Appendix B. AERMOD Results and Input

Plant Boundary Receptor Maximum

Janus Solar and Battery Strorage Project- DPM
Met data: Oroville 2015-2019

DPM - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.01018	ug/m^3	562944.67	4328278.59	94.26	0.00	780.04	
ANNUAL		0.01018	ug/m^3	562964.61	4328278.64	94.34	0.00	780.04	
ANNUAL		0.01018	ug/m^3	563044.38	4328278.80	94.43	0.00	674.75	

Sensitive Receptor Summary

Janus Solar and Battery Strorage Project- DPM
Met data: Oroville 2015-2019

DPM - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.00209	ug/m^3	MEIR	562162.00	4326589.00	102.86	0.00	793.04	
ANNUAL		0.00228	ug/m^3	MEIR	563523.00	4326392.00	94.59	0.00	793.04	
ANNUAL		0.00131	ug/m^3	MEIR	561352.00	4328174.00	96.10	0.00	793.04	
ANNUAL		0.00055	ug/m^3	MEIR	564143.00	4330100.00	63.38	0.00	63.38	
ANNUAL		0.00017	ug/m^3	MEIW	564144.00	4333548.00	46.41	0.00	46.41	
ANNUAL		0.00007	ug/m^3	MEIW	570497.00	4332064.00	32.79	0.00	32.79	
ANNUAL		0.00016	ug/m^3	MEIW	571703.00	4326731.00	50.36	0.00	50.36	
ANNUAL		0.00006	ug/m^3	SR	572581.00	4333193.00	30.89	0.00	30.89	
ANNUAL		0.00005	ug/m^3	SR	572606.00	4334093.00	28.18	0.00	28.18	
ANNUAL		0.00005	ug/m^3	SR	572804.00	4334125.00	27.15	0.00	27.15	

```
** Lakes Environmental AERMOD MPI
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 8/2/2024
** File: C:\Users\s.sridharan\Documents\CEQA\Janus Solar\Janus Solar_DPM\Janus
Solar_DPM.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE Janus Solar and Battery Strorage Project- DPM
   TITLETWO Met data: Oroville 2015-2019
   MODELOPT DFAULT CONC
   AVERTIME ANNUAL
   POLLUTID DPM
   RUNORNOT RUN
   ERRORFIL "Janus Solar_DPM.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA1       AREAPOLY   562147.908  4328274.802       93.750
** Source Parameters **
   SRCPARAM PAREA1       1.7455E-09     2.550        10     2.372
   AREAVERT PAREA1       562147.908 4328274.802 564537.369 4328278.390
   AREAVERT PAREA1       564530.475 4327115.277 564316.757 4327122.477
   AREAVERT PAREA1       564216.056 4327043.973 564039.794 4327042.743
   AREAVERT PAREA1       563860.682 4326831.900 562907.292 4326682.873
   AREAVERT PAREA1       562916.414 4326602.720 562135.239 4326621.559

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 2"
** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT PAREA1       HRDOW 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "Janus Solar_DPM.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE "..\Met data\2015-2019 Aermet Data Oroville.SFC"
   PROFFILE "..\Met data\2015-2019 Aermet Data Oroville.PFL"
   SURFDATA 93210 2015
   UAIRDATA 23230 2015 OAKLAND/WSO_AP
   PROFBASE 33.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
** Auto-Generated Plotfiles
   PLOTFILE ANNUAL ALL "JANUS SOLAR_DPM.AD\AN00GALL.PLT" 31
   SUMMFILE "Janus Solar_DPM.sum"
OU FINISHED
```

```
  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            1 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      85       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                           ***        06:53:13

                                      PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                                             ***     MODEL SETUP OPTIONS SUMMARY
  ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses RURAL Dispersion Only.
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Assumes No FLAGPOLE Receptor Heights.
```

```
     * The User Specified a Pollutant Type of: DPM

 **Model Calculates ANNUAL Averages Only

 **This Run Includes:      1 Source(s);       1 Source Group(s); and    5643
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:      0 VOLUME source(s)
                 and:      1 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                 and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  19191

 **Output Options Selected:
          Model Outputs Tables of ANNUAL Averages by Receptor
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing
Hours
                                                                 b for Both Calm
and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    33.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      4.1 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:   Janus Solar_DPM.err
```

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
PAREA1	0	0.17455E-08	562147.9	4328274.8	93.8	2.55	10	2.37	NO	HRDOW

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	PAREA1 ,

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY

OF WEEK (HRDOW) *

 SOURCE ID = PAREA1   ; SOURCE TYPE = AREAPOLY :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .1000E+01
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .1000E+01   18 .1000E+01   19 .1000E+01   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .1000E+01   18 .1000E+01   19 .1000E+01   20 .1000E+01   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .1000E+01   18 .1000E+01   19 .1000E+01   20 .1000E+01   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                    (METERS)

     (562162.0, 4326589.0,   102.9,   793.0,   0.0);   (563523.0,
4326392.0,   94.6,   793.0,   0.0);
     (561352.0, 4328174.0,   96.1,   793.0,   0.0);   (564143.0,
4330100.0,   63.4,   63.4,   0.0);
     (564144.0, 4333548.0,   46.4,   46.4,   0.0);   (570497.0,
4332064.0,   32.8,   32.8,   0.0);
     (571703.0, 4326731.0,   50.4,   50.4,   0.0);   (572581.0,
4333193.0,   30.9,   30.9,   0.0);
     (572606.0, 4334093.0,   28.2,   28.2,   0.0);   (572804.0,
4334125.0,   27.2,   27.2,   0.0);

```
     ( 562111.6, 4326586.0,     102.8,     793.0,       0.0);         ( 562211.6,
4326586.0,     102.5,     793.0,       0.0);
     ( 562311.6, 4326586.0,     101.9,     793.0,       0.0);         ( 562411.6,
4326586.0,     101.8,     793.0,       0.0);
     ( 562511.6, 4326586.0,     101.2,     793.0,       0.0);         ( 562611.6,
4326586.0,     100.1,     793.0,       0.0);
     ( 562711.6, 4326586.0,      99.6,     793.0,       0.0);         ( 562811.6,
4326586.0,     101.6,     793.0,       0.0);
     ( 562911.6, 4326586.0,     100.1,     793.0,       0.0);         ( 563011.6,
4326586.0,     110.8,     793.0,       0.0);
     ( 563111.6, 4326586.0,     106.9,     793.0,       0.0);         ( 563211.6,
4326586.0,     109.2,     793.0,       0.0);
     ( 563311.6, 4326586.0,     102.7,     793.0,       0.0);         ( 563411.6,
4326586.0,      99.7,     793.0,       0.0);
     ( 563511.6, 4326586.0,     106.3,     793.0,       0.0);         ( 563611.6,
4326586.0,     104.4,     793.0,       0.0);
     ( 563711.6, 4326586.0,      96.0,     793.0,       0.0);         ( 563811.6,
4326586.0,      94.1,     793.0,       0.0);
     ( 563911.6, 4326586.0,     105.1,     793.0,       0.0);         ( 564011.6,
4326586.0,      95.0,     793.0,       0.0);
     ( 564111.6, 4326586.0,      82.7,     793.0,       0.0);         ( 564211.6,
4326586.0,      81.0,     793.0,       0.0);
     ( 564311.6, 4326586.0,      82.0,     793.0,       0.0);         ( 564411.6,
4326586.0,      83.9,     137.2,       0.0);
     ( 564511.6, 4326586.0,      83.0,     137.2,       0.0);         ( 562111.6,
4326686.0,     102.3,     793.0,       0.0);
     ( 563011.6, 4326686.0,      99.2,     793.0,       0.0);         ( 563111.6,
4326686.0,      95.8,     793.0,       0.0);
     ( 563211.6, 4326686.0,      97.6,     793.0,       0.0);         ( 563311.6,
4326686.0,     102.9,     793.0,       0.0);
     ( 563411.6, 4326686.0,      92.6,     793.0,       0.0);         ( 563511.6,
4326686.0,     102.6,     793.0,       0.0);
     ( 563611.6, 4326686.0,      98.1,     793.0,       0.0);         ( 563711.6,
4326686.0,     105.8,     793.0,       0.0);
     ( 563811.6, 4326686.0,     106.8,     793.0,       0.0);         ( 563911.6,
4326686.0,     104.3,     793.0,       0.0);
     ( 564011.6, 4326686.0,      93.1,     793.0,       0.0);         ( 564111.6,
4326686.0,      82.6,     793.0,       0.0);
     ( 564211.6, 4326686.0,      80.5,     793.0,       0.0);         ( 564311.6,
4326686.0,      80.0,     780.0,       0.0);
     ( 564411.6, 4326686.0,      79.0,     136.7,       0.0);         ( 564511.6,
4326686.0,      78.6,     137.2,       0.0);
     ( 562111.6, 4326786.0,     101.4,     793.0,       0.0);         ( 563611.6,
4326786.0,      87.7,     793.0,       0.0);
     ( 563711.6, 4326786.0,      86.0,     793.0,       0.0);         ( 563811.6,
4326786.0,      85.1,     793.0,       0.0);
     ( 563911.6, 4326786.0,      84.4,     793.0,       0.0);         ( 564011.6,
4326786.0,      83.2,     793.0,       0.0);
     ( 564111.6, 4326786.0,      81.9,     793.0,       0.0);         ( 564211.6,
4326786.0,      80.8,     793.0,       0.0);
```

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     ( 564311.6, 4326786.0,      79.9,     780.0,       0.0);         ( 564411.6,
4326786.0,      78.9,      78.9,       0.0);
     ( 564511.6, 4326786.0,      78.1,      78.1,       0.0);         ( 562111.6,
4326886.0,     100.7,     793.0,       0.0);
     ( 563911.6, 4326886.0,      83.8,     793.0,       0.0);         ( 564011.6,
4326886.0,      82.9,     793.0,       0.0);
     ( 564111.6, 4326886.0,      82.2,     793.0,       0.0);         ( 564211.6,
4326886.0,      81.4,     780.0,       0.0);
     ( 564311.6, 4326886.0,      80.2,      80.2,       0.0);         ( 564411.6,
4326886.0,      79.1,      79.1,       0.0);
     ( 564511.6, 4326886.0,      78.3,      78.3,       0.0);         ( 562111.6,
4326986.0,     100.1,     793.0,       0.0);
     ( 564011.6, 4326986.0,      82.7,     793.0,       0.0);         ( 564111.6,
4326986.0,      81.8,     780.0,       0.0);
     ( 564211.6, 4326986.0,      80.9,      97.9,       0.0);         ( 564311.6,
4326986.0,      80.0,      80.0,       0.0);
     ( 564411.6, 4326986.0,      79.0,     102.7,       0.0);         ( 564511.6,
4326986.0,      78.2,     102.7,       0.0);
     ( 562111.6, 4327086.0,      99.5,     793.0,       0.0);         ( 564311.6,
4327086.0,      79.5,     104.7,       0.0);
     ( 564411.6, 4327086.0,      78.1,     104.7,       0.0);         ( 564511.6,
4327086.0,      79.3,     104.7,       0.0);
     ( 562111.6, 4327186.0,      98.8,     793.0,       0.0);         ( 562111.6,
4327286.0,      97.9,     793.0,       0.0);
     ( 562111.6, 4327386.0,      97.4,     793.0,       0.0);         ( 562111.6,
4327486.0,      96.8,     793.0,       0.0);
     ( 562111.6, 4327586.0,      96.4,     793.0,       0.0);         ( 562111.6,
4327686.0,      94.3,     793.0,       0.0);
     ( 562111.6, 4327786.0,      93.6,     793.0,       0.0);         ( 562111.6,
4327886.0,      93.0,     793.0,       0.0);
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                          ***        06:53:13

                                    PAGE   6
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                                                 *** DISCRETE CARTESIAN RECEPTORS ***
                                               (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                           (METERS)

     ( 562111.6, 4327986.0,      92.5,     793.0,       0.0);         ( 562111.6,
4328086.0,      94.0,     793.0,       0.0);
     ( 562111.6, 4328186.0,      92.9,     793.0,       0.0);         ( 562111.6,
4328286.0,      93.9,     793.0,       0.0);
     ( 562211.6, 4328286.0,      93.8,     793.0,       0.0);         ( 562311.6,
4328286.0,      94.7,     793.0,       0.0);
     ( 562411.6, 4328286.0,      94.2,     793.0,       0.0);         ( 562511.6,
4328286.0,      92.2,     793.0,       0.0);
```

```
     ( 562611.6, 4328286.0,      93.7,     793.0,       0.0);         ( 562711.6,
4328286.0,      94.3,     793.0,       0.0);
     ( 562811.6, 4328286.0,      94.9,     780.0,       0.0);         ( 562911.6,
4328286.0,      94.4,     780.0,       0.0);
     ( 563011.6, 4328286.0,      94.7,     674.8,       0.0);         ( 563111.6,
4328286.0,      94.6,     662.3,       0.0);
     ( 563211.6, 4328286.0,      94.5,     662.3,       0.0);         ( 563311.6,
4328286.0,      95.4,      95.4,       0.0);
     ( 563411.6, 4328286.0,      95.1,      95.1,       0.0);         ( 563511.6,
4328286.0,      97.7,      97.7,       0.0);
     ( 563611.6, 4328286.0,      95.6,      95.6,       0.0);         ( 563711.6,
4328286.0,      98.0,      98.0,       0.0);
     ( 563811.6, 4328286.0,      95.1,     102.3,       0.0);         ( 563911.6,
4328286.0,      95.5,      95.9,       0.0);
     ( 564011.6, 4328286.0,      88.8,     101.5,       0.0);         ( 564111.6,
4328286.0,      86.3,     103.2,       0.0);
     ( 564211.6, 4328286.0,      87.9,      87.9,       0.0);         ( 564311.6,
4328286.0,      91.9,      91.9,       0.0);
     ( 564411.6, 4328286.0,      89.0,      93.3,       0.0);         ( 564511.6,
4328286.0,      85.6,     110.6,       0.0);
     ( 560111.6, 4324586.0,     357.5,     793.0,       0.0);         ( 560211.6,
4324586.0,     334.7,     793.0,       0.0);
     ( 560311.6, 4324586.0,     306.8,     793.0,       0.0);         ( 560411.6,
4324586.0,     287.2,     793.0,       0.0);
     ( 560511.6, 4324586.0,     265.7,     849.1,       0.0);         ( 560611.6,
4324586.0,     248.4,     849.1,       0.0);
     ( 560711.6, 4324586.0,     200.9,     849.1,       0.0);         ( 560811.6,
4324586.0,     166.1,     849.1,       0.0);
     ( 560911.6, 4324586.0,     158.9,     849.1,       0.0);         ( 561011.6,
4324586.0,     152.9,     849.1,       0.0);
     ( 561111.6, 4324586.0,     149.6,     849.1,       0.0);         ( 561211.6,
4324586.0,     147.3,     849.1,       0.0);
     ( 561311.6, 4324586.0,     143.9,     849.1,       0.0);         ( 561411.6,
4324586.0,     139.0,     849.1,       0.0);
     ( 561511.6, 4324586.0,     157.0,     849.1,       0.0);         ( 561611.6,
4324586.0,     151.2,     849.1,       0.0);
     ( 561711.6, 4324586.0,     154.8,     849.1,       0.0);         ( 561811.6,
4324586.0,     138.2,     849.1,       0.0);
     ( 561911.6, 4324586.0,     136.2,     849.1,       0.0);         ( 562011.6,
4324586.0,     137.4,     849.1,       0.0);
     ( 562111.6, 4324586.0,     136.0,     849.1,       0.0);         ( 562211.6,
4324586.0,     144.9,     849.1,       0.0);
     ( 562311.6, 4324586.0,     154.9,     849.1,       0.0);         ( 562411.6,
4324586.0,     157.1,     849.1,       0.0);
     ( 562511.6, 4324586.0,     144.1,     849.1,       0.0);         ( 562611.6,
4324586.0,     157.1,     849.1,       0.0);
     ( 562711.6, 4324586.0,     159.0,     849.1,       0.0);         ( 562811.6,
4324586.0,     147.2,     849.1,       0.0);
     ( 562911.6, 4324586.0,     140.6,     849.1,       0.0);         ( 563011.6,
4324586.0,     141.8,     849.1,       0.0);
```

(563111.6, 4324586.0, 140.0, 849.1, 0.0); (563211.6, 4324586.0, 144.9, 793.0, 0.0);
(563311.6, 4324586.0, 137.6, 793.0, 0.0); (563411.6, 4324586.0, 153.7, 793.0, 0.0);
(563511.6, 4324586.0, 148.7, 793.0, 0.0); (563611.6, 4324586.0, 131.7, 793.0, 0.0);
(563711.6, 4324586.0, 147.3, 793.0, 0.0); (563811.6, 4324586.0, 150.2, 793.0, 0.0);
(563911.6, 4324586.0, 161.1, 793.0, 0.0); (564011.6, 4324586.0, 140.9, 793.0, 0.0);
(564111.6, 4324586.0, 129.3, 793.0, 0.0); (564211.6, 4324586.0, 127.7, 793.0, 0.0);
(564311.6, 4324586.0, 146.7, 793.0, 0.0); (564411.6, 4324586.0, 115.3, 793.0, 0.0);
(564511.6, 4324586.0, 109.5, 793.0, 0.0); (564611.6, 4324586.0, 109.4, 793.0, 0.0);
(564711.6, 4324586.0, 115.9, 793.0, 0.0); (564811.6, 4324586.0, 152.9, 154.5, 0.0);
(564911.6, 4324586.0, 124.0, 177.7, 0.0); (565011.6, 4324586.0, 131.0, 177.7, 0.0);
(565111.6, 4324586.0, 163.8, 163.8, 0.0); (565211.6, 4324586.0, 129.3, 178.6, 0.0);
(565311.6, 4324586.0, 153.4, 177.7, 0.0); (565411.6, 4324586.0, 158.6, 177.7, 0.0);
(565511.6, 4324586.0, 160.2, 177.5, 0.0); (565611.6, 4324586.0, 161.5, 174.5, 0.0);
(565711.6, 4324586.0, 161.0, 176.7, 0.0); (565811.6, 4324586.0, 163.9, 174.5, 0.0);
(565911.6, 4324586.0, 154.7, 181.6, 0.0); (566011.6, 4324586.0, 165.2, 179.6, 0.0);
(566111.6, 4324586.0, 172.5, 176.7, 0.0); (566211.6, 4324586.0, 170.4, 175.6, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(566311.6, 4324586.0, 170.9, 173.6, 0.0); (566411.6, 4324586.0, 163.5, 174.8, 0.0);
(566511.6, 4324586.0, 172.9, 172.9, 0.0); (560111.6, 4324686.0, 350.1, 793.0, 0.0);
(560211.6, 4324686.0, 322.8, 793.0, 0.0); (560311.6, 4324686.0, 303.8, 793.0, 0.0);

