, fire threats would likely decrease through the development of management plans, prescribed grazing practices for Fuel

Management (see Plan Appendix F, *Fuel Management*). The costs of such activities have been included in the cost and funding model and are more likely to be consistently implemented due to the availability of public funding to implement fire hazard management plans.

Response to Comment 43-10

The commenter expressed concerns regarding PCCP costs to individual ranchers.

As noted above, no individuals including ranchers would be compelled to sell conservation easements to the PCA. Based on experience in the County, elsewhere in California (see description of the California Rangeland Trust below) as well as under other HCPs (notably the San Joaquin County HCP and the Yolo County HCP/NCCP), and nationally, the Permit Applicants anticipate there would be interest from willing sellers. The Plan management implementation budget (for water supply, fencing, grazing, and other land management activities) is only assumed on land that the PCA would acquire in fee title and replicates the BMPs appropriate to these lands were they to remain in private ownership.

The calculated average annual operating cost per acre for the PCCP is only more than $1,300 per acre in the very early years of Plan implementation (2019 estimate show $1,400 per acre cost in implementation years 1–5), when the Reserve System consists of less than 4,000 acres. Average annual costs quickly drop to $300–500 per reserve acre as more reserve land is acquired and fixed costs are spread over a larger number of acres. Only about 20% of these costs are actual land management and maintenance costs. Most of the costs are a function of the requirements of the habitat plan: restoration, enhancement, species and natural community monitoring, environmental compliance, and Plan administration. These are costs that the PCA would undertake above and beyond the typical land management and maintenance costs faced by farmers and ranchers. These costs would be funded by development fees on the Covered Activities that benefit from the PCCP mitigation components and by federal, state, and local funding on behalf of other Plan beneficiaries. Post-permit, once the Plan's reserve assembly, restoration, and compliance obligations are fulfilled, ongoing annual management and maintenance costs are estimated at about $78 per acre.

On ranchland acquired in fee title from willing sellers, the PCA would be responsible for ongoing management and maintenance, and those costs are included in the PCA implementation budget. Ongoing grazing is an important PCCP land management tool, and it is expected that the PCA would enter into grazing leases to achieve these management objectives. Where easements are acquired from ranchers, the owners would retain the underlying land management responsibilities that include grazing and the ability to generate revenue from these activities. The willing seller entering into a PCCP easement on ranchland would be compensated for any extraordinary management costs, but these are not anticipated.

Note that the California Rangeland Trust protects over 330,000 acres of ranchland throughout California with conservation easements and has a waiting list of ranchers representing 205,000 acres of ranchland that have applied for the conservation easement program and await funding. The ranchers participating in this program benefit from capital investment to enable families to continue ranching, preserving their working lands, tax benefits, and participation in land and environmental stewardship. These ranchers continue to thrive on their land, and there is more demand for participation in the conservation easement program than funding available to purchase the easements. This is also the case under the San Joaquin County HCP as well as the Yolo County HCP/NCCP.

The PCA budget for site improvements is estimated at about $23 million over the 50-year permit term on land acquired in fee title. The costs are those of a responsible land steward. Most of the costs (70% of the total) are for fencing repair and replacement as would be required of any responsible landowner.

The costs to provide and maintain water sources for grazing ($2.3 million over 50 years in the current cost model) and the costs of water for rice production ($9.8 million over 50 years in the current cost model of which the PCA would pay half) are precisely those faced by existing ranchers and rice growers in Placer County. The costs are based on the input of local experts and on water rates and water requirements and loss factors specific to users served by the PCWA. Agricultural Advisory Services provided by the Plan are intended to supplement (with specific reference to PCCP goals and objectives) the resources provided since 1917 by the federally funded University of California Cooperative Extension (UCCE) program in Placer County—resources available to support and nurture livestock operations and family farms. The PCCP funds a select list of fish barrier modification projects that would be developed in consultation with the water purveyors in the Plan Area and include fish screens, fish ladders and step pools, and other types of modifications.

The PCCP draft restoration budget is actually substantially higher at $238 million over the permit term than estimated in 2008. This represents the cost for restoration and creation activity on just over 6,000 acres within the 47,300-acre Reserve System (13% of the total Reserve System). Restoration and creation of habitat are key goals of the PCCP and are funded by Special Habitat Fees assessed against Covered Activities that impact these specific habitat types. Restoration and creation of 6,000 acres of natural communities to benefit species is by no means intended to eradicate agriculture, which remains a vital contributor to the PCCP Reserve System. PCCP restoration objectives are not based on recreating a pre-European or pre-native American environment.

An example description of grassland restoration in Plan Section 5.3.3.3.1, *Vernal Pool and Grassland Natural Communities*, reads as follows:

> The restored grasslands will be planted with native species and managed to encourage native biodiversity but will not require a predominance of natives for the restored lands to contribute to the 1,000-acre commitment. As long as the restored grasslands have some native component (i.e., they can still be dominated by non-native species that do not substantially reduce grassland function), the grassland restoration will count toward the restoration commitment. Rather than completely eliminating non-natives, grassland restoration focuses on increasing native biodiversity by planting natives, controlling or removing non-native invasive species, and improving native wildlife habitat functions by increasing habitat extent and connectivity.

Restoration would be for a number of communities that are in agriculture today and would remain in agriculture after restoration is complete (e.g., rice to grassland restoration, and valley oak and foothill oak woodlands). Other restoration activities would occur in areas that are not in agricultural production today and would likely not be in the future when restoration is complete (e.g., riverine habitat, fresh emergent marsh wetlands, and riparian woodlands).

The PCCP does not provide any freedom from mitigation requirements of the Wildlife Agencies. Take authorization is based upon meeting the numerous requirements of the PCCP in order to comply with (not freedom from) the mitigation requirements of resource agencies including the USFWS, NMFS, CDFW, and USACE.

Comment Letter 44—AquaAlliance and Center for Biological Diversity

Response to Comment 44-1

The commenters stated that the EIS/EIR "fails to properly describe the PCCP's impacts to wildlife and habitat, while providing inadequate mitigation for those effects."

This letter contains specific comments regarding this general opinion. Please refer to the responses below.

Response to Comment 44-2

The commenters stated that the amount of risk from development, particularly in certain portions of the Plan, is too great; that the Plan ignores smart-growth principles; and that based on the Plan's temporal and geographic scale, the Plan could "lock in" proposed development that fails to incorporate these smart-growth principles.

The commenters do not clarify the specific "smart growth" or "sustainable land use practices" to which they were referring.

The Plan is not a land use plan and would not require future development or land use planning to adhere to a particular land use regime, nor would it prevent or discourage future development covered under the Plan from incorporating evolving smart-growth principles. Rather, the Plan is a species and habitat conservation plan that was prepared in accordance with the federal ESA and the California NCCPA. The Plan was developed to address the impacts on species and habitat based on growth projections and land use plans and ordinances prepared and approved by the City and the County pursuant to California law.

As mentioned above, the commenters do not identify the smart-growth principles to which they have referred—this omission precludes responding more specifically. Nonetheless, while the Plan is not a land use plan, it is generally consistent with smart growth principles because it provides regulatory incentives that should have the effect of focusing development near more urbanized areas and limiting development in rural areas away from existing urban centers. For example, the Plan's Reserve System would protect large blocks of lands and wildlife corridors, and the Plan would seek to minimize edge effects on the Reserve System. This would indirectly limit urban sprawl and "leapfrog" development. The Plan also incorporates principles consistent with smart growth such as low-impact development (LID) and BMPs. Plan Section 6.1.4, *Use of Standards, Guidelines and BMPs*, describes how such standards and guidelines will be carried out. These and other conditions (described fully in Chapter 6, *Program Participation and Conditions on Covered Activities*) will be adopted by ordinance and will be enforceable by the Permittees.

Response to Comment 44-3

The commenters stated that the Plan does not meet the state and federal standards of an HCP, including that the Plan must not "appreciably reduce the likelihood of survival and recovery" of Covered Species in the wild, and that the Plan's conservation strategy must minimize and mitigate to the maximum extent practicable the effects of the taking on each Covered Species. The commenters

also stated that the Plan does not provide for the conservation of the Covered Species, as required by the NCCPA.

Plan Section 4.7, *Effects on Covered Species*, describes the effects of the Covered Activities on each Covered Species in detail. These effects are described largely in terms of the maximum loss of suitable modeled habitat for each Covered Species that could occur. These effects are offset by the conservation measures described in Plan Section 5.3, *Conservation Measures*.

In Section 5.4, *Mitigation and Conservation Outcomes,* the Plan summarizes, for each Covered Species, the anticipated benefits of Plan conservation measures and the anticipated outcome for the population(s) of the species in the Plan Area when these conservation measures are combined with the maximum effects described in Chapter 4, *Effects of Covered Activities*. For each Covered Species, Plan Section 5.4 describes how the conservation measures meet all applicable state and federal regulatory standards for an HCP (ESA Section 10 permit issuance criteria) and an NCCP (NCCPA permit issuance criteria). The commenters do not specify or substantiate how they think the Plan fails, for any of the Covered Species, to meet either the federal or state regulatory standards that are cited. USFWS and NMFS will determine, based on the best available scientific information, whether the Plan meets the issuance criteria at ESA Section 10(a)(1)(B) including whether or not the taking "appreciably reduces the likelihood of survival and recovery the species in the wild" when they finalize their intra-Service biological opinions and make their Findings and Recommendations. In order to issue the permits, both USFWS and NMFS must determine that the application and Plan meet all issuance criteria. CDFW, before issuing an NCCPA permit, must make similar determinations.

To that end, the Plan was developed using the best available science and in conjunction with a panel of Science Advisors who contributed to Plan development and helped inform the conservation strategy, specifically with respect to species conservation.

The commenters also suggested that the Plan proponents have feasible alternatives and mitigation measures available to ensure a more biologically robust conservation plan than the proposed Plan. As described in Chapter 2, *Covered Activities*, the Plan is designed to provide programmatic endangered species permits for the planned development and operations and maintenance activities of the Permittees, consistent with local approved land use plans and capital improvement programs. The Plan's conservation strategy is designed to meet the ESA Section 10 and NCCPA incidental take permit requirements in order to implement these adopted land use plans and capital improvement programs. As noted above, USFWS, NMFS, and CDFW are required to make their specific Findings and Recommendations regarding permit issuance. USFWS and NMFS must find the impact of the taking has been minimized and mitigated to the maximum extent practicable. Alternatives to the proposed conservation strategy that meet federal and state standards are presented in Plan Chapter 11, *Alternatives to Take*, and as alternatives evaluated in the EIS/EIR.

Response to Comment 44-4

The commenters described potential future climate change effects and summarized steps California has taken to reduce GHG emissions, including preparation of the California Air Resources Board's (CARB's) *2017 Climate Change Scoping Plan*. The commenters claimed that development activities covered by the Plan would undermine California's efforts to address climate change. The commenters also restated the EIS/EIR conclusion that the Covered Activities could conflict with emissions reduction targets set by State GHG legislation and executive orders.

Section 3.2.1, *Regulatory Setting*, in Chapter 3.2, *Air Quality, Greenhouse Gases, and Climate Change*, of the EIS/EIR describes the applicable federal, State, and local policies and regulations related to GHG emissions and climate change. The section acknowledges that California has adopted statewide legislation addressing various aspects of climate change and GHG mitigation, and describes those actions in detail, including Assembly Bill (AB) 1493, Senate Bill (SB) 32, Executive Order (EO) S-3-05, AB 32, EO B-55-18, and the Pavley Standards. Relevant policies and goals from local general plans are also discussed, as well as the *Sutter County Climate Action Plan*. Section 3.2.2, *Environmental Setting*, acknowledges that increases in GHG concentrations since the Industrial Revolution have led to warming of Earth's lower atmosphere and large-scale changes in Earth's climate.

Impact AQ-6 in Section 4.2.2, *Impacts and Mitigation Measures*, of Chapter 4.2, *Air Quality, Greenhouse Gases, and Climate Change*, analyzes whether GHG emissions resulting from implementation of the Plan and Covered Activities would have a significant impact on the environment. The EIS/EIR concludes that GHG emissions generated by construction and operation of the Covered Activities would make a cumulatively considerable incremental contribution to global climate change. While emissions from Covered Activities would be significant, they would not "undermine California's efforts to combat the climate crisis," as the commenter asserted. Climate change is the result of human activities and development projects locally, regionally, nationally, and worldwide. GHG emissions cumulatively contribute to the environmental impacts of climate change. The Covered Activities would not generate enough GHG emissions to change average temperatures measurably or to impede the State's ability to achieve its GHG reduction targets. Instead, the combination of GHG emissions from past, present, and future projects and activities have and will continue to contribute to global climate change and its associated environmental impacts.