```
     ( 560411.6, 4324686.0,     284.0,     793.0,       0.0);         ( 560511.6,
4324686.0,     257.5,     849.1,       0.0);
     ( 560611.6, 4324686.0,     217.8,     849.1,       0.0);         ( 560711.6,
4324686.0,     191.1,     849.1,       0.0);
     ( 560811.6, 4324686.0,     164.2,     849.1,       0.0);         ( 560911.6,
4324686.0,     156.6,     849.1,       0.0);
     ( 561011.6, 4324686.0,     150.9,     849.1,       0.0);         ( 561111.6,
4324686.0,     146.8,     849.1,       0.0);
     ( 561211.6, 4324686.0,     147.7,     849.1,       0.0);         ( 561311.6,
4324686.0,     145.1,     849.1,       0.0);
     ( 561411.6, 4324686.0,     140.3,     849.1,       0.0);         ( 561511.6,
4324686.0,     144.1,     849.1,       0.0);
     ( 561611.6, 4324686.0,     138.8,     849.1,       0.0);         ( 561711.6,
4324686.0,     156.2,     849.1,       0.0);
     ( 561811.6, 4324686.0,     135.2,     849.1,       0.0);         ( 561911.6,
4324686.0,     132.5,     849.1,       0.0);
     ( 562011.6, 4324686.0,     135.7,     849.1,       0.0);         ( 562111.6,
4324686.0,     134.9,     849.1,       0.0);
     ( 562211.6, 4324686.0,     140.4,     849.1,       0.0);         ( 562311.6,
4324686.0,     150.3,     849.1,       0.0);
     ( 562411.6, 4324686.0,     152.6,     849.1,       0.0);         ( 562511.6,
4324686.0,     152.0,     849.1,       0.0);
     ( 562611.6, 4324686.0,     141.0,     849.1,       0.0);         ( 562711.6,
4324686.0,     148.4,     849.1,       0.0);
     ( 562811.6, 4324686.0,     158.0,     793.0,       0.0);         ( 562911.6,
4324686.0,     144.4,     849.1,       0.0);
     ( 563011.6, 4324686.0,     142.1,     849.1,       0.0);         ( 563111.6,
4324686.0,     132.8,     849.1,       0.0);
     ( 563211.6, 4324686.0,     130.8,     849.1,       0.0);         ( 563311.6,
4324686.0,     128.3,     793.0,       0.0);
     ( 563411.6, 4324686.0,     131.1,     793.0,       0.0);         ( 563511.6,
4324686.0,     133.7,     793.0,       0.0);
     ( 563611.6, 4324686.0,     130.1,     793.0,       0.0);         ( 563711.6,
4324686.0,     153.0,     793.0,       0.0);
     ( 563811.6, 4324686.0,     134.1,     793.0,       0.0);         ( 563911.6,
4324686.0,     144.5,     793.0,       0.0);
     ( 564011.6, 4324686.0,     149.8,     793.0,       0.0);         ( 564111.6,
4324686.0,     157.8,     793.0,       0.0);
     ( 564211.6, 4324686.0,     150.9,     793.0,       0.0);         ( 564311.6,
4324686.0,     122.8,     793.0,       0.0);
     ( 564411.6, 4324686.0,     141.4,     793.0,       0.0);         ( 564511.6,
4324686.0,     105.5,     793.0,       0.0);
     ( 564611.6, 4324686.0,     108.5,     793.0,       0.0);         ( 564711.6,
4324686.0,     109.7,     793.0,       0.0);
     ( 564811.6, 4324686.0,     118.4,     176.2,       0.0);         ( 564911.6,
4324686.0,     113.8,     177.7,       0.0);
     ( 565011.6, 4324686.0,     153.9,     168.1,       0.0);         ( 565111.6,
4324686.0,     162.5,     168.1,       0.0);
     ( 565211.6, 4324686.0,     125.4,     178.5,       0.0);         ( 565311.6,
4324686.0,     163.0,     171.5,       0.0);
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(565411.6, 4324686.0, 145.3, 177.7, 0.0); (565511.6, 4324686.0, 162.3, 173.0, 0.0);
(565611.6, 4324686.0, 169.6, 169.6, 0.0); (565711.6, 4324686.0, 171.3, 174.3, 0.0);
(565811.6, 4324686.0, 171.4, 173.0, 0.0); (565911.6, 4324686.0, 161.6, 174.5, 0.0);
(566011.6, 4324686.0, 149.9, 181.3, 0.0); (566111.6, 4324686.0, 165.8, 176.8, 0.0);
(566211.6, 4324686.0, 168.8, 175.9, 0.0); (566311.6, 4324686.0, 167.4, 174.8, 0.0);
(566411.6, 4324686.0, 174.5, 174.5, 0.0); (566511.6, 4324686.0, 165.2, 174.5, 0.0);
(560111.6, 4324786.0, 334.6, 793.0, 0.0); (560211.6, 4324786.0, 315.4, 793.0, 0.0);
(560311.6, 4324786.0, 300.2, 793.0, 0.0); (560411.6, 4324786.0, 276.1, 793.0, 0.0);
(560511.6, 4324786.0, 262.5, 793.0, 0.0); (560611.6, 4324786.0, 217.8, 849.1, 0.0);
(560711.6, 4324786.0, 183.0, 849.1, 0.0); (560811.6, 4324786.0, 160.3, 849.1, 0.0);
(560911.6, 4324786.0, 155.7, 849.1, 0.0); (561011.6, 4324786.0, 148.7, 849.1, 0.0);
(561111.6, 4324786.0, 143.6, 849.1, 0.0); (561211.6, 4324786.0, 142.1, 849.1, 0.0);
(561311.6, 4324786.0, 156.4, 849.1, 0.0); (561411.6, 4324786.0, 145.1, 849.1, 0.0);
(561511.6, 4324786.0, 135.9, 849.1, 0.0); (561611.6, 4324786.0, 133.2, 849.1, 0.0);
(561711.6, 4324786.0, 155.5, 849.1, 0.0); (561811.6, 4324786.0, 133.8, 849.1, 0.0);
(561911.6, 4324786.0, 131.7, 849.1, 0.0); (562011.6, 4324786.0, 133.0, 849.1, 0.0);
(562111.6, 4324786.0, 141.5, 849.1, 0.0); (562211.6, 4324786.0, 143.7, 849.1, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(562311.6, 4324786.0, 145.6, 849.1, 0.0); (562411.6, 4324786.0, 143.7, 849.1, 0.0);
(562511.6, 4324786.0, 151.5, 849.1, 0.0); (562611.6, 4324786.0, 149.2, 849.1, 0.0);

```
     ( 562711.6, 4324786.0,     136.8,     849.1,       0.0);         ( 562811.6,
4324786.0,     146.6,     849.1,       0.0);
     ( 562911.6, 4324786.0,     150.8,     793.0,       0.0);         ( 563011.6,
4324786.0,     148.4,     793.0,       0.0);
     ( 563111.6, 4324786.0,     148.5,     793.0,       0.0);         ( 563211.6,
4324786.0,     150.3,     793.0,       0.0);
     ( 563311.6, 4324786.0,     137.3,     793.0,       0.0);         ( 563411.6,
4324786.0,     135.2,     793.0,       0.0);
     ( 563511.6, 4324786.0,     128.5,     793.0,       0.0);         ( 563611.6,
4324786.0,     120.4,     793.0,       0.0);
     ( 563711.6, 4324786.0,     141.1,     793.0,       0.0);         ( 563811.6,
4324786.0,     144.5,     793.0,       0.0);
     ( 563911.6, 4324786.0,     126.5,     793.0,       0.0);         ( 564011.6,
4324786.0,     137.5,     793.0,       0.0);
     ( 564111.6, 4324786.0,     138.8,     793.0,       0.0);         ( 564211.6,
4324786.0,     150.1,     793.0,       0.0);
     ( 564311.6, 4324786.0,     116.0,     793.0,       0.0);         ( 564411.6,
4324786.0,     142.7,     793.0,       0.0);
     ( 564511.6, 4324786.0,     140.1,     157.5,       0.0);         ( 564611.6,
4324786.0,     107.4,     793.0,       0.0);
     ( 564711.6, 4324786.0,     106.5,     793.0,       0.0);         ( 564811.6,
4324786.0,     106.4,     177.7,       0.0);
     ( 564911.6, 4324786.0,     118.2,     177.7,       0.0);         ( 565011.6,
4324786.0,     139.6,     168.1,       0.0);
     ( 565111.6, 4324786.0,     130.4,     177.7,       0.0);         ( 565211.6,
4324786.0,     143.1,     171.5,       0.0);
     ( 565311.6, 4324786.0,     151.7,     171.5,       0.0);         ( 565411.6,
4324786.0,     149.7,     173.1,       0.0);
     ( 565511.6, 4324786.0,     159.8,     173.1,       0.0);         ( 565611.6,
4324786.0,     164.5,     173.1,       0.0);
     ( 565711.6, 4324786.0,     160.8,     174.5,       0.0);         ( 565811.6,
4324786.0,     154.1,     174.5,       0.0);
     ( 565911.6, 4324786.0,     155.2,     174.5,       0.0);         ( 566011.6,
4324786.0,     155.5,     176.8,       0.0);
     ( 566111.6, 4324786.0,     146.7,     179.5,       0.0);         ( 566211.6,
4324786.0,     143.8,     180.8,       0.0);
     ( 566311.6, 4324786.0,     144.4,     179.1,       0.0);         ( 566411.6,
4324786.0,     148.8,     174.8,       0.0);
     ( 566511.6, 4324786.0,     152.9,     174.8,       0.0);         ( 560111.6,
4324886.0,     358.2,     793.0,       0.0);
     ( 560211.6, 4324886.0,     323.2,     793.0,       0.0);         ( 560311.6,
4324886.0,     300.2,     793.0,       0.0);
     ( 560411.6, 4324886.0,     274.0,     793.0,       0.0);         ( 560511.6,
4324886.0,     251.2,     793.0,       0.0);
     ( 560611.6, 4324886.0,     211.7,     849.1,       0.0);         ( 560711.6,
4324886.0,     176.4,     849.1,       0.0);
     ( 560811.6, 4324886.0,     158.4,     849.1,       0.0);         ( 560911.6,
4324886.0,     152.1,     849.1,       0.0);
     ( 561011.6, 4324886.0,     147.5,     849.1,       0.0);         ( 561111.6,
4324886.0,     141.3,     849.1,       0.0);
```

```
     ( 561211.6, 4324886.0,     139.4,     849.1,       0.0);         ( 561311.6,
4324886.0,     157.5,     849.1,       0.0);
     ( 561411.6, 4324886.0,     159.4,     849.1,       0.0);         ( 561511.6,
4324886.0,     141.8,     849.1,       0.0);
     ( 561611.6, 4324886.0,     129.0,     849.1,       0.0);         ( 561711.6,
4324886.0,     137.1,     849.1,       0.0);
     ( 561811.6, 4324886.0,     131.5,     849.1,       0.0);         ( 561911.6,
4324886.0,     129.4,     849.1,       0.0);
     ( 562011.6, 4324886.0,     134.6,     849.1,       0.0);         ( 562111.6,
4324886.0,     144.8,     849.1,       0.0);
     ( 562211.6, 4324886.0,     138.7,     849.1,       0.0);         ( 562311.6,
4324886.0,     144.4,     849.1,       0.0);
     ( 562411.6, 4324886.0,     142.8,     849.1,       0.0);         ( 562511.6,
4324886.0,     144.2,     849.1,       0.0);
     ( 562611.6, 4324886.0,     154.6,     793.0,       0.0);         ( 562711.6,
4324886.0,     140.8,     849.1,       0.0);
     ( 562811.6, 4324886.0,     136.6,     849.1,       0.0);         ( 562911.6,
4324886.0,     146.5,     793.0,       0.0);
     ( 563011.6, 4324886.0,     147.0,     793.0,       0.0);         ( 563111.6,
4324886.0,     149.2,     793.0,       0.0);
     ( 563211.6, 4324886.0,     144.6,     793.0,       0.0);         ( 563311.6,
4324886.0,     139.2,     793.0,       0.0);
     ( 563411.6, 4324886.0,     131.3,     793.0,       0.0);         ( 563511.6,
4324886.0,     149.3,     793.0,       0.0);
     ( 563611.6, 4324886.0,     135.8,     793.0,       0.0);         ( 563711.6,
4324886.0,     116.9,     793.0,       0.0);
     ( 563811.6, 4324886.0,     143.3,     793.0,       0.0);         ( 563911.6,
4324886.0,     134.1,     793.0,       0.0);
     ( 564011.6, 4324886.0,     118.3,     793.0,       0.0);         ( 564111.6,
4324886.0,     123.8,     793.0,       0.0);
     ( 564211.6, 4324886.0,     151.0,     793.0,       0.0);         ( 564311.6,
4324886.0,     122.7,     793.0,       0.0);
     ( 564411.6, 4324886.0,     111.5,     793.0,       0.0);         ( 564511.6,
4324886.0,     126.7,     793.0,       0.0);
     ( 564611.6, 4324886.0,     115.9,     793.0,       0.0);         ( 564711.6,
4324886.0,     105.7,     793.0,       0.0);
↟ *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                         ***       06:53:13

                                    PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                    (METERS)

     ( 564811.6, 4324886.0,     106.2,     177.7,       0.0);         ( 564911.6,
4324886.0,     109.6,     177.7,       0.0);
```

```
     ( 565011.6, 4324886.0,     131.5,     168.1,       0.0);         ( 565111.6,
4324886.0,     116.5,     177.7,       0.0);
     ( 565211.6, 4324886.0,     132.6,     177.7,       0.0);         ( 565311.6,
4324886.0,     139.3,     173.0,       0.0);
     ( 565411.6, 4324886.0,     156.9,     158.5,       0.0);         ( 565511.6,
4324886.0,     154.7,     173.0,       0.0);
     ( 565611.6, 4324886.0,     164.1,     168.3,       0.0);         ( 565711.6,
4324886.0,     163.9,     167.4,       0.0);
     ( 565811.6, 4324886.0,     166.8,     166.8,       0.0);         ( 565911.6,
4324886.0,     162.1,     167.0,       0.0);
     ( 566011.6, 4324886.0,     165.2,     169.0,       0.0);         ( 566111.6,
4324886.0,     160.1,     169.0,       0.0);
     ( 566211.6, 4324886.0,     148.8,     176.8,       0.0);         ( 566311.6,
4324886.0,     145.8,     176.7,       0.0);
     ( 566411.6, 4324886.0,     152.0,     175.0,       0.0);         ( 566511.6,
4324886.0,     139.3,     175.9,       0.0);
     ( 560111.6, 4324986.0,     339.9,     793.0,       0.0);         ( 560211.6,
4324986.0,     313.4,     793.0,       0.0);
     ( 560311.6, 4324986.0,     291.6,     793.0,       0.0);         ( 560411.6,
4324986.0,     265.0,     793.0,       0.0);
     ( 560511.6, 4324986.0,     244.9,     793.0,       0.0);         ( 560611.6,
4324986.0,     213.4,     849.1,       0.0);
     ( 560711.6, 4324986.0,     169.6,     849.1,       0.0);         ( 560811.6,
4324986.0,     157.5,     849.1,       0.0);
     ( 560911.6, 4324986.0,     158.1,     849.1,       0.0);         ( 561011.6,
4324986.0,     144.5,     849.1,       0.0);
     ( 561111.6, 4324986.0,     139.6,     849.1,       0.0);         ( 561211.6,
4324986.0,     137.0,     849.1,       0.0);
     ( 561311.6, 4324986.0,     156.5,     849.1,       0.0);         ( 561411.6,
4324986.0,     153.8,     849.1,       0.0);
     ( 561511.6, 4324986.0,     153.7,     849.1,       0.0);         ( 561611.6,
4324986.0,     129.4,     849.1,       0.0);
     ( 561711.6, 4324986.0,     127.4,     849.1,       0.0);         ( 561811.6,
4324986.0,     127.4,     849.1,       0.0);
     ( 561911.6, 4324986.0,     127.5,     849.1,       0.0);         ( 562011.6,
4324986.0,     130.2,     849.1,       0.0);
     ( 562111.6, 4324986.0,     133.0,     849.1,       0.0);         ( 562211.6,
4324986.0,     142.3,     849.1,       0.0);
     ( 562311.6, 4324986.0,     143.4,     849.1,       0.0);         ( 562411.6,
4324986.0,     136.0,     849.1,       0.0);
     ( 562511.6, 4324986.0,     145.4,     849.1,       0.0);         ( 562611.6,
4324986.0,     141.6,     849.1,       0.0);
     ( 562711.6, 4324986.0,     144.5,     793.0,       0.0);         ( 562811.6,
4324986.0,     134.7,     793.0,       0.0);
     ( 562911.6, 4324986.0,     129.9,     793.0,       0.0);         ( 563011.6,
4324986.0,     130.6,     793.0,       0.0);
     ( 563111.6, 4324986.0,     131.9,     793.0,       0.0);         ( 563211.6,
4324986.0,     132.9,     793.0,       0.0);
     ( 563311.6, 4324986.0,     124.6,     793.0,       0.0);         ( 563411.6,
4324986.0,     120.5,     793.0,       0.0);
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     ( 563511.6, 4324986.0,     118.9,     793.0,       0.0);         ( 563611.6,
4324986.0,     119.1,     793.0,       0.0);
     ( 563711.6, 4324986.0,     119.7,     793.0,       0.0);         ( 563811.6,
4324986.0,     113.5,     793.0,       0.0);
     ( 563911.6, 4324986.0,     116.7,     793.0,       0.0);         ( 564011.6,
4324986.0,     117.8,     793.0,       0.0);
     ( 564111.6, 4324986.0,     115.3,     793.0,       0.0);         ( 564211.6,
4324986.0,     117.5,     793.0,       0.0);
     ( 564311.6, 4324986.0,     110.3,     793.0,       0.0);         ( 564411.6,
4324986.0,     107.2,     793.0,       0.0);
     ( 564511.6, 4324986.0,     106.0,     793.0,       0.0);         ( 564611.6,
4324986.0,     105.2,     793.0,       0.0);
     ( 564711.6, 4324986.0,     104.2,     793.0,       0.0);         ( 564811.6,
4324986.0,     104.6,     171.6,       0.0);
     ( 564911.6, 4324986.0,     106.7,     177.7,       0.0);         ( 565011.6,
4324986.0,     108.6,     177.7,       0.0);
     ( 565111.6, 4324986.0,     117.6,     177.7,       0.0);         ( 565211.6,
4324986.0,     119.3,     177.7,       0.0);
     ( 565311.6, 4324986.0,     148.3,     154.2,       0.0);         ( 565411.6,
4324986.0,     140.3,     173.1,       0.0);
     ( 565511.6, 4324986.0,     151.5,     168.2,       0.0);         ( 565611.6,
4324986.0,     153.0,     168.3,       0.0);
     ( 565711.6, 4324986.0,     152.0,     168.3,       0.0);         ( 565811.6,
4324986.0,     151.1,     168.3,       0.0);
     ( 565911.6, 4324986.0,     159.9,     164.9,       0.0);         ( 566011.6,
4324986.0,     157.9,     169.0,       0.0);
     ( 566111.6, 4324986.0,     155.3,     169.0,       0.0);         ( 566211.6,
4324986.0,     163.0,     164.6,       0.0);
     ( 566311.6, 4324986.0,     166.0,     172.2,       0.0);         ( 566411.6,
4324986.0,     156.0,     175.9,       0.0);
     ( 566511.6, 4324986.0,     169.5,     169.5,       0.0);         ( 560111.6,
4325086.0,     313.8,     793.0,       0.0);
     ( 560211.6, 4325086.0,     284.3,     793.0,       0.0);         ( 560311.6,
4325086.0,     273.9,     793.0,       0.0);
     ( 560411.6, 4325086.0,     255.1,     793.0,       0.0);         ( 560511.6,
4325086.0,     220.4,     849.1,       0.0);
     ( 560611.6, 4325086.0,     192.5,     849.1,       0.0);         ( 560711.6,
4325086.0,     167.0,     849.1,       0.0);
↟ *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                         ***        06:53:13

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                                      *** DISCRETE CARTESIAN RECEPTORS ***
                                    (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                (METERS)
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```
     ( 560811.6, 4325086.0,     156.5,     849.1,       0.0);         ( 560911.6,
4325086.0,     148.7,     849.1,       0.0);
     ( 561011.6, 4325086.0,     141.1,     849.1,       0.0);         ( 561111.6,
4325086.0,     136.7,     849.1,       0.0);
     ( 561211.6, 4325086.0,     137.6,     849.1,       0.0);         ( 561311.6,
4325086.0,     157.8,     849.1,       0.0);
     ( 561411.6, 4325086.0,     144.6,     849.1,       0.0);         ( 561511.6,
4325086.0,     145.6,     849.1,       0.0);
     ( 561611.6, 4325086.0,     139.1,     849.1,       0.0);         ( 561711.6,
4325086.0,     124.5,     849.1,       0.0);
     ( 561811.6, 4325086.0,     124.5,     849.1,       0.0);         ( 561911.6,
4325086.0,     125.4,     849.1,       0.0);
     ( 562011.6, 4325086.0,     133.0,     849.1,       0.0);         ( 562111.6,
4325086.0,     140.9,     849.1,       0.0);
     ( 562211.6, 4325086.0,     139.1,     849.1,       0.0);         ( 562311.6,
4325086.0,     136.2,     849.1,       0.0);
     ( 562411.6, 4325086.0,     132.4,     849.1,       0.0);         ( 562511.6,
4325086.0,     134.9,     849.1,       0.0);
     ( 562611.6, 4325086.0,     142.9,     793.0,       0.0);         ( 562711.6,
4325086.0,     130.8,     848.7,       0.0);
     ( 562811.6, 4325086.0,     140.7,     793.0,       0.0);         ( 562911.6,
4325086.0,     144.0,     793.0,       0.0);
     ( 563011.6, 4325086.0,     134.2,     793.0,       0.0);         ( 563111.6,
4325086.0,     125.7,     793.0,       0.0);
     ( 563211.6, 4325086.0,     125.9,     793.0,       0.0);         ( 563311.6,
4325086.0,     130.0,     793.0,       0.0);
     ( 563411.6, 4325086.0,     136.3,     793.0,       0.0);         ( 563511.6,
4325086.0,     135.1,     793.0,       0.0);
     ( 563611.6, 4325086.0,     133.1,     793.0,       0.0);         ( 563711.6,
4325086.0,     130.3,     793.0,       0.0);
     ( 563811.6, 4325086.0,     119.8,     793.0,       0.0);         ( 563911.6,
4325086.0,     115.9,     793.0,       0.0);
     ( 564011.6, 4325086.0,     125.6,     793.0,       0.0);         ( 564111.6,
4325086.0,     110.6,     793.0,       0.0);
     ( 564211.6, 4325086.0,     110.0,     793.0,       0.0);         ( 564311.6,
4325086.0,     108.3,     793.0,       0.0);
     ( 564411.6, 4325086.0,     110.1,     793.0,       0.0);         ( 564511.6,
4325086.0,     116.2,     793.0,       0.0);
     ( 564611.6, 4325086.0,     118.5,     157.8,       0.0);         ( 564711.6,
4325086.0,     108.5,     168.1,       0.0);
     ( 564811.6, 4325086.0,     103.9,     168.1,       0.0);         ( 564911.6,
4325086.0,     100.1,     177.7,       0.0);
     ( 565011.6, 4325086.0,     104.7,     177.7,       0.0);         ( 565111.6,
4325086.0,     114.4,     171.5,       0.0);
     ( 565211.6, 4325086.0,     132.3,     154.2,       0.0);         ( 565311.6,
4325086.0,     116.9,     174.5,       0.0);
     ( 565411.6, 4325086.0,     145.7,     157.5,       0.0);         ( 565511.6,
4325086.0,     151.7,     157.0,       0.0);
     ( 565611.6, 4325086.0,     130.8,     174.5,       0.0);         ( 565711.6,
4325086.0,     148.2,     154.8,       0.0);
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     ( 565811.6, 4325086.0,     132.3,     174.1,       0.0);         ( 565911.6,
4325086.0,     154.9,     164.6,       0.0);
     ( 566011.6, 4325086.0,     163.5,     163.5,       0.0);         ( 566111.6,
4325086.0,     162.4,     166.4,       0.0);
     ( 566211.6, 4325086.0,     164.7,     175.9,       0.0);         ( 566311.6,
4325086.0,     174.4,     174.4,       0.0);
     ( 566411.6, 4325086.0,     172.3,     172.3,       0.0);         ( 566511.6,
4325086.0,     157.6,     175.4,       0.0);
     ( 560111.6, 4325186.0,     297.8,     793.0,       0.0);         ( 560211.6,
4325186.0,     275.0,     793.0,       0.0);
     ( 560311.6, 4325186.0,     265.6,     793.0,       0.0);         ( 560411.6,
4325186.0,     244.1,     793.0,       0.0);
     ( 560511.6, 4325186.0,     232.4,     793.0,       0.0);         ( 560611.6,
4325186.0,     205.5,     849.1,       0.0);
     ( 560711.6, 4325186.0,     166.5,     849.1,       0.0);         ( 560811.6,
4325186.0,     162.7,     849.1,       0.0);
     ( 560911.6, 4325186.0,     160.5,     849.1,       0.0);         ( 561011.6,
4325186.0,     146.7,     849.1,       0.0);
     ( 561111.6, 4325186.0,     134.7,     849.1,       0.0);         ( 561211.6,
4325186.0,     146.7,     849.1,       0.0);
     ( 561311.6, 4325186.0,     154.8,     849.1,       0.0);         ( 561411.6,
4325186.0,     145.7,     849.1,       0.0);
     ( 561511.6, 4325186.0,     132.3,     849.1,       0.0);         ( 561611.6,
4325186.0,     129.5,     849.1,       0.0);
     ( 561711.6, 4325186.0,     124.6,     849.1,       0.0);         ( 561811.6,
4325186.0,     123.4,     849.1,       0.0);
     ( 561911.6, 4325186.0,     123.0,     849.1,       0.0);         ( 562011.6,
4325186.0,     125.1,     849.1,       0.0);
     ( 562111.6, 4325186.0,     125.5,     849.1,       0.0);         ( 562211.6,
4325186.0,     128.0,     849.1,       0.0);
     ( 562311.6, 4325186.0,     130.4,     849.1,       0.0);         ( 562411.6,
4325186.0,     137.0,     849.1,       0.0);
     ( 562511.6, 4325186.0,     138.6,     793.0,       0.0);         ( 562611.6,
4325186.0,     137.5,     793.0,       0.0);
     ( 562711.6, 4325186.0,     123.0,     793.0,       0.0);         ( 562811.6,
4325186.0,     130.2,     793.0,       0.0);
     ( 562911.6, 4325186.0,     132.4,     793.0,       0.0);         ( 563011.6,
4325186.0,     128.8,     793.0,       0.0);
     ( 563111.6, 4325186.0,     130.9,     793.0,       0.0);         ( 563211.6,
4325186.0,     140.1,     793.0,       0.0);
↟ *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                           ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                          ***       06:53:13

                                    PAGE  11
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                                                  *** DISCRETE CARTESIAN RECEPTORS ***
                                                (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
```

(METERS)

(563311.6, 4325186.0, 140.3, 793.0, 0.0); (563411.6, 4325186.0, 146.3, 793.0, 0.0);
(563511.6, 4325186.0, 132.9, 793.0, 0.0); (563611.6, 4325186.0, 136.3, 793.0, 0.0);
(563711.6, 4325186.0, 131.2, 793.0, 0.0); (563811.6, 4325186.0, 120.3, 793.0, 0.0);
(563911.6, 4325186.0, 134.8, 793.0, 0.0); (564011.6, 4325186.0, 131.6, 793.0, 0.0);
(564111.6, 4325186.0, 121.6, 793.0, 0.0); (564211.6, 4325186.0, 128.1, 793.0, 0.0);
(564311.6, 4325186.0, 115.7, 793.0, 0.0); (564411.6, 4325186.0, 116.2, 793.0, 0.0);
(564511.6, 4325186.0, 134.1, 148.5, 0.0); (564611.6, 4325186.0, 139.8, 146.7, 0.0);
(564711.6, 4325186.0, 114.9, 157.8, 0.0); (564811.6, 4325186.0, 113.3, 157.8, 0.0);
(564911.6, 4325186.0, 104.6, 168.1, 0.0); (565011.6, 4325186.0, 101.4, 171.5, 0.0);
(565111.6, 4325186.0, 101.9, 177.1, 0.0); (565211.6, 4325186.0, 110.8, 173.1, 0.0);
(565311.6, 4325186.0, 109.0, 174.5, 0.0); (565411.6, 4325186.0, 128.9, 168.3, 0.0);
(565511.6, 4325186.0, 143.2, 153.8, 0.0); (565611.6, 4325186.0, 146.1, 153.6, 0.0);
(565711.6, 4325186.0, 113.9, 175.9, 0.0); (565811.6, 4325186.0, 122.3, 175.9, 0.0);
(565911.6, 4325186.0, 148.9, 164.7, 0.0); (566011.6, 4325186.0, 143.2, 175.9, 0.0);
(566111.6, 4325186.0, 145.8, 175.9, 0.0); (566211.6, 4325186.0, 165.7, 172.5, 0.0);
(566311.6, 4325186.0, 163.5, 175.9, 0.0); (566411.6, 4325186.0, 162.8, 175.9, 0.0);
(566511.6, 4325186.0, 164.6, 172.7, 0.0); (560111.6, 4325286.0, 267.3, 793.0, 0.0);
(560211.6, 4325286.0, 281.1, 793.0, 0.0); (560311.6, 4325286.0, 249.9, 793.0, 0.0);
(560411.6, 4325286.0, 236.1, 793.0, 0.0); (560511.6, 4325286.0, 206.2, 793.0, 0.0);
(560611.6, 4325286.0, 172.9, 849.1, 0.0); (560711.6, 4325286.0, 153.3, 849.1, 0.0);
(560811.6, 4325286.0, 152.6, 849.1, 0.0); (560911.6, 4325286.0, 156.8, 849.1, 0.0);
(561011.6, 4325286.0, 141.8, 849.1, 0.0); (561111.6, 4325286.0, 132.1, 849.1, 0.0);
(561211.6, 4325286.0, 148.4, 849.1, 0.0); (561311.6, 4325286.0, 148.3, 849.1, 0.0);
(561411.6, 4325286.0, 142.7, 849.1, 0.0); (561511.6, 4325286.0, 132.8, 849.1, 0.0);

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     ( 561611.6, 4325286.0,     124.3,     849.1,       0.0);         ( 561711.6,
4325286.0,     121.1,     849.1,       0.0);
     ( 561811.6, 4325286.0,     122.1,     849.1,       0.0);         ( 561911.6,
4325286.0,     120.9,     849.1,       0.0);
     ( 562011.6, 4325286.0,     121.6,     849.1,       0.0);         ( 562111.6,
4325286.0,     136.4,     849.1,       0.0);
     ( 562211.6, 4325286.0,     135.5,     849.1,       0.0);         ( 562311.6,
4325286.0,     133.9,     849.1,       0.0);
     ( 562411.6, 4325286.0,     127.5,     849.1,       0.0);         ( 562511.6,
4325286.0,     122.9,     849.1,       0.0);
     ( 562611.6, 4325286.0,     120.6,     793.0,       0.0);         ( 562711.6,
4325286.0,     119.5,     793.0,       0.0);
     ( 562811.6, 4325286.0,     123.7,     793.0,       0.0);         ( 562911.6,
4325286.0,     130.3,     793.0,       0.0);
     ( 563011.6, 4325286.0,     136.4,     793.0,       0.0);         ( 563111.6,
4325286.0,     139.0,     793.0,       0.0);
     ( 563211.6, 4325286.0,     139.4,     793.0,       0.0);         ( 563311.6,
4325286.0,     145.0,     793.0,       0.0);
     ( 563411.6, 4325286.0,     142.9,     793.0,       0.0);         ( 563511.6,
4325286.0,     131.7,     793.0,       0.0);
     ( 563611.6, 4325286.0,     145.5,     793.0,       0.0);         ( 563711.6,
4325286.0,     135.0,     793.0,       0.0);
     ( 563811.6, 4325286.0,     125.1,     793.0,       0.0);         ( 563911.6,
4325286.0,     145.2,     793.0,       0.0);
     ( 564011.6, 4325286.0,     131.5,     793.0,       0.0);         ( 564111.6,
4325286.0,     138.7,     793.0,       0.0);
     ( 564211.6, 4325286.0,     130.6,     793.0,       0.0);         ( 564311.6,
4325286.0,     118.2,     793.0,       0.0);
     ( 564411.6, 4325286.0,     129.8,     780.0,       0.0);         ( 564511.6,
4325286.0,     143.2,     148.5,       0.0);
     ( 564611.6, 4325286.0,     137.9,     157.8,       0.0);         ( 564711.6,
4325286.0,     135.9,     157.8,       0.0);
     ( 564811.6, 4325286.0,     130.9,     157.8,       0.0);         ( 564911.6,
4325286.0,     111.0,     157.8,       0.0);
     ( 565011.6, 4325286.0,      99.6,     168.1,       0.0);         ( 565111.6,
4325286.0,      97.0,     173.1,       0.0);
     ( 565211.6, 4325286.0,      97.2,     174.5,       0.0);         ( 565311.6,
4325286.0,     112.9,     168.3,       0.0);
     ( 565411.6, 4325286.0,     117.6,     168.3,       0.0);         ( 565511.6,
4325286.0,     122.1,     168.3,       0.0);
     ( 565611.6, 4325286.0,     132.3,     153.8,       0.0);         ( 565711.6,
4325286.0,     117.3,     172.5,       0.0);
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                          ***        06:53:13

                                    PAGE  12
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL
```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(565811.6, 4325286.0, 114.6, 175.9, 0.0); (565911.6, 4325286.0, 120.1, 175.9, 0.0);
(566011.6, 4325286.0, 150.8, 162.1, 0.0); (566111.6, 4325286.0, 161.6, 161.6, 0.0);
(566211.6, 4325286.0, 160.6, 172.5, 0.0); (566311.6, 4325286.0, 149.9, 175.9, 0.0);
(566411.6, 4325286.0, 160.7, 160.7, 0.0); (566511.6, 4325286.0, 147.6, 175.9, 0.0);
(560111.6, 4325386.0, 260.6, 793.0, 0.0); (560211.6, 4325386.0, 266.8, 793.0, 0.0);
(560311.6, 4325386.0, 238.9, 793.0, 0.0); (560411.6, 4325386.0, 234.4, 793.0, 0.0);
(560511.6, 4325386.0, 206.1, 793.0, 0.0); (560611.6, 4325386.0, 154.2, 849.1, 0.0);
(560711.6, 4325386.0, 144.1, 849.1, 0.0); (560811.6, 4325386.0, 138.0, 849.1, 0.0);
(560911.6, 4325386.0, 134.5, 849.1, 0.0); (561011.6, 4325386.0, 132.2, 849.1, 0.0);
(561111.6, 4325386.0, 128.4, 849.1, 0.0); (561211.6, 4325386.0, 130.9, 849.1, 0.0);
(561311.6, 4325386.0, 146.6, 849.1, 0.0); (561411.6, 4325386.0, 138.7, 849.1, 0.0);
(561511.6, 4325386.0, 134.7, 849.1, 0.0); (561611.6, 4325386.0, 134.6, 849.1, 0.0);
(561711.6, 4325386.0, 120.1, 849.1, 0.0); (561811.6, 4325386.0, 120.3, 849.1, 0.0);
(561911.6, 4325386.0, 119.5, 849.1, 0.0); (562011.6, 4325386.0, 123.2, 849.1, 0.0);
(562111.6, 4325386.0, 134.8, 849.1, 0.0); (562211.6, 4325386.0, 136.7, 793.0, 0.0);
(562311.6, 4325386.0, 137.1, 793.0, 0.0); (562411.6, 4325386.0, 128.8, 793.0, 0.0);
(562511.6, 4325386.0, 135.5, 793.0, 0.0); (562611.6, 4325386.0, 129.9, 793.0, 0.0);
(562711.6, 4325386.0, 116.9, 793.0, 0.0); (562811.6, 4325386.0, 141.8, 793.0, 0.0);
(562911.6, 4325386.0, 130.2, 793.0, 0.0); (563011.6, 4325386.0, 143.9, 793.0, 0.0);
(563111.6, 4325386.0, 138.3, 793.0, 0.0); (563211.6, 4325386.0, 139.0, 793.0, 0.0);
(563311.6, 4325386.0, 145.1, 793.0, 0.0); (563411.6, 4325386.0, 142.5, 793.0, 0.0);
(563511.6, 4325386.0, 143.4, 793.0, 0.0); (563611.6, 4325386.0, 148.4, 793.0, 0.0);
(563711.6, 4325386.0, 141.9, 793.0, 0.0); (563811.6, 4325386.0, 131.8, 793.0, 0.0);

```
     ( 563911.6, 4325386.0,     139.6,     793.0,       0.0);         ( 564011.6,
4325386.0,     126.0,     793.0,       0.0);
     ( 564111.6, 4325386.0,     145.4,     793.0,       0.0);         ( 564211.6,
4325386.0,     139.8,     793.0,       0.0);
     ( 564311.6, 4325386.0,     124.3,     793.0,       0.0);         ( 564411.6,
4325386.0,     149.5,     151.4,       0.0);
     ( 564511.6, 4325386.0,     138.1,     156.4,       0.0);         ( 564611.6,
4325386.0,     139.7,     157.8,       0.0);
     ( 564711.6, 4325386.0,     153.3,     157.8,       0.0);         ( 564811.6,
4325386.0,     135.1,     157.8,       0.0);
     ( 564911.6, 4325386.0,     134.6,     157.8,       0.0);         ( 565011.6,
4325386.0,     110.5,     157.8,       0.0);
     ( 565111.6, 4325386.0,      98.5,     159.0,       0.0);         ( 565211.6,
4325386.0,      97.4,     169.8,       0.0);
     ( 565311.6, 4325386.0,      97.0,     173.1,       0.0);         ( 565411.6,
4325386.0,     101.4,     173.1,       0.0);
     ( 565511.6, 4325386.0,     115.3,     168.3,       0.0);         ( 565611.6,
4325386.0,     117.7,     168.3,       0.0);
     ( 565711.6, 4325386.0,      96.5,     175.9,       0.0);         ( 565811.6,
4325386.0,     139.0,     155.7,       0.0);
     ( 565911.6, 4325386.0,     144.8,     155.7,       0.0);         ( 566011.6,
4325386.0,     150.5,     156.4,       0.0);
     ( 566111.6, 4325386.0,     145.0,     172.5,       0.0);         ( 566211.6,
4325386.0,     142.1,     175.9,       0.0);
     ( 566311.6, 4325386.0,     135.7,     175.9,       0.0);         ( 566411.6,
4325386.0,     164.7,     164.7,       0.0);
     ( 566511.6, 4325386.0,     158.0,     161.0,       0.0);         ( 560111.6,
4325486.0,     240.3,     793.0,       0.0);
     ( 560211.6, 4325486.0,     227.6,     793.0,       0.0);         ( 560311.6,
4325486.0,     210.2,     793.0,       0.0);
     ( 560411.6, 4325486.0,     186.1,     849.1,       0.0);         ( 560511.6,
4325486.0,     172.1,     849.1,       0.0);
     ( 560611.6, 4325486.0,     148.3,     849.1,       0.0);         ( 560711.6,
4325486.0,     141.8,     849.1,       0.0);
     ( 560811.6, 4325486.0,     140.9,     849.1,       0.0);         ( 560911.6,
4325486.0,     136.3,     849.1,       0.0);
     ( 561011.6, 4325486.0,     131.1,     849.1,       0.0);         ( 561111.6,
4325486.0,     128.5,     849.1,       0.0);
     ( 561211.6, 4325486.0,     125.8,     849.1,       0.0);         ( 561311.6,
4325486.0,     126.0,     849.1,       0.0);
     ( 561411.6, 4325486.0,     140.2,     849.1,       0.0);         ( 561511.6,
4325486.0,     136.3,     849.1,       0.0);
     ( 561611.6, 4325486.0,     138.8,     849.1,       0.0);         ( 561711.6,
4325486.0,     122.5,     849.1,       0.0);
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                             ***        06:53:13

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(561811.6, 4325486.0, 118.8, 849.1, 0.0); (561911.6, 4325486.0, 117.6, 849.1, 0.0);
(562011.6, 4325486.0, 116.9, 849.1, 0.0); (562111.6, 4325486.0, 133.3, 793.0, 0.0);
(562211.6, 4325486.0, 127.7, 793.0, 0.0); (562311.6, 4325486.0, 125.6, 793.0, 0.0);
(562411.6, 4325486.0, 125.9, 793.0, 0.0); (562511.6, 4325486.0, 132.4, 793.0, 0.0);
(562611.6, 4325486.0, 118.1, 793.0, 0.0); (562711.6, 4325486.0, 116.2, 793.0, 0.0);
(562811.6, 4325486.0, 132.0, 793.0, 0.0); (562911.6, 4325486.0, 124.3, 793.0, 0.0);
(563011.6, 4325486.0, 142.0, 793.0, 0.0); (563111.6, 4325486.0, 143.0, 793.0, 0.0);
(563211.6, 4325486.0, 127.1, 793.0, 0.0); (563311.6, 4325486.0, 148.0, 793.0, 0.0);
(563411.6, 4325486.0, 141.4, 793.0, 0.0); (563511.6, 4325486.0, 140.8, 793.0, 0.0);
(563611.6, 4325486.0, 135.2, 793.0, 0.0); (563711.6, 4325486.0, 131.8, 793.0, 0.0);
(563811.6, 4325486.0, 139.9, 793.0, 0.0); (563911.6, 4325486.0, 131.0, 793.0, 0.0);
(564011.6, 4325486.0, 141.9, 793.0, 0.0); (564111.6, 4325486.0, 138.4, 793.0, 0.0);
(564211.6, 4325486.0, 137.4, 793.0, 0.0); (564311.6, 4325486.0, 139.8, 152.8, 0.0);
(564411.6, 4325486.0, 151.9, 151.9, 0.0); (564511.6, 4325486.0, 154.4, 156.4, 0.0);
(564611.6, 4325486.0, 141.9, 157.6, 0.0); (564711.6, 4325486.0, 144.3, 157.8, 0.0);
(564811.6, 4325486.0, 145.4, 157.6, 0.0); (564911.6, 4325486.0, 130.7, 157.8, 0.0);
(565011.6, 4325486.0, 131.2, 153.3, 0.0); (565111.6, 4325486.0, 121.2, 153.3, 0.0);
(565211.6, 4325486.0, 96.6, 157.8, 0.0); (565311.6, 4325486.0, 95.5, 168.3, 0.0);
(565411.6, 4325486.0, 95.6, 168.3, 0.0); (565511.6, 4325486.0, 95.3, 173.1, 0.0);
(565611.6, 4325486.0, 93.0, 175.9, 0.0); (565711.6, 4325486.0, 92.8, 175.9, 0.0);
(565811.6, 4325486.0, 109.7, 175.9, 0.0); (565911.6, 4325486.0, 127.4, 172.5, 0.0);
(566011.6, 4325486.0, 142.9, 155.7, 0.0); (566111.6, 4325486.0, 125.5, 175.9, 0.0);

```
     ( 566211.6, 4325486.0,     118.1,     175.9,       0.0);         ( 566311.6,
4325486.0,     156.0,     160.5,       0.0);
     ( 566411.6, 4325486.0,     162.2,     162.2,       0.0);         ( 566511.6,
4325486.0,     148.3,     165.9,       0.0);
     ( 560111.6, 4325586.0,     261.6,     793.0,       0.0);         ( 560211.6,
4325586.0,     256.9,     793.0,       0.0);
     ( 560311.6, 4325586.0,     259.2,     793.0,       0.0);         ( 560411.6,
4325586.0,     222.9,     793.0,       0.0);
     ( 560511.6, 4325586.0,     182.9,     793.0,       0.0);         ( 560611.6,
4325586.0,     146.0,     849.1,       0.0);
     ( 560711.6, 4325586.0,     139.5,     849.1,       0.0);         ( 560811.6,
4325586.0,     142.2,     849.1,       0.0);
     ( 560911.6, 4325586.0,     135.5,     849.1,       0.0);         ( 561011.6,
4325586.0,     128.8,     849.1,       0.0);
     ( 561111.6, 4325586.0,     129.2,     849.1,       0.0);         ( 561211.6,
4325586.0,     124.0,     849.1,       0.0);
     ( 561311.6, 4325586.0,     120.9,     849.1,       0.0);         ( 561411.6,
4325586.0,     120.2,     849.1,       0.0);
     ( 561511.6, 4325586.0,     118.2,     849.1,       0.0);         ( 561611.6,
4325586.0,     117.0,     849.1,       0.0);
     ( 561711.6, 4325586.0,     114.9,     849.1,       0.0);         ( 561811.6,
4325586.0,     116.5,     849.1,       0.0);
     ( 561911.6, 4325586.0,     116.1,     849.1,       0.0);         ( 562011.6,
4325586.0,     115.8,     849.1,       0.0);
     ( 562111.6, 4325586.0,     114.0,     849.1,       0.0);         ( 562211.6,
4325586.0,     131.7,     793.0,       0.0);
     ( 562311.6, 4325586.0,     117.8,     793.0,       0.0);         ( 562411.6,
4325586.0,     123.2,     793.0,       0.0);
     ( 562511.6, 4325586.0,     134.4,     793.0,       0.0);         ( 562611.6,
4325586.0,     114.4,     793.0,       0.0);
     ( 562711.6, 4325586.0,     112.8,     793.0,       0.0);         ( 562811.6,
4325586.0,     122.7,     793.0,       0.0);
     ( 562911.6, 4325586.0,     125.4,     793.0,       0.0);         ( 563011.6,
4325586.0,     135.1,     793.0,       0.0);
     ( 563111.6, 4325586.0,     124.6,     793.0,       0.0);         ( 563211.6,
4325586.0,     129.6,     793.0,       0.0);
     ( 563311.6, 4325586.0,     132.8,     793.0,       0.0);         ( 563411.6,
4325586.0,     140.7,     793.0,       0.0);
     ( 563511.6, 4325586.0,     142.7,     793.0,       0.0);         ( 563611.6,
4325586.0,     142.6,     793.0,       0.0);
     ( 563711.6, 4325586.0,     131.6,     793.0,       0.0);         ( 563811.6,
4325586.0,     121.9,     793.0,       0.0);
     ( 563911.6, 4325586.0,     131.1,     793.0,       0.0);         ( 564011.6,
4325586.0,     142.2,     793.0,       0.0);
     ( 564111.6, 4325586.0,     142.6,     793.0,       0.0);         ( 564211.6,
4325586.0,     144.9,     147.9,       0.0);
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                             ***        06:53:13
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(564311.6, 4325586.0, 130.4, 780.0, 0.0); (564411.6, 4325586.0, 145.3, 145.3, 0.0);
(564511.6, 4325586.0, 134.9, 156.4, 0.0); (564611.6, 4325586.0, 132.5, 157.8, 0.0);
(564711.6, 4325586.0, 129.0, 157.8, 0.0); (564811.6, 4325586.0, 134.1, 157.8, 0.0);
(564911.6, 4325586.0, 144.7, 144.7, 0.0); (565011.6, 4325586.0, 134.9, 153.3, 0.0);
(565111.6, 4325586.0, 143.5, 153.3, 0.0); (565211.6, 4325586.0, 109.6, 153.3, 0.0);
(565311.6, 4325586.0, 97.8, 157.5, 0.0); (565411.6, 4325586.0, 94.5, 168.1, 0.0);
(565511.6, 4325586.0, 94.0, 168.3, 0.0); (565611.6, 4325586.0, 93.2, 172.5, 0.0);
(565711.6, 4325586.0, 93.2, 175.9, 0.0); (565811.6, 4325586.0, 92.7, 175.9, 0.0);
(565911.6, 4325586.0, 100.8, 175.9, 0.0); (566011.6, 4325586.0, 104.6, 175.9, 0.0);
(566111.6, 4325586.0, 107.3, 175.9, 0.0); (566211.6, 4325586.0, 119.9, 175.9, 0.0);
(566311.6, 4325586.0, 130.8, 172.5, 0.0); (566411.6, 4325586.0, 133.9, 165.9, 0.0);
(566511.6, 4325586.0, 140.5, 165.8, 0.0); (560111.6, 4325686.0, 273.8, 793.0, 0.0);
(560211.6, 4325686.0, 251.5, 793.0, 0.0); (560311.6, 4325686.0, 231.6, 793.0, 0.0);
(560411.6, 4325686.0, 206.6, 793.0, 0.0); (560511.6, 4325686.0, 162.8, 849.1, 0.0);
(560611.6, 4325686.0, 146.5, 849.1, 0.0); (560711.6, 4325686.0, 137.2, 849.1, 0.0);
(560811.6, 4325686.0, 141.7, 849.1, 0.0); (560911.6, 4325686.0, 131.3, 849.1, 0.0);
(561011.6, 4325686.0, 126.8, 849.1, 0.0); (561111.6, 4325686.0, 129.7, 849.1, 0.0);
(561211.6, 4325686.0, 123.9, 849.1, 0.0); (561311.6, 4325686.0, 120.0, 849.1, 0.0);
(561411.6, 4325686.0, 118.5, 849.1, 0.0); (561511.6, 4325686.0, 117.3, 849.1, 0.0);
(561611.6, 4325686.0, 115.7, 849.1, 0.0); (561711.6, 4325686.0, 114.0, 849.1, 0.0);
(561811.6, 4325686.0, 114.3, 849.1, 0.0); (561911.6, 4325686.0, 113.8, 849.1, 0.0);

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     ( 562011.6, 4325686.0,     114.0,     793.0,       0.0);         ( 562111.6,
4325686.0,     114.0,     793.0,       0.0);
     ( 562211.6, 4325686.0,     113.5,     793.0,       0.0);         ( 562311.6,
4325686.0,     114.2,     793.0,       0.0);
     ( 562411.6, 4325686.0,     118.1,     793.0,       0.0);         ( 562511.6,
4325686.0,     113.4,     793.0,       0.0);
     ( 562611.6, 4325686.0,     116.0,     793.0,       0.0);         ( 562711.6,
4325686.0,     110.0,     793.0,       0.0);
     ( 562811.6, 4325686.0,     126.5,     793.0,       0.0);         ( 562911.6,
4325686.0,     117.6,     793.0,       0.0);
     ( 563011.6, 4325686.0,     131.8,     793.0,       0.0);         ( 563111.6,
4325686.0,     133.2,     793.0,       0.0);
     ( 563211.6, 4325686.0,     115.2,     793.0,       0.0);         ( 563311.6,
4325686.0,     133.5,     793.0,       0.0);
     ( 563411.6, 4325686.0,     119.9,     793.0,       0.0);         ( 563511.6,
4325686.0,     139.5,     793.0,       0.0);
     ( 563611.6, 4325686.0,     129.3,     793.0,       0.0);         ( 563711.6,
4325686.0,     123.1,     793.0,       0.0);
     ( 563811.6, 4325686.0,     125.0,     793.0,       0.0);         ( 563911.6,
4325686.0,     137.9,     793.0,       0.0);
     ( 564011.6, 4325686.0,     138.2,     793.0,       0.0);         ( 564111.6,
4325686.0,     141.8,     792.5,       0.0);
     ( 564211.6, 4325686.0,     138.6,     140.0,       0.0);         ( 564311.6,
4325686.0,     142.8,     152.1,       0.0);
     ( 564411.6, 4325686.0,     151.1,     151.1,       0.0);         ( 564511.6,
4325686.0,     146.7,     148.9,       0.0);
     ( 564611.6, 4325686.0,     134.1,     156.4,       0.0);         ( 564711.6,
4325686.0,     129.1,     149.6,       0.0);
     ( 564811.6, 4325686.0,     119.0,     157.8,       0.0);         ( 564911.6,
4325686.0,     119.5,     157.8,       0.0);
     ( 565011.6, 4325686.0,     137.5,     153.3,       0.0);         ( 565111.6,
4325686.0,     141.2,     153.3,       0.0);
     ( 565211.6, 4325686.0,     141.2,     152.1,       0.0);         ( 565311.6,
4325686.0,     119.6,     153.3,       0.0);
     ( 565411.6, 4325686.0,     105.3,     153.3,       0.0);         ( 565511.6,
4325686.0,      99.8,     155.7,       0.0);
     ( 565611.6, 4325686.0,      94.6,     172.5,       0.0);         ( 565711.6,
4325686.0,      92.9,     175.9,       0.0);
     ( 565811.6, 4325686.0,      91.7,     175.9,       0.0);         ( 565911.6,
4325686.0,      91.1,     175.9,       0.0);
     ( 566011.6, 4325686.0,      90.1,     175.9,       0.0);         ( 566111.6,
4325686.0,      91.0,     175.9,       0.0);
     ( 566211.6, 4325686.0,      89.8,     175.9,       0.0);         ( 566311.6,
4325686.0,     101.4,     175.9,       0.0);
     ( 566411.6, 4325686.0,     114.8,     175.9,       0.0);         ( 566511.6,
4325686.0,     148.4,     149.2,       0.0);
     ( 560111.6, 4325786.0,     261.2,     793.0,       0.0);         ( 560211.6,
4325786.0,     239.0,     793.0,       0.0);
```

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(560311.6, 4325786.0, 209.4, 793.0, 0.0); (560411.6, 4325786.0, 205.0, 793.0, 0.0);
(560511.6, 4325786.0, 171.1, 793.0, 0.0); (560611.6, 4325786.0, 142.2, 849.1, 0.0);
(560711.6, 4325786.0, 135.7, 849.1, 0.0); (560811.6, 4325786.0, 130.7, 849.1, 0.0);
(560911.6, 4325786.0, 129.2, 849.1, 0.0); (561011.6, 4325786.0, 126.4, 849.1, 0.0);
(561111.6, 4325786.0, 122.2, 849.1, 0.0); (561211.6, 4325786.0, 120.1, 849.1, 0.0);
(561311.6, 4325786.0, 117.3, 849.1, 0.0); (561411.6, 4325786.0, 116.5, 849.1, 0.0);
(561511.6, 4325786.0, 115.4, 849.1, 0.0); (561611.6, 4325786.0, 114.1, 849.1, 0.0);
(561711.6, 4325786.0, 112.8, 849.1, 0.0); (561811.6, 4325786.0, 113.4, 793.0, 0.0);
(561911.6, 4325786.0, 112.8, 793.0, 0.0); (562011.6, 4325786.0, 112.5, 793.0, 0.0);
(562111.6, 4325786.0, 112.5, 793.0, 0.0); (562211.6, 4325786.0, 112.1, 793.0, 0.0);
(562311.6, 4325786.0, 110.8, 793.0, 0.0); (562411.6, 4325786.0, 110.0, 793.0, 0.0);
(562511.6, 4325786.0, 109.3, 793.0, 0.0); (562611.6, 4325786.0, 108.7, 793.0, 0.0);
(562711.6, 4325786.0, 107.1, 793.0, 0.0); (562811.6, 4325786.0, 122.8, 793.0, 0.0);
(562911.6, 4325786.0, 111.3, 793.0, 0.0); (563011.6, 4325786.0, 123.1, 793.0, 0.0);
(563111.6, 4325786.0, 117.2, 793.0, 0.0); (563211.6, 4325786.0, 109.9, 793.0, 0.0);
(563311.6, 4325786.0, 123.4, 793.0, 0.0); (563411.6, 4325786.0, 115.3, 793.0, 0.0);
(563511.6, 4325786.0, 127.0, 793.0, 0.0); (563611.6, 4325786.0, 130.4, 793.0, 0.0);
(563711.6, 4325786.0, 116.6, 793.0, 0.0); (563811.6, 4325786.0, 120.7, 793.0, 0.0);
(563911.6, 4325786.0, 135.5, 793.0, 0.0); (564011.6, 4325786.0, 142.2, 793.0, 0.0);
(564111.6, 4325786.0, 128.1, 793.0, 0.0); (564211.6, 4325786.0, 135.1, 138.2, 0.0);

```
     ( 564311.6, 4325786.0,     131.3,     152.3,       0.0);         ( 564411.6,
4325786.0,     142.6,     152.3,       0.0);
     ( 564511.6, 4325786.0,     144.6,     151.6,       0.0);         ( 564611.6,
4325786.0,     148.8,     148.8,       0.0);
     ( 564711.6, 4325786.0,     137.6,     149.6,       0.0);         ( 564811.6,
4325786.0,     136.3,     144.8,       0.0);
     ( 564911.6, 4325786.0,     112.3,     157.8,       0.0);         ( 565011.6,
4325786.0,     129.4,     153.3,       0.0);
     ( 565111.6, 4325786.0,     137.2,     152.1,       0.0);         ( 565211.6,
4325786.0,     132.4,     152.1,       0.0);
     ( 565311.6, 4325786.0,     135.2,     143.2,       0.0);         ( 565411.6,
4325786.0,     130.5,     137.8,       0.0);
     ( 565511.6, 4325786.0,     127.4,     137.4,       0.0);         ( 565611.6,
4325786.0,     114.1,     143.1,       0.0);
     ( 565711.6, 4325786.0,     121.0,     137.6,       0.0);         ( 565811.6,
4325786.0,     108.2,     155.7,       0.0);
     ( 565911.6, 4325786.0,     106.0,     172.5,       0.0);         ( 566011.6,
4325786.0,      83.8,     175.9,       0.0);
     ( 566111.6, 4325786.0,      88.6,     175.9,       0.0);         ( 566211.6,
4325786.0,      87.5,     175.9,       0.0);
     ( 566311.6, 4325786.0,      83.7,     175.9,       0.0);         ( 566411.6,
4325786.0,      85.9,     175.9,       0.0);
     ( 566511.6, 4325786.0,     102.1,     175.9,       0.0);         ( 560111.6,
4325886.0,     258.7,     793.0,       0.0);
     ( 560211.6, 4325886.0,     238.2,     793.0,       0.0);         ( 560311.6,
4325886.0,     233.9,     793.0,       0.0);
     ( 560411.6, 4325886.0,     208.5,     793.0,       0.0);         ( 560511.6,
4325886.0,     163.4,     793.0,       0.0);
     ( 560611.6, 4325886.0,     140.9,     849.1,       0.0);         ( 560711.6,
4325886.0,     137.0,     849.1,       0.0);
     ( 560811.6, 4325886.0,     130.5,     849.1,       0.0);         ( 560911.6,
4325886.0,     127.5,     849.1,       0.0);
     ( 561011.6, 4325886.0,     124.8,     849.1,       0.0);         ( 561111.6,
4325886.0,     122.9,     849.1,       0.0);
     ( 561211.6, 4325886.0,     120.5,     849.1,       0.0);         ( 561311.6,
4325886.0,     117.5,     849.1,       0.0);
     ( 561411.6, 4325886.0,     114.6,     849.1,       0.0);         ( 561511.6,
4325886.0,     113.9,     849.1,       0.0);
     ( 561611.6, 4325886.0,     112.6,     793.0,       0.0);         ( 561711.6,
4325886.0,     112.1,     793.0,       0.0);
     ( 561811.6, 4325886.0,     112.0,     793.0,       0.0);         ( 561911.6,
4325886.0,     111.6,     793.0,       0.0);
     ( 562011.6, 4325886.0,     111.0,     793.0,       0.0);         ( 562111.6,
4325886.0,     110.8,     793.0,       0.0);
     ( 562211.6, 4325886.0,     109.4,     793.0,       0.0);         ( 562311.6,
4325886.0,     110.0,     793.0,       0.0);
     ( 562411.6, 4325886.0,     109.1,     793.0,       0.0);         ( 562511.6,
4325886.0,     107.9,     793.0,       0.0);
     ( 562611.6, 4325886.0,     106.7,     793.0,       0.0);         ( 562711.6,
4325886.0,     105.4,     793.0,       0.0);
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(562811.6, 4325886.0, 105.7, 793.0, 0.0); (562911.6, 4325886.0, 108.0, 793.0, 0.0);
(563011.6, 4325886.0, 107.6, 793.0, 0.0); (563111.6, 4325886.0, 107.5, 793.0, 0.0);
(563211.6, 4325886.0, 107.5, 793.0, 0.0); (563311.6, 4325886.0, 106.4, 793.0, 0.0);
(563411.6, 4325886.0, 111.3, 793.0, 0.0); (563511.6, 4325886.0, 127.0, 793.0, 0.0);
(563611.6, 4325886.0, 128.0, 793.0, 0.0); (563711.6, 4325886.0, 112.3, 793.0, 0.0);
(563811.6, 4325886.0, 117.8, 793.0, 0.0); (563911.6, 4325886.0, 135.7, 793.0, 0.0);
(564011.6, 4325886.0, 124.6, 793.0, 0.0); (564111.6, 4325886.0, 120.9, 793.0, 0.0);
(564211.6, 4325886.0, 135.9, 135.9, 0.0); (564311.6, 4325886.0, 120.0, 780.0, 0.0);
(564411.6, 4325886.0, 118.1, 152.3, 0.0); (564511.6, 4325886.0, 117.8, 152.3, 0.0);
(564611.6, 4325886.0, 119.1, 152.3, 0.0); (564711.6, 4325886.0, 114.6, 152.3, 0.0);
(564811.6, 4325886.0, 108.9, 153.3, 0.0); (564911.6, 4325886.0, 131.6, 143.5, 0.0);
(565011.6, 4325886.0, 134.9, 143.5, 0.0); (565111.6, 4325886.0, 135.6, 140.0, 0.0);
(565211.6, 4325886.0, 121.7, 153.3, 0.0); (565311.6, 4325886.0, 117.5, 152.1, 0.0);
(565411.6, 4325886.0, 114.0, 152.1, 0.0); (565511.6, 4325886.0, 118.9, 143.1, 0.0);
(565611.6, 4325886.0, 119.5, 143.1, 0.0); (565711.6, 4325886.0, 122.6, 143.1, 0.0);
(565811.6, 4325886.0, 117.3, 141.8, 0.0); (565911.6, 4325886.0, 109.6, 141.5, 0.0);
(566011.6, 4325886.0, 96.3, 172.5, 0.0); (566111.6, 4325886.0, 99.4, 172.5, 0.0);
(566211.6, 4325886.0, 95.3, 175.9, 0.0); (566311.6, 4325886.0, 90.0, 175.9, 0.0);
(566411.6, 4325886.0, 80.2, 175.9, 0.0); (566511.6, 4325886.0, 83.4, 175.9, 0.0);