Impact AQ-7 discusses whether the proposed project would conflict with plans policies, and regulations intended to reduce GHG emissions. As stated in Impact AQ-7, GHG emissions from construction and operations and maintenance activities associated with the Covered Activities could conflict with AB 32, SB 32, and EO S-3-05. Accordingly, the EIS/EIR concludes that implementation of the proposed action and Alternatives 3 and 4 would result in a significant and unavoidable impact with respect to consistency with applicable plans, policies, and regulations adopted for the purposes of reducing GHG emissions. See also Responses to Comments 44-5 and 44-6.

Responses to Comments 44-5 and 44-6

The commenters stated that "The Plan fails to adopt feasible mitigation measures to account for the foreseeable effects of climate change."

The Plan includes feasible measures to address climate change (as described by the commenters in Comment 44-6). The ameliorative effect of these measures has been taken into account in the significance conclusions for Impacts AQ-6 and AQ-7. The level of climate change described in the *Changed Circumstance* section of the Plan fits the definition of action that is not yet occurring but is reasonably foreseeable. The Plan proposes to address the changing effects of climate change as part of the conservation strategy through adaptive management. As its name implies, *adaptive management* adapts implementation of the conservation strategies based on analysis of monitoring and other data. Adaptive management is essentially a feedback loop that enables adjustments to be made, such as when a particular conservation outcome could be met more effectively through different management actions.

The commenters further stated that the EIS/EIR should include feasible mitigation measures for "significant and unavoidable GHG emissions impacts associated with the development activities covered under the Plan." The measures the commenters point to in the Plan are part of the overall PCCP program and are by default included in the Proposed Action as well as each of the action alternatives. The PCCP also contains the following measures that will reduce GHG emissions by conserving natural lands and increasing natural sequestration, which CARB identifies as crucial to achieving the State's long-term climate change strategy (California Air Resources Board 2017).

- Conservation Measure 1: Establish Reserve System.
- Conservation Measure 3: Restore and Create Natural Communities and Covered Species' Habitat.

Although not explicitly identified as mitigation measures, these measures will be imposed as integral requirements of the PCCP. There is no need to state them as mitigation measures in the EIS/EIR.

Additionally, GHG impacts resulting from implementation of the Covered Activities would occur not only under the Proposed Action (the PCCP), they would also occur under the no action alternative as well as the other action alternatives. The development activities covered by the Plan—and GHG emissions and impacts resulting from those development activities—would occur regardless of the Proposed Action; such emissions and impacts are the result of development currently authorized under the existing general plans and zoning ordinances of Placer County and the cities within the county. These development activities are not caused by the Proposed Action, and amendments to city and county general plan policies are outside the scope of the Plan.

Should the PCCP be approved, the PCA would be created as a JPA comprising the Permittees to implement the Plan on behalf of all Permittees. The authority of the PCA would be limited to implementation of the Plan requirements and would not include questions of land use policies and regulations established in the applicable general plan, specific plan, and zoning. As a result, measures to reduce GHG impacts resulting from such development activities are not feasible in the EIS/EIR for the Proposed Action. However, as discussed in Chapter 4.6, *Air Quality, Greenhouse Gases, and Climate Change*, under Impact AQ-6, future development included in the Covered Activities would be subject to additional environmental review and applicable air district regulatory measures, which would reduce GHG emissions.

Responses to Comments 44-7 and 44-8

The commenters questioned why only two action alternatives, in addition to the Proposed Action, were evaluated in the EIS/EIR.

As described in detail in EIS/EIR Chapter 2, *Proposed Action and Alternatives*, a broad range of alternatives, including 12 separate alternatives, were considered and screened during preparation of the EIS/EIR. The screening process reduced the number of alternatives evaluated in detail in the EIS/EIR to four alternatives: the two action alternatives, the proposed action, and the no action alternative.

Response to Comment 44-9

The commenters stated their opinion that the Expanded Reserve Acquisition Area alternative should not have been screened out and should have be evaluated in the EIS/EIR.

The reasons for this alternative being screened out are explained in detail in Chapter 2, *Proposed Action and Alternatives*, of the EIS/EIR. The commenters questioned whether allowing "appropriate and compatible growth in accordance with applicable laws"—one screening criterion—is one of the objectives of the project.

The first two paragraphs of Section 1.3.3, *Statement of Project Objectives*, of the EIS/EIR are:

> The Permit Applicants' objectives for the proposed PCCP are stated in HCP/NCCP Section 1.1.4. The broad objective for the PCCP is stated as follows:
>
> > the purpose of the PCCP is to protect and enhance ecological diversity and function, including aquatic resource functions and values, in the greater portion of western Placer County while allowing appropriate and compatible growth in accordance with applicable laws.

The broad objective of the project is clearly stated and includes the language questioned by the commenters.

The commenters also recommended revising the Plan "to consider alternatives that vary the area committed to development, and the scale of covered activities allowed therein."

The County's and City's land use plans and policies, not the Plan and permits, determine what land uses are allowed and how much growth and development can occur in the Plan Area. The Plan and permits instead determine to what extent that future growth and development will be covered by the Plan and required to comply with the Plan's avoidance, minimization, and mitigation requirements. For purposes of preparing the Plan and applying for related state and federal permits, it was necessary to determine the maximum extent of growth and development that would be covered by the Plan and proposed for coverage under the permits. The Plan's analysis of impacts on Covered Species, and the EIS/EIR's analysis of environmental impacts, assumes this level of growth and development will occur to ensure such impacts are adequately analyzed and are not underestimated, and that proposed avoidance, minimization, and mitigation measures will be adequate if the growth and development in fact occurs. If the Plan and permits provided coverage for less than the maximum extent of development anticipated for coverage during the proposed 50-year permit term, it would not preclude additional development from occurring. That development would simply need to undergo permitting on a project-by-project basis instead of under the Plan.

The Plan and permits would terminate when the extent of growth and development covered under the permits as well as the successful implementation of the conservation strategy is reached or the permits' 50-year terms expires. After the Plan and permits expire, growth and development can continue to occur on lands outside the Reserve System without regard to the Plan, in accordance with laws, regulations, and policies in effect at that time. Therefore, a key objective of the Plan is to ensure that the growth and development that is likely occur within the term of the Plan and permits will be covered and will be consistent with the Plan's goals and objectives.

Two of the Plan's specific objectives relate to the extent of growth that can be covered by the Plan:

- Allow issuance of federal permits to the Permittees for lawful incidental take of species listed as threatened or endangered pursuant to the ESA resulting from development under the Permittees' adopted plans, policies, and programs.
- Allow issuance of a state authorization to the Permittee for lawful take of both non-listed species and species listed as threatened or endangered pursuant to the CESA resulting from development under the Permittees' *adopted plans, policies, and programs*. (Plan, p. 1-7, emphasis added.)

The reference to the Permittees' adopted plans, policies, and programs reflects the fact that development is currently allowed in certain areas pursuant to the County's and City's general plans, zoning ordinances, and land use policies. The existing adopted land use plans, policies, and programs were therefore necessary considerations for purposes of estimating how much growth and development could occur within the Plan Area during the 50-year term of the Plan. An alternative based on growth and development estimates without regard to existing land use plans, policies, and programs, or that excluded from coverage areas within which development is currently allowed, would have failed to achieve these two key Plan objectives.

The EIS/EIR considered a reduced take alternative (Alternative 3). That is, the EIS/EIR considered an alternative under which the Plan would not cover the full amount of growth and development that was estimated to occur over the 50-year term of the Plan and permits. However, this alternative could not assume that less growth and development would occur as a result of the reduced level of coverage. Because the County's and City's land use plans and policies—not the Plan and permits—determine how much growth and development can occur in the Plan Area, reducing the level of coverage under the Plan and permits would not by itself reduce the extent of growth and development.

Response to Comment 44-10

The commenters stated that the Plan's alternative analysis improperly limits its ability to assess a reasonable range of feasible alternatives and that the project objective of meeting regional growth projections is too narrow, undermining a realistic analysis of Plan alternatives. The commenters stated further that the Plan should be revised to consider alternatives that reduce the impacts of land conversions by shrinking the amount of land that can be developed and reducing the intensity of development covered under the Plan.

The alternatives analyzed in the Plan itself are "alternative actions to such taking the applicant considered and the reasons why such alternatives are not being utilized" as required by ESA Section 10(a)(2)(A)(iii). The analysis of these alternatives accords with the requirements of the ESA. The commenters cited CEQA case law, however, and the comment presumably is referring to CEQA's requirements regarding alternatives analysis and the alternatives analysis in the EIS/EIR.

The EIS/EIR considered an alternative (Alternative 3) under which the Plan would not cover the full amount of growth and development that was estimated to occur over the 50-year term of the Plan and permits. However, this alternative could not assume that less growth and development would occur as a result of the reduced level of coverage for two reasons: (1) because the County's and City's land use plans and policies—not the Plan and permits—determine how much growth and development can occur in the Plan Area; and (2) covering less growth under Alternative 3 would not preclude individuals seeking to pursue their own permits under various environmental laws and regulations (ESA, CESA, CWA, etc.); therefore, reducing the level of coverage under the Plan and permits would not by itself reduce the extent of growth and development.

In addition, it is not a project objective *to meet* regional growth projections. Rather, the growth projections in the Growth Scenario Memo were used to determine the maximum extent of growth and development that could be covered by the Plan and proposed for coverage under the permits in order to meet project objectives to:

- Allow issuance of federal permits to the Permittees for lawful incidental take of species listed as threatened or endangered pursuant to the ESA resulting from development under the Permittees' adopted plans, policies, and programs.
- Allow issuance of a state authorization to the Permittee for lawful take of both non-listed species and species listed as threatened or endangered pursuant to the CESA resulting from development under the Permittees' adopted plans, policies, and programs. (Plan, p. 1-7)

The Plan's analysis of impacts on Covered Species, and the EIS/EIR's analysis of environmental impacts, assumes this level of growth and development will occur to ensure such impacts are adequately analyzed and are not underestimated, and that proposed avoidance, minimization, and mitigation measures will be adequate if the growth and development in fact occurs. If the growth projections in the Growth Scenario Memo *overestimate* actual growth, and the maximum extent of coverage under the permits is not used, the project would still meet its objectives for Plan compliance and permit coverage for development under adopted land use plans, policies, and programs.

Response to Comment 44-11

The commenters expressed concerns about impacts from recreational use on natural communities and Covered Species.

The Plan provides incidental take permit coverage for trails, parks, park facilities, etc., as Covered Activities of the Plan. Plan Chapter 2, *Covered Activities,* Section 2.6.5.5 includes the establishment and maintenance of public parks and recreational facilities by Permittees that would generally be separate from and in addition to the PCCP Reserve System unless specifically proposed for inclusion in the Reserve System as described below. Chapter 4, *Effects of Covered Activities*, Section 4.4.5.3.6 identifies these facilities and describes the potential for effects. Chapter 6, *Program Participation and Conditions on Covered Activities,* includes prescribed avoidance, minimization, and mitigation measures for those effects to Covered Species and their habitats (please see Response to Comment 21-4 for additional details). Specific projects associated with these activities will be subject to CEQA, and supplemental environmental analyses will be prepared as necessary.

Recreational uses on Reserve System lands would be limited as necessary to protect Covered Species and habitat. While passive recreation may be allowed on some lands acquired for the Reserve System, the majority of the Reserve System would have no public access for recreational purposes. In addition, the Plan includes specific standards to ensure that any recreational use has minimal effects on biological resources (please see Plan Section 6.3.6.1.1, *Restrictions on Recreational Uses in the Future Reserves Acquired during Plan Implementation,* and also see Response to Comment 21-4 for additional details).

The purpose of the Plan is not to provide outdoor active or passive recreation opportunities (Section 1.1.4, *Purpose,* states that the purpose of the Plan is to protect and enhance ecological diversity and function, including aquatic resource functions and values, in the greater portion of western Placer County while allowing appropriate and compatible growth in accordance with application laws), and any construction and operation of trails or other recreational facilities and amenities within the Reserve System would be subject to Plan requirements including Conditions on Covered Activities and avoidance, minimization and mitigation measures.