```
     ( 560111.6, 4325986.0,     261.6,     793.0,       0.0);         ( 560211.6,
4325986.0,     242.6,     793.0,       0.0);
     ( 560311.6, 4325986.0,     206.1,     793.0,       0.0);         ( 560411.6,
4325986.0,     194.1,     793.0,       0.0);
     ( 560511.6, 4325986.0,     155.9,     793.0,       0.0);         ( 560611.6,
4325986.0,     141.2,     793.0,       0.0);
     ( 560711.6, 4325986.0,     134.0,     793.0,       0.0);         ( 560811.6,
4325986.0,     131.4,     793.0,       0.0);
     ( 560911.6, 4325986.0,     126.2,     849.1,       0.0);         ( 561011.6,
4325986.0,     124.0,     848.7,       0.0);
     ( 561111.6, 4325986.0,     120.7,     848.7,       0.0);         ( 561211.6,
4325986.0,     119.0,     793.0,       0.0);
     ( 561311.6, 4325986.0,     117.1,     793.0,       0.0);         ( 561411.6,
4325986.0,     114.5,     793.0,       0.0);
     ( 561511.6, 4325986.0,     112.9,     793.0,       0.0);         ( 561611.6,
4325986.0,     111.3,     793.0,       0.0);
     ( 561711.6, 4325986.0,     111.0,     793.0,       0.0);         ( 561811.6,
4325986.0,     110.6,     793.0,       0.0);
     ( 561911.6, 4325986.0,     110.3,     793.0,       0.0);         ( 562011.6,
4325986.0,     110.0,     793.0,       0.0);
     ( 562111.6, 4325986.0,     109.6,     793.0,       0.0);         ( 562211.6,
4325986.0,     108.0,     793.0,       0.0);
     ( 562311.6, 4325986.0,     109.7,     793.0,       0.0);         ( 562411.6,
4325986.0,     109.0,     793.0,       0.0);
     ( 562511.6, 4325986.0,     107.6,     793.0,       0.0);         ( 562611.6,
4325986.0,     106.4,     793.0,       0.0);
     ( 562711.6, 4325986.0,     105.1,     793.0,       0.0);         ( 562811.6,
4325986.0,     103.8,     793.0,       0.0);
     ( 562911.6, 4325986.0,     103.0,     793.0,       0.0);         ( 563011.6,
4325986.0,     102.1,     793.0,       0.0);
     ( 563111.6, 4325986.0,     101.9,     793.0,       0.0);         ( 563211.6,
4325986.0,     102.8,     793.0,       0.0);
     ( 563311.6, 4325986.0,     101.3,     793.0,       0.0);         ( 563411.6,
4325986.0,     106.0,     793.0,       0.0);
     ( 563511.6, 4325986.0,     114.0,     793.0,       0.0);         ( 563611.6,
4325986.0,     116.5,     793.0,       0.0);
     ( 563711.6, 4325986.0,     110.8,     793.0,       0.0);         ( 563811.6,
4325986.0,     131.1,     793.0,       0.0);
     ( 563911.6, 4325986.0,     133.3,     793.0,       0.0);         ( 564011.6,
4325986.0,     117.8,     793.0,       0.0);
     ( 564111.6, 4325986.0,     116.1,     793.0,       0.0);         ( 564211.6,
4325986.0,     136.4,     136.4,       0.0);
     ( 564311.6, 4325986.0,     133.8,     137.2,       0.0);         ( 564411.6,
4325986.0,     133.2,     138.3,       0.0);
     ( 564511.6, 4325986.0,     127.3,     151.6,       0.0);         ( 564611.6,
4325986.0,     117.2,     152.3,       0.0);
     ( 564711.6, 4325986.0,     101.4,     156.4,       0.0);         ( 564811.6,
4325986.0,     121.8,     148.6,       0.0);
     ( 564911.6, 4325986.0,     142.8,     142.8,       0.0);         ( 565011.6,
4325986.0,     133.9,     143.5,       0.0);
```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(565311.6, 4325986.0, 129.6, 143.1, 0.0); (565411.6, 4325986.0, 140.1, 142.6, 0.0);
(565511.6, 4325986.0, 135.7, 142.4, 0.0); (565611.6, 4325986.0, 123.1, 143.1, 0.0);
(565711.6, 4325986.0, 108.0, 143.1, 0.0); (565811.6, 4325986.0, 116.7, 143.1, 0.0);
(565911.6, 4325986.0, 114.4, 141.5, 0.0); (566011.6, 4325986.0, 129.2, 134.3, 0.0);
(566111.6, 4325986.0, 115.8, 139.9, 0.0); (566211.6, 4325986.0, 102.9, 163.8, 0.0);
(566311.6, 4325986.0, 118.9, 135.5, 0.0); (566411.6, 4325986.0, 89.1, 175.8, 0.0);
(566511.6, 4325986.0, 84.5, 175.9, 0.0); (560111.6, 4326086.0, 247.1, 793.0, 0.0);
(560211.6, 4326086.0, 225.6, 793.0, 0.0); (560311.6, 4326086.0, 204.0, 793.0, 0.0);
(560411.6, 4326086.0, 178.1, 793.0, 0.0); (560511.6, 4326086.0, 152.5, 793.0, 0.0);
(560611.6, 4326086.0, 141.9, 793.0, 0.0); (560711.6, 4326086.0, 135.1, 793.0, 0.0);
(560811.6, 4326086.0, 129.9, 793.0, 0.0); (560911.6, 4326086.0, 125.2, 793.0, 0.0);
(561011.6, 4326086.0, 122.6, 793.0, 0.0); (561111.6, 4326086.0, 119.8, 793.0, 0.0);
(561211.6, 4326086.0, 117.4, 793.0, 0.0); (561311.6, 4326086.0, 115.6, 793.0, 0.0);
(561411.6, 4326086.0, 113.3, 793.0, 0.0); (561511.6, 4326086.0, 111.7, 793.0, 0.0);
(561611.6, 4326086.0, 110.2, 793.0, 0.0); (561711.6, 4326086.0, 109.5, 793.0, 0.0);
(561811.6, 4326086.0, 109.2, 793.0, 0.0); (561911.6, 4326086.0, 109.0, 793.0, 0.0);
(562011.6, 4326086.0, 108.9, 793.0, 0.0); (562111.6, 4326086.0, 108.5, 793.0, 0.0);
(562211.6, 4326086.0, 108.5, 793.0, 0.0); (562311.6, 4326086.0, 108.0, 793.0, 0.0);

```
     ( 562411.6, 4326086.0,     108.5,     793.0,       0.0);         ( 562511.6,
4326086.0,     107.2,     793.0,       0.0);
     ( 562611.6, 4326086.0,     105.7,     793.0,       0.0);         ( 562711.6,
4326086.0,     104.3,     793.0,       0.0);
     ( 562811.6, 4326086.0,     103.2,     793.0,       0.0);         ( 562911.6,
4326086.0,     102.2,     793.0,       0.0);
     ( 563011.6, 4326086.0,     101.2,     793.0,       0.0);         ( 563111.6,
4326086.0,     100.2,     793.0,       0.0);
     ( 563211.6, 4326086.0,      99.4,     793.0,       0.0);         ( 563311.6,
4326086.0,      98.2,     793.0,       0.0);
     ( 563411.6, 4326086.0,      97.5,     793.0,       0.0);         ( 563511.6,
4326086.0,      98.2,     793.0,       0.0);
     ( 563611.6, 4326086.0,      99.3,     793.0,       0.0);         ( 563711.6,
4326086.0,     117.6,     793.0,       0.0);
     ( 563811.6, 4326086.0,     129.2,     793.0,       0.0);         ( 563911.6,
4326086.0,     130.8,     793.0,       0.0);
     ( 564011.6, 4326086.0,     120.4,     793.0,       0.0);         ( 564111.6,
4326086.0,     104.8,     793.0,       0.0);
     ( 564211.6, 4326086.0,     116.4,     780.0,       0.0);         ( 564311.6,
4326086.0,     133.0,     135.1,       0.0);
     ( 564411.6, 4326086.0,     128.9,     138.3,       0.0);         ( 564511.6,
4326086.0,     127.8,     137.2,       0.0);
     ( 564611.6, 4326086.0,     134.3,     136.3,       0.0);         ( 564711.6,
4326086.0,      98.8,     152.3,       0.0);
     ( 564811.6, 4326086.0,     133.1,     138.0,       0.0);         ( 564911.6,
4326086.0,     138.8,     138.8,       0.0);
     ( 565011.6, 4326086.0,     137.2,     140.7,       0.0);         ( 565111.6,
4326086.0,     135.1,     140.0,       0.0);
     ( 565211.6, 4326086.0,     123.9,     143.1,       0.0);         ( 565311.6,
4326086.0,     138.6,     138.6,       0.0);
     ( 565411.6, 4326086.0,     130.4,     143.1,       0.0);         ( 565511.6,
4326086.0,     141.5,     141.5,       0.0);
     ( 565611.6, 4326086.0,     140.9,     143.1,       0.0);         ( 565711.6,
4326086.0,     123.9,     143.1,       0.0);
     ( 565811.6, 4326086.0,     139.4,     141.4,       0.0);         ( 565911.6,
4326086.0,     137.3,     138.9,       0.0);
     ( 566011.6, 4326086.0,     117.8,     141.5,       0.0);         ( 566111.6,
4326086.0,     118.0,     137.1,       0.0);
     ( 566211.6, 4326086.0,     134.7,     134.7,       0.0);         ( 566311.6,
4326086.0,     114.6,     135.9,       0.0);
     ( 566411.6, 4326086.0,     106.4,     149.2,       0.0);         ( 566511.6,
4326086.0,      97.7,     163.8,       0.0);
     ( 560111.6, 4326186.0,     238.2,     793.0,       0.0);         ( 560211.6,
4326186.0,     232.1,     793.0,       0.0);
     ( 560311.6, 4326186.0,     209.0,     793.0,       0.0);         ( 560411.6,
4326186.0,     186.4,     793.0,       0.0);
     ( 560511.6, 4326186.0,     150.2,     793.0,       0.0);         ( 560611.6,
4326186.0,     141.2,     793.0,       0.0);
     ( 560711.6, 4326186.0,     134.4,     793.0,       0.0);         ( 560811.6,
4326186.0,     129.5,     793.0,       0.0);
```

(560911.6, 4326186.0, 125.1, 793.0, 0.0); (561011.6, 4326186.0, 122.2, 793.0, 0.0);
(561111.6, 4326186.0, 119.6, 793.0, 0.0); (561211.6, 4326186.0, 114.3, 793.0, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(561311.6, 4326186.0, 114.3, 793.0, 0.0); (561411.6, 4326186.0, 112.5, 793.0, 0.0);
(561511.6, 4326186.0, 111.1, 793.0, 0.0); (561611.6, 4326186.0, 109.6, 793.0, 0.0);
(561711.6, 4326186.0, 107.2, 793.0, 0.0); (561811.6, 4326186.0, 108.2, 793.0, 0.0);
(561911.6, 4326186.0, 107.7, 793.0, 0.0); (562011.6, 4326186.0, 107.4, 793.0, 0.0);
(562111.6, 4326186.0, 107.1, 793.0, 0.0); (562211.6, 4326186.0, 107.1, 793.0, 0.0);
(562311.6, 4326186.0, 106.0, 793.0, 0.0); (562411.6, 4326186.0, 107.0, 793.0, 0.0);
(562511.6, 4326186.0, 106.5, 793.0, 0.0); (562611.6, 4326186.0, 105.1, 793.0, 0.0);
(562711.6, 4326186.0, 103.8, 793.0, 0.0); (562811.6, 4326186.0, 102.7, 793.0, 0.0);
(562911.6, 4326186.0, 101.6, 793.0, 0.0); (563011.6, 4326186.0, 100.6, 793.0, 0.0);
(563111.6, 4326186.0, 99.7, 793.0, 0.0); (563211.6, 4326186.0, 98.7, 793.0, 0.0);
(563311.6, 4326186.0, 98.1, 793.0, 0.0); (563411.6, 4326186.0, 97.6, 793.0, 0.0);
(563511.6, 4326186.0, 95.8, 793.0, 0.0); (563611.6, 4326186.0, 96.4, 793.0, 0.0);
(563711.6, 4326186.0, 99.5, 793.0, 0.0); (563811.6, 4326186.0, 112.2, 793.0, 0.0);
(563911.6, 4326186.0, 116.0, 793.0, 0.0); (564011.6, 4326186.0, 114.9, 793.0, 0.0);
(564111.6, 4326186.0, 97.8, 793.0, 0.0); (564211.6, 4326186.0, 109.4, 793.0, 0.0);
(564311.6, 4326186.0, 125.0, 134.4, 0.0); (564411.6, 4326186.0, 119.6, 138.3, 0.0);
(564511.6, 4326186.0, 121.5, 137.2, 0.0); (564611.6, 4326186.0, 133.7, 135.0, 0.0);

```
     ( 564711.6, 4326186.0,      96.2,     152.3,       0.0);         ( 564811.6,
4326186.0,     115.0,     143.5,       0.0);
     ( 564911.6, 4326186.0,     127.3,     142.2,       0.0);         ( 565011.6,
4326186.0,     118.6,     143.2,       0.0);
     ( 565111.6, 4326186.0,     109.4,     143.5,       0.0);         ( 565211.6,
4326186.0,     103.7,     143.5,       0.0);
     ( 565311.6, 4326186.0,     111.2,     143.1,       0.0);         ( 565411.6,
4326186.0,     122.4,     143.1,       0.0);
     ( 565511.6, 4326186.0,     117.7,     143.1,       0.0);         ( 565611.6,
4326186.0,     123.0,     143.1,       0.0);
     ( 565711.6, 4326186.0,     137.0,     137.0,       0.0);         ( 565811.6,
4326186.0,     118.7,     143.1,       0.0);
     ( 565911.6, 4326186.0,     112.7,     141.5,       0.0);         ( 566011.6,
4326186.0,     122.5,     140.6,       0.0);
     ( 566111.6, 4326186.0,     125.1,     135.9,       0.0);         ( 566211.6,
4326186.0,     108.2,     136.2,       0.0);
     ( 566311.6, 4326186.0,     115.6,     135.9,       0.0);         ( 566411.6,
4326186.0,     119.5,     123.9,       0.0);
     ( 566511.6, 4326186.0,     109.9,     127.3,       0.0);         ( 560111.6,
4326286.0,     239.7,     793.0,       0.0);
     ( 560211.6, 4326286.0,     225.0,     793.0,       0.0);         ( 560311.6,
4326286.0,     180.3,     793.0,       0.0);
     ( 560411.6, 4326286.0,     159.9,     793.0,       0.0);         ( 560511.6,
4326286.0,     143.3,     793.0,       0.0);
     ( 560611.6, 4326286.0,     139.7,     793.0,       0.0);         ( 560711.6,
4326286.0,     134.6,     793.0,       0.0);
     ( 560811.6, 4326286.0,     128.8,     793.0,       0.0);         ( 560911.6,
4326286.0,     124.9,     793.0,       0.0);
     ( 561011.6, 4326286.0,     123.8,     793.0,       0.0);         ( 561111.6,
4326286.0,     120.3,     793.0,       0.0);
     ( 561211.6, 4326286.0,     116.2,     793.0,       0.0);         ( 561311.6,
4326286.0,     114.4,     793.0,       0.0);
     ( 561411.6, 4326286.0,     112.3,     793.0,       0.0);         ( 561511.6,
4326286.0,     110.9,     793.0,       0.0);
     ( 561611.6, 4326286.0,     109.6,     793.0,       0.0);         ( 561711.6,
4326286.0,     108.2,     793.0,       0.0);
     ( 561811.6, 4326286.0,     105.9,     793.0,       0.0);         ( 561911.6,
4326286.0,     106.7,     793.0,       0.0);
     ( 562011.6, 4326286.0,     106.1,     793.0,       0.0);         ( 562111.6,
4326286.0,     106.0,     793.0,       0.0);
     ( 562211.6, 4326286.0,     105.6,     793.0,       0.0);         ( 562311.6,
4326286.0,     104.6,     793.0,       0.0);
     ( 562411.6, 4326286.0,     105.5,     793.0,       0.0);         ( 562511.6,
4326286.0,     106.5,     793.0,       0.0);
     ( 562611.6, 4326286.0,     104.4,     793.0,       0.0);         ( 562711.6,
4326286.0,     103.5,     793.0,       0.0);
     ( 562811.6, 4326286.0,     102.5,     793.0,       0.0);         ( 562911.6,
4326286.0,     103.1,     793.0,       0.0);
     ( 563011.6, 4326286.0,     100.5,     793.0,       0.0);         ( 563111.6,
4326286.0,      99.3,     793.0,       0.0);
```

(563211.6, 4326286.0, 98.1, 793.0, 0.0); (563311.6, 4326286.0, 97.2, 793.0, 0.0);
(563411.6, 4326286.0, 96.3, 793.0, 0.0); (563511.6, 4326286.0, 95.4, 793.0, 0.0);
(563611.6, 4326286.0, 94.9, 793.0, 0.0); (563711.6, 4326286.0, 91.6, 793.0, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(563811.6, 4326286.0, 91.8, 793.0, 0.0); (563911.6, 4326286.0, 96.3, 793.0, 0.0);
(564011.6, 4326286.0, 99.2, 793.0, 0.0); (564111.6, 4326286.0, 91.6, 793.0, 0.0);
(564211.6, 4326286.0, 97.2, 793.0, 0.0); (564311.6, 4326286.0, 107.2, 138.3, 0.0);
(564411.6, 4326286.0, 100.8, 138.3, 0.0); (564511.6, 4326286.0, 111.1, 137.2, 0.0);
(564611.6, 4326286.0, 114.0, 137.2, 0.0); (564711.6, 4326286.0, 92.8, 151.6, 0.0);
(564811.6, 4326286.0, 121.7, 137.1, 0.0); (564911.6, 4326286.0, 127.1, 137.1, 0.0);
(565011.6, 4326286.0, 122.6, 137.1, 0.0); (565111.6, 4326286.0, 126.8, 130.7, 0.0);
(565211.6, 4326286.0, 127.1, 130.1, 0.0); (565311.6, 4326286.0, 106.3, 143.1, 0.0);
(565411.6, 4326286.0, 92.4, 143.1, 0.0); (565511.6, 4326286.0, 111.9, 143.1, 0.0);
(565611.6, 4326286.0, 135.8, 137.5, 0.0); (565711.6, 4326286.0, 124.6, 138.4, 0.0);
(565811.6, 4326286.0, 135.3, 135.7, 0.0); (565911.6, 4326286.0, 126.3, 137.0, 0.0);
(566011.6, 4326286.0, 125.3, 137.0, 0.0); (566111.6, 4326286.0, 119.8, 136.6, 0.0);
(566211.6, 4326286.0, 122.5, 135.3, 0.0); (566311.6, 4326286.0, 130.1, 130.1, 0.0);
(566411.6, 4326286.0, 116.3, 135.3, 0.0); (566511.6, 4326286.0, 106.8, 135.3, 0.0);
(560111.6, 4326386.0, 196.1, 793.0, 0.0); (560211.6, 4326386.0, 199.5, 793.0, 0.0);
(560311.6, 4326386.0, 162.3, 793.0, 0.0); (560411.6, 4326386.0, 168.2, 793.0, 0.0);

```
     ( 560511.6, 4326386.0,     142.8,     793.0,       0.0);         ( 560611.6,
4326386.0,     137.1,     793.0,       0.0);
     ( 560711.6, 4326386.0,     133.6,     793.0,       0.0);         ( 560811.6,
4326386.0,     126.8,     793.0,       0.0);
     ( 560911.6, 4326386.0,     124.1,     793.0,       0.0);         ( 561011.6,
4326386.0,     120.5,     793.0,       0.0);
     ( 561111.6, 4326386.0,     118.5,     793.0,       0.0);         ( 561211.6,
4326386.0,     116.5,     793.0,       0.0);
     ( 561311.6, 4326386.0,     114.5,     793.0,       0.0);         ( 561411.6,
4326386.0,     112.7,     793.0,       0.0);
     ( 561511.6, 4326386.0,     111.2,     793.0,       0.0);         ( 561611.6,
4326386.0,     110.1,     793.0,       0.0);
     ( 561711.6, 4326386.0,     108.4,     793.0,       0.0);         ( 561811.6,
4326386.0,     106.8,     793.0,       0.0);
     ( 561911.6, 4326386.0,     105.4,     793.0,       0.0);         ( 562011.6,
4326386.0,     105.2,     793.0,       0.0);
     ( 562111.6, 4326386.0,     105.0,     793.0,       0.0);         ( 562211.6,
4326386.0,     104.6,     793.0,       0.0);
     ( 562311.6, 4326386.0,     104.5,     793.0,       0.0);         ( 562411.6,
4326386.0,     104.3,     793.0,       0.0);
     ( 562511.6, 4326386.0,     104.9,     793.0,       0.0);         ( 562611.6,
4326386.0,     104.0,     793.0,       0.0);
     ( 562711.6, 4326386.0,     103.2,     793.0,       0.0);         ( 562811.6,
4326386.0,     104.8,     793.0,       0.0);
     ( 562911.6, 4326386.0,     104.3,     793.0,       0.0);         ( 563011.6,
4326386.0,     100.6,     793.0,       0.0);
     ( 563111.6, 4326386.0,     101.3,     793.0,       0.0);         ( 563211.6,
4326386.0,      98.0,     793.0,       0.0);
     ( 563311.6, 4326386.0,      96.5,     793.0,       0.0);         ( 563411.6,
4326386.0,      95.3,     793.0,       0.0);
     ( 563511.6, 4326386.0,      94.9,     793.0,       0.0);         ( 563611.6,
4326386.0,      93.1,     793.0,       0.0);
     ( 563711.6, 4326386.0,      91.0,     793.0,       0.0);         ( 563811.6,
4326386.0,      87.1,     793.0,       0.0);
     ( 563911.6, 4326386.0,      85.3,     793.0,       0.0);         ( 564011.6,
4326386.0,      84.3,     793.0,       0.0);
     ( 564111.6, 4326386.0,      87.1,     793.0,       0.0);         ( 564211.6,
4326386.0,      82.5,     793.0,       0.0);
     ( 564311.6, 4326386.0,      85.4,     793.0,       0.0);         ( 564411.6,
4326386.0,      92.2,     138.3,       0.0);
     ( 564511.6, 4326386.0,      96.3,     138.3,       0.0);         ( 564611.6,
4326386.0,      95.7,     139.6,       0.0);
     ( 564711.6, 4326386.0,      86.5,     149.6,       0.0);         ( 564811.6,
4326386.0,      98.6,     143.2,       0.0);
     ( 564911.6, 4326386.0,      99.3,     143.2,       0.0);         ( 565011.6,
4326386.0,      93.4,     143.5,       0.0);
     ( 565111.6, 4326386.0,      92.1,     143.5,       0.0);         ( 565211.6,
4326386.0,      95.0,     143.1,       0.0);
     ( 565311.6, 4326386.0,      91.0,     143.1,       0.0);         ( 565411.6,
4326386.0,     107.7,     142.3,       0.0);
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(565511.6, 4326386.0, 117.3, 138.0, 0.0); (565611.6, 4326386.0, 126.6, 134.9, 0.0);
(565711.6, 4326386.0, 129.5, 129.5, 0.0); (565811.6, 4326386.0, 112.6, 138.4, 0.0);
(565911.6, 4326386.0, 132.1, 136.9, 0.0); (566011.6, 4326386.0, 130.5, 136.7, 0.0);
(566111.6, 4326386.0, 129.1, 136.2, 0.0); (566211.6, 4326386.0, 134.2, 134.2, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(566311.6, 4326386.0, 126.7, 135.3, 0.0); (566411.6, 4326386.0, 126.1, 127.9, 0.0);
(566511.6, 4326386.0, 118.2, 127.9, 0.0); (560111.6, 4326486.0, 192.7, 793.0, 0.0);
(560211.6, 4326486.0, 175.4, 793.0, 0.0); (560311.6, 4326486.0, 176.5, 793.0, 0.0);
(560411.6, 4326486.0, 159.3, 793.0, 0.0); (560511.6, 4326486.0, 140.4, 793.0, 0.0);
(560611.6, 4326486.0, 132.5, 793.0, 0.0); (560711.6, 4326486.0, 129.7, 793.0, 0.0);
(560811.6, 4326486.0, 121.8, 793.0, 0.0); (560911.6, 4326486.0, 121.4, 793.0, 0.0);
(561011.6, 4326486.0, 119.8, 793.0, 0.0); (561111.6, 4326486.0, 118.2, 793.0, 0.0);
(561211.6, 4326486.0, 116.4, 793.0, 0.0); (561311.6, 4326486.0, 114.5, 793.0, 0.0);
(561411.6, 4326486.0, 113.1, 793.0, 0.0); (561511.6, 4326486.0, 111.9, 793.0, 0.0);
(561611.6, 4326486.0, 110.3, 793.0, 0.0); (561711.6, 4326486.0, 108.4, 793.0, 0.0);
(561811.6, 4326486.0, 106.8, 793.0, 0.0); (561911.6, 4326486.0, 105.5, 793.0, 0.0);
(562011.6, 4326486.0, 103.7, 793.0, 0.0); (562111.6, 4326486.0, 103.8, 793.0, 0.0);
(562211.6, 4326486.0, 103.4, 793.0, 0.0); (562311.6, 4326486.0, 103.0, 793.0, 0.0);
(562411.6, 4326486.0, 103.0, 793.0, 0.0); (562511.6, 4326486.0, 102.4, 793.0, 0.0);
(562611.6, 4326486.0, 103.7, 793.0, 0.0); (562711.6, 4326486.0, 102.8, 793.0, 0.0);

```
     ( 562811.6, 4326486.0,     106.8,     793.0,       0.0);         ( 562911.6,
4326486.0,     105.7,     793.0,       0.0);
     ( 563011.6, 4326486.0,     105.4,     793.0,       0.0);         ( 563111.6,
4326486.0,     102.9,     793.0,       0.0);
     ( 563211.6, 4326486.0,     102.1,     793.0,       0.0);         ( 563311.6,
4326486.0,     102.6,     793.0,       0.0);
     ( 563411.6, 4326486.0,     102.2,     793.0,       0.0);         ( 563511.6,
4326486.0,      94.7,     793.0,       0.0);
     ( 563611.6, 4326486.0,      93.4,     793.0,       0.0);         ( 563711.6,
4326486.0,      90.8,     793.0,       0.0);
     ( 563811.6, 4326486.0,      87.2,     793.0,       0.0);         ( 563911.6,
4326486.0,      87.2,     793.0,       0.0);
     ( 564011.6, 4326486.0,      86.4,     793.0,       0.0);         ( 564111.6,
4326486.0,      82.5,     793.0,       0.0);
     ( 564211.6, 4326486.0,      81.5,     793.0,       0.0);         ( 564311.6,
4326486.0,      82.4,     793.0,       0.0);
     ( 564411.6, 4326486.0,      86.9,     138.3,       0.0);         ( 564511.6,
4326486.0,      88.9,     138.0,       0.0);
     ( 564611.6, 4326486.0,      89.2,     139.0,       0.0);         ( 564711.6,
4326486.0,      86.6,     143.2,       0.0);
     ( 564811.6, 4326486.0,      86.2,     143.5,       0.0);         ( 564911.6,
4326486.0,      78.8,     143.5,       0.0);
     ( 565011.6, 4326486.0,      80.9,     143.5,       0.0);         ( 565111.6,
4326486.0,      83.0,     143.5,       0.0);
     ( 565211.6, 4326486.0,      85.1,     143.1,       0.0);         ( 565311.6,
4326486.0,      82.3,     143.1,       0.0);
     ( 565411.6, 4326486.0,      77.8,     143.1,       0.0);         ( 565511.6,
4326486.0,      81.2,     143.1,       0.0);
     ( 565611.6, 4326486.0,     102.6,     138.4,       0.0);         ( 565711.6,
4326486.0,     103.9,     138.4,       0.0);
     ( 565811.6, 4326486.0,      96.5,     141.5,       0.0);         ( 565911.6,
4326486.0,     112.8,     137.0,       0.0);
     ( 566011.6, 4326486.0,     116.6,     137.0,       0.0);         ( 566111.6,
4326486.0,     111.7,     137.0,       0.0);
     ( 566211.6, 4326486.0,     120.8,     135.3,       0.0);         ( 566311.6,
4326486.0,     117.0,     135.3,       0.0);
     ( 566411.6, 4326486.0,     111.8,     135.3,       0.0);         ( 566511.6,
4326486.0,     103.8,     135.3,       0.0);
     ( 560111.6, 4326586.0,     197.1,     793.0,       0.0);         ( 560211.6,
4326586.0,     192.0,     793.0,       0.0);
     ( 560311.6, 4326586.0,     174.0,     793.0,       0.0);         ( 560411.6,
4326586.0,     158.8,     793.0,       0.0);
     ( 560511.6, 4326586.0,     138.4,     793.0,       0.0);         ( 560611.6,
4326586.0,     130.0,     793.0,       0.0);
     ( 560711.6, 4326586.0,     127.1,     793.0,       0.0);         ( 560811.6,
4326586.0,     119.4,     793.0,       0.0);
     ( 560911.6, 4326586.0,     122.8,     793.0,       0.0);         ( 561011.6,
4326586.0,     118.9,     793.0,       0.0);
     ( 561111.6, 4326586.0,     116.6,     793.0,       0.0);         ( 561211.6,
4326586.0,     115.7,     793.0,       0.0);
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(561311.6, 4326586.0, 114.1, 793.0, 0.0); (561411.6, 4326586.0, 112.7, 793.0, 0.0);
(561511.6, 4326586.0, 111.5, 793.0, 0.0); (561611.6, 4326586.0, 109.9, 793.0, 0.0);
(561711.6, 4326586.0, 108.1, 793.0, 0.0); (561811.6, 4326586.0, 106.7, 793.0, 0.0);
(561911.6, 4326586.0, 105.1, 793.0, 0.0); (562011.6, 4326586.0, 103.8, 793.0, 0.0);
(564611.6, 4326586.0, 83.7, 138.9, 0.0); (564711.6, 4326586.0, 88.4, 137.2, 0.0);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(564811.6, 4326586.0, 82.7, 143.1, 0.0); (564911.6, 4326586.0, 77.8, 143.5, 0.0);
(565011.6, 4326586.0, 75.4, 143.5, 0.0); (565111.6, 4326586.0, 74.2, 143.5, 0.0);
(565211.6, 4326586.0, 72.8, 143.5, 0.0); (565311.6, 4326586.0, 74.5, 143.1, 0.0);
(565411.6, 4326586.0, 73.8, 143.1, 0.0); (565511.6, 4326586.0, 72.6, 143.1, 0.0);
(565611.6, 4326586.0, 71.7, 143.1, 0.0); (565711.6, 4326586.0, 73.1, 143.1, 0.0);
(565811.6, 4326586.0, 76.4, 143.1, 0.0); (565911.6, 4326586.0, 77.1, 143.1, 0.0);
(566011.6, 4326586.0, 77.1, 142.7, 0.0); (566111.6, 4326586.0, 81.6, 141.2, 0.0);
(566211.6, 4326586.0, 101.1, 137.0, 0.0); (566311.6, 4326586.0, 110.5, 135.3, 0.0);
(566411.6, 4326586.0, 110.5, 128.1, 0.0); (566511.6, 4326586.0, 114.4, 122.3, 0.0);
(560111.6, 4326686.0, 235.7, 793.0, 0.0); (560211.6, 4326686.0, 209.2, 793.0, 0.0);
(560311.6, 4326686.0, 169.9, 793.0, 0.0); (560411.6, 4326686.0, 155.8, 793.0, 0.0);
(560511.6, 4326686.0, 133.9, 793.0, 0.0); (560611.6, 4326686.0, 127.6, 793.0, 0.0);
(560711.6, 4326686.0, 124.3, 793.0, 0.0); (560811.6, 4326686.0, 121.1, 793.0, 0.0);
(560911.6, 4326686.0, 124.8, 793.0, 0.0); (561011.6, 4326686.0, 116.8, 793.0, 0.0);

```
     ( 561111.6, 4326686.0,     115.0,     793.0,       0.0);         ( 561211.6,
4326686.0,     114.1,     793.0,       0.0);
     ( 561311.6, 4326686.0,     113.4,     793.0,       0.0);         ( 561411.6,
4326686.0,     111.3,     793.0,       0.0);
     ( 561511.6, 4326686.0,     110.4,     793.0,       0.0);         ( 561611.6,
4326686.0,     109.2,     793.0,       0.0);
     ( 561711.6, 4326686.0,     107.7,     793.0,       0.0);         ( 561811.6,
4326686.0,     106.2,     793.0,       0.0);
     ( 561911.6, 4326686.0,     104.7,     793.0,       0.0);         ( 562011.6,
4326686.0,     103.2,     793.0,       0.0);
     ( 564611.6, 4326686.0,      77.6,     137.2,       0.0);         ( 564711.6,
4326686.0,      77.5,     138.9,       0.0);
     ( 564811.6, 4326686.0,      80.7,     137.1,       0.0);         ( 564911.6,
4326686.0,      76.4,     142.4,       0.0);
     ( 565011.6, 4326686.0,      74.6,     142.4,       0.0);         ( 565111.6,
4326686.0,      73.5,     142.4,       0.0);
     ( 565211.6, 4326686.0,      72.8,     143.1,       0.0);         ( 565311.6,
4326686.0,      72.2,     143.1,       0.0);
     ( 565411.6, 4326686.0,      71.7,     143.1,       0.0);         ( 565511.6,
4326686.0,      71.1,     143.1,       0.0);
     ( 565611.6, 4326686.0,      70.1,     143.1,       0.0);         ( 565711.6,
4326686.0,      69.8,     143.1,       0.0);
     ( 565811.6, 4326686.0,      69.3,     143.1,       0.0);         ( 565911.6,
4326686.0,      68.9,     143.1,       0.0);
     ( 566011.6, 4326686.0,      69.7,     141.5,       0.0);         ( 566111.6,
4326686.0,      71.4,     141.5,       0.0);
     ( 566211.6, 4326686.0,      70.4,     140.2,       0.0);         ( 566311.6,
4326686.0,      72.1,     137.0,       0.0);
     ( 566411.6, 4326686.0,      83.1,     136.2,       0.0);         ( 566511.6,
4326686.0,     112.1,     122.3,       0.0);
     ( 560111.6, 4326786.0,     249.4,     793.0,       0.0);         ( 560211.6,
4326786.0,     200.2,     793.0,       0.0);
     ( 560311.6, 4326786.0,     164.9,     793.0,       0.0);         ( 560411.6,
4326786.0,     148.8,     793.0,       0.0);
     ( 560511.6, 4326786.0,     133.9,     793.0,       0.0);         ( 560611.6,
4326786.0,     127.1,     793.0,       0.0);
     ( 560711.6, 4326786.0,     123.0,     793.0,       0.0);         ( 560811.6,
4326786.0,     119.7,     793.0,       0.0);
     ( 560911.6, 4326786.0,     117.1,     793.0,       0.0);         ( 561011.6,
4326786.0,     114.4,     793.0,       0.0);
     ( 561111.6, 4326786.0,     113.4,     793.0,       0.0);         ( 561211.6,
4326786.0,     112.5,     793.0,       0.0);
     ( 561311.6, 4326786.0,     111.8,     793.0,       0.0);         ( 561411.6,
4326786.0,     110.5,     793.0,       0.0);
     ( 561511.6, 4326786.0,     110.2,     793.0,       0.0);         ( 561611.6,
4326786.0,     108.7,     793.0,       0.0);
     ( 561711.6, 4326786.0,     107.0,     793.0,       0.0);         ( 561811.6,
4326786.0,     105.5,     793.0,       0.0);
     ( 561911.6, 4326786.0,     104.1,     793.0,       0.0);         ( 562011.6,
4326786.0,     102.6,     793.0,       0.0);
```

(564611.6, 4326786.0, 77.3, 136.8, 0.0); (564711.6, 4326786.0, 76.5, 137.1, 0.0);
(564811.6, 4326786.0, 75.8, 137.1, 0.0); (564911.6, 4326786.0, 75.2, 137.1, 0.0);
(565011.6, 4326786.0, 74.3, 137.1, 0.0); (565111.6, 4326786.0, 73.5, 137.1, 0.0);
(565211.6, 4326786.0, 72.7, 137.1, 0.0); (565311.6, 4326786.0, 72.0, 138.0, 0.0);
(565411.6, 4326786.0, 71.6, 141.8, 0.0); (565511.6, 4326786.0, 70.7, 142.4, 0.0);
(565611.6, 4326786.0, 69.9, 143.1, 0.0); (565711.6, 4326786.0, 69.7, 143.1, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(565811.6, 4326786.0, 69.1, 141.4, 0.0); (565911.6, 4326786.0, 68.4, 141.4, 0.0);
(566011.6, 4326786.0, 67.7, 140.3, 0.0); (566111.6, 4326786.0, 65.7, 138.4, 0.0);
(566211.6, 4326786.0, 67.2, 137.0, 0.0); (566311.6, 4326786.0, 67.0, 137.0, 0.0);
(566411.6, 4326786.0, 68.6, 137.0, 0.0); (566511.6, 4326786.0, 73.8, 136.2, 0.0);
(560111.6, 4326886.0, 228.8, 793.0, 0.0); (560211.6, 4326886.0, 195.0, 793.0, 0.0);
(560311.6, 4326886.0, 165.8, 793.0, 0.0); (560411.6, 4326886.0, 149.3, 793.0, 0.0);
(560511.6, 4326886.0, 131.1, 793.0, 0.0); (560611.6, 4326886.0, 125.1, 793.0, 0.0);
(560711.6, 4326886.0, 120.2, 793.0, 0.0); (560811.6, 4326886.0, 116.8, 793.0, 0.0);
(560911.6, 4326886.0, 114.4, 793.0, 0.0); (561011.6, 4326886.0, 112.9, 793.0, 0.0);
(561111.6, 4326886.0, 111.9, 793.0, 0.0); (561211.6, 4326886.0, 111.1, 793.0, 0.0);
(561311.6, 4326886.0, 110.5, 793.0, 0.0); (561411.6, 4326886.0, 109.3, 793.0, 0.0);
(561511.6, 4326886.0, 109.0, 793.0, 0.0); (561611.6, 4326886.0, 108.3, 793.0, 0.0);
(561711.6, 4326886.0, 106.8, 793.0, 0.0); (561811.6, 4326886.0, 104.8, 793.0, 0.0);

```
     ( 561911.6, 4326886.0,     103.3,     793.0,       0.0);         ( 562011.6,
4326886.0,     102.0,     793.0,       0.0);
     ( 564611.6, 4326886.0,      77.3,      77.3,       0.0);         ( 564711.6,
4326886.0,      76.6,      76.6,       0.0);
     ( 564811.6, 4326886.0,      75.8,      75.8,       0.0);         ( 564911.6,
4326886.0,      75.0,      75.0,       0.0);
     ( 565011.6, 4326886.0,      74.6,     106.7,       0.0);         ( 565111.6,
4326886.0,      73.6,     106.7,       0.0);
     ( 565211.6, 4326886.0,      73.0,     106.7,       0.0);         ( 565311.6,
4326886.0,      72.2,     134.9,       0.0);
     ( 565411.6, 4326886.0,      71.2,     138.0,       0.0);         ( 565511.6,
4326886.0,      70.8,     138.0,       0.0);
     ( 565611.6, 4326886.0,      70.4,     138.0,       0.0);         ( 565711.6,
4326886.0,      69.8,     138.4,       0.0);
     ( 565811.6, 4326886.0,      68.8,     138.0,       0.0);         ( 565911.6,
4326886.0,      68.0,     138.0,       0.0);
     ( 566011.6, 4326886.0,      67.4,     137.0,       0.0);         ( 566111.6,
4326886.0,      67.0,     137.0,       0.0);
     ( 566211.6, 4326886.0,      66.0,     137.0,       0.0);         ( 566311.6,
4326886.0,      65.4,     137.0,       0.0);
     ( 566411.6, 4326886.0,      65.0,     137.0,       0.0);         ( 566511.6,
4326886.0,      65.0,     136.2,       0.0);
     ( 560111.6, 4326986.0,     228.3,     793.0,       0.0);         ( 560211.6,
4326986.0,     193.0,     793.0,       0.0);
     ( 560311.6, 4326986.0,     161.1,     793.0,       0.0);         ( 560411.6,
4326986.0,     141.9,     793.0,       0.0);
     ( 560511.6, 4326986.0,     130.4,     793.0,       0.0);         ( 560611.6,
4326986.0,     122.8,     793.0,       0.0);
     ( 560711.6, 4326986.0,     118.6,     793.0,       0.0);         ( 560811.6,
4326986.0,     114.8,     793.0,       0.0);
     ( 560911.6, 4326986.0,     112.6,     793.0,       0.0);         ( 561011.6,
4326986.0,     111.4,     793.0,       0.0);
     ( 561111.6, 4326986.0,     110.5,     793.0,       0.0);         ( 561211.6,
4326986.0,     109.6,     793.0,       0.0);
     ( 561311.6, 4326986.0,     108.8,     793.0,       0.0);         ( 561411.6,
4326986.0,     107.7,     793.0,       0.0);
     ( 561511.6, 4326986.0,     107.2,     793.0,       0.0);         ( 561611.6,
4326986.0,     106.9,     793.0,       0.0);
     ( 561711.6, 4326986.0,     106.0,     793.0,       0.0);         ( 561811.6,
4326986.0,     104.7,     793.0,       0.0);
     ( 561911.6, 4326986.0,     102.9,     793.0,       0.0);         ( 562011.6,
4326986.0,     101.4,     793.0,       0.0);
     ( 564611.6, 4326986.0,      77.3,      99.6,       0.0);         ( 564711.6,
4326986.0,      76.5,     111.0,       0.0);
     ( 564811.6, 4326986.0,      75.6,     111.5,       0.0);         ( 564911.6,
4326986.0,      75.4,     111.5,       0.0);
     ( 565011.6, 4326986.0,      74.7,     111.2,       0.0);         ( 565111.6,
4326986.0,      79.6,     106.7,       0.0);
     ( 565211.6, 4326986.0,      82.8,     106.7,       0.0);         ( 565311.6,
4326986.0,      79.8,     106.7,       0.0);
```

(565411.6, 4326986.0, 77.4, 106.7, 0.0); (565511.6, 4326986.0, 75.5, 106.6, 0.0);
(565611.6, 4326986.0, 74.2, 96.4, 0.0); (565711.6, 4326986.0, 72.7, 131.2, 0.0);
(565811.6, 4326986.0, 69.2, 137.0, 0.0); (565911.6, 4326986.0, 68.1, 137.0, 0.0);
(566011.6, 4326986.0, 67.2, 137.0, 0.0); (566111.6, 4326986.0, 66.6, 137.0, 0.0);
(566211.6, 4326986.0, 66.0, 137.0, 0.0); (566311.6, 4326986.0, 65.5, 136.2, 0.0);
(566411.6, 4326986.0, 64.5, 136.2, 0.0); (566511.6, 4326986.0, 63.9, 135.3, 0.0);
(560111.6, 4327086.0, 224.7, 793.0, 0.0); (560211.6, 4327086.0, 189.2, 793.0, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(560311.6, 4327086.0, 161.8, 793.0, 0.0); (560411.6, 4327086.0, 140.5, 793.0, 0.0);
(560511.6, 4327086.0, 127.7, 793.0, 0.0); (560611.6, 4327086.0, 120.7, 793.0, 0.0);
(560711.6, 4327086.0, 116.3, 793.0, 0.0); (560811.6, 4327086.0, 113.4, 793.0, 0.0);
(560911.6, 4327086.0, 110.9, 793.0, 0.0); (561011.6, 4327086.0, 109.9, 793.0, 0.0);
(561111.6, 4327086.0, 109.0, 793.0, 0.0); (561211.6, 4327086.0, 108.1, 793.0, 0.0);
(561311.6, 4327086.0, 107.3, 793.0, 0.0); (561411.6, 4327086.0, 106.2, 793.0, 0.0);
(561511.6, 4327086.0, 105.3, 793.0, 0.0); (561611.6, 4327086.0, 105.0, 793.0, 0.0);
(561711.6, 4327086.0, 104.8, 793.0, 0.0); (561811.6, 4327086.0, 103.7, 793.0, 0.0);
(561911.6, 4327086.0, 102.2, 793.0, 0.0); (562011.6, 4327086.0, 100.7, 793.0, 0.0);
(564611.6, 4327086.0, 77.3, 111.1, 0.0); (564711.6, 4327086.0, 76.8, 112.5, 0.0);
(564811.6, 4327086.0, 76.1, 112.5, 0.0); (564911.6, 4327086.0, 78.1, 112.5, 0.0);
(565011.6, 4327086.0, 79.6, 111.9, 0.0); (565111.6, 4327086.0, 93.5, 106.7, 0.0);

```
     ( 565211.6, 4327086.0,     104.5,     104.5,       0.0);         ( 565311.6,
4327086.0,      94.3,     105.4,       0.0);
     ( 565411.6, 4327086.0,      87.0,     106.7,       0.0);         ( 565511.6,
4327086.0,      83.1,     106.6,       0.0);
     ( 565611.6, 4327086.0,      87.5,      93.6,       0.0);         ( 565711.6,
4327086.0,      77.4,     101.4,       0.0);
     ( 565811.6, 4327086.0,      75.3,     101.4,       0.0);         ( 565911.6,
4327086.0,      72.6,     105.6,       0.0);
     ( 566011.6, 4327086.0,      77.4,      89.5,       0.0);         ( 566111.6,
4327086.0,      70.6,     106.0,       0.0);
     ( 566211.6, 4327086.0,      66.6,     134.4,       0.0);         ( 566311.6,
4327086.0,      65.1,     134.4,       0.0);
     ( 566411.6, 4327086.0,      64.3,     122.3,       0.0);         ( 566511.6,
4327086.0,      63.7,     122.3,       0.0);
     ( 560111.6, 4327186.0,     217.8,     793.0,       0.0);         ( 560211.6,
4327186.0,     202.0,     793.0,       0.0);
     ( 560311.6, 4327186.0,     156.2,     793.0,       0.0);         ( 560411.6,
4327186.0,     135.9,     793.0,       0.0);
     ( 560511.6, 4327186.0,     126.3,     793.0,       0.0);         ( 560611.6,
4327186.0,     120.1,     793.0,       0.0);
     ( 560711.6, 4327186.0,     113.5,     793.0,       0.0);         ( 560811.6,
4327186.0,     113.8,     793.0,       0.0);
     ( 560911.6, 4327186.0,     109.4,     793.0,       0.0);         ( 561011.6,
4327186.0,     108.4,     793.0,       0.0);
     ( 561111.6, 4327186.0,     107.4,     793.0,       0.0);         ( 561211.6,
4327186.0,     106.6,     793.0,       0.0);
     ( 561311.6, 4327186.0,     105.7,     793.0,       0.0);         ( 561411.6,
4327186.0,     104.6,     793.0,       0.0);
     ( 561511.6, 4327186.0,     104.3,     793.0,       0.0);         ( 561611.6,
4327186.0,     103.9,     793.0,       0.0);
     ( 561711.6, 4327186.0,     103.4,     793.0,       0.0);         ( 561811.6,
4327186.0,     102.3,     793.0,       0.0);
     ( 561911.6, 4327186.0,     101.4,     793.0,       0.0);         ( 562011.6,
4327186.0,      99.9,     793.0,       0.0);
     ( 564611.6, 4327186.0,      81.5,     112.1,       0.0);         ( 564711.6,
4327186.0,      79.4,     113.2,       0.0);
     ( 564811.6, 4327186.0,      90.0,     112.3,       0.0);         ( 564911.6,
4327186.0,      92.1,     112.0,       0.0);
     ( 565011.6, 4327186.0,      96.6,     109.5,       0.0);         ( 565111.6,
4327186.0,      98.9,     100.7,       0.0);
     ( 565211.6, 4327186.0,      85.9,     106.8,       0.0);         ( 565311.6,
4327186.0,      96.0,     106.7,       0.0);
     ( 565411.6, 4327186.0,      97.7,     106.6,       0.0);         ( 565511.6,
4327186.0,      88.0,     106.7,       0.0);
     ( 565611.6, 4327186.0,      76.8,     106.7,       0.0);         ( 565711.6,
4327186.0,      84.5,     102.5,       0.0);
     ( 565811.6, 4327186.0,      86.0,     100.6,       0.0);         ( 565911.6,
4327186.0,      87.7,      99.8,       0.0);
     ( 566011.6, 4327186.0,      85.9,     101.8,       0.0);         ( 566111.6,
4327186.0,      78.7,     106.1,       0.0);
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*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(561311.6, 4327286.0, 104.3, 793.0, 0.0); (561411.6, 4327286.0, 103.5, 793.0, 0.0);
(561511.6, 4327286.0, 103.0, 793.0, 0.0); (561611.6, 4327286.0, 102.6, 793.0, 0.0);
(561711.6, 4327286.0, 101.9, 793.0, 0.0); (561811.6, 4327286.0, 101.0, 793.0, 0.0);
(561911.6, 4327286.0, 100.2, 793.0, 0.0); (562011.6, 4327286.0, 98.9, 793.0, 0.0);
(564611.6, 4327286.0, 89.2, 98.5, 0.0); (564711.6, 4327286.0, 84.6, 113.7, 0.0);
(564811.6, 4327286.0, 103.9, 111.8, 0.0); (564911.6, 4327286.0, 109.3, 109.3, 0.0);
(565011.6, 4327286.0, 101.3, 101.7, 0.0); (565111.6, 4327286.0, 94.7, 106.8, 0.0);
(565211.6, 4327286.0, 101.8, 106.1, 0.0); (565311.6, 4327286.0, 105.1, 105.1, 0.0);
(565411.6, 4327286.0, 104.7, 104.7, 0.0); (565511.6, 4327286.0, 83.5, 106.7, 0.0);
(565611.6, 4327286.0, 85.4, 105.9, 0.0); (565711.6, 4327286.0, 97.6, 100.6, 0.0);
(565811.6, 4327286.0, 98.1, 100.5, 0.0); (565911.6, 4327286.0, 87.5, 106.1, 0.0);

```
     ( 566011.6, 4327286.0,      93.1,     105.8,       0.0);         ( 566111.6,
4327286.0,      84.6,     106.1,       0.0);
     ( 566211.6, 4327286.0,      79.7,     106.1,       0.0);         ( 566311.6,
4327286.0,      72.5,     105.9,       0.0);
     ( 566411.6, 4327286.0,      73.2,      73.2,       0.0);         ( 566511.6,
4327286.0,      67.3,      73.7,       0.0);
     ( 560111.6, 4327386.0,     198.9,     793.0,       0.0);         ( 560211.6,
4327386.0,     164.5,     793.0,       0.0);
     ( 560311.6, 4327386.0,     146.4,     793.0,       0.0);         ( 560411.6,
4327386.0,     133.8,     793.0,       0.0);
     ( 560511.6, 4327386.0,     118.8,     793.0,       0.0);         ( 560611.6,
4327386.0,     114.2,     793.0,       0.0);
     ( 560711.6, 4327386.0,     109.6,     793.0,       0.0);         ( 560811.6,
4327386.0,     113.2,     793.0,       0.0);
     ( 560911.6, 4327386.0,     106.5,     793.0,       0.0);         ( 561011.6,
4327386.0,     105.5,     793.0,       0.0);
     ( 561111.6, 4327386.0,     104.6,     793.0,       0.0);         ( 561211.6,
4327386.0,     103.8,     793.0,       0.0);
     ( 561311.6, 4327386.0,     103.1,     793.0,       0.0);         ( 561411.6,
4327386.0,     102.7,     793.0,       0.0);
     ( 561511.6, 4327386.0,     101.9,     793.0,       0.0);         ( 561611.6,
4327386.0,     101.5,     793.0,       0.0);
     ( 561711.6, 4327386.0,     100.8,     793.0,       0.0);         ( 561811.6,
4327386.0,      99.9,     793.0,       0.0);
     ( 561911.6, 4327386.0,      99.1,     793.0,       0.0);         ( 562011.6,
4327386.0,      98.1,     793.0,       0.0);
     ( 564611.6, 4327386.0,      98.8,      98.8,       0.0);         ( 564711.6,
4327386.0,      85.1,     113.7,       0.0);
     ( 564811.6, 4327386.0,     107.9,     112.5,       0.0);         ( 564911.6,
4327386.0,     106.1,     112.0,       0.0);
     ( 565011.6, 4327386.0,      96.9,     110.2,       0.0);         ( 565111.6,
4327386.0,     101.0,     107.4,       0.0);
     ( 565211.6, 4327386.0,     106.4,     106.4,       0.0);         ( 565311.6,
4327386.0,      96.2,     106.7,       0.0);
     ( 565411.6, 4327386.0,      87.2,     106.8,       0.0);         ( 565511.6,
4327386.0,      89.7,     108.5,       0.0);
     ( 565611.6, 4327386.0,      95.1,     106.4,       0.0);         ( 565711.6,
4327386.0,     102.8,     102.8,       0.0);
     ( 565811.6, 4327386.0,     100.8,     100.8,       0.0);         ( 565911.6,
4327386.0,      93.8,     106.1,       0.0);
     ( 566011.6, 4327386.0,     104.4,     104.4,       0.0);         ( 566111.6,
4327386.0,      96.0,      96.0,       0.0);
     ( 566211.6, 4327386.0,      85.8,     105.6,       0.0);         ( 566311.6,
4327386.0,      79.4,      79.4,       0.0);
     ( 566411.6, 4327386.0,      74.7,      74.7,       0.0);         ( 566511.6,
4327386.0,      76.1,      76.1,       0.0);
     ( 560111.6, 4327486.0,     206.3,     793.0,       0.0);         ( 560211.6,
4327486.0,     169.9,     793.0,       0.0);
     ( 560311.6, 4327486.0,     147.1,     793.0,       0.0);         ( 560411.6,
4327486.0,     127.4,     793.0,       0.0);
```