The Plan does incorporate Jump Start lands into the Reserve System (see Section 6.3.6.3, *Reserve Management Condition 3 Jump Start Lands*). These lands are existing protected areas with existing recreational uses. See Plan Section 5.3.1.3.5, *The Role of Existing Protected Areas in the Conservation Strategy*, for a description of how these lands would be credited to the Reserve System, as some acreage would not be counted towards the Reserve System to account for recreational use in some areas. Jump Start lands are included in the Reserve System because these properties can help form an early foundation for the future Reserve System, and they provide valuable biological amenities for the Covered Species. Jump Start lands have some pre-established recreational activities that would continue as long as the recreation does not inhibit the ability of the PCA to achieve the biological goals and objectives of the Plan. A description of these Jump Start lands to be enrolled in the Reserve System and associated limits on recreational use are found in Condition 3. As described in Plan Section 6.3.6.1, *Reserve Management Condition 1, Public Access and Recreation on Future Reserve Lands,* future reserves (as distinct from Jump Start Lands) acquired for the Reserve System would be strictly limited in terms of recreation.

For both future reserves and Jump Start lands, recreational uses are required to be outlined in the Reserve Unit Management Plan approved by the PCA and the Wildlife Agencies and designed to minimize effects on biological resources (Plan Section 6.3.6.1.1, *Restrictions on Recreational Uses in Future Reserves Acquired during Plan Implementation*). Also, lands with existing or planned future recreational use such as trails must meet the Criteria for Reserve System Lands to be added to the Reserve System, which is subject to the review and approval of the PCA and Wildlife Agencies (Plan Section 8.4.1, *Criteria for Reserve System Lands*). Any parklands or recreational facilities or amenities proposed for inclusion in the Reserve System that do not meet these criteria and requirements cannot be added to the Reserve System.

Limitations on future reserves are spelled out in detail in Reserve Management Condition 1 and include restrictions on activities within reserves (e.g., no off-road vehicles, no hunting) and the amount of trail construction (i.e., no more than 70 miles/50 acres of new trails within the Reserve System). The location and density of these trails would be regulated. Recreational facilities, including trails, would not be enrolled in (i.e., count towards) the Reserve System. Plan Section 6.3.6.1.1, *Restrictions on Recreational Uses in Future Reserves Acquired during Plan Implementation,* lays out restrictions on all lands acquired for the future Reserve System. Section 6.3.6.1.2, *New Trail Design and Use Standards for Future Reserves*, lays out criteria for the inclusion of trails within any future reserves. Reserve Management Condition 2 describes the recreation component that must be included in Reserve Unit Management Plans and that would describe and circumscribe recreational activities.

Regarding potentially competing requirements for passive parkland and PCCP reserves, these requirements are separate and therefore additive.

Response to Comment 44-12

The commenters expressed concern that the Plan does not do enough to protect oak woodland.

Most oak losses would occur within existing highly fragmented rural residential properties in the Foothills PFG, and the opportunities for effective oak woodland conservation are constrained by the location and ownership type of this land cover. Please see Responses to Comments 24-3, 24-5, and 24-8 for a description of the constraints on oak acquisition and for a description of the role that avoidance and minimization measures play in oak woodland conservation. Plan Section 6.3.2.3,

Community Condition 3, Valley Oak Woodland Avoidance, Minimization, and Mitigation, provides for specific avoidance of valley oak woodlands and for mitigation for impacts on individual valley oak trees or stands of valley oak woodland. The conservation strategy emphasizes the preservation of large areas of unfragmented oak woodlands. Over 10,300 acres of oak woodlands (includes valley oak woodlands) would be acquired. Combined with existing protected areas, this represents the protection of 24% and 35% of oak and valley oak woodlands available in the Plan Area, respectively. In addition, 100 acres of oak woodlands and 225 acres of valley oak woodlands would be restored, independent of effects. Additional restoration would be added dependent on effects at a 1.5:1 ratio of restoration to impacts. As per Objective OW-1.3, oak woodlands within the Reserve System would be maintained and enhanced by promoting regeneration and recruitment and managing invasive plants. Please also see Response to Comment 44-13.

The commenters were also critical of the Plan's oak woodland conservation strategy in that it is based upon broad conservation goals for oak woodlands in general and lacks specific objectives for each oak woodland habitat type.

The resource inventory conducted to support the work of the Science Advisors and the preliminary framework of the Plan was an adaption of CDFW Wildlife Habitat Relationship (WHR) vegetation classification scheme so that it matched the western Placer County landscape. A half-dozen WHR woodland types are found in the Western Placer foothills and constitute a variable mosaic of predominately deciduous woodland. The initial mapping for the PCCP was conducted by Jones and Stokes Associates (JSA) in 2002. Portions of that mapping were updated by air photo work subsequent to the original interpretation and by cross comparison with the vegetation mapping conducted for CDFW around 2009.

The Sierra foothills in the Plan Area show a highly variable mix of tree species so that the WHR woodland types adapted by JSA represent complexes of woodland species rather than single species dominant stands. The relative proportions of individual species in the complex change in response to gradations in slope steepness, slope orientation, soil types, and microclimate. Anthropogenic influences, particularly in rural residential settings, can also influence species composition. In most cases, the changes are gradual so that it is difficult to draw a hard line where one species becomes dominant over another. Indeed, comparisons between JSA and CDFW mapping showed that the same areas were often classified differently when the most detailed criteria were applied. These differences are easily explained by differences in methodology such as the size of the minimum mapping unit, the seasonality of the aerial imagery available, and the emphasis in identifying dominant species. When detail WHR subtypes were "rolled up" into broader classifications, the different mapping efforts agree well.

The following table shows the Placer WHR oak woodland communities as used in the PCCP. WHR types foothill chaparral and rock outcrop were included because they are best treated as small-patch ecosystems occurring naturally within the community as a whole.

Oak Woodland Community Composition in the Foothills (acres)

Placer WHR Type	Existing Protected Areas	Potential Future Growth Area	Reserve Acquisition Area	All Foothills
Blue Oak Woodland	1,436	3,755	3,780	8,971
Foothill Chaparral	0	217	0	217
Interior Live Oak Wood	0	533	2	535
Mixed Oak Woodland	1,188	16,700	2,020	19,908
Oak Savanna	357	4,757	3,207	8,320
Oak-Foothill Pine Wood	2,715	4,182	4,140	11,037
Rock Outcrop	6	112	0	119
Oak Woodland Total	**5,702**	**30,256**	**13,149**	**49,107**

Source: MIGTRA 2016.

As the goals and objectives for federal ESA and state NCCP permitting were developed for the Plan, it emerged that the differences between the detailed Placer WHR types were not significant for most of the woodland classifications. A key exception is valley oak woodland identified as a special consideration in the Valley itself where it usually occurs in a riparian setting but has a reliably recognized woodland dominant. In the Foothills the valley oak is a scattered occurrence generally associated with areas that were mapped as riparian woodland but also oak woodland; it is generally not a dominant species.

None of the Covered Species are strictly woodland type dependent. Plan Table 4-10 shows that woodland can serve as upland habitat for western pond turtle and California red legged frog where it occurs adjacent to primary, aquatic habitat—the specific WHR woodland type is not important. Oak savanna is specifically modeled for western burrowing owl but only in the Valley where the bird is taking advantage of the open grassland character of savanna; mapping the specific woodland type in the Foothills does not affect Plan treatment of the burrowing owl.

The species model evaluates Plan effects comparing land cover types subject to take and corresponding land cover types subject to protection and restoration. At the request of CDFW, the detailed Placer WHR map units were carried through the analysis and are available in the Plan effects and species effects models. The results were aggregated for the presentation in the PCCP documents because breakdown into subtypes did not meaningfully change the assessment of Plan goals and objectives for Covered Species.

Conservation goals for woodland natural communities will take into account species presence and species diversity; Conservation Measure OW-1 additionally states, “Protection of oak woodland in the Foothills will include small-patch ecosystems imbedded within oak woodland landscapes.” Specific goals for species diversity on woodland reserves would be incorporated into reserve management plans as potential reserve lands are identified and prepared for approval by the Wildlife Agencies. The goals themselves would be subject to the adaptive management process outlined in the Plan. This will be particularly relevant to woodland conservation because the multi-species mosaic will change in response to climate change, fire regime, fire management, and land management including grazing.

Response to Comment 44-13

The commenters asserted that the EIS/EIR inadequately describes the impacts on oak woodlands, including indirect effects in the foothill portion of the Plan Area, and claimed that the Plan fails to adequately mitigate impacts on oak woodlands, and therefore the less-than significant finding is invalid.

Please see Responses to Comments 44-12, 24-3, 24-5 and 24-8 regarding the adequacy of the proposed oak woodland mitigation. Regarding the adequacy of the effects analysis in the EIS/EIR, in Chapter 4, *Environmental Consequences*, of the EIS/EIR, Impact BIO-5 for Alternative 2 addresses permanent and temporary direct impacts on oak woodlands, quantifying the impacts and noting what these areas would be affected by (e.g., suburban development, transportation). The commenters stated that the EIS/EIR lacks a "discussion of the intensity of impacts from development in the foothills, nor is there a quantification of the ecological loss associated with the effects." At the scale of this analysis, where information on the quality of habitat lost versus the quality of areas that would be preserved/restored is not available due to these lands being in private ownership and due to a lack of specific reserve sites selected, it is not possible to conduct such an analysis in the EIS/EIR. However, the EIS/EIR does consider as part of the analysis, the Plan's commitments in its objectives, conservation measures, and conditions. The Plan includes commitments to manage, enhance, and maintain the integrity of those oak woodlands that would be conserved, which will include addressing invasive species issues that are ongoing in the foothills. The EIS/EIR also addresses potential effects from operations and maintenance and identifies those conditions (see Plan Chapter 6, *Program Participation and Conditions on Covered Activities*) that would be available to offset effects related to operations and maintenance. No quantification of ecological loss is appropriate at the scale of this analysis because information to support such an analysis is not available at this time. The effects discussion in the EIS/EIR has been revised to clearly discuss potential indirect impacts on oak woodland.

Response to Comment 44-14

The commenters asserted that because much of the state's riparian habitat has been lost, riparian habitat is extremely important to certain species and for its climate storage values and, consequently, higher mitigation ratios are needed. In addition, the commenters expressed concern that reduced forest and woodland cover, including riparian vegetation, will lead to various impacts such as increased runoff, erosion, and sedimentation.

Regarding mitigation ratios, note that riverine/riparian fees are the highest per acre impact fees except for those for vernal pools and are supported by the analyses provided in the Plan. Also, as described in Section 6.3.3, *Conditions to Avoid, Minimize, and Mitigate Effect on the Stream System,* which includes riparian habitat, "the primary objective of Stream System Conditions is protection of watershed integrity (health and hydrology) by defining the extent of the Stream System and providing an incentive (in the form of a fee) for the project applicant to avoid land conversion within the Stream System boundary." Regarding other impacts from the potential removal of riparian vegetation, it is understood that riparian habitats are important, which is why the Plan was developed in conjunction with the CARP to help meet the needs associated with the CWA as well as the CDFW's Lake and Streambed Alteration Program (LSA); as a result, there are many measures specifically designed to offset runoff and similar impacts.

The Plan has numerous conditions that will avoid and minimize impacts on riverine and riparian areas, including the Stream System. The Stream System is defined and mapped as the stream channel itself, and either the surrounding area within the boundary of the 100-year floodplain or the outermost limit of a variable-width buffer measured outward from the edge of the Ordinary High Water Mark of "blueline streams", whichever is greater. These conditions include Community Condition 2.1 that removes Special Habitat Fees on avoided areas up to 50 feet beyond the outward edge of riparian buffer. Condition 2.2 establishes BMPs that will reduce impacts on riverine and riparian areas when they do occur (see Plan Table 6-1). Condition 2.3 requires that impacts on riverine and riparian areas be restored, and Condition 2.4 imposes specific conditions on the PCWA with respect to operations and maintenance in riverine and riparian areas. Stream System Conditions 1 and 2 also avoid, minimize, and mitigate for impacts on riverine and riparian areas.