(560511.6, 4327486.0, 118.8, 793.0, 0.0); (560611.6, 4327486.0, 111.4, 793.0, 0.0);
(560711.6, 4327486.0, 111.5, 793.0, 0.0); (560811.6, 4327486.0, 106.9, 793.0, 0.0);
(560911.6, 4327486.0, 105.1, 793.0, 0.0); (561011.6, 4327486.0, 104.2, 793.0, 0.0);
(561111.6, 4327486.0, 103.3, 793.0, 0.0); (561211.6, 4327486.0, 102.5, 793.0, 0.0);
(561311.6, 4327486.0, 101.8, 793.0, 0.0); (561411.6, 4327486.0, 101.3, 793.0, 0.0);
(561511.6, 4327486.0, 100.8, 793.0, 0.0); (561611.6, 4327486.0, 100.3, 793.0, 0.0);
(561711.6, 4327486.0, 99.5, 793.0, 0.0); (561811.6, 4327486.0, 98.8, 793.0, 0.0);
(561911.6, 4327486.0, 98.1, 793.0, 0.0); (562011.6, 4327486.0, 97.4, 793.0, 0.0);
(564611.6, 4327486.0, 88.7, 113.7, 0.0); (564711.6, 4327486.0, 98.0, 113.7, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(564811.6, 4327486.0, 112.4, 112.4, 0.0); (564911.6, 4327486.0, 102.4, 112.9, 0.0);
(565011.6, 4327486.0, 100.9, 111.9, 0.0); (565111.6, 4327486.0, 109.1, 110.7, 0.0);
(565211.6, 4327486.0, 104.4, 107.6, 0.0); (565311.6, 4327486.0, 95.9, 107.6, 0.0);
(565411.6, 4327486.0, 86.5, 109.3, 0.0); (565511.6, 4327486.0, 90.0, 110.0, 0.0);
(565611.6, 4327486.0, 104.0, 106.4, 0.0); (565711.6, 4327486.0, 107.2, 108.6, 0.0);
(565811.6, 4327486.0, 104.0, 109.4, 0.0); (565911.6, 4327486.0, 91.9, 109.9, 0.0);
(566011.6, 4327486.0, 102.8, 104.1, 0.0); (566111.6, 4327486.0, 94.9, 101.1, 0.0);
(566211.6, 4327486.0, 89.1, 96.0, 0.0); (566311.6, 4327486.0, 81.3, 96.5, 0.0);
(566411.6, 4327486.0, 73.4, 95.7, 0.0); (566511.6, 4327486.0, 78.1, 78.1, 0.0);
(560111.6, 4327586.0, 188.6, 793.0, 0.0); (560211.6, 4327586.0, 156.7, 793.0, 0.0);

```
     ( 560311.6, 4327586.0,     138.0,     793.0,       0.0);         ( 560411.6,
4327586.0,     123.7,     793.0,       0.0);
     ( 560511.6, 4327586.0,     115.4,     793.0,       0.0);         ( 560611.6,
4327586.0,     110.5,     793.0,       0.0);
     ( 560711.6, 4327586.0,     107.5,     793.0,       0.0);         ( 560811.6,
4327586.0,     105.6,     793.0,       0.0);
     ( 560911.6, 4327586.0,     103.7,     793.0,       0.0);         ( 561011.6,
4327586.0,     102.7,     793.0,       0.0);
     ( 561111.6, 4327586.0,     101.9,     793.0,       0.0);         ( 561211.6,
4327586.0,     101.1,     793.0,       0.0);
     ( 561311.6, 4327586.0,     100.6,     793.0,       0.0);         ( 561411.6,
4327586.0,     100.2,     793.0,       0.0);
     ( 561511.6, 4327586.0,      99.8,     793.0,       0.0);         ( 561611.6,
4327586.0,      99.2,     793.0,       0.0);
     ( 561711.6, 4327586.0,      98.5,     793.0,       0.0);         ( 561811.6,
4327586.0,      97.6,     793.0,       0.0);
     ( 561911.6, 4327586.0,      96.8,     793.0,       0.0);         ( 562011.6,
4327586.0,      96.3,     793.0,       0.0);
     ( 564611.6, 4327586.0,      94.2,     114.9,       0.0);         ( 564711.6,
4327586.0,     101.9,     113.7,       0.0);
     ( 564811.6, 4327586.0,     110.2,     113.3,       0.0);         ( 564911.6,
4327586.0,      99.5,     113.7,       0.0);
     ( 565011.6, 4327586.0,     103.1,     108.6,       0.0);         ( 565111.6,
4327586.0,     101.2,     112.8,       0.0);
     ( 565211.6, 4327586.0,      89.9,     117.8,       0.0);         ( 565311.6,
4327586.0,     100.4,     109.3,       0.0);
     ( 565411.6, 4327586.0,     103.5,     104.8,       0.0);         ( 565511.6,
4327586.0,      90.9,     117.5,       0.0);
     ( 565611.6, 4327586.0,     104.5,     108.8,       0.0);         ( 565711.6,
4327586.0,     101.0,     113.1,       0.0);
     ( 565811.6, 4327586.0,      95.6,     113.2,       0.0);         ( 565911.6,
4327586.0,      96.7,     112.6,       0.0);
     ( 566011.6, 4327586.0,     101.3,     101.3,       0.0);         ( 566111.6,
4327586.0,      97.3,      99.4,       0.0);
     ( 566211.6, 4327586.0,      92.1,      97.1,       0.0);         ( 566311.6,
4327586.0,      77.0,     101.0,       0.0);
     ( 566411.6, 4327586.0,      79.9,      79.9,       0.0);         ( 566511.6,
4327586.0,      73.9,      80.1,       0.0);
     ( 560111.6, 4327686.0,     180.9,     793.0,       0.0);         ( 560211.6,
4327686.0,     151.8,     793.0,       0.0);
     ( 560311.6, 4327686.0,     135.5,     793.0,       0.0);         ( 560411.6,
4327686.0,     122.3,     793.0,       0.0);
     ( 560511.6, 4327686.0,     114.5,     793.0,       0.0);         ( 560611.6,
4327686.0,     109.4,     793.0,       0.0);
     ( 560711.6, 4327686.0,     107.4,     793.0,       0.0);         ( 560811.6,
4327686.0,     105.8,     793.0,       0.0);
     ( 560911.6, 4327686.0,     103.6,     793.0,       0.0);         ( 561011.6,
4327686.0,     101.9,     793.0,       0.0);
     ( 561111.6, 4327686.0,     100.8,     793.0,       0.0);         ( 561211.6,
4327686.0,     100.0,     793.0,       0.0);
```

(561311.6, 4327686.0, 99.6, 793.0, 0.0); (561411.6, 4327686.0, 99.1, 793.0, 0.0);
(561511.6, 4327686.0, 98.8, 793.0, 0.0); (561611.6, 4327686.0, 98.1, 793.0, 0.0);
(561711.6, 4327686.0, 97.4, 793.0, 0.0); (561811.6, 4327686.0, 96.6, 793.0, 0.0);
(561911.6, 4327686.0, 95.8, 793.0, 0.0); (562011.6, 4327686.0, 95.1, 793.0, 0.0);
(564611.6, 4327686.0, 91.8, 114.9, 0.0); (564711.6, 4327686.0, 107.8, 114.9, 0.0);
(564811.6, 4327686.0, 106.8, 114.8, 0.0); (564911.6, 4327686.0, 103.2, 105.4, 0.0);
(565011.6, 4327686.0, 108.5, 114.8, 0.0); (565111.6, 4327686.0, 109.4, 112.7, 0.0);
(565211.6, 4327686.0, 93.4, 117.8, 0.0); (565311.6, 4327686.0, 108.6, 108.6, 0.0);
(565411.6, 4327686.0, 103.9, 117.5, 0.0); (565511.6, 4327686.0, 101.2, 117.5, 0.0);
(565611.6, 4327686.0, 110.7, 110.7, 0.0); (565711.6, 4327686.0, 109.0, 113.1, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(565811.6, 4327686.0, 111.9, 111.9, 0.0); (565911.6, 4327686.0, 104.6, 110.2, 0.0);
(566011.6, 4327686.0, 90.8, 112.6, 0.0); (566111.6, 4327686.0, 90.3, 101.0, 0.0);
(566211.6, 4327686.0, 85.6, 101.0, 0.0); (566311.6, 4327686.0, 86.8, 96.1, 0.0);
(566411.6, 4327686.0, 80.9, 81.6, 0.0); (566511.6, 4327686.0, 77.2, 79.8, 0.0);
(560111.6, 4327786.0, 189.8, 793.0, 0.0); (560211.6, 4327786.0, 157.3, 793.0, 0.0);
(560311.6, 4327786.0, 131.0, 793.0, 0.0); (560411.6, 4327786.0, 115.3, 793.0, 0.0);
(560511.6, 4327786.0, 111.5, 793.0, 0.0); (560611.6, 4327786.0, 106.5, 793.0, 0.0);
(560711.6, 4327786.0, 107.8, 793.0, 0.0); (560811.6, 4327786.0, 106.8, 793.0, 0.0);
(560911.6, 4327786.0, 104.4, 793.0, 0.0); (561011.6, 4327786.0, 101.4, 793.0, 0.0);

```
     ( 561111.6, 4327786.0,      99.9,     793.0,       0.0);         ( 561211.6,
4327786.0,      98.9,     793.0,       0.0);
     ( 561311.6, 4327786.0,      98.6,     793.0,       0.0);         ( 561411.6,
4327786.0,      98.0,     793.0,       0.0);
     ( 561511.6, 4327786.0,      98.0,     793.0,       0.0);         ( 561611.6,
4327786.0,      97.4,     793.0,       0.0);
     ( 561711.6, 4327786.0,      96.5,     793.0,       0.0);         ( 561811.6,
4327786.0,      95.9,     793.0,       0.0);
     ( 561911.6, 4327786.0,      95.1,     793.0,       0.0);         ( 562011.6,
4327786.0,      94.3,     793.0,       0.0);
     ( 564611.6, 4327786.0,      90.3,     115.3,       0.0);         ( 564711.6,
4327786.0,     111.9,     112.3,       0.0);
     ( 564811.6, 4327786.0,     108.4,     108.4,       0.0);         ( 564911.6,
4327786.0,     109.4,     109.4,       0.0);
     ( 565011.6, 4327786.0,     112.5,     112.5,       0.0);         ( 565111.6,
4327786.0,      99.8,     117.6,       0.0);
     ( 565211.6, 4327786.0,     106.1,     117.8,       0.0);         ( 565311.6,
4327786.0,     117.6,     117.6,       0.0);
     ( 565411.6, 4327786.0,     113.1,     116.8,       0.0);         ( 565511.6,
4327786.0,     113.5,     116.8,       0.0);
     ( 565611.6, 4327786.0,     109.8,     111.7,       0.0);         ( 565711.6,
4327786.0,     104.5,     113.2,       0.0);
     ( 565811.6, 4327786.0,      95.5,     113.2,       0.0);         ( 565911.6,
4327786.0,      89.7,     113.2,       0.0);
     ( 566011.6, 4327786.0,      94.9,      97.2,       0.0);         ( 566111.6,
4327786.0,      86.3,     107.0,       0.0);
     ( 566211.6, 4327786.0,      97.4,      97.4,       0.0);         ( 566311.6,
4327786.0,      84.9,     105.8,       0.0);
     ( 566411.6, 4327786.0,      78.8,     105.8,       0.0);         ( 566511.6,
4327786.0,      80.2,      80.2,       0.0);
     ( 560111.6, 4327886.0,     186.4,     793.0,       0.0);         ( 560211.6,
4327886.0,     153.0,     793.0,       0.0);
     ( 560311.6, 4327886.0,     124.6,     793.0,       0.0);         ( 560411.6,
4327886.0,     112.8,     793.0,       0.0);
     ( 560511.6, 4327886.0,     108.8,     793.0,       0.0);         ( 560611.6,
4327886.0,     104.0,     793.0,       0.0);
     ( 560711.6, 4327886.0,     105.3,     793.0,       0.0);         ( 560811.6,
4327886.0,     103.6,     793.0,       0.0);
     ( 560911.6, 4327886.0,     100.7,     793.0,       0.0);         ( 561011.6,
4327886.0,      99.2,     793.0,       0.0);
     ( 561111.6, 4327886.0,      98.5,     793.0,       0.0);         ( 561211.6,
4327886.0,      97.9,     793.0,       0.0);
     ( 561311.6, 4327886.0,      97.7,     793.0,       0.0);         ( 561411.6,
4327886.0,      97.3,     793.0,       0.0);
     ( 561511.6, 4327886.0,      97.0,     793.0,       0.0);         ( 561611.6,
4327886.0,      96.5,     793.0,       0.0);
     ( 561711.6, 4327886.0,      95.6,     793.0,       0.0);         ( 561811.6,
4327886.0,      95.0,     793.0,       0.0);
     ( 561911.6, 4327886.0,      94.2,     793.0,       0.0);         ( 562011.6,
4327886.0,      93.5,     793.0,       0.0);
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(564611.6, 4327886.0, 89.8, 115.3, 0.0); (564711.6, 4327886.0, 113.5, 114.0, 0.0);
(564811.6, 4327886.0, 108.6, 109.4, 0.0); (564911.6, 4327886.0, 102.5, 116.7, 0.0);
(565011.6, 4327886.0, 114.0, 116.6, 0.0); (565111.6, 4327886.0, 102.8, 116.7, 0.0);
(565211.6, 4327886.0, 110.6, 110.6, 0.0); (565311.6, 4327886.0, 106.6, 117.8, 0.0);
(565411.6, 4327886.0, 103.6, 117.8, 0.0); (565511.6, 4327886.0, 111.8, 111.8, 0.0);
(565611.6, 4327886.0, 103.5, 111.8, 0.0); (565711.6, 4327886.0, 109.0, 111.5, 0.0);
(565811.6, 4327886.0, 110.4, 110.6, 0.0); (565911.6, 4327886.0, 96.2, 112.9, 0.0);
(566011.6, 4327886.0, 101.3, 103.9, 0.0); (566111.6, 4327886.0, 101.4, 105.2, 0.0);
(566211.6, 4327886.0, 105.0, 105.0, 0.0); (566311.6, 4327886.0, 86.3, 105.8, 0.0);
(566411.6, 4327886.0, 81.7, 105.8, 0.0); (566511.6, 4327886.0, 79.5, 101.7, 0.0);
(560111.6, 4327986.0, 190.7, 793.0, 0.0); (560211.6, 4327986.0, 144.0, 793.0, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(560311.6, 4327986.0, 123.2, 793.0, 0.0); (560411.6, 4327986.0, 111.2, 793.0, 0.0);
(560511.6, 4327986.0, 106.1, 793.0, 0.0); (560611.6, 4327986.0, 101.9, 793.0, 0.0);
(560711.6, 4327986.0, 101.6, 793.0, 0.0); (560811.6, 4327986.0, 100.4, 793.0, 0.0);
(560911.6, 4327986.0, 98.6, 793.0, 0.0); (561011.6, 4327986.0, 97.8, 793.0, 0.0);
(561111.6, 4327986.0, 96.4, 793.0, 0.0); (561211.6, 4327986.0, 96.7, 793.0, 0.0);
(561311.6, 4327986.0, 96.2, 793.0, 0.0); (561411.6, 4327986.0, 96.7, 793.0, 0.0);
(561511.6, 4327986.0, 96.2, 793.0, 0.0); (561611.6, 4327986.0, 95.6, 793.0, 0.0);
(561711.6, 4327986.0, 94.9, 793.0, 0.0); (561811.6, 4327986.0, 94.4, 793.0, 0.0);

```
     ( 561911.6, 4327986.0,      93.7,     793.0,       0.0);         ( 562011.6,
4327986.0,      92.9,     793.0,       0.0);
     ( 564611.6, 4327986.0,      87.7,     115.3,       0.0);         ( 564711.6,
4327986.0,      98.2,     115.3,       0.0);
     ( 564811.6, 4327986.0,     102.6,     112.5,       0.0);         ( 564911.6,
4327986.0,     108.8,     108.8,       0.0);
     ( 565011.6, 4327986.0,     112.4,     113.5,       0.0);         ( 565111.6,
4327986.0,     108.7,     115.5,       0.0);
     ( 565211.6, 4327986.0,     106.2,     112.6,       0.0);         ( 565311.6,
4327986.0,      99.7,     112.6,       0.0);
     ( 565411.6, 4327986.0,      94.6,     117.8,       0.0);         ( 565511.6,
4327986.0,      99.8,     116.8,       0.0);
     ( 565611.6, 4327986.0,      94.8,     117.4,       0.0);         ( 565711.6,
4327986.0,     108.0,     109.9,       0.0);
     ( 565811.6, 4327986.0,     104.3,     112.8,       0.0);         ( 565911.6,
4327986.0,     104.7,     104.7,       0.0);
     ( 566011.6, 4327986.0,     101.9,     107.4,       0.0);         ( 566111.6,
4327986.0,     103.1,     103.1,       0.0);
     ( 566211.6, 4327986.0,      95.2,     105.8,       0.0);         ( 566311.6,
4327986.0,      90.5,     105.8,       0.0);
     ( 566411.6, 4327986.0,      92.3,     101.7,       0.0);         ( 566511.6,
4327986.0,      90.4,      98.9,       0.0);
     ( 560111.6, 4328086.0,     172.4,     793.0,       0.0);         ( 560211.6,
4328086.0,     136.4,     793.0,       0.0);
     ( 560311.6, 4328086.0,     116.8,     793.0,       0.0);         ( 560411.6,
4328086.0,     107.7,     793.0,       0.0);
     ( 560511.6, 4328086.0,     105.0,     793.0,       0.0);         ( 560611.6,
4328086.0,     100.4,     793.0,       0.0);
     ( 560711.6, 4328086.0,     100.4,     793.0,       0.0);         ( 560811.6,
4328086.0,      99.0,     793.0,       0.0);
     ( 560911.6, 4328086.0,      98.4,     793.0,       0.0);         ( 561011.6,
4328086.0,      98.0,     793.0,       0.0);
     ( 561111.6, 4328086.0,      97.3,     793.0,       0.0);         ( 561211.6,
4328086.0,      95.4,     793.0,       0.0);
     ( 561311.6, 4328086.0,      94.0,     793.0,       0.0);         ( 561411.6,
4328086.0,      96.0,     793.0,       0.0);
     ( 561511.6, 4328086.0,      96.0,     793.0,       0.0);         ( 561611.6,
4328086.0,      95.3,     793.0,       0.0);
     ( 561711.6, 4328086.0,      94.5,     793.0,       0.0);         ( 561811.6,
4328086.0,      93.8,     793.0,       0.0);
     ( 561911.6, 4328086.0,      93.4,     793.0,       0.0);         ( 562011.6,
4328086.0,      94.7,     793.0,       0.0);
     ( 564611.6, 4328086.0,      97.0,     115.0,       0.0);         ( 564711.6,
4328086.0,     103.5,     105.4,       0.0);
     ( 564811.6, 4328086.0,     109.0,     112.5,       0.0);         ( 564911.6,
4328086.0,     103.2,     112.5,       0.0);
     ( 565011.6, 4328086.0,     107.3,     115.6,       0.0);         ( 565111.6,
4328086.0,     114.5,     114.5,       0.0);
     ( 565211.6, 4328086.0,     105.5,     112.6,       0.0);         ( 565311.6,
4328086.0,     109.2,     111.3,       0.0);
```

(565411.6, 4328086.0, 104.2, 109.0, 0.0); (565511.6, 4328086.0, 103.7, 103.7, 0.0);
(565611.6, 4328086.0, 89.2, 112.9, 0.0); (565711.6, 4328086.0, 91.8, 112.9, 0.0);
(565811.6, 4328086.0, 97.8, 107.3, 0.0); (565911.6, 4328086.0, 92.4, 107.6, 0.0);
(566011.6, 4328086.0, 91.7, 107.6, 0.0); (566111.6, 4328086.0, 88.2, 107.2, 0.0);
(566211.6, 4328086.0, 86.6, 105.8, 0.0); (566311.6, 4328086.0, 91.1, 101.7, 0.0);
(566411.6, 4328086.0, 97.6, 101.6, 0.0); (566511.6, 4328086.0, 88.7, 101.6, 0.0);
(560111.6, 4328186.0, 166.8, 793.0, 0.0); (560211.6, 4328186.0, 124.1, 793.0, 0.0);
(560311.6, 4328186.0, 112.7, 793.0, 0.0); (560411.6, 4328186.0, 104.9, 793.0, 0.0);
(560511.6, 4328186.0, 103.2, 793.0, 0.0); (560611.6, 4328186.0, 98.8, 793.0, 0.0);
(560711.6, 4328186.0, 100.9, 793.0, 0.0); (560811.6, 4328186.0, 99.1, 793.0, 0.0);
(560911.6, 4328186.0, 98.9, 793.0, 0.0); (561011.6, 4328186.0, 97.9, 793.0, 0.0);
(561111.6, 4328186.0, 96.6, 793.0, 0.0); (561211.6, 4328186.0, 91.5, 793.0, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(561311.6, 4328186.0, 96.0, 793.0, 0.0); (561411.6, 4328186.0, 96.2, 793.0, 0.0);
(561511.6, 4328186.0, 95.3, 793.0, 0.0); (561611.6, 4328186.0, 95.0, 793.0, 0.0);
(561711.6, 4328186.0, 94.3, 793.0, 0.0); (561811.6, 4328186.0, 93.4, 793.0, 0.0);
(561911.6, 4328186.0, 93.7, 793.0, 0.0); (562011.6, 4328186.0, 94.0, 793.0, 0.0);
(564611.6, 4328186.0, 103.3, 110.6, 0.0); (564711.6, 4328186.0, 100.3, 110.6, 0.0);
(564811.6, 4328186.0, 102.4, 112.0, 0.0); (564911.6, 4328186.0, 95.9, 115.5, 0.0);
(565011.6, 4328186.0, 98.8, 115.6, 0.0); (565111.6, 4328186.0, 103.8, 115.5, 0.0);

```
     ( 565211.6, 4328186.0,      92.4,     115.6,       0.0);         ( 565311.6,
4328186.0,      96.2,     112.2,       0.0);
     ( 565411.6, 4328186.0,      94.8,     111.5,       0.0);         ( 565511.6,
4328186.0,      98.8,     105.8,       0.0);
     ( 565611.6, 4328186.0,      87.4,     107.9,       0.0);         ( 565711.6,
4328186.0,     105.5,     105.5,       0.0);
     ( 565811.6, 4328186.0,     104.3,     105.3,       0.0);         ( 565911.6,
4328186.0,     101.8,     101.8,       0.0);
     ( 566011.6, 4328186.0,      93.2,      98.6,       0.0);         ( 566111.6,
4328186.0,      93.7,      98.2,       0.0);
     ( 566211.6, 4328186.0,      87.4,      98.7,       0.0);         ( 566311.6,
4328186.0,      80.8,     101.7,       0.0);
     ( 566411.6, 4328186.0,      88.6,     101.1,       0.0);         ( 566511.6,
4328186.0,      90.7,      92.4,       0.0);
     ( 560111.6, 4328286.0,     149.7,     793.0,       0.0);         ( 560211.6,
4328286.0,     114.0,     793.0,       0.0);
     ( 560311.6, 4328286.0,     109.2,     793.0,       0.0);         ( 560411.6,
4328286.0,     103.2,     793.0,       0.0);
     ( 560511.6, 4328286.0,     100.8,     793.0,       0.0);         ( 560611.6,
4328286.0,      97.8,     793.0,       0.0);
     ( 560711.6, 4328286.0,     100.1,     793.0,       0.0);         ( 560811.6,
4328286.0,      99.2,     793.0,       0.0);
     ( 560911.6, 4328286.0,      98.9,     793.0,       0.0);         ( 561011.6,
4328286.0,      97.6,     793.0,       0.0);
     ( 561111.6, 4328286.0,      96.3,     793.0,       0.0);         ( 561211.6,
4328286.0,      88.8,     793.0,       0.0);
     ( 561311.6, 4328286.0,      96.8,     793.0,       0.0);         ( 561411.6,
4328286.0,      96.5,     793.0,       0.0);
     ( 561511.6, 4328286.0,      96.0,     793.0,       0.0);         ( 561611.6,
4328286.0,      95.3,     793.0,       0.0);
     ( 561711.6, 4328286.0,      94.1,     793.0,       0.0);         ( 561811.6,
4328286.0,      93.4,     793.0,       0.0);
     ( 561911.6, 4328286.0,      94.5,     793.0,       0.0);         ( 562011.6,
4328286.0,      94.3,     793.0,       0.0);
     ( 564611.6, 4328286.0,     108.7,     109.2,       0.0);         ( 564711.6,
4328286.0,     106.6,     106.6,       0.0);
     ( 564811.6, 4328286.0,      99.1,      99.1,       0.0);         ( 564911.6,
4328286.0,      93.1,     102.1,       0.0);
     ( 565011.6, 4328286.0,      91.8,     115.5,       0.0);         ( 565111.6,
4328286.0,      88.4,     115.6,       0.0);
     ( 565211.6, 4328286.0,      87.1,     115.6,       0.0);         ( 565311.6,
4328286.0,      84.6,     115.5,       0.0);
     ( 565411.6, 4328286.0,      89.2,      98.5,       0.0);         ( 565511.6,
4328286.0,      95.9,      95.9,       0.0);
     ( 565611.6, 4328286.0,      86.9,     107.9,       0.0);         ( 565711.6,
4328286.0,      91.5,     107.9,       0.0);
     ( 565811.6, 4328286.0,     102.5,     102.5,       0.0);         ( 565911.6,
4328286.0,      94.3,     103.6,       0.0);
     ( 566011.6, 4328286.0,      91.4,      98.8,       0.0);         ( 566111.6,
4328286.0,      92.7,      98.7,       0.0);
```

```
     ( 566211.6, 4328286.0,      95.2,      95.2,       0.0);         ( 566311.6,
4328286.0,      83.9,      97.2,       0.0);
     ( 566411.6, 4328286.0,      81.7,      88.9,       0.0);         ( 566511.6,
4328286.0,      80.1,      93.1,       0.0);
     ( 560111.6, 4328386.0,     122.2,     793.0,       0.0);         ( 560211.6,
4328386.0,     114.3,     793.0,       0.0);
     ( 560311.6, 4328386.0,     108.0,     793.0,       0.0);         ( 560411.6,
4328386.0,     104.3,     793.0,       0.0);
     ( 560511.6, 4328386.0,     100.1,     793.0,       0.0);         ( 560611.6,
4328386.0,      97.0,     793.0,       0.0);
     ( 560711.6, 4328386.0,      96.8,     793.0,       0.0);         ( 560811.6,
4328386.0,      98.8,     793.0,       0.0);
     ( 560911.6, 4328386.0,      99.0,     793.0,       0.0);         ( 561011.6,
4328386.0,      97.7,     793.0,       0.0);
     ( 561111.6, 4328386.0,      96.2,     793.0,       0.0);         ( 561211.6,
4328386.0,      89.1,     793.0,       0.0);
     ( 561311.6, 4328386.0,      96.9,     793.0,       0.0);         ( 561411.6,
4328386.0,      96.3,     793.0,       0.0);
     ( 561511.6, 4328386.0,      95.6,     793.0,       0.0);         ( 561611.6,
4328386.0,      95.0,     793.0,       0.0);
     ( 561711.6, 4328386.0,      94.0,     793.0,       0.0);         ( 561811.6,
4328386.0,      94.1,     793.0,       0.0);
     ( 561911.6, 4328386.0,      94.1,     793.0,       0.0);         ( 562011.6,
4328386.0,      93.9,     793.0,       0.0);
     ( 562111.6, 4328386.0,      94.5,     793.0,       0.0);         ( 562211.6,
4328386.0,      94.7,     793.0,       0.0);
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                           ***        06:53:13

                                    PAGE  29
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                    (METERS)

     ( 562311.6, 4328386.0,      94.7,     793.0,       0.0);         ( 562411.6,
4328386.0,      94.5,     793.0,       0.0);
     ( 562511.6, 4328386.0,      93.0,     793.0,       0.0);         ( 562611.6,
4328386.0,      93.3,     793.0,       0.0);
     ( 562711.6, 4328386.0,      94.1,     780.0,       0.0);         ( 562811.6,
4328386.0,      94.9,     780.0,       0.0);
     ( 562911.6, 4328386.0,      91.9,     780.0,       0.0);         ( 563011.6,
4328386.0,      91.7,     674.8,       0.0);
     ( 563111.6, 4328386.0,      88.9,     662.3,       0.0);         ( 563211.6,
4328386.0,      91.1,     662.3,       0.0);
     ( 563311.6, 4328386.0,      95.6,      95.6,       0.0);         ( 563411.6,
4328386.0,      90.7,     100.8,       0.0);
```