The commenters also pointed to inconsistencies between the total allowable acres of riverine impacts noted in the Plan (115 acres) and the EIS/EIR (165 acres).

The amount reported in Tables 5-4 and 5-5 of the HCP are the correct amounts, 115 acres of riverine and 375 acres of riparian habitat, for a total of 490 acres. The corresponding tables in the EIS/EIR have been corrected in response to this comment. No changes to the findings of the document would result from these changes.

The commenters also asserted that the amount of mitigation fails to fully address the impacts on riparian/riverine habitat and that if enhancement or restoration is utilized the Plan should require higher mitigation ratios. However, the commenters did not state why they think the amount of mitigation for riparian areas in the Plan is too low nor what amount they believe would be sufficient.

As noted above, the PCCP was designed to address stream and riparian systems by not only meeting mitigation standards of the ESA, LSA, and CWA, but also the conservation requirement of the NCCPA. The USFWS, NMFS, CDFW, and USACE will make their final determinations on whether the PCCP mitigates impacts on resources subject to their respective jurisdictions in their individual decision documents. For USFWS and NMFS the adequacy of mitigation will be determined in Findings and Recommendations. CDFW will make a similar determination with respect to the Plan's conservation components.

Response to Comment 44-15

The commenters stated that larger buffer zones along jurisdictional streams and wetlands are needed to account for climate change, that larger setbacks are needed especially within designated critical habitat, and that connections to uplands are needed for California red-legged frog and pond turtles.

Buffer zones are consistent with current standards under the CWA and protect both wetlands and surrounding upland areas. However, the goal of the Plan is not simply to avoid impacts in urbanizing areas but to provide regulatory incentives for development in areas with relatively low natural resource values and to permanently protect areas that have higher natural resource values.

Also see Response to Comment 17-1 for additional details about how the Plan developed buffer requirements and addresses connectivity.

Response to Comment 44-16

The commenters stated that the species account for western pond turtle in the Plan does not note the USFWS's 2015 90-day finding; the species account has been updated.

Responses to Comments 44-17 and 44-18

The commenters stated that impacts on the western pond turtle are underestimated in the Plan and EIS/EIR.

The western pond turtle habitat model is described in the species account (Appendix D) of the Plan. As noted, the species model uses 150 feet from water to predict the distribution of species in upland habitat. The species account states that "[n]esting has been reported to occur up to 1,391 feet from water (Jennings and Hayes 1994), but is usually closer, averaging 92 feet from aquatic habitat (Rathbun et al. 2002)." Using the largest reported distance traveled from aquatic habitat (i.e., 1,391 feet) would likely vastly overestimate the amount of upland habitat in the Plan Area. The Plan authors believe that using the current distance of 150 feet captures the majority of upland habitat for western pond turtles and adequately estimates impacts on western pond turtle habitat.

The commenters also stated that "Bury and Germano (2008) found that most individuals rapidly depart basking sites when disturbed by either visual or auditory stimuli of people (e.g., waving an arm, shouting) at distances of over 100 m (329 feet)." However, a review of the cited paper shows the authors did not provide supportive evidence of the assertion nor does the paper explain how the conclusion was reached. A more recent study (Nyhof and Trulio 2015) on western pond turtles in the San Francisco Bay noted that "Basking was rarely interrupted by human activity, as only 25 of 346 (7%) possible events ended with turtles abandoning their basking site." Nyhof and Trulio (2015) further noted that abandonment of basking sites varied by type of disturbance, with runners, walkers, and bicyclists all being less than 10% of the time (2, 5, and 6%, respectively) at distances between 3 and 30 meters (9.8 and 98 feet).

In addition, it should be noted that numerous conditions on Covered Activities restrict the activities that can occur in upland habitat near water. These include General Condition 1, Community Conditions 1.1 and 1.2, Community Conditions 2 and 3, Stream System Condition 1, Regional Projects Conditions 1, 2, and 3, Species Conditions 4 and 7.

Response to Comment 44-19

The commenters noted an error in Table 3.3-4 of the EIS/EIR regarding two entries for foothill-yellow legged frog.

Table 3.3-4 has been corrected in response to this comment. No changes to the findings of the document would result from these changes.

Response to Comment 44-20

The commenters' assertion that the EIS/EIR looked at only "impacts to the riverine environment" and "ignored the use of upland habitats" with respect to foothill yellow-legged frog is incorrect.

The EIS/EIR does not state there are no impacts in upland areas; it correctly states that disturbance of upland habitat would have minimal direct effects on foothill yellow-legged frog in upland habitats.

In the case of foothill yellow-legged frog, the species is highly aquatic. While the species has been noted in upland habitat, these occurrences are unusual and do not represent habitat types likely to contain the species. Furthermore, conditions on Covered Activities limit actions in riparian areas and adjacent to streams. As noted in response to Comment 44-17, conditions that minimize impacts for aquatic and semi-aquatic species include the following: General Condition 1, Community Conditions 1.1 and 1.2, Community Conditions 2 and 3, Stream System Condition 1, Regional Projects Conditions 1, 2, and 3, Species Conditions 4 and 7. A sentence has been added to the species account, clarifying that the species has been observed in upland habitat during the winter.

Response to Comment 44-21

With regard to California red-legged frog dispersal, the commenters asserted that the Plan and EIS/EIR underestimate "the amount of potential upland habitat" and "again fail to properly consider the potential for impacts to a sensitive species."

While the commenters are correct that California red-legged frogs can move greater distances than 1 mile, the relevance to the Plan does not change. California red-legged frogs in Placer County are currently known solely from the Big Gun Conservation Bank, which—as noted in the Plan's species account—is the only historical population in the Sierra Nevada within Placer County known to still be extant. As a result of the lack of known occurrences of California red-legged frogs from the rest of Placer County and the Plan Area, development-related impacts associated with the Covered Activities would not occur within areas known to be occupied nor even within 17 miles of the Big Gun Conservation Bank. Because the Plan utilizes modeled habitat, since there is no known occupied habitat other than the Big Gun Conservation Bank, the Plan likely over-estimates the actual impacts on California red-legged frog.

Response to Comment 44-22

The commenters stated their opinion that the conclusion in the EIS/EIR that the Plan's impacts on wildlife connectivity will be less than significant is not supported by substantial evidence.

The EIS/EIR analyzed the effects of full buildout within the PFG by overlaying these areas on the Essential Connectivity Areas (ECAs) identified by the CEHC. The CEHC was commissioned by CDFW and Caltrans with the goal of identifying large remaining blocks of intact habitat or natural landscape and model linkages between them, which resulted in a statewide wildlife habitat connectivity map to provide a framework for regional analysis, planning, and implementation (Spencer et al. 2010). As discussed in Impact BIO-28 on draft EIS/EIR page 4.3-104, this data was used to produce EIS/EIR Figure 4.3-1, and the resources that occur in the ECAs that overlap with the Plan Area were reviewed, and the gaps that would be created across the ECAs were discussed. The NEPA and CEQA determinations do note that Alternative 2 would result in the isolation of some natural habitat, which would be potentially adverse effects on wildlife corridors. The EIS/EIR ultimately concludes this impact would be less than significant when weighing the Plan's objectives for landscape-level conservation of natural communities and habitats for Covered Species. The regional scale of the analysis, the sources used (i.e., CEHC GIS data), together with the Plan's landscape-level objectives, provide sufficient information for making the determinations made in the EIS/EIR.

The commenters also stated that the EIS/EIR "ignores the potential impacts of rural residential development in the 24,000-acre Reserve Acquisition Area." Under the existing conditions, as described in Table 2-1 of the Plan, there are 14,042 acres of existing rural residential development in the Foothills portion of the Plan Area. The commenters referred to the 24,000-acre RAA on page 4-12 of the Plan, which is reporting the RAA acreage in the Foothills portion of the Plan Area. The 972 acres that would be directly affected in the Foothills RAA represents approximately 4% of this area. When considering the addition of 972 acres of rural residential development to the existing 14,042 acres, this would not result in a substantial increase and would still retain value to wildlife relative to development in the PFG. The EIS/EIR does not specifically note this impact; however, the exact locations of where any rural residential development in the RAA is not known at this time, which makes conducting the regional scale analysis done for the PFG difficult. Considering that much of the RAA already contains rural residential development and ongoing agricultural activities, the increase in rural residential development would not be significant relative to existing conditions in the RAA. However, Impact BIO-28 has been revised to note the effects of development in the RAA on wildlife movement and that this increase would not be substantial.

Response to Comment 44-23

The commenters stated their opinion that the EIS/EIR fails to accurately describe the extent of vernal pool impacts allowed under the Plan, provides insufficient mitigation for impacts on vernal pool complex, and overestimates the efficacy of proposed mitigation.

Regarding the first claim on the extent over vernal pool impacts allowed, the analysis in Impact BIO-1 for Alternative 2, starting on draft EIS/EIR page 4.3-35, states that permanent impacts on vernal pool complex would total 12,550 acres, temporary impacts would not exceed 455 acres, and indirect effects would not exceed 1,979 acres. The analysis also notes that existing vernal pool complexes could be impacted by the restoration/creation of 900 acres of vernal pool-type wetlands. Though the later impact does not specify a permanent or temporary impact acreage to vernal pool complex in these areas, they are part of the overall conservation strategy and will—as stated in CM1 VPCG-2, which is called out in the EIS/EIR—ensure that restoration will not affect existing vernal pools, that local watersheds for existing vernal pool hydrology are not affected, and that restored complexes will reflect historic conditions in high value vernal pool complexes. The EIS/EIR is presenting a potential impact and noting how the Plan will avoid this potential impact. Also it should be noted that the Plan only allows permanent impacts on vernal pool complex up to 12,550 acres and temporary impacts to 455 acres. Any impact beyond these would not be covered by the Plan.

Regarding the comment on sufficient mitigation and the overestimate of efficacy of the mitigation, the analysis in the EIS/EIR took into consideration the acres proposed for conservation, the commitments to improving the overall functions and services of vernal pools in the Plan Area, and the management of vernal pool complexes in perpetuity. The Plan's objectives, conservation measures, and conditions were viewed as performance standards for measuring the effectiveness of the proposed conservation actions, and Chapter 7, *Monitoring and Adaptive Management Program*, of the Plan describes a robust monitoring program that will evaluate implementation of mitigation actions to ensure that the conservation strategy, including the biological goals and objectives, are achieved.

Response to Comment 44-24

The commenters inappropriately cited the San Diego HCP as the reason the mitigation for vernal pool complex in the Plan is inadequate and went on to say that the mitigation in the Plan should be higher, without explaining why they recommend doubling and quadrupling that ratio beyond citing the San Diego HCP.

Under both state and federal law, each HCP's (or NCCP's) mitigation must be evaluated on its own merits and in context with the impacts occurring under that specific HCP. Whether a proposed HCP meets the ESA's issuance criteria of mitigating the impact of the taking to the maximum extent practicable is decided on the individual and unique circumstances of each HCP. For example, vernal pools in other areas such as San Diego, and the listed species that depend on these pools, are considerably more rare than vernal pools and associated species in the Central Valley; therefore, using the same mitigation "ratios" is not warranted. In the context of the PCCP, the protection and restoration of large, interconnected vernal pool complexes that are well distributed and contain high-quality vernal pools with populations of Covered Species that are equal to or greater than the affected population is expected to adequately offset the impacts of Covered Activities and contribute to the recovery of the Covered Species. Plan Section 5.3.3.3.1, *Vernal Pool and Grassland Communities*; Section 5.3.3.4.3, *Vernal Pool Branchiopods*; and Section 5.3.4.2.1, *Vernal Pool Complex and Grassland Natural Communities* describe conservation measures specific to vernal pool species and vernal pool complexes. Section 5.4.11, *Vernal Pool Branchiopods,* summarizes conservation outcomes for the species. USFWS and CDFW will make a final determination regarding adequacy of the proposed mitigation for vernal pool complexes in their respective decision documents.

Please also see Response to Comment 35-2 in response to the commenters' concern regarding preservation versus restoration of vernal pools.

Response to Comment 44-25

The commenters expressed concern about adequate funding of the PCCP.

It is understood that funding the Plan is critically important to its success. Plan Chapter 9, *Costs and Funding,* provides a description of the costs associated with the Plan and the funding mechanisms. Furthermore, Plan Appendix M, *Growth Scenario Memo,* and Appendix L, *Public Review Draft Implementation Cost Estimates and Assumptions*, provide a detailed cost analysis and funding plan for the Plan. Development fees will provide about 68% of total funding, with most of the remaining funding coming from state and federal grant programs for habitat conservation. The land cost estimates are based on a series of studies and land value analyses prepared in 2011 and subsequently updated in 2012 and 2017 by Bender Rosenthal, Inc., and assigned scarcity factors by the Hausrath Economics Group for the purpose of estimating conservation and wetland land values. The PCA would annually adjust development fees for inflation based on established indices for land acquisition and other costs. Every 5 years the PCA would conduct a comprehensive assessment of all Plan costs and revenues based on actual experience to date and make necessary adjustments to the development fees (see Plan Section 9.4.1.7, *Adjustment of Development Fees*). These requirements ensure that funding is adjusted to reflect market fluctuations in land values.

The Plan identifies use of the Housing Price Index (HPI) published by the Federal Housing Finance Agency as the index to use for the automatic annual adjustment of development fees to reflect changes in land acquisition costs. However, recent experience of members of the Plan consultant

team with other northern California regional HCP/NCCPs, specifically the East Contra Costa County HCP/NCCP and the Santa Clara Valley Habitat Plan, suggests that HPI does not appropriately reflect changes in land prices based on land appraisal and transaction data gathered as a part of the periodic assessments of costs and funding conducted for those plans. Accordingly, in Table 9-8 of the final Plan, HPI has been replaced with land value data published annually by the California Chapter of the American Society of Farm Managers and Rural Appraisers for the South Sutter, Western Placer, North Sacramento, Solano, and Yolo Counties region as part of their annual report, *Trends in Agricultural Land & Lease Values*. This index has been determined to more accurately reflect trends in market prices for reserve land in the Plan Area. In addition, the PCCP land cost estimate includes a higher contingency factor for reserve land acquisition cost (5%) than for operating costs (3%). Permittee staff and the consultant team who prepared the Plan do not have direct experience with the *Western Riverside County Multi-Species Habitat Conservation Plan* and refer the reader to the response to the Riverside County Grand Jury report prepared by the Regional Conservation Authority and dated September 9, 2019. Members of the consultant team do have direct experience with the adequacy of funding plans associated with other northern California regional Plans as a result of engagements by their respective implementing agencies to assess costs and funding and revise development fees as necessary following plan adoption. These plans include the *San Joaquin County Multi-Species Habitat Conservation and Open Space Plan* that started in 2001, the *East Contra Costa County HCP/NCCP* that started in 2007, and the *Santa Clara Valley Habitat Plan* that started in 2013. In all cases the periodic assessment of costs and adjustments to development fees have maintained adequate funding to fully implement these plans.

Response to Comment 44-26

The commenters summarized their earlier concerns and urged the "Service, Placer County and Plan Permittees to address the concerns raised in these comments, and to incorporate additional impact analysis and mitigation into subsequent drafts of the PCCP and related impact analyses."

Please see Response to Comment Letter 44.

Response to Comment 44-27

The commenter asked the County to maintain records relevant to CEQA compliance.

Documents pertaining to the Plan are being retained.

Comment Letter 45—Placer County Planning Commission, Public Hearing (August 8, 2019)

Responses to Comments 45-1, 45-3, 45-4, and 45-5

The commenter expressed concern regarding the recreational use of conservation lands under the PCCP.

Recreation is a component of open space conservation elements of the Placer Legacy Program and general plans for the Placer County and the City of Lincoln, as described in Plan Section 2.4, *Permittees, Plans, Policies, and Programs.* Local policies and programs supporting public access to natural lands are predicated on the understanding that such access has physical and mental public health benefits and that ongoing stewardship of conservation lands depends on a public appreciation that is cultivated through experience with nature (Gentry et al. 2015). The PCCP recognizes the impacts on Covered Species and natural communities that may result from the low-intensity recreational use to be allowed in portions of the Reserve System, as described in Plan Chapter 4, *Effects of Covered Activities.* These effects would be minimized through management and supervision of the trail system, education of open space users, and restricted or managed access to open space; and unavoidable impacts would be offset through the larger conservation strategy.

Reserve management plans would be developed for each reserve, with specific restrictions to avoid and minimize effects on Covered Species and their habitats, as described in Plan Section 5.3.2.1.1, *Content of Reserve Management Plans.* Recreational uses would only be allowed within the Reserve System if the PCA determines that such uses are consistent with the biological goals and objectives of the Plan. Trails and facilities would be carefully sited to avoid sensitive resources. Allowed uses would vary by site but would include low-intensity activities, and motorized recreational vehicles would be prohibited. The PCCP acknowledges that effects may still occur, and it factors such effects into the overall conservation strategy, which mitigates for the impacts of Covered Activities including recreational facilities, and additionally contributes toward the recovery of the Covered Species.

Response to Comment 45-2

The commenter expressed concern about wildfire risk.

Please see Response to Comment 19-1.

Response to Comment 45-6

In this comment, the speaker at the public meeting read Letter 37 into the record.

Please see Response to Comment Letter 37.

Response to Comment 45-7

The commenter stated that she will submit her comments in writing.

Please see Comment Letter 25, in which the commenter did provide her comments in writing.

Response to Comment 45-8

The commenter stated that she had some concerns about the alternatives analysis.

For a response to this comment, please see Response to Comment 25-1 in the letter from this commenter.

Response to Comment 45-9

The commenter stated that she had some questions about development, the PFG, and acquisitions.

For a response to this comment, please see Response to Comment 25-2 in the letter from this commenter.

Response to Comment 45-10

The commenter stated a concern about the feasibility of acquiring land by private landowners.

For a response to this comment, please see Response to Comment 17-2 in the letter from this commenter.

Responses to Comments 45-11 and 45-14

Comments 45-11 through 45-17, which concern the review period for PCCP documents, are from the same commenter who submitted Letter 42. For a response to these specific comments, please see Responses to Comments 42-4 and 42-5.

Response to Comment 45-12

The commenter stated that "the future growth areas need adjustment and definition in terms of looking at alternatives for these broadly-defined areas for the valley and foothills."

As stated in Response to Comment 19-7, Placer County originally envisioned that the PCCP would be completed in three phases, with western Placer County being the first phase. The second phase would be the upper foothills of the Sierra Nevada and the Martis Valley area. The third phase would be the forested areas of the County. The decision to prioritize the western portion of the County is due to the number of sensitive species that could be impacted by changes in land use that are forecasted for the region. By far the most significant amount of land use change will occur in western Placer County as a result of growth in the unincorporated area and city of Lincoln. The Board of Supervisors will determine whether additional phases will be implemented.

Responses to Comments 45-13 and 45-17

The commenter expressed concern about agricultural easements.

For a response to these comments, please see Response to Comment 8-11.

Response to Comment 45-15

Comments 45-11 through 45-17 are from the same commenter who submitted Letter 42. Comment 45-15 concerns the governing authority for PCA. For a response to this specific comment, please see Response to Comment 42-15.

Response to Comment 45-16

Comments 45-11 through 45-17 are from the same commenter who submitted Letter 42. Comment 45-16 concerns definitions. For a response to this specific comment, please see Response to Comment 42-10.

Comment Letter 46—George T. Kammerer

Please note that Comment Letter 46 was submitted to USACE regarding the agency's public notice for its draft CWA Permit Strategy (file number SPK-2005-00485). The response to this comment letter is numbered sequentially and presented in chronological order (based on the date received) along with those received by USFWS and the County on their respective NOAs. USACE's public notice opened on July 8, 2019, for a 30-day comment period; this was separate from the NOAs issued by USFWS and the County that opened on June 21, 2019, for a 60-day comment period (and included the USACE's draft CWA Permit Strategy). The response provided here is not a USFWS or County response and is not in response to the USFWS or County's NOAs, USFWS's NEPA obligations, or the County's CEQA obligations for the draft EIS/EIR, draft Plan, or Section 10(a)(1)(B) incidental take permit applications. Rather, the response has been provided here by USACE as a means to consolidate all comments received by all agencies regarding their respective jurisdictions and to eliminate the need for a separate disclosure to the public for comments and responses on USACE's public notice.

Response to Comment 46-1

The commenter noted being unable to find "an abbreviated process for issuing standard permits (SPs)."

USACE has prepared a draft of the abbreviated SP strategy, which is included in Appendix C of the EIS/EIR.

Response to Comment 46-2

The commenter asserted that certain activities should be covered.

This comment is noted. USACE has not proposed changes to the list of activities covered under the PGP. The activities that would be authorized under the PGP, if issued, were obtained from Section 2.6, *Categories of Covered Activities*, of the Plan.

Response to Comment 46-3

The commenter asserted that specific in-stream activities should be "covered and included under the D-PGP authorization within all jurisdictional 'streams' in the PCCP."

This comment is noted. USACE has not proposed changes to the list of activities covered under the PGP. The activities that would be authorized under the PGP, if issued, were obtained from Section 2.6, *Categories of Covered Activities*, of the Plan.

Response to Comment 46-4

The commenter stated that "adjacent" should be defined by an exact measurable distance when referring to "adjacent waters of the U.S. within the riparian corridor."

USACE is unable to provide a measurable distance for "adjacent" waters of the United States, as these determinations are made on a case-by-case basis and are not defined by a specific distance that is applicable in all cases.

Response to Comment 46-5

The commenter requested modifying the language of Provision 5.

USACE understands the USFWS and NMFS intend to utilize the Plan and EIS/EIR in order to issue incidental take permits under Section 10 of the ESA. However, as identified in Chapter 1, *Introduction*, of the EIS/EIR, the PCCP encompasses not only the issuance of the incidental take permits but a number of other activities as well. USACE is still responsible for ensuring that compliance with Section 404 of the CWA, including compliance with the Section 404(b)(1) Guidelines and the Public Interest Review Requirements, in determining whether or not to issue all or part of the permit strategy. In order to ensure compliance with the Section 404(b)(1) Guidelines, USACE must ensure adverse effects on the aquatic environment are avoided and minimized to the maximum extent practicable. USFWS and NMFS, not USACE, is responsible for ensuring avoidance and minimization of effects to federally listed as threatened and/or endangered species. Because the USACE proposed permit strategy is not solely related to federally listed as threatened and/or endangered species, and because USACE is not responsible for ensuring avoidance and minimization of these species, USACE has not modified Term 5 as proposed by the commenter.

Response to Comment 46-6

The commenter deemed as appropriate the definition for determining loss of waters of the United States.

This comment is noted.

Response to Comment 46-7

The commenter asserted that "a loss of at least 5.0 acres of waters (including wetlands) should be allowed" for various reasons. USACE Regulations (33 CFR 323.2(h)) require that a general permit authorize only those activities that result in individual and cumulative adverse environmental impacts.

The proposed PGP is intended to avoid unnecessary duplication of regulatory control exercised by Placer County and the City of Lincoln, once they have passed the implementing ordinances and incorporated the requirements of the CARP. However, USACE is responsible for ensuring that those activities authorized under the PGP would result in no more than minimal individual and cumulative adverse environmental consequences. In making this determination, USACE completed an assessment of cumulative impacts on waters of the United States within the Plan Area, identifying the extent of the cumulative loss of potential waters of the United States as a result of past, present, and reasonably foreseeable future activities authorized by USACE. Under the PGP, USACE would not receive notification of proposed activities requiring a Section 404 permit, nor would USACE be conducting an individual review of these activities to ensure they would result in no more than minimal individual or cumulative adverse environmental impacts. Therefore, it is necessary for the PGP to authorize the maximum loss of waters of the United States per single and complete project and cumulatively, that would allow USACE to determine the effects would be no more than individually or cumulatively minimal, after taking into account proposed avoidance and minimization measures, and compensatory mitigation as described in the Plan and CARP. The previous use of expired NWPs authorizing up to 10 acres of loss of waters of the United States is not a factor in determining whether or not the proposed activities under the PGP would result in no

more than minimal individual or cumulative adverse environmental impacts. With the information from the cumulative impact assessment, as well as information in the Plan and CARP, USACE believes the proposed thresholds for loss of waters of the United States, with the proposed changes identified in Response to Comment 15-1, are the maximum to ensure no more than minimal impacts without USACE conducting a case-specific evaluation of the Proposed Action. USACE has determined that activities that would result in a loss of waters of the United States that exceeds those in the PGP would need to be evaluated by USACE on a case-by-case basis, either through the permit strategy (e.g., LOP or SP processes), or through another permitting mechanism. USACE also notes that the proposed PGP would be valid for no more than 5 years, at which time USACE will evaluate whether to re-issue the PGP. Re-issuance of the PGP may include modifications based on the previous use of the PGP. During the evaluation of the PGP, USACE may determine that sufficient information is available to modify (increase or decrease) the proposed loss of waters of the United States, if appropriate. As written, USACE estimates, based on the information obtained in the cumulative impact assessment, that the proposed PGP would authorize more than 80% of proposed activities within the Plan Area, thereby allowing USACE to focus on conducting a case-specific evaluation of activities that may result in more than minimal adverse effects on the aquatic environment.