```
     ( 563511.6, 4328386.0,      97.6,      97.6,       0.0);         ( 563611.6,
4328386.0,      98.8,      98.8,       0.0);
     ( 563711.6, 4328386.0,      95.3,     102.4,       0.0);         ( 563811.6,
4328386.0,      94.0,     102.4,       0.0);
     ( 563911.6, 4328386.0,      88.5,      88.5,       0.0);         ( 564011.6,
4328386.0,      90.8,      90.8,       0.0);
     ( 564111.6, 4328386.0,      91.6,      91.6,       0.0);         ( 564211.6,
4328386.0,      94.2,      94.2,       0.0);
     ( 564311.6, 4328386.0,      91.3,      92.2,       0.0);         ( 564411.6,
4328386.0,      78.9,     110.5,       0.0);
     ( 564511.6, 4328386.0,      87.4,     110.0,       0.0);         ( 564611.6,
4328386.0,     106.5,     106.5,       0.0);
     ( 564711.6, 4328386.0,      97.4,     110.0,       0.0);         ( 564811.6,
4328386.0,      98.4,     103.1,       0.0);
     ( 564911.6, 4328386.0,     101.6,     101.6,       0.0);         ( 565011.6,
4328386.0,      93.1,     101.1,       0.0);
     ( 565111.6, 4328386.0,     100.4,     100.4,       0.0);         ( 565211.6,
4328386.0,      98.9,     100.8,       0.0);
     ( 565311.6, 4328386.0,      92.9,      93.0,       0.0);         ( 565411.6,
4328386.0,      84.0,      99.1,       0.0);
     ( 565511.6, 4328386.0,      99.0,      99.0,       0.0);         ( 565611.6,
4328386.0,      84.3,     107.9,       0.0);
     ( 565711.6, 4328386.0,      94.6,      98.3,       0.0);         ( 565811.6,
4328386.0,      90.6,     105.1,       0.0);
     ( 565911.6, 4328386.0,      86.5,     105.0,       0.0);         ( 566011.6,
4328386.0,      80.3,     104.0,       0.0);
     ( 566111.6, 4328386.0,      86.5,      91.7,       0.0);         ( 566211.6,
4328386.0,      82.2,      98.7,       0.0);
     ( 566311.6, 4328386.0,      86.8,      89.5,       0.0);         ( 566411.6,
4328386.0,      68.7,     101.1,       0.0);
     ( 566511.6, 4328386.0,      66.9,     100.3,       0.0);         ( 560111.6,
4328486.0,     117.9,     793.0,       0.0);
     ( 560211.6, 4328486.0,     112.1,     793.0,       0.0);         ( 560311.6,
4328486.0,     107.9,     793.0,       0.0);
     ( 560411.6, 4328486.0,     102.3,     793.0,       0.0);         ( 560511.6,
4328486.0,      99.0,     793.0,       0.0);
     ( 560611.6, 4328486.0,      95.9,     793.0,       0.0);         ( 560711.6,
4328486.0,      92.9,     793.0,       0.0);
     ( 560811.6, 4328486.0,      98.0,     793.0,       0.0);         ( 560911.6,
4328486.0,      93.0,     793.0,       0.0);
     ( 561011.6, 4328486.0,      94.5,     793.0,       0.0);         ( 561111.6,
4328486.0,      95.4,     793.0,       0.0);
     ( 561211.6, 4328486.0,      88.1,     793.0,       0.0);         ( 561311.6,
4328486.0,      96.5,     793.0,       0.0);
     ( 561411.6, 4328486.0,      96.1,     793.0,       0.0);         ( 561511.6,
4328486.0,      95.3,     793.0,       0.0);
     ( 561611.6, 4328486.0,      94.5,     793.0,       0.0);         ( 561711.6,
4328486.0,      94.2,     793.0,       0.0);
     ( 561811.6, 4328486.0,      94.2,     793.0,       0.0);         ( 561911.6,
4328486.0,      94.5,     793.0,       0.0);
```

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     ( 565811.6, 4328486.0,      91.3,      92.0,       0.0);         ( 565911.6,
4328486.0,      92.3,      92.3,       0.0);
     ( 566011.6, 4328486.0,      85.8,      88.8,       0.0);         ( 566111.6,
4328486.0,      75.5,      97.4,       0.0);
     ( 566211.6, 4328486.0,      70.3,      98.7,       0.0);         ( 566311.6,
4328486.0,      67.0,      98.7,       0.0);
     ( 566411.6, 4328486.0,      69.2,      90.0,       0.0);         ( 566511.6,
4328486.0,      66.0,      89.9,       0.0);
     ( 560111.6, 4328586.0,     115.7,     793.0,       0.0);         ( 560211.6,
4328586.0,     108.6,     793.0,       0.0);
     ( 560311.6, 4328586.0,     104.1,     793.0,       0.0);         ( 560411.6,
4328586.0,     100.3,     793.0,       0.0);
     ( 560511.6, 4328586.0,      97.0,     793.0,       0.0);         ( 560611.6,
4328586.0,      93.8,     793.0,       0.0);
     ( 560711.6, 4328586.0,      90.9,     793.0,       0.0);         ( 560811.6,
4328586.0,      88.1,     793.0,       0.0);
     ( 560911.6, 4328586.0,      85.6,     793.0,       0.0);         ( 561011.6,
4328586.0,      85.2,     793.0,       0.0);
     ( 561111.6, 4328586.0,      92.7,     793.0,       0.0);         ( 561211.6,
4328586.0,      84.0,     793.0,       0.0);
     ( 561311.6, 4328586.0,      94.6,     793.0,       0.0);         ( 561411.6,
4328586.0,      95.8,     793.0,       0.0);
     ( 561511.6, 4328586.0,      95.5,     793.0,       0.0);         ( 561611.6,
4328586.0,      94.7,     793.0,       0.0);
     ( 561711.6, 4328586.0,      94.7,     793.0,       0.0);         ( 561811.6,
4328586.0,      95.4,     793.0,       0.0);
     ( 561911.6, 4328586.0,      96.1,     793.0,       0.0);         ( 562011.6,
4328586.0,      96.0,     793.0,       0.0);
     ( 562111.6, 4328586.0,      96.8,     793.0,       0.0);         ( 562211.6,
4328586.0,      98.0,     793.0,       0.0);
     ( 562311.6, 4328586.0,      95.9,     793.0,       0.0);         ( 562411.6,
4328586.0,      96.6,     780.0,       0.0);
     ( 562511.6, 4328586.0,      96.4,     780.0,       0.0);         ( 562611.6,
4328586.0,      92.3,     780.0,       0.0);
     ( 562711.6, 4328586.0,      93.2,     709.8,       0.0);         ( 562811.6,
4328586.0,      91.0,     674.8,       0.0);
     ( 562911.6, 4328586.0,      88.4,     674.8,       0.0);         ( 563011.6,
4328586.0,      87.1,     662.3,       0.0);
     ( 563111.6, 4328586.0,      89.8,     662.3,       0.0);         ( 563211.6,
4328586.0,      91.0,     105.5,       0.0);
     ( 563311.6, 4328586.0,     104.7,     104.7,       0.0);         ( 563411.6,
4328586.0,      93.0,     105.5,       0.0);
     ( 563511.6, 4328586.0,      90.5,     100.6,       0.0);         ( 563611.6,
4328586.0,      93.9,      93.9,       0.0);
     ( 563711.6, 4328586.0,      92.7,      93.6,       0.0);         ( 563811.6,
4328586.0,      96.4,      96.4,       0.0);
     ( 563911.6, 4328586.0,      87.0,      95.6,       0.0);         ( 564011.6,
4328586.0,      88.5,      91.7,       0.0);
     ( 564111.6, 4328586.0,      87.4,      90.6,       0.0);         ( 564211.6,
4328586.0,      87.8,      88.7,       0.0);
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     ( 564311.6, 4328586.0,      78.1,     107.3,       0.0);         ( 564411.6,
4328586.0,      81.9,     108.3,       0.0);
     ( 564511.6, 4328586.0,      94.6,     108.1,       0.0);         ( 564611.6,
4328586.0,     105.0,     107.1,       0.0);
     ( 564711.6, 4328586.0,      92.8,     108.3,       0.0);         ( 564811.6,
4328586.0,      97.5,     100.8,       0.0);
     ( 564911.6, 4328586.0,      91.8,     102.5,       0.0);         ( 565011.6,
4328586.0,      95.7,      96.5,       0.0);
     ( 565111.6, 4328586.0,      88.4,      95.2,       0.0);         ( 565211.6,
4328586.0,      86.8,      90.8,       0.0);
     ( 565311.6, 4328586.0,      83.0,      89.3,       0.0);         ( 565411.6,
4328586.0,      79.1,      98.7,       0.0);
     ( 565511.6, 4328586.0,      88.1,      91.8,       0.0);         ( 565611.6,
4328586.0,      84.8,      91.6,       0.0);
     ( 565711.6, 4328586.0,      87.6,      92.3,       0.0);         ( 565811.6,
4328586.0,      86.2,      92.4,       0.0);
     ( 565911.6, 4328586.0,      78.6,      92.4,       0.0);         ( 566011.6,
4328586.0,      75.6,      92.4,       0.0);
     ( 566111.6, 4328586.0,      68.8,      92.4,       0.0);         ( 566211.6,
4328586.0,      68.1,      90.0,       0.0);
     ( 566311.6, 4328586.0,      72.0,      72.0,       0.0);         ( 566411.6,
4328586.0,      74.5,      74.5,       0.0);
     ( 566511.6, 4328586.0,      69.0,      71.8,       0.0);         ( 560111.6,
4328686.0,     110.8,     793.0,       0.0);
     ( 560211.6, 4328686.0,     106.6,     793.0,       0.0);         ( 560311.6,
4328686.0,     105.8,     793.0,       0.0);
     ( 560411.6, 4328686.0,     101.7,     793.0,       0.0);         ( 560511.6,
4328686.0,      95.9,     793.0,       0.0);
     ( 560611.6, 4328686.0,      95.9,     793.0,       0.0);         ( 560711.6,
4328686.0,      92.4,     793.0,       0.0);
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                          ***        06:53:13

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                                                 *** DISCRETE CARTESIAN RECEPTORS ***
                                               (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                           (METERS)

     ( 560811.6, 4328686.0,      87.7,     793.0,       0.0);         ( 560911.6,
4328686.0,      88.8,     793.0,       0.0);
     ( 561011.6, 4328686.0,      83.1,     793.0,       0.0);         ( 561111.6,
4328686.0,      87.3,     793.0,       0.0);
     ( 561211.6, 4328686.0,      85.5,     793.0,       0.0);         ( 561311.6,
4328686.0,      88.0,     793.0,       0.0);
     ( 561411.6, 4328686.0,      91.9,     793.0,       0.0);         ( 561511.6,
4328686.0,      93.3,     793.0,       0.0);
```

```
     ( 561611.6, 4328686.0,      94.3,     793.0,       0.0);         ( 561711.6,
4328686.0,      95.6,     793.0,       0.0);
     ( 561811.6, 4328686.0,      96.5,     793.0,       0.0);         ( 561911.6,
4328686.0,      97.1,     793.0,       0.0);
     ( 562011.6, 4328686.0,      96.5,     793.0,       0.0);         ( 562111.6,
4328686.0,      95.3,     793.0,       0.0);
     ( 562211.6, 4328686.0,      97.5,     792.5,       0.0);         ( 562311.6,
4328686.0,      92.8,     780.0,       0.0);
     ( 562411.6, 4328686.0,      92.8,     780.0,       0.0);         ( 562511.6,
4328686.0,      94.8,     780.0,       0.0);
     ( 562611.6, 4328686.0,      93.0,     709.8,       0.0);         ( 562711.6,
4328686.0,      88.4,     684.3,       0.0);
     ( 562811.6, 4328686.0,      94.2,     669.0,       0.0);         ( 562911.6,
4328686.0,      98.7,     662.3,       0.0);
     ( 563011.6, 4328686.0,      85.0,     662.3,       0.0);         ( 563111.6,
4328686.0,      90.1,     100.1,       0.0);
     ( 563211.6, 4328686.0,      94.5,     100.1,       0.0);         ( 563311.6,
4328686.0,      92.6,     105.5,       0.0);
     ( 563411.6, 4328686.0,      86.2,     105.5,       0.0);         ( 563511.6,
4328686.0,      97.7,     100.0,       0.0);
     ( 563611.6, 4328686.0,      95.0,     100.8,       0.0);         ( 563711.6,
4328686.0,      91.3,      91.3,       0.0);
     ( 563811.6, 4328686.0,      82.5,      96.6,       0.0);         ( 563911.6,
4328686.0,      82.6,      96.1,       0.0);
     ( 564011.6, 4328686.0,      87.3,      92.5,       0.0);         ( 564111.6,
4328686.0,      82.3,      92.0,       0.0);
     ( 564211.6, 4328686.0,      80.5,      89.6,       0.0);         ( 564311.6,
4328686.0,      81.3,      90.6,       0.0);
     ( 564411.6, 4328686.0,      85.6,     107.3,       0.0);         ( 564511.6,
4328686.0,      90.4,     107.3,       0.0);
     ( 564611.6, 4328686.0,     101.6,     101.6,       0.0);         ( 564711.6,
4328686.0,      90.8,     107.3,       0.0);
     ( 564811.6, 4328686.0,      94.6,      94.6,       0.0);         ( 564911.6,
4328686.0,      91.4,      91.4,       0.0);
     ( 565011.6, 4328686.0,      90.4,      96.1,       0.0);         ( 565111.6,
4328686.0,      87.8,      94.7,       0.0);
     ( 565211.6, 4328686.0,      86.3,      92.3,       0.0);         ( 565311.6,
4328686.0,      80.0,      91.7,       0.0);
     ( 565411.6, 4328686.0,      80.6,      87.1,       0.0);         ( 565511.6,
4328686.0,      77.4,      91.8,       0.0);
     ( 565611.6, 4328686.0,      81.5,      87.5,       0.0);         ( 565711.6,
4328686.0,      74.9,      92.5,       0.0);
     ( 565811.6, 4328686.0,      75.5,      92.5,       0.0);         ( 565911.6,
4328686.0,      72.0,      92.4,       0.0);
     ( 566011.6, 4328686.0,      71.3,      82.5,       0.0);         ( 566111.6,
4328686.0,      77.0,      77.0,       0.0);
     ( 566211.6, 4328686.0,      74.2,      80.0,       0.0);         ( 566311.6,
4328686.0,      76.7,      76.7,       0.0);
     ( 566411.6, 4328686.0,      73.3,      73.3,       0.0);         ( 566511.6,
4328686.0,      69.6,      76.1,       0.0);
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(560111.6, 4328786.0, 106.5, 793.0, 0.0); (560211.6, 4328786.0, 104.4, 793.0, 0.0);
(560311.6, 4328786.0, 102.1, 793.0, 0.0); (560411.6, 4328786.0, 101.7, 793.0, 0.0);
(560511.6, 4328786.0, 96.0, 793.0, 0.0); (560611.6, 4328786.0, 95.4, 793.0, 0.0);
(560711.6, 4328786.0, 92.8, 793.0, 0.0); (560811.6, 4328786.0, 92.5, 793.0, 0.0);
(560911.6, 4328786.0, 90.8, 793.0, 0.0); (561011.6, 4328786.0, 85.4, 793.0, 0.0);
(561111.6, 4328786.0, 83.2, 793.0, 0.0); (561211.6, 4328786.0, 84.3, 793.0, 0.0);
(561311.6, 4328786.0, 84.0, 793.0, 0.0); (561411.6, 4328786.0, 85.2, 793.0, 0.0);
(561511.6, 4328786.0, 89.3, 793.0, 0.0); (561611.6, 4328786.0, 86.0, 793.0, 0.0);
(561711.6, 4328786.0, 93.3, 793.0, 0.0); (561811.6, 4328786.0, 95.3, 793.0, 0.0);
(561911.6, 4328786.0, 93.4, 793.0, 0.0); (562011.6, 4328786.0, 94.3, 793.0, 0.0);
(562111.6, 4328786.0, 95.0, 792.5, 0.0); (562211.6, 4328786.0, 96.8, 780.0, 0.0);
(562311.6, 4328786.0, 91.0, 780.0, 0.0); (562411.6, 4328786.0, 89.8, 780.0, 0.0);
(562511.6, 4328786.0, 95.6, 684.3, 0.0); (562611.6, 4328786.0, 88.4, 684.3, 0.0);
(562711.6, 4328786.0, 89.7, 674.8, 0.0); (562811.6, 4328786.0, 93.8, 662.3, 0.0);
(562911.6, 4328786.0, 96.3, 98.3, 0.0); (563011.6, 4328786.0, 84.0, 662.3, 0.0);
(563111.6, 4328786.0, 83.7, 101.6, 0.0); (563211.6, 4328786.0, 96.2, 96.2, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(563311.6, 4328786.0, 101.3, 101.3, 0.0); (563411.6, 4328786.0, 86.9, 101.9, 0.0);
(563511.6, 4328786.0, 86.6, 102.3, 0.0); (563611.6, 4328786.0, 101.9, 101.9, 0.0);
(563711.6, 4328786.0, 92.2, 102.3, 0.0); (563811.6, 4328786.0, 91.1, 94.2, 0.0);

```
     ( 563911.6, 4328786.0,      83.9,      94.5,       0.0);         ( 564011.6,
4328786.0,      79.2,      91.5,       0.0);
     ( 564111.6, 4328786.0,      76.6,      86.0,       0.0);         ( 564211.6,
4328786.0,      73.6,      90.6,       0.0);
     ( 564311.6, 4328786.0,      84.5,      90.5,       0.0);         ( 564411.6,
4328786.0,      86.2,      88.8,       0.0);
     ( 564511.6, 4328786.0,      83.3,     107.3,       0.0);         ( 564611.6,
4328786.0,      97.6,      99.8,       0.0);
     ( 564711.6, 4328786.0,      92.1,      92.1,       0.0);         ( 564811.6,
4328786.0,      92.0,      97.2,       0.0);
     ( 564911.6, 4328786.0,      90.7,      97.5,       0.0);         ( 565011.6,
4328786.0,      89.3,      96.6,       0.0);
     ( 565111.6, 4328786.0,      87.3,      96.6,       0.0);         ( 565211.6,
4328786.0,      88.8,      88.9,       0.0);
     ( 565311.6, 4328786.0,      87.4,      87.4,       0.0);         ( 565411.6,
4328786.0,      84.1,      84.1,       0.0);
     ( 565511.6, 4328786.0,      76.4,      76.4,       0.0);         ( 565611.6,
4328786.0,      74.0,      74.0,       0.0);
     ( 565711.6, 4328786.0,      73.4,      90.5,       0.0);         ( 565811.6,
4328786.0,      74.6,      90.5,       0.0);
     ( 565911.6, 4328786.0,      78.8,      86.3,       0.0);         ( 566011.6,
4328786.0,      81.5,      81.5,       0.0);
     ( 566111.6, 4328786.0,      72.2,      81.8,       0.0);         ( 566211.6,
4328786.0,      80.5,      80.5,       0.0);
     ( 566311.6, 4328786.0,      78.9,      78.9,       0.0);         ( 566411.6,
4328786.0,      70.6,      70.6,       0.0);
     ( 566511.6, 4328786.0,      75.8,      75.8,       0.0);         ( 560111.6,
4328886.0,      99.1,     793.0,       0.0);
     ( 560211.6, 4328886.0,     103.7,     793.0,       0.0);         ( 560311.6,
4328886.0,      97.3,     793.0,       0.0);
     ( 560411.6, 4328886.0,     100.1,     793.0,       0.0);         ( 560511.6,
4328886.0,      93.8,     793.0,       0.0);
     ( 560611.6, 4328886.0,      95.0,     793.0,       0.0);         ( 560711.6,
4328886.0,      92.9,     793.0,       0.0);
     ( 560811.6, 4328886.0,      91.3,     793.0,       0.0);         ( 560911.6,
4328886.0,      88.0,     793.0,       0.0);
     ( 561011.6, 4328886.0,      83.3,     793.0,       0.0);         ( 561111.6,
4328886.0,      80.1,     793.0,       0.0);
     ( 561211.6, 4328886.0,      80.8,     793.0,       0.0);         ( 561311.6,
4328886.0,      79.4,     793.0,       0.0);
     ( 561411.6, 4328886.0,      80.4,     793.0,       0.0);         ( 561511.6,
4328886.0,      84.8,     793.0,       0.0);
     ( 561611.6, 4328886.0,      83.3,     793.0,       0.0);         ( 561711.6,
4328886.0,      92.0,     793.0,       0.0);
     ( 561811.6, 4328886.0,      87.2,     793.0,       0.0);         ( 561911.6,
4328886.0,      94.4,     793.0,       0.0);
     ( 562011.6, 4328886.0,      98.0,     780.0,       0.0);         ( 562111.6,
4328886.0,      89.3,     780.0,       0.0);
     ( 562211.6, 4328886.0,     101.5,     710.1,       0.0);         ( 562311.6,
4328886.0,      91.7,     780.0,       0.0);
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(562411.6, 4328886.0, 87.4, 710.1, 0.0); (562511.6, 4328886.0, 91.8, 684.3, 0.0);
(562611.6, 4328886.0, 89.1, 674.8, 0.0); (562711.6, 4328886.0, 91.9, 667.5, 0.0);
(562811.6, 4328886.0, 87.1, 662.3, 0.0); (562911.6, 4328886.0, 92.0, 95.7, 0.0);
(563011.6, 4328886.0, 89.6, 97.4, 0.0); (563111.6, 4328886.0, 80.1, 101.6, 0.0);
(563211.6, 4328886.0, 91.8, 99.3, 0.0); (563311.6, 4328886.0, 93.4, 99.5, 0.0);
(563411.6, 4328886.0, 92.3, 92.3, 0.0); (563511.6, 4328886.0, 81.3, 102.3, 0.0);
(563611.6, 4328886.0, 87.3, 102.3, 0.0); (563711.6, 4328886.0, 91.0, 99.5, 0.0);
(563811.6, 4328886.0, 91.1, 96.1, 0.0); (563911.6, 4328886.0, 85.7, 91.5, 0.0);
(564011.6, 4328886.0, 84.2, 91.1, 0.0); (564111.6, 4328886.0, 83.1, 85.3, 0.0);
(564211.6, 4328886.0, 75.7, 85.1, 0.0); (564311.6, 4328886.0, 79.5, 82.1, 0.0);
(564411.6, 4328886.0, 80.1, 101.4, 0.0); (564511.6, 4328886.0, 86.3, 101.4, 0.0);
(564611.6, 4328886.0, 99.0, 100.3, 0.0); (564711.6, 4328886.0, 91.9, 94.8, 0.0);
(564811.6, 4328886.0, 87.3, 97.5, 0.0); (564911.6, 4328886.0, 88.5, 97.5, 0.0);
(565011.6, 4328886.0, 93.2, 95.4, 0.0); (565111.6, 4328886.0, 91.8, 95.2, 0.0);
(565211.6, 4328886.0, 85.2, 92.6, 0.0); (565311.6, 4328886.0, 86.1, 92.1, 0.0);
(565411.6, 4328886.0, 77.2, 91.5, 0.0); (565511.6, 4328886.0, 79.1, 91.3, 0.0);
(565611.6, 4328886.0, 82.5, 88.2, 0.0); (565711.6, 4328886.0, 86.5, 90.0, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(565811.6, 4328886.0, 87.3, 87.3, 0.0); (565911.6, 4328886.0, 80.3, 87.4, 0.0);
(566011.6, 4328886.0, 74.5, 83.4, 0.0); (566111.6, 4328886.0, 80.1, 80.1, 0.0);

```
     ( 566211.6, 4328886.0,      78.7,      81.4,       0.0);         ( 566311.6,
4328886.0,      76.6,      82.5,       0.0);
     ( 566411.6, 4328886.0,      76.1,      76.1,       0.0);         ( 566511.6,
4328886.0,      72.9,      72.9,       0.0);
     ( 560111.6, 4328986.0,      98.5,     793.0,       0.0);         ( 560211.6,
4328986.0,      94.9,     793.0,       0.0);
     ( 560311.6, 4328986.0,      93.5,     793.0,       0.0);         ( 560411.6,
4328986.0,      90.4,     793.0,       0.0);
     ( 560511.6, 4328986.0,      91.2,     793.0,       0.0);         ( 560611.6,
4328986.0,      96.1,     793.0,       0.0);
     ( 560711.6, 4328986.0,      94.2,     793.0,       0.0);         ( 560811.6,
4328986.0,      90.8,     793.0,       0.0);
     ( 560911.6, 4328986.0,      86.3,     793.0,       0.0);         ( 561011.6,
4328986.0,      85.7,     793.0,       0.0);
     ( 561111.6, 4328986.0,      89.6,     793.0,       0.0);         ( 561211.6,
4328986.0,      93.0,     793.0,       0.0);
     ( 561311.6, 4328986.0,      92.2,     793.0,       0.0);         ( 561411.6,
4328986.0,      76.9,     793.0,       0.0);
     ( 561511.6, 4328986.0,      78.1,     793.0,       0.0);         ( 561611.6,
4328986.0,      86.6,     793.0,       0.0);
     ( 561711.6, 4328986.0,      89.2,     793.0,       0.0);         ( 561811.6,
4328986.0,      84.9,     793.0,       0.0);
     ( 561911.6, 4328986.0,      90.7,     780.0,       0.0);         ( 562011.6,
4328986.0,      94.5,     780.0,       0.0);
     ( 562111.6, 4328986.0,      84.8,     780.0,       0.0);         ( 562211.6,
4328986.0,      96.0,     710.1,       0.0);
     ( 562311.6, 4328986.0,     101.3,     674.8,       0.0);         ( 562411.6,
4328986.0,      88.4,     684.3,       0.0);
     ( 562511.6, 4328986.0,      83.6,     684.3,       0.0);         ( 562611.6,
4328986.0,      84.6,     674.8,       0.0);
     ( 562711.6, 4328986.0,      86.9,     662.3,       0.0);         ( 562811.6,
4328986.0,      83.0,     662.3,       0.0);
     ( 562911.6, 4328986.0,      86.8,      97.4,       0.0);         ( 563011.6,
4328986.0,      89.6,      97.4,       0.0);
     ( 563111.6, 4328986.0,      78.2,      99.3,       0.0);         ( 563211.6,
4328986.0,      83.1,      99.3,       0.0);
     ( 563311.6, 4328986.0,      84.8,      98.4,       0.0);         ( 563411.6,
4328986.0,      85.9,      85.9,       0.0);
     ( 563511.6, 4328986.0,      86.0,      88.0,       0.0);         ( 563611.6,
4328986.0,      80.6,     102.3,       0.0);
     ( 563711.6, 4328986.0,      82.5,      99.0,       0.0);         ( 563811.6,
4328986.0,      87.2,      91.4,       0.0);
     ( 563911.6, 4328986.0,      88.9,      88.9,       0.0);         ( 564011.6,
4328986.0,      86.0,      90.3,       0.0);
     ( 564111.6, 4328986.0,      83.8,      90.8,       0.0);         ( 564211.6,
4328986.0,      73.8,      90.8,       0.0);
     ( 564311.6, 4328986.0,      76.6,      86.6,       0.0);         ( 564411.6,
4328986.0,      78.7,     101.4,       0.0);
     ( 564511.6, 4328986.0,      79.5,     101.4,       0.0);         ( 564611.6,
4328986.0,      95.3,     100.6,       0.0);
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(564711.6, 4328986.0, 89.5, 98.1, 0.0); (564811.6, 4328986.0, 84.8, 84.8, 0.0);
(564911.6, 4328986.0, 83.2, 83.2, 0.0); (565011.6, 4328986.0, 85.8, 85.8, 0.0);
(565111.6, 4328986.0, 85.1, 89.0, 0.0); (565211.6, 4328986.0, 83.6, 83.6, 0.0);
(565311.6, 4328986.0, 79.2, 79.2, 0.0); (565411.6, 4328986.0, 78.6, 91.6, 0.0);
(565511.6, 4328986.0, 90.4, 90.4, 0.0); (565611.6, 4328986.0, 86.6, 88.8, 0.0);
(565711.6, 4328986.0, 85.0, 90.0, 0.0); (565811.6, 4328986.0, 80.4, 90.5, 0.0);
(565911.6, 4328986.0, 76.6, 82.9, 0.0); (566011.6, 4328986.0, 78.8, 78.8, 0.0);
(566111.6, 4328986.0, 81.9, 81.9, 0.0); (566211.6, 4328986.0, 78.7, 78.7, 0.0);
(566311.6, 4328986.0, 75.3, 75.3, 0.0); (566411.6, 4328986.0, 74.0, 74.0, 0.0);
(566511.6, 4328986.0, 70.7, 70.7, 0.0); (560111.6, 4329086.0, 100.3, 793.0, 0.0);
(560211.6, 4329086.0, 106.6, 793.0, 0.0); (560311.6, 4329086.0, 93.9, 793.0, 0.0);
(560411.6, 4329086.0, 90.6, 793.0, 0.0); (560511.6, 4329086.0, 89.5, 793.0, 0.0);
(560611.6, 4329086.0, 100.3, 793.0, 0.0); (560711.6, 4329086.0, 96.4, 793.0, 0.0);
(560811.6, 4329086.0, 95.3, 793.0, 0.0); (560911.6, 4329086.0, 93.1, 793.0, 0.0);
(561011.6, 4329086.0, 92.9, 793.0, 0.0); (561111.6, 4329086.0, 96.1, 793.0, 0.0);
(561211.6, 4329086.0, 96.5, 793.0, 0.0); (561311.6, 4329086.0, 90.8, 793.0, 0.0);
(561411.6, 4329086.0, 81.2, 793.0, 0.0); (561511.6, 4329086.0, 76.0, 793.0, 0.0);
(561611.6, 4329086.0, 91.5, 793.0, 0.0); (561711.6, 4329086.0, 91.4, 780.0, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(561811.6, 4329086.0, 82.8, 793.0, 0.0); (561911.6, 4329086.0, 83.9, 780.0, 0.0);