Response to Comment 46-8

The commenter asserted that the 1.0-acre limitation regarding loss of vernal pool waters of the United States is "unnecessarily restrictive" and favored a loss of at least 5.0 acres of vernal pool habitat. See Response to Comment 46-7, which is applicable to all waters of the United States, including vernal pools.

USACE also notes that cumulative effects that have resulted in degradation of existing vernal pools within the Plan Area do not automatically ensure that filling these vernal pools would result in no more than minimal individual and cumulative adverse effects. In addition, compensatory mitigation does not negate the requirement that USACE comply with the Section 404(b)(1) Guidelines and Public Interest Review requirements, by ensuring activities have been designed to avoid and minimize adverse effects on the aquatic environment to the maximum extent practicable. USACE disagrees with the commenter that sufficient information is available to demonstrate that the loss of 5 acres of vernal pools for each single and complete project would ensure the adverse environmental impacts are no more than minimal.

Response to Comment 46-9

The commenter commented on the allowable loss of vernal pool habitat.

Please see Response to Comments 46-7 and 46-8. While adverse effects on federally listed threatened and/or endangered species, as well as other fish and wildlife species, are an important consideration for USACE in determining the appropriate thresholds for authorization under a general permit, these are not the only factors. In ensuring individual and cumulative impacts are no more than minimal for the issuance of a general permit, USACE must consider the physical, chemical, and biological characteristics of the aquatic environment under the Section 404(b)(1) Guidelines, as well as the Public Interest Review considerations required by USACE regulations at 33 CFR 320.4. In addition to effects on fish, wildlife, and other aquatic organisms, factors evaluated by USACE include, but are not limited to, water quality, aesthetics, substrate, flood hazards, floodplain values, economics, water supply, safety, food and fiber production, and the needs and welfare of the public. After evaluating the effects that would occur from issuance of the proposed PGP, including proposed

avoidance, minimization, and compensatory mitigation, USACE can only issue the PGP if it determines the overall effects would be no more than minimal. USACE has determined it does not have sufficient information to support a determination that the loss of 5 acres of vernal pools for each single and complete project would result in no more than minimal individual or cumulative impacts.

Response to Comment 46-10

The commenter asserted that there should be no limit on the acreage of loss of irrigated wetlands.

USACE recognizes that, in general, irrigated wetlands in existing and active rice fields that are considered to be waters of the United States provide fewer functions and services than natural wetlands within undeveloped areas. Therefore, in the PGP, USACE proposed a higher threshold for the loss of these specific types of waters of the United States than other types of waters of the United States. However, as identified in Responses to Comments 46-7 through 46-9, the information available to USACE does not support a determination that it would be appropriate to eliminate the threshold for the loss of these aquatic resources. The proposed threshold was determined based on information available to USACE, in order to ensure the effects of activities authorized under the PGP would result in no more than minimal individual or cumulative effects, without USACE having to make a case-specific determination. USACE disagrees with the commenter that sufficient information is available to demonstrate that the unlimited loss of these types of waters of the United States would ensure the adverse environmental impacts are no more than minimal.

Response to Comment 46-11

The commenter asserted that there should be no limit on the acreage of loss of “all other waters.”

Please see Responses to Comments 46-7 through 46-10. USACE disagrees with the commenter that "all other waters of the U.S." as identified in term 6(a)(3) of the proposed PGP encompasses only seasonal wetlands. The other types of waters of the United States that may be included under this category include, but are not limited to, streams, rivers, lakes, ponds, perennial wetlands, perennial or seasonal marshes, and seeps. USACE also notes that cumulative effects that have resulted in degradation of existing vernal pools within the Plan Area do not automatically ensure that filling these vernal pools would result in no more than minimal individual and cumulative adverse effects. USACE disagrees with the commenter that sufficient information is available to demonstrate that the unlimited loss of these types of waters of the United States would ensure the adverse environmental impacts are no more than minimal.

Response to Comment 46-12

The commenter asserted that “Some loss of vernal pool waters of the U.S. should be allowed.”

Please see Response to Comment 15-1.

Response to Comment 46-13

The commenter asserted that the limits set on cumulative loss of waters of the United States and of vernal pools would have minimal utility to the regulated public.

USACE disagrees with the commenter that the proposed loss of waters of the Unite States authorized under the PGP would provide minimal utility to the regulated public. USACE determined the proposed threshold under the PGP based on the proposed 50-year loss as identified in the Plan, as well as the information obtained in the cumulative impact assessment, in order to identify a threshold that would ensure no more than minimal individual and cumulative adverse environmental impacts. USACE has modified the proposed threshold to account for proposed activities within the PVSP and backbone infrastructure area, as identified in Response to Comment 15-1. Per USACE regulations (33 CFR 325.2(e)(2)), the PGP will be valid for no more than 5 years. The proposed thresholds would authorize an average loss of 3 acres of vernal pools, and 18 acres of all waters of the United States each year, excluding proposed activities within the PVSP and backbone infrastructure area. The cumulative impact assessment conducted by USACE identified 159 past, present, and reasonably foreseeable future actions that have been/may be authorized by USACE. Of those, 128 would individually meet the proposed thresholds on loss of waters of the United States identified in the Draft PGP. Those 128 projects, which include past and present projects authorized by USACE between 1989 and 2015, and future projects that may be authorized by USACE in the next 5–10 years, cumulatively resulted in the loss of 13.03 acres of vernal pools, and 71.10 acres of all waters of the United States. Therefore, USACE believes it is reasonable to presume that, if activities conducted over a more than 30-year period would fall below the proposed 5-year threshold, that the proposed thresholds are reasonable to ensure utility of the proposed PGP, while also ensuring these activities result in no more than minimal individual and cumulative adverse effects. USACE also notes that during the time the PGP is valid, or prior to the expiration of the PGP, if USACE has sufficient information to determine that greater individual or cumulative thresholds on the PGP would ensure no more than minimal individual or cumulative adverse effects, USACE may modify the PGP, after opportunity for public comment and appropriate review, to allow for higher individual or cumulative thresholds on the loss of waters of the United States.

Response to Comment 46-14

The commenter asserted that the loss of vernal pool allowed would be “virtually un-registerable at a landscape level and can be fully offset.”

Please see Response to Comment 46-14. USACE notes that while 15 acres of vernal pools may encompass only a small fraction of estimated vernal pool complexes, vernal pool complexes, as identified in Table 3-13 of the Plan (and Table 3.3-1 of the EIS/EIR), do not consist solely of vernal pool wetlands, but also encompass other types of aquatic resources, aquatic resources that may not be considered waters of the United States, as well as uplands. Similarly, other resources as identified in Table 3-13 of the Plan do not encompass solely aquatic resources that are waters of the United States. The thresholds identified by USACE in the PGP are solely for aquatic resources considered to be waters of the United States. Using USACE, National Wetland Inventory, and National HD data, in the cumulative impact assessment USACE identified a total of approximately 8,900 acres of potential waters of the United States within the Plan Area. Taking into account compensatory mitigation conducted within the Plan Area, USACE estimated that past, present, and reasonably foreseeable future actions resulted in a net loss of slightly less than 3% of waters of the United States within the Plan Area. While the cumulative impact assessment takes into account reasonably foreseeable future actions, it does not take into account all actions that may occur during the timeframe the PGP is valid, as the identification of reasonably foreseeable future actions was based on only those projects USACE is aware of that may be constructed in the near future. USACE believes the proposed thresholds are sufficient, and appropriate to ensure proposed activities authorized under the PGP

would result in no more than minimal effects, without USACE having to make a case-specific determination.

Response to Comment 46-15

The commenter continued to characterize his assessment of the limits on loss of waters of the United States and vernal pools.

Please see Responses to Comments 46-13 and 46-14.

Response to Comment 46-16

The commenter asked, "What do you do after the total allowed loss is exhausted in 1-3 years under a 50-year PCCP?"

As identified in Response to Comment 46-13, the proposed PGP would be valid for 5 years, unless modified, suspended, or revoked, the maximum time allowed by USACE regulations. The proposed cumulative thresholds are not proposed thresholds over the 50-year term covered by the Plan, but over the 5-year term of the PGP. USACE believes these cumulative thresholds are sufficient and appropriate to allow reasonable development with the Plan Area under the PGP, while ensuring the effects of those activities are no more than minimal.

Response to Comment 46-17

The commenter asserted that the "cumulative loss of waters of the U.S. should allow loss up to at least 1,000 acres of all waters with at least 160 acres of vernal pool waters."

As identified in Response to Comment 46-13, the proposed PGP would be valid for 5 years, unless modified, suspended, or revoked, the maximum time allowed by USACE regulations. The proposed cumulative thresholds are not proposed thresholds over the 50-year term covered by the Plan, but over the 5-year term of the PGP. In addition, this does not include the loss of waters of the United States that may be authorized by USACE under the other permit types identified in the permit strategy, including the proposed RGP for PCWA projects, the LOP procedures, or the SP procedures. A key aspect of the Plan, and one reason USACE determined it appropriate to develop a permit strategy based on the Plan and CARP, is the Stay Ahead Provision as identified in Section 8.4.3, *Stay Ahead Provision*, of the Plan. Authorizing 1,000 acres of waters of the United States and 160 acres of vernal pools within a 5-year time frame would prevent compliance with this provision. USACE believes the proposed cumulative thresholds are sufficient and appropriate to allow reasonable development with the Plan Area under the PGP, while ensuring the effects of those activities are no more than minimal.

Response to Comment 46-18

The commenter asked USACE to "verify when the Section 106 PA is anticipated to be completed and approved."

USACE acknowledges it has conducted initial coordination with the California State Historic Preservation Officer (SHPO) on the preparation of a Programmatic Agreement (PA) for compliance with Section 106 of the National Historic Preservation Act (NHPA) for those activities that would require a Department of the Army (DA) permit under the permit strategy. USACE has not yet

submitted a formal request for the preparation of a PA with the SHPO, and does not have a timeframe for the completion of a PA.

Response to Comment 46-19

The commenter recommended extending the 5-year term of the PGP. As identified in Response to Comment 46-13, the permit duration for an RGP is identified in USACE regulations at (33 CFR 325.2(e)(2)). USACE cannot extend the proposed timeframe of the PGP, as this would be in violation of USACE regulations.

Response to Comment 46-20

The commenter asserted that the RGP should allow a "higher threshold for loss of waters under the authorization of a single and complete project."

USACE developed the proposed RGP for activities proposed by PCWA in coordination with PCWA. During the development of the proposed RGP, USACE asked PCWA to provide an estimate of the individual and cumulative effects of the proposed RGP. PCWA estimated that the proposed loss of waters of the United States per year would be approximately 0.25 acre and over a 5-year period would be approximately 1.25 acres, estimating that between three and five projects would occur per year. The estimated yearly loss and yearly number of projects would result in an estimate that each single and complete project would result in an estimated loss of between 0.05 and 0.08 acre of waters of the United States. The thresholds proposed by USACE are substantially higher than those estimated by PCWA. USACE determined that allowing for higher thresholds than identified by PCWA would allow for additional proposed losses of waters of the United States for unanticipated activities, while still ensuring the effects are no more than minimal. PCWA was provided an opportunity to review and comment on the Draft RGP prior to the USACE public notice. If PCWA identified to USACE that there was a need for increased thresholds, USACE would evaluate the identified needs by PCWA and determine whether or not an increase in thresholds would still ensure no more than minimal individual and cumulative adverse effects. The comment does not provide justification for why higher thresholds would be needed for these activities conducted by PCWA.

Response to Comment 46-21

The commenter stated justification for a recommendation to extend thresholds. See Response to Comment 46-20.

USACE coordinated with PCWA in the development of the proposed thresholds, to identify the needs of PCWA. The thresholds provided would meet the majority of the needs by PCWA, while ensuring no more than minimal effects.

Response to Comment 46-22

The commenter noted support for USACE's thresholds for bank stabilization activities.

This comment is noted.

Response to Comment 46-23

The commenter asserted that the RGP's cumulative limits on loss of waters of the United States and vernal pools is of "minimal utility to PCWA, and ultimately to its ratepayers."

Please see Response to Comment 46-20. USACE coordinated with PCWA in the development of the proposed thresholds in order to identify the needs of PCWA. The thresholds provided would meet the majority of the needs by PCWA, while ensuring no more than minimal effects.

Response to Comment 46-24

The commenter proposed a modification to a distance limit for sediment removal.

Please see Response to Comment 46-20. USACE coordinated with PCWA in the development of the proposed RGP, to identify the needs of PCWA. The comment does not provide information to support a determination that PCWA would need a greater area for the removal of accumulated sediment.

Response to Comment 46-25

The commenter asked USACE to "verify when the Section 106 PA is anticipated to be completed and approved."

Please see Response to Comment 46-18.

Response to Comment 46-26

The commenter recommended extending the 5-year term of the RGP.

Please see Response to Comment 46-19.

Response to Comment 46-27

The commenter inquired about the exclusions for the LOP procedure.

By USACE regulations (33 CFR 325, Appendix B(6)(a)(5)), letters of permission are activities that USACE has determined are not major federal actions significantly affecting the quality of the human environment, and therefore are categorically excluded from NEPA documentation. Section 102(2)(c) of NEPA requires federal agencies prepare an EIS for major federal actions significantly affecting the quality of the human environment. USACE cannot issue LOP procedures for those activities that would require the preparation of an EIS, as that would violate USACE regulations. The determination on whether or not the proposed activity would result in significant impacts on the human environment is made after taking into consideration mitigation (avoid, minimize, rectify, reduce/eliminate, compensate). In making this determination, USACE would follow existing laws, regulations, policies, and guidance, including the January 14, 2011, guidance memorandum issued by the Council on Environmental Quality to the heads of federal departments and agencies, *Subject: Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact.*

Response to Comment 46-28

The commenter raised various points related to conflicts between different regulatory requirements.

While USACE has developed a draft permit strategy to align closely with the Plan and CARP, the development of this permit strategy does not obviate the need for USACE to comply with its laws and regulations. USACE must ensure activities requiring authorization under Section 404 of the CWA are in compliance with the USEPA's Section 404(b)(1) Guidelines, including ensuring the proposed discharge in in compliance with all restrictions on discharge identified in the 404(b)(1) Guidelines. The first restriction on discharge identified in the 404(b)(1) Guidelines, relates avoiding the proposed discharge of fill material into waters of the United States to the maximum extent practicable. Specifically, the 404(b)(1) Guidelines state (40 CFR 230.10(a)) the following: "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences." While all forms of mitigation, including compensatory mitigation, are taken into account by USACE in determining the overall effects of proposed activities, compensatory mitigation is not taken into account by USACE in determining whether or not practicable alternatives to the proposed discharge exist. Without information submitted by the applicant, USACE would not be able to determine whether or not a proposed discharge is in compliance with the 404(b)(1) Guidelines. As identified in the 404(b)(1) Guidelines (40 CFR 230.12(a)(3)(iv), if there is not sufficient information to make a reasonable judgment as to whether the proposed discharge will comply with the 404(b)(1) Guidelines, USACE would be required to deny the permit.

Under the LOP procedures, applicants would be required, in the permit application, to provide a description of how impacts to aquatic resources and associated functions have been avoided and minimized to the maximum extent practicable on the project site, as well as provide information, in report form, concerning onsite practicable alternatives and the relative environmental impacts of those alternatives. The information needed would be commensurate with the proposed impacts on waters of the United States. If sufficient justification is provided by the applicant, compliance with the HCP may be a factor in the determination of practicability. However, USACE is unable to control what fees may be required under the Plan, even for those areas where waters of the Unite States would be avoided (although see Plan Section 6.3.1.3.1 *Permanent Effect Avoidance,* for information about how Plan fees apply to avoided areas). USACE may also determine if avoided waters of the United States would be indirectly affected by the proposed action, and require additional compensatory mitigation. In addition, USACE is not interested in evaluating alternatives that would result in the avoidance of isolated waters that would be indirectly affected by surrounding development, as these avoidance areas would result in similar overall adverse effects on the aquatic ecosystem as the Proposed Action. USACE's focus for onsite avoidance of waters of the United States is on modifying proposed avoidance areas to minimize adverse effects on waters of the United States, and further avoiding or minimizing direct and indirect adverse effects on jurisdictional streams and their adjacent wetlands. Therefore, onsite alternatives will be limited to: (1) the no action alternative; (2) alternatives that modify proposed avoidance areas to further avoid or minimize adverse effects to waters of the United States; and (3) alternatives that would result in further avoidance and/or minimization of adverse direct or indirect effects on jurisdictional streams and their adjacent wetlands. In order to ensure applicants understand USACE's intent regarding onsite alternatives for the proposed LOP, USACE has modified page 2 and Section 2(l) of the *LOP*

Procedure section of the LOP procedures (page 5), to clarify expectations for onsite alternatives under the LOP procedures. Applicants should work with USACE, as soon as possible, in identifying specific waters of the United States meeting those three focus areas identified above, as well as the specific information needs for onsite alternatives under either the LOP or SP procedures. Under the USACE permit strategy, all activities must comply with the Plan and CARP. Alternatives that do not comply with the Plan or CARP would therefore not be practicable alternatives.

Response to Comment 46-29

The commenter discussed permit duration periods.

Because LOP procedures are not an authorization, but procedures that may be used in the evaluation of an LOP, unlike the Draft PGP and RGPs, the LOP procedures do not have a timeframe for their validity. As identified in Response to Comment 46-19, USACE is unable to extend the timeframe for the proposed PGPs and RGPs. While the proposed LOP procedures do not have a specific timeframe, USACE intends to periodically evaluate the LOP procedures, including their utility and use, and make modifications, as necessary. USACE anticipates that this evaluation will occur, at a minimum, during the timeframe of evaluation of the PGP and RGPs for re-issuance.

Comment Letter 47—U.S. Environmental Protection Agency, Region IX

Response to Comment 47-1

The commenter noted USEPA's collaboration with USFWS and other collaborating agencies throughout PCCP development. The commenter requested that USFWS consult with the agencies and entities with monitoring expertise when implementing the PCCP activities that may affect aquatic resources.

No response to this comment is required.

Response to Comment 47-2

The commenter requested a copy of the final environmental document when it is released for public review.

A copy of the final EIS/EIR will be sent to the commenter.

Comment Letter 48—Albert Scheiber

Response to Comment 48-1

The commenter expressed concerns about impacts the PCCP would have on his property, located in the Lincoln Village 5 development, and noted differences between the EIS/EIR analysis and that of City of Lincoln's General Plan EIR. Responses to Comments 48-2 through 48-17 address the commenter's specific concerns.

Response to Comment 48-2

The commenter requested more than 60 days for review and comment.

Copies of the public review Plan, CARP, EIS/EIR, and all appendices were made available for 60 days (and still are available for public review and inspection) online on the County's website and as printed copies viewable during normal business hours at the Placer County Community Development Resource Agency, public libraries, and other locations identified in the lead agency NOAs.

The NOA for the final EIS/EIR will be posted in the Federal Register and with the State Clearinghouse, and the final documents will be available electronically and locally for public inspection for an additional 30 days prior to consideration for adoption. In addition, the Plan and CARP will continue to be open to public review and comment through the local public hearing and adoption process that will conclude once a decision is rendered by the Board of Supervisors, as well as other Permit Applicants (City of Lincoln, PCWA, and South Placer Regional Transportation Authority), and a Record of Decision is issued by the applicable state/federal agencies.

Response to Comment 48-3

The commenter asked when people who own property that has been designated as "open space" for the PCCP by the City of Lincoln's Village 5 EIR would be compensated for their properties.

For the purposes of the PCCP, any City or County general plan or zoning designation as "open space" does not require land to be dedicated to the PCCP's Reserve System. The PCCP includes separate provisions for adding lands to the Reserve System either through fee title or conservation easement purchase. Lands can only be added to the PCCP Reserve System if they are proposed for inclusion in the PCCP Reserve System and are approved by the PCA and the state and federal wildlife agencies as described in Plan Section 8.4, *Establishing the Reserve System*. As stated in that section, "Purchase of land (fee title or conservation easement) from willing sellers" as one of six means of assembling the Reserve System. Section 8.4.2.6, *Step 6: Purchase Offer*, states, "The PCA will develop purchase offers and negotiate price and other terms and conditions with property owners. For conservation easements, the PCA will reach agreement on easement terms and any necessary management objectives prior to purchase."

Further, Section 8.4.9.1, *General Guidelines*, states that all conservation easements will "be voluntarily offered by the fee title owner" and "be negotiated on a case-by-case basis between the landowner and the PCA." Eminent domain is not proposed nor included in the authorities of the proposed Joint Powers Formation documents or the Plan.

Response to Comment 48-4

The commenter asked what happens to water rights when the Village 5/PCCP is "forced upon [them] by the City."

The effects of development previously approved by the City of Lincoln would occur with or without the PCCP. The effects of the Lincoln Village 5 Specific Plan were addressed in the Lincoln Village 5 Specific Plan EIR (SCH 2014052071), in which groundwater levels, supply, and recharge were addressed in detail. See also Response to Comment Letter 29 and Response to Comment Letter 41.

Response to Comment 48-5

The commenter asked what would occur if a property is in the acquisition area but the landowner wishes to develop it.

The PCCP is only applicable to land use categories, programs, permits, and projects listed in Plan Chapter 2, *Covered Activities*. If owners of properties within the RAA designation sought to develop consistent with existing general plan or zoning designations—such as a single family residential home on an existing 20-acre parcel as allowed within the Residential-Agricultural zoning district—the required grading and building permits would be a PCCP Covered Activity subject to Plan Chapter 6, *Conditions on Covered Activities*, and applicable Development Fees associated with the project. However, if the owner of the same existing 20-acre property sought a general plan and zoning amendment to a more intensive land use—such as Residential-Single Family 1 acre and a 20-lot subdivision map—the project would not be able to be covered by the PCCP for state and federal endangered species and related permits. In addition, the project would be inconsistent with an adopted HCP/NCCP and would not likely be capable of meeting the requirements for findings under CEQA or land use policies in order to be approved by the Board of Supervisors or the City Council of Lincoln.

However, it is important to note that the PCCP is not a land use plan; it is a species and habitat conservation plan that was prepared in accordance with the federal ESA and the NCCPA. The PCCP was developed to address the impacts on species and habitat based on growth projections and land use plans and ordinances prepared and approved by the City and the County pursuant to California law.

Response to Comment 48-6

The commenter asked whether there would be private, for-profit agricultural operations (covered under the PCCP or not) in the acquisition area if the Plan is implemented.

Please refer to Plan Section 5.2.6.5*, Agriculture and Other Open Space Objective,* AO1.1: "Since agriculture is an important component of the economy and cultural of Placer County, the Plan seeks to achieve a sustainable balance of agriculture and conservation within the landscape." The Plan includes provisions to conserve agriculture independent of the effects of Covered Activities: "Protect at least 8,240 acres of agricultural lands, at least 2,000 acres of the 8,240 acres will be rice, the remaining 6,240 acres will not be required to be maintained in any particular crop type, and therefore will not count toward meeting the USFWS federal permit requirements."

While routine and ongoing agricultural activities would not be covered by the Plan, it is anticipated that under current assumptions, about 12,000 acres of grassland and woodlands would be protected

by conservation easements allowing grazing as a management tool, and another 10,000 acres of the Reserve System held in fee title is conservatively assumed to depend on commercial grazing in perpetuity. In fact, the Plan needs ranching to continue because of the numerous management requirements of the Plan that require grazing. Furthermore, permanent protection of these ranchland resources, ensuring that they are not converted for urban/suburban development, has benefit to ongoing ranchland and other agricultural operations by eliminating potential land use conflicts.

Also see Response to Comment Letter 43.

Response to Comment 48-7

The commenter asked whether rice farming is for snakes.

The PCCP defines rice as a semi-natural community (draft Plan page 3-28) that has been intensively managed for agricultural uses with soil disturbance and planting that may retain habitat values for native wildlife. Rice cultivation with flood irrigation provides an important substitute for wetlands during the summer and provides habitat for many aquatic plants, insects, crustaceans, small mammals, waterfowl, and amphibians such as giant garter snake, which is a Covered Species. On September 28, 2017, USFWS approved the recovery plan for the giant garter snake (U.S. Fish and Wildlife Service 2017), designating areas west of Highway 65 within the American Basin Recovery Unit as essential to the recovery of the species. Because road, bridge, water lines, canals, and other public and private projects that are Covered Activities under the PCCP may result impacts on the species, it is a Covered Species for the PCCP. The objective of the PCCP for giant garter snake is to protect agricultural lands including at least 2,000 acres of rice to support the species in the far western portion of the Plan Area (Plan Section 5.2.7.5, *Giant Garter Snake*).

Response to Comment 48-8

The commenter asked where water would come from to support the PCCP. Since the comment is not specific it is reasonably assumed to be related to the prior comment regarding rice.

The PCCP Cost Model (Plan Appendix L) estimates costs associated with water for rice production (and other agriculture and grazing) consistent with recent agriculture raw water costs from PCWA, of which the Plan proposes to pay half and the rice grower to pay the balance as part of the typical per acre cost to grow rice. In the future, water would be purchased as it is currently—from PCWA, South Sutter Irrigation District, or NID—or supplied from groundwater subject to requirements of state law and the WPGSA.

Response to Comment 48-9

The commenter asked what is in the PCCP for property owners who do not want to develop nor participate in the PCCP.

The PCCP is only applicable to Covered Activities listed in Plan Chapter 2, *Covered Activities*. Routine and ongoing agricultural activities are not covered by the Plan (Section 2.7, *Activities not Covered by this Plan*). Therefore, if an existing agricultural operation continued its operation without seeking approvals from the City or County for permits or development that would result in the conversion of land (e.g., grassland converted into a residential building subject to grading and building permits), the ongoing land use would not be subject to the PCCP. If a landowner neither wishes to develop nor

sell land or a conservation easement in the RAA, and continues to own and manage lands without need for PCCP coverage or permits, there would be no need or obligation to confer or receive benefit from the PCCP aside from the direct and indirect benefits resulting from conserving open space, habitat, agriculture, and other similar related objectives of the Plan.

It is important to note, however, that activities not covered by the PCCP may still be—and often in cases are—subject to state and federal laws and regulations for which the PCCP is designed to provide coverage and streamlined permitting processes.

Response to Comment 48-10

The commenter asked about the consequences of people in the acquisition area who do not want to participate in the PCCP.

As noted in Response to Comment 48-2, lands added to the PCCP's Reserve System in fee title or conservation easement are subject to review and approval by the state and federal wildlife agencies after price and terms are negotiated with landowners. It is anticipated that lands would continue to be conserved in response to growth over the next 50 years with or without the PCCP through Placer Legacy, the state's Sustainable Agricultural Land Conservation program, and many other similar programs. However, the PCCP provides a comprehensive landscape-level conservation plan designed to provide better connectivity and consistency in their management.

If lands within the RAA were not available to support the goals and objectives of the conservation strategy, then the PCCP would not meet its objectives, and the permits issued by the state and federal wildlife agencies would likely be suspended.

Responses to Comments 48-11 and 48-12

The commenter asked what affects the PCCP would have on groundwater and surface water. The EIS/EIR addresses impacts on water resources in Section 4.5, *Hydrology and Water Quality*.

As discussed therein, the proposed Plan would not result in a demand for water; while Covered Activities could result in an increased demand, the environmental effects were previously evaluated in the Placer County and City of Lincoln general plan EIRs, concluding that impacts on water supply are less than significant. Several policies are in place to ensure that the Covered Activities do not deplete groundwater supply or interfere with recharge. Additionally, the PCCP contains several conservation measures (see EIS/EIR Chapter 2, *Proposed Action and Alternatives*, Table 2-13) that would provide beneficial changes to groundwater recharge.

Similarly, the EIS/EIR concludes that the proposed Plan would have a less than significant impact on surface water quality, based on the analysis presented in the EIRs for the Placer County and City of Lincoln general plans.

The comment does not include a question or comment about the adequacy of this analysis. No further response to this comment is required.

Response to Comment 48-13

The commenter asked how implementation of the PCCP would affect the commenter's Williamson Act contract.

Refer to Responses to Comments 48-2, 48-8, and 48-9. Properties under Williamson Act contract would be subject to the same rules and procedures under the PCCP as any other property.

Additionally, Placer County's Williamson Act Program's Section 6.10, *Establishment of Williamson Act Lands Program,* states "Placement of a Williamson Act Contract does not preclude the placement of a conservation easement on the same land, as long as such easements recognize the agricultural nature of the property and do not preclude such activities."

Response to Comment 48-14

The commenter asked about the Jump Start properties and whether there is an opportunity to stop the Plan from moving forward or whether it is a "done deal."

The Jump Start provisions and properties are identified in Plan Section 8.4.4, *Jump Start*, and Plan Table 8-1. Lands that have been acquired by the County or that the County has participated in funding may be counted toward meeting the PCCP's conservation objectives. This includes those properties listed in Plan Table 8-1 that have been previously approved by the state and federal wildlife agencies to be added to the Reserve System. With or without the PCCP, the properties included in Plan Table 8-1 also meet other Placer Legacy objectives addressing open space, agriculture, natural resources, recreation, and other ongoing actions implemented by multiple County departments that complement and facilitate successful implementation if and when the PCCP is adopted.

The adoption of the PCCP and permitting by the state and federal agencies is not complete and the Final EIS/EIR, Final Plan, and Final CARP will continue to be open to public review and comment through the public hearing and adoption process that will conclude once a decision is rendered by the Board of Supervisors, as well as other Permit Applicants (City of Lincoln, Placer County Water Agency, South Placer Regional Transportation Authority), and a Record of Decision is issued by the applicable state/federal agencies.

Response to Comment 48-15

The commenter asked why the EIS/EIR relies on Lincoln's Village 5 project/EIR to cover some of the necessary studies.

It is assumed the commenter is referring to the *City of Lincoln General Plan EIR*, which was last updated in 2008. The EIR evaluates the impacts of the City's 2050 general plan, which includes the Lincoln Village 5 development. As stated on page 4-2 in Chapter 4, *Environmental Consequences*, of the EIS/EIR, CEQA and NEPA allow incorporation by reference of existing documents used to prepare each resource chapter. The EIS/EIR incorporates by reference information or analysis from several existing plans and supporting environmental documents that were developed concurrently with the PCCP planning process, including the *City of Lincoln General Plan EIR* and subsequent updates. A brief summary of the *City of Lincoln General Plan EIR* and subsequent updates are provided on pages 4-3 through 4-6 of the EIS/EIR in accordance with requirements of CEQA and NEPA.

Response to Comment 48-16

The commenter asked about the PCCP's impacts on air quality.

The PCCP's impacts on air quality are evaluated in Section 4.2, *Air Quality, Greenhouse Gases, and Climate Change*, of the EIS/EIR. As discussed therein, implementation of the PCCP would generally result in less than significant impacts on air quality in the study area, whereas emissions resulting from Covered Activities would generally result in significant and unavoidable impacts on air quality in the study area. The comment does not include a question or comment about the adequacy of this analysis. No further response to this comment is required.

Response to Comment 48-17

The commenter asked why the Lincoln H.S. Farm is being counted toward the Lincoln Village 5 open space and dedicated to the PCCP with no compensation.

For the purposes of the PCCP, the Lincoln H.S. Farm (also referred to as the *West Placer Schools Conservation Bank*) is an Existing Protected Area (Plan Section 5.3.1.3.5, *The Role of Existing Protected Areas in the Conservation Strategy*) and listed in Plan Appendix H, *Existing Open Space Lands*. Although it supports the PCCP's overall conservation strategy for developing the future PCCP Reserve System and can be foundational in establishing a large, interconnected landscape-level Reserve System in western Placer County (Plan Section 5.3.1.4, *Landscape-Level Reserve Design*), it would not count toward meeting the PCCP's commitment to protect lands for the Reserve System unless it is proposed to be added; is consistent with PCCP Reserve System requirements for management and monitoring, etc.; and is approved by the PCA and state/federal agencies for inclusion in the PCCP's Reserve System.

Comment Letter 49—Barton Ruud

Response to Comment 49-1

The commenter stated concerns with the prior open space acquisitions and easements in the Big Hill Area and with the level of current and future proposed recreation and trail expansion. The comment notes specifically the descriptions of the Big Hill Area, Taylor Ranch, and Harvego Bear River Preserve on pages 4-17 and 4-18 in Chapter 4, *Environmental Consequences*, of the draft EIS/EIR.

The referenced section provides an overview of some of the lands protected in the Plan Area that occurred in advance of the Plan including the properties referenced in the comment. This discussion is provided in accordance with NEPA and CEQA, which require an environmental document to include a description of the affected environment/existing setting that composes the baseline for the evaluation of effects/impacts that would result from the proposed action/project. The referenced section in the EIS/EIR presents an accurate description of the existing setting; therefore, no revisions are required.

The Plan does include one property within the Big Hill Area, the Harvego Bear River Preserve, as a potential Jump Start property (see Plan Section 8.4.4, *Jump Start*). The other noted properties are not included as Jump Start properties because the County does not have the same rights to record conservation easements on those properties as it does for the Harvego Bear River Preserve. The County and Wildlife Agencies recognize that Harvego and Hidden Falls have existing trails and related recreation infrastructure that are excluded from the Jump Start acreage credit. In order to count the balance of the acreage of these properties toward the Plan commitments, a conservation easement and terms of a Reserve System Management Plan, including limits on recreation and trail development, would need to be developed and recorded on the lands.

See also Responses to Comment Letters 21 and 31 for responses to comments regarding recreation on future reserve lands.

Response to Comment 49-2

The commenter stated that willing seller parties likely had no understanding and a lack of communication about the implications of public use on the same properties noted in Comment 49-1.

This comment is noted. However, the comment does not pertain to the EIS/EIR. No response to this comment is required.

Response to Comment 49-3

The commenter requested that statements regarding passive recreation on lands noted in Comment 49-1 be stricken from the PCCP.

As noted in Response to Comment 49-1, CEQA and NEPA require that the environmental setting disclose information regarding existing baseline conditions including properties already conserved in the Plan Area, in this case including the properties noted in Comment 49-1. These acts also require existing and potential future environmental effects of such activities and uses be disclosed to decision-makers and the public. The EIS/EIR evaluates the environmental impacts associated with the implementation of the PCCP including the effects of recreational use of reserve lands (see

Chapter 4, Section 4.10, *Recreation*). Recreational use of conservation lands that have been protected through the initiatives of the Placer Land Trust, non-participating cities, or conservation organizations with no affiliation to the PCCP are not subject to review by this EIS/EIR. The exception is for those lands that are held by Placer Land Trust that are proposed for enrollment into the Reserve System (e.g., Harvego Bear River Preserve owned by Placer Land Trust).

The lead agencies agree that lessons learned from prior conservation actions by the County and other third parties should not be lost. This is the primary reason limits on recreational use and trails are included in the Plan. See Plan Section 6.3.6.1.1, *Restrictions on Recreational Uses in Future Reserves Acquired during Plan Implementation*; Section 6.3.6.1.2, *New Trail Design and Use Standards for Future Reserves*; and Section 6.3.6.2, *Reserve Management Condition 2, Recreation Component of Reserve Unit Management Plans*; these three sections, in addition to the other Conditions on Covered Activities, provide a comprehensive set of standards that would limit the effects of the limited amount of recreational activities that are allowed in the Reserve System. Additional mitigation requirements may be imposed through any discretionary approval by the County/City, PCA, or Wildlife Agencies for a wide range of environmental effects unrelated to the PCCP (e.g., traffic, noise, land use compatibility, etc.).

Landowners interested in conserving their lands for agricultural and/or species and habitat may exclude trails or other recreational uses from the terms of the conservation easements.