```
     ( 562011.6, 4329086.0,      94.9,     710.1,       0.0);         ( 562111.6,
4329086.0,      81.5,     780.0,       0.0);
     ( 562211.6, 4329086.0,      89.3,     684.3,       0.0);         ( 562311.6,
4329086.0,      95.1,     674.8,       0.0);
     ( 562411.6, 4329086.0,      88.6,     674.8,       0.0);         ( 562511.6,
4329086.0,      85.9,     674.8,       0.0);
     ( 562611.6, 4329086.0,      84.0,     669.4,       0.0);         ( 562711.6,
4329086.0,      78.9,     667.7,       0.0);
     ( 562811.6, 4329086.0,      79.6,     662.3,       0.0);         ( 562911.6,
4329086.0,      85.3,      93.8,       0.0);
     ( 563011.6, 4329086.0,      88.9,      88.9,       0.0);         ( 563111.6,
4329086.0,      79.2,      97.0,       0.0);
     ( 563211.6, 4329086.0,      86.5,      89.2,       0.0);         ( 563311.6,
4329086.0,      86.4,      87.3,       0.0);
     ( 563411.6, 4329086.0,      80.1,      80.1,       0.0);         ( 563511.6,
4329086.0,      80.1,      88.7,       0.0);
     ( 563611.6, 4329086.0,      84.5,      84.5,       0.0);         ( 563711.6,
4329086.0,      82.1,      83.2,       0.0);
     ( 563811.6, 4329086.0,      77.3,      91.4,       0.0);         ( 563911.6,
4329086.0,      82.3,      90.6,       0.0);
     ( 564011.6, 4329086.0,      85.3,      90.6,       0.0);         ( 564111.6,
4329086.0,      87.6,      90.1,       0.0);
     ( 564211.6, 4329086.0,      75.4,      90.8,       0.0);         ( 564311.6,
4329086.0,      77.1,      86.6,       0.0);
     ( 564411.6, 4329086.0,      80.3,      86.6,       0.0);         ( 564511.6,
4329086.0,      78.9,     101.4,       0.0);
     ( 564611.6, 4329086.0,      97.8,      97.8,       0.0);         ( 564711.6,
4329086.0,      92.2,      92.2,       0.0);
     ( 564811.6, 4329086.0,      89.4,      89.4,       0.0);         ( 564911.6,
4329086.0,      86.4,      86.4,       0.0);
     ( 565011.6, 4329086.0,      82.8,      82.8,       0.0);         ( 565111.6,
4329086.0,      81.0,      81.0,       0.0);
     ( 565211.6, 4329086.0,      79.3,      79.3,       0.0);         ( 565311.6,
4329086.0,      78.1,      78.1,       0.0);
     ( 565411.6, 4329086.0,      86.7,      86.7,       0.0);         ( 565511.6,
4329086.0,      89.2,      89.2,       0.0);
     ( 565611.6, 4329086.0,      82.7,      82.7,       0.0);         ( 565711.6,
4329086.0,      81.1,      81.1,       0.0);
     ( 565811.6, 4329086.0,      83.0,      83.0,       0.0);         ( 565911.6,
4329086.0,      82.2,      82.2,       0.0);
     ( 566011.6, 4329086.0,      77.1,      82.1,       0.0);         ( 566111.6,
4329086.0,      75.3,      78.9,       0.0);
     ( 566211.6, 4329086.0,      70.8,      76.8,       0.0);         ( 566311.6,
4329086.0,      71.5,      74.6,       0.0);
     ( 566411.6, 4329086.0,      70.5,      72.4,       0.0);         ( 566511.6,
4329086.0,      68.9,      68.9,       0.0);
     ( 560111.6, 4329186.0,      99.8,     793.0,       0.0);         ( 560211.6,
4329186.0,      98.5,     793.0,       0.0);
     ( 560311.6, 4329186.0,      94.1,     793.0,       0.0);         ( 560411.6,
4329186.0,      87.9,     793.0,       0.0);
```

```
     ( 560511.6, 4329186.0,      86.6,     793.0,       0.0);         ( 560611.6,
4329186.0,      87.4,     793.0,       0.0);
     ( 560711.6, 4329186.0,      90.1,     793.0,       0.0);         ( 560811.6,
4329186.0,     101.1,     793.0,       0.0);
     ( 560911.6, 4329186.0,      98.3,     793.0,       0.0);         ( 561011.6,
4329186.0,      90.0,     793.0,       0.0);
     ( 561111.6, 4329186.0,      95.7,     793.0,       0.0);         ( 561211.6,
4329186.0,     100.0,     793.0,       0.0);
     ( 561311.6, 4329186.0,      91.0,     793.0,       0.0);         ( 561411.6,
4329186.0,      83.7,     793.0,       0.0);
     ( 561511.6, 4329186.0,      75.0,     793.0,       0.0);         ( 561611.6,
4329186.0,      80.2,     793.0,       0.0);
     ( 561711.6, 4329186.0,      84.4,     780.0,       0.0);         ( 561811.6,
4329186.0,      83.6,     780.0,       0.0);
     ( 561911.6, 4329186.0,      82.3,     780.0,       0.0);         ( 562011.6,
4329186.0,      93.3,     684.3,       0.0);
     ( 562111.6, 4329186.0,      78.5,     780.0,       0.0);         ( 562211.6,
4329186.0,      93.3,     674.8,       0.0);
     ( 562311.6, 4329186.0,      92.6,     674.8,       0.0);         ( 562411.6,
4329186.0,      89.9,     669.4,       0.0);
     ( 562511.6, 4329186.0,      88.2,     662.3,       0.0);         ( 562611.6,
4329186.0,      87.0,     662.3,       0.0);
     ( 562711.6, 4329186.0,      80.8,     662.3,       0.0);         ( 562811.6,
4329186.0,      77.3,     662.3,       0.0);
     ( 562911.6, 4329186.0,      75.1,      93.8,       0.0);         ( 563011.6,
4329186.0,      79.4,      93.4,       0.0);
     ( 563111.6, 4329186.0,      75.7,      88.2,       0.0);         ( 563211.6,
4329186.0,      78.6,      89.3,       0.0);
     ( 563311.6, 4329186.0,      83.0,      83.0,       0.0);         ( 563411.6,
4329186.0,      82.4,      82.4,       0.0);
     ( 563511.6, 4329186.0,      80.3,      82.2,       0.0);         ( 563611.6,
4329186.0,      78.1,      86.1,       0.0);
     ( 563711.6, 4329186.0,      80.3,      80.3,       0.0);         ( 563811.6,
4329186.0,      77.3,      77.3,       0.0);
     ( 563911.6, 4329186.0,      73.4,      90.7,       0.0);         ( 564011.6,
4329186.0,      73.8,      90.8,       0.0);
     ( 564111.6, 4329186.0,      73.9,      90.8,       0.0);         ( 564211.6,
4329186.0,      71.3,      90.8,       0.0);
↟ *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                           ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                          ***       06:53:13

                                    PAGE  35
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                                        *** DISCRETE CARTESIAN RECEPTORS ***
                                      (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                  (METERS)
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```
     ( 564311.6, 4329186.0,      70.2,      86.6,       0.0);         ( 564411.6,
4329186.0,      71.2,      98.6,       0.0);
     ( 564511.6, 4329186.0,      73.4,     101.1,       0.0);         ( 564611.6,
4329186.0,      89.4,      89.4,       0.0);
     ( 564711.6, 4329186.0,      85.8,      91.5,       0.0);         ( 564811.6,
4329186.0,      82.3,      82.3,       0.0);
     ( 564911.6, 4329186.0,      82.5,      82.5,       0.0);         ( 565011.6,
4329186.0,      81.5,      81.5,       0.0);
     ( 565111.6, 4329186.0,      80.4,      80.4,       0.0);         ( 565211.6,
4329186.0,      80.1,      80.1,       0.0);
     ( 565311.6, 4329186.0,      83.1,      83.1,       0.0);         ( 565411.6,
4329186.0,      82.7,      89.5,       0.0);
     ( 565511.6, 4329186.0,      88.4,      88.4,       0.0);         ( 565611.6,
4329186.0,      85.0,      85.0,       0.0);
     ( 565711.6, 4329186.0,      82.1,      83.0,       0.0);         ( 565811.6,
4329186.0,      80.6,      80.6,       0.0);
     ( 565911.6, 4329186.0,      80.4,      80.4,       0.0);         ( 566011.6,
4329186.0,      74.5,      74.5,       0.0);
     ( 566111.6, 4329186.0,      68.5,      76.8,       0.0);         ( 566211.6,
4329186.0,      65.9,      70.8,       0.0);
     ( 566311.6, 4329186.0,      69.5,      69.5,       0.0);         ( 566411.6,
4329186.0,      70.8,      70.8,       0.0);
     ( 566511.6, 4329186.0,      63.3,      63.3,       0.0);         ( 560111.6,
4329286.0,     100.6,     793.0,       0.0);
     ( 560211.6, 4329286.0,      96.1,     793.0,       0.0);         ( 560311.6,
4329286.0,      92.4,     793.0,       0.0);
     ( 560411.6, 4329286.0,      88.7,     793.0,       0.0);         ( 560511.6,
4329286.0,      86.1,     793.0,       0.0);
     ( 560611.6, 4329286.0,      85.5,     793.0,       0.0);         ( 560711.6,
4329286.0,      83.5,     793.0,       0.0);
     ( 560811.6, 4329286.0,      86.8,     793.0,       0.0);         ( 560911.6,
4329286.0,      83.4,     793.0,       0.0);
     ( 561011.6, 4329286.0,      82.7,     793.0,       0.0);         ( 561111.6,
4329286.0,      84.2,     793.0,       0.0);
     ( 561211.6, 4329286.0,     103.4,     780.0,       0.0);         ( 561311.6,
4329286.0,      98.8,     780.0,       0.0);
     ( 561411.6, 4329286.0,      88.2,     792.5,       0.0);         ( 561511.6,
4329286.0,      80.0,     793.0,       0.0);
     ( 561611.6, 4329286.0,      73.4,     793.0,       0.0);         ( 561711.6,
4329286.0,      73.7,     792.5,       0.0);
     ( 561811.6, 4329286.0,      83.2,     780.0,       0.0);         ( 561911.6,
4329286.0,      75.2,     780.0,       0.0);
     ( 562011.6, 4329286.0,      87.9,     684.3,       0.0);         ( 562111.6,
4329286.0,      76.7,     710.1,       0.0);
     ( 562211.6, 4329286.0,      92.5,     674.8,       0.0);         ( 562311.6,
4329286.0,      86.9,     674.8,       0.0);
     ( 562411.6, 4329286.0,      88.8,     662.3,       0.0);         ( 562511.6,
4329286.0,      85.7,     662.3,       0.0);
     ( 562611.6, 4329286.0,      82.9,     662.3,       0.0);         ( 562711.6,
4329286.0,      84.9,      84.9,       0.0);
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```
     ( 562811.6, 4329286.0,      86.4,      86.4,       0.0);         ( 562911.6,
4329286.0,      83.5,      83.5,       0.0);
     ( 563011.6, 4329286.0,      76.9,      84.6,       0.0);         ( 563111.6,
4329286.0,      71.6,      83.8,       0.0);
     ( 563211.6, 4329286.0,      80.4,      80.4,       0.0);         ( 563311.6,
4329286.0,      78.6,      78.6,       0.0);
     ( 563411.6, 4329286.0,      82.4,      82.4,       0.0);         ( 563511.6,
4329286.0,      78.8,      80.2,       0.0);
     ( 563611.6, 4329286.0,      74.0,      79.3,       0.0);         ( 563711.6,
4329286.0,      78.6,      78.6,       0.0);
     ( 563811.6, 4329286.0,      76.6,      76.6,       0.0);         ( 563911.6,
4329286.0,      76.2,      76.2,       0.0);
     ( 564011.6, 4329286.0,      73.1,      73.1,       0.0);         ( 564111.6,
4329286.0,      70.8,      70.8,       0.0);
     ( 564211.6, 4329286.0,      68.7,      68.7,       0.0);         ( 564311.6,
4329286.0,      68.9,      68.9,       0.0);
     ( 564411.6, 4329286.0,      72.4,      99.3,       0.0);         ( 564511.6,
4329286.0,      74.0,      99.3,       0.0);
     ( 564611.6, 4329286.0,      90.9,      96.5,       0.0);         ( 564711.6,
4329286.0,      85.7,      98.0,       0.0);
     ( 564811.6, 4329286.0,      81.2,      83.1,       0.0);         ( 564911.6,
4329286.0,      83.5,      83.5,       0.0);
     ( 565011.6, 4329286.0,      83.2,      83.2,       0.0);         ( 565111.6,
4329286.0,      86.3,      86.3,       0.0);
     ( 565211.6, 4329286.0,      74.7,      86.8,       0.0);         ( 565311.6,
4329286.0,      82.1,      82.1,       0.0);
     ( 565411.6, 4329286.0,      78.9,      88.8,       0.0);         ( 565511.6,
4329286.0,      86.4,      86.4,       0.0);
     ( 565611.6, 4329286.0,      79.6,      81.0,       0.0);         ( 565711.6,
4329286.0,      76.5,      81.8,       0.0);
     ( 565811.6, 4329286.0,      75.1,      81.9,       0.0);         ( 565911.6,
4329286.0,      79.1,      79.1,       0.0);
     ( 566011.6, 4329286.0,      73.0,      73.0,       0.0);         ( 566111.6,
4329286.0,      74.2,      74.2,       0.0);
     ( 566211.6, 4329286.0,      63.6,      74.5,       0.0);         ( 566311.6,
4329286.0,      69.4,      69.4,       0.0);
     ( 566411.6, 4329286.0,      65.0,      65.0,       0.0);         ( 566511.6,
4329286.0,      61.7,      61.7,       0.0);
     ( 560111.6, 4329386.0,      96.2,     793.0,       0.0);         ( 560211.6,
4329386.0,      94.9,     793.0,       0.0);
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                             ***       06:53:13

                                      PAGE  36
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                                                  *** DISCRETE CARTESIAN RECEPTORS ***
                                                (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
```

(METERS)

(560311.6, 4329386.0, 87.4, 793.0, 0.0); (560411.6, 4329386.0, 83.9, 793.0, 0.0);
(560511.6, 4329386.0, 84.6, 793.0, 0.0); (560611.6, 4329386.0, 82.3, 793.0, 0.0);
(560711.6, 4329386.0, 83.0, 793.0, 0.0); (560811.6, 4329386.0, 81.8, 793.0, 0.0);
(560911.6, 4329386.0, 80.0, 793.0, 0.0); (561011.6, 4329386.0, 78.4, 793.0, 0.0);
(561111.6, 4329386.0, 77.6, 793.0, 0.0); (561211.6, 4329386.0, 80.8, 793.0, 0.0);
(561311.6, 4329386.0, 88.9, 780.0, 0.0); (561411.6, 4329386.0, 90.8, 780.0, 0.0);
(561511.6, 4329386.0, 82.9, 780.0, 0.0); (561611.6, 4329386.0, 78.3, 780.0, 0.0);
(561711.6, 4329386.0, 74.0, 780.0, 0.0); (561811.6, 4329386.0, 70.6, 780.0, 0.0);
(561911.6, 4329386.0, 70.0, 780.0, 0.0); (562011.6, 4329386.0, 73.0, 710.1, 0.0);
(562111.6, 4329386.0, 75.5, 684.3, 0.0); (562211.6, 4329386.0, 76.6, 674.8, 0.0);
(562311.6, 4329386.0, 84.6, 669.4, 0.0); (562411.6, 4329386.0, 90.3, 662.3, 0.0);
(562511.6, 4329386.0, 89.0, 661.3, 0.0); (562611.6, 4329386.0, 86.7, 598.4, 0.0);
(562711.6, 4329386.0, 91.7, 91.7, 0.0); (562811.6, 4329386.0, 85.7, 87.4, 0.0);
(562911.6, 4329386.0, 80.7, 80.7, 0.0); (563011.6, 4329386.0, 84.5, 84.5, 0.0);
(563111.6, 4329386.0, 71.6, 85.0, 0.0); (563211.6, 4329386.0, 76.5, 76.5, 0.0);
(563311.6, 4329386.0, 75.1, 75.1, 0.0); (563411.6, 4329386.0, 81.4, 81.4, 0.0);
(563511.6, 4329386.0, 80.2, 80.2, 0.0); (563611.6, 4329386.0, 73.2, 84.0, 0.0);
(563711.6, 4329386.0, 82.2, 82.2, 0.0); (563811.6, 4329386.0, 79.7, 79.7, 0.0);
(563911.6, 4329386.0, 75.0, 82.0, 0.0); (564011.6, 4329386.0, 71.9, 71.9, 0.0);
(564111.6, 4329386.0, 74.7, 74.7, 0.0); (564211.6, 4329386.0, 67.5, 67.5, 0.0);
(564311.6, 4329386.0, 69.0, 99.3, 0.0); (564411.6, 4329386.0, 76.8, 99.3, 0.0);
(564511.6, 4329386.0, 77.2, 99.3, 0.0); (564611.6, 4329386.0, 98.3, 98.3, 0.0);
(564711.6, 4329386.0, 88.3, 99.1, 0.0); (564811.6, 4329386.0, 83.9, 85.1, 0.0);
(564911.6, 4329386.0, 86.2, 86.2, 0.0); (565011.6, 4329386.0, 87.1, 87.1, 0.0);

```
     ( 565111.6, 4329386.0,      84.1,      86.6,       0.0);         ( 565211.6,
4329386.0,      76.6,      85.9,       0.0);
     ( 565311.6, 4329386.0,      76.8,      79.6,       0.0);         ( 565411.6,
4329386.0,      72.8,      88.0,       0.0);
     ( 565511.6, 4329386.0,      78.8,      82.1,       0.0);         ( 565611.6,
4329386.0,      74.1,      80.9,       0.0);
     ( 565711.6, 4329386.0,      76.8,      79.0,       0.0);         ( 565811.6,
4329386.0,      70.7,      80.9,       0.0);
     ( 565911.6, 4329386.0,      76.7,      76.7,       0.0);         ( 566011.6,
4329386.0,      72.9,      72.9,       0.0);
     ( 566111.6, 4329386.0,      66.9,      74.2,       0.0);         ( 566211.6,
4329386.0,      62.1,      72.5,       0.0);
     ( 566311.6, 4329386.0,      66.1,      66.1,       0.0);         ( 566411.6,
4329386.0,      62.0,      62.0,       0.0);
     ( 566511.6, 4329386.0,      58.0,      58.0,       0.0);         ( 560111.6,
4329486.0,      93.2,     793.0,       0.0);
     ( 560211.6, 4329486.0,      91.5,     793.0,       0.0);         ( 560311.6,
4329486.0,      85.0,     793.0,       0.0);
     ( 560411.6, 4329486.0,      82.8,     793.0,       0.0);         ( 560511.6,
4329486.0,      83.1,     793.0,       0.0);
     ( 560611.6, 4329486.0,      81.9,     793.0,       0.0);         ( 560711.6,
4329486.0,      80.6,     793.0,       0.0);
     ( 560811.6, 4329486.0,      79.7,     793.0,       0.0);         ( 560911.6,
4329486.0,      78.8,     793.0,       0.0);
     ( 561011.6, 4329486.0,      78.0,     793.0,       0.0);         ( 561111.6,
4329486.0,      76.8,     793.0,       0.0);
     ( 561211.6, 4329486.0,      75.7,     793.0,       0.0);         ( 561311.6,
4329486.0,      74.9,     792.5,       0.0);
     ( 561411.6, 4329486.0,      81.4,     780.0,       0.0);         ( 561511.6,
4329486.0,      86.7,     710.1,       0.0);
     ( 561611.6, 4329486.0,      81.7,     710.1,       0.0);         ( 561711.6,
4329486.0,      84.8,     710.1,       0.0);
     ( 561811.6, 4329486.0,      81.2,     684.3,       0.0);         ( 561911.6,
4329486.0,      82.1,     684.3,       0.0);
     ( 562011.6, 4329486.0,      70.8,     684.3,       0.0);         ( 562111.6,
4329486.0,      74.0,     684.3,       0.0);
     ( 562211.6, 4329486.0,      72.9,     674.8,       0.0);         ( 562311.6,
4329486.0,      77.2,     669.4,       0.0);
     ( 562411.6, 4329486.0,      81.3,     662.3,       0.0);         ( 562511.6,
4329486.0,      87.3,     598.4,       0.0);
     ( 562611.6, 4329486.0,      83.7,     598.4,       0.0);         ( 562711.6,
4329486.0,      85.8,      85.8,       0.0);
↟ *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                           ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                          ***        06:53:13

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL
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*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(562811.6, 4329486.0, 83.2, 83.2, 0.0); (562911.6, 4329486.0, 77.8, 77.8, 0.0);
(563011.6, 4329486.0, 77.4, 82.2, 0.0); (563111.6, 4329486.0, 73.4, 82.5, 0.0);
(563211.6, 4329486.0, 74.9, 80.6, 0.0); (563311.6, 4329486.0, 72.5, 80.6, 0.0);
(563411.6, 4329486.0, 79.1, 79.1, 0.0); (563511.6, 4329486.0, 76.4, 76.4, 0.0);
(563611.6, 4329486.0, 71.8, 83.8, 0.0); (563711.6, 4329486.0, 80.0, 80.0, 0.0);
(563811.6, 4329486.0, 75.9, 75.9, 0.0); (563911.6, 4329486.0, 76.0, 81.6, 0.0);
(564011.6, 4329486.0, 70.3, 81.8, 0.0); (564111.6, 4329486.0, 76.6, 76.6, 0.0);
(564211.6, 4329486.0, 66.5, 77.5, 0.0); (564311.6, 4329486.0, 71.0, 98.9, 0.0);
(564411.6, 4329486.0, 73.8, 99.3, 0.0); (564511.6, 4329486.0, 86.1, 99.3, 0.0);
(564611.6, 4329486.0, 92.2, 99.3, 0.0); (564711.6, 4329486.0, 77.1, 99.3, 0.0);
(564811.6, 4329486.0, 86.5, 86.5, 0.0); (564911.6, 4329486.0, 80.5, 87.6, 0.0);
(565011.6, 4329486.0, 88.7, 88.7, 0.0); (565111.6, 4329486.0, 82.0, 84.1, 0.0);
(565211.6, 4329486.0, 72.9, 72.9, 0.0); (565311.6, 4329486.0, 72.3, 72.3, 0.0);
(565411.6, 4329486.0, 70.8, 77.5, 0.0); (565511.6, 4329486.0, 75.5, 77.5, 0.0);
(565611.6, 4329486.0, 68.4, 68.4, 0.0); (565711.6, 4329486.0, 76.1, 76.1, 0.0);
(565811.6, 4329486.0, 66.2, 77.3, 0.0); (565911.6, 4329486.0, 72.1, 72.1, 0.0);
(566011.6, 4329486.0, 68.8, 70.0, 0.0); (566111.6, 4329486.0, 66.5, 66.5, 0.0);
(566211.6, 4329486.0, 60.5, 60.5, 0.0); (566311.6, 4329486.0, 61.8, 61.8, 0.0);
(566411.6, 4329486.0, 60.5, 60.5, 0.0); (566511.6, 4329486.0, 59.1, 59.1, 0.0);
(560111.6, 4329586.0, 90.0, 793.0, 0.0); (560211.6, 4329586.0, 86.3, 793.0, 0.0);
(560311.6, 4329586.0, 84.4, 793.0, 0.0); (560411.6, 4329586.0, 81.0, 793.0, 0.0);
(560511.6, 4329586.0, 81.9, 793.0, 0.0); (560611.6, 4329586.0, 81.1, 793.0, 0.0);
(560711.6, 4329586.0, 80.5, 793.0, 0.0); (560811.6, 4329586.0, 79.0, 793.0, 0.0);

```
     ( 560911.6, 4329586.0,      78.1,     793.0,       0.0);         ( 561011.6,
4329586.0,      76.3,     793.0,       0.0);
     ( 561111.6, 4329586.0,      75.9,     780.0,       0.0);         ( 561211.6,
4329586.0,      75.0,     780.0,       0.0);
     ( 561311.6, 4329586.0,      73.8,     780.0,       0.0);         ( 561411.6,
4329586.0,      73.3,     780.0,       0.0);
     ( 561511.6, 4329586.0,      72.7,     780.0,       0.0);         ( 561611.6,
4329586.0,      74.5,     710.1,       0.0);
     ( 561711.6, 4329586.0,      77.0,     709.8,       0.0);         ( 561811.6,
4329586.0,      83.1,     684.3,       0.0);
     ( 561911.6, 4329586.0,      86.5,     674.8,       0.0);         ( 562011.6,
4329586.0,      86.6,     669.4,       0.0);
     ( 562111.6, 4329586.0,      70.8,     674.8,       0.0);         ( 562211.6,
4329586.0,      68.6,     674.8,       0.0);
     ( 562311.6, 4329586.0,      73.1,     667.7,       0.0);         ( 562411.6,
4329586.0,      75.2,     662.3,       0.0);
     ( 562511.6, 4329586.0,      84.1,     598.4,       0.0);         ( 562611.6,
4329586.0,      78.0,     598.4,       0.0);
     ( 562711.6, 4329586.0,      83.2,      83.2,       0.0);         ( 562811.6,
4329586.0,      81.4,      81.4,       0.0);
     ( 562911.6, 4329586.0,      78.5,      78.5,       0.0);         ( 563011.6,
4329586.0,      73.4,      73.4,       0.0);
     ( 563111.6, 4329586.0,      69.7,      69.7,       0.0);         ( 563211.6,
4329586.0,      68.1,      80.4,       0.0);
     ( 563311.6, 4329586.0,      69.1,      69.1,       0.0);         ( 563411.6,
4329586.0,      73.6,      73.6,       0.0);
     ( 563511.6, 4329586.0,      72.6,      72.6,       0.0);         ( 563611.6,
4329586.0,      70.4,      81.1,       0.0);
     ( 563711.6, 4329586.0,      74.1,      74.1,       0.0);         ( 563811.6,
4329586.0,      75.2,      80.9,       0.0);
     ( 563911.6, 4329586.0,      80.1,      80.1,       0.0);         ( 564011.6,
4329586.0,      69.8,      81.9,       0.0);
     ( 564111.6, 4329586.0,      70.7,      70.7,       0.0);         ( 564211.6,
4329586.0,      66.3,      98.7,       0.0);
     ( 564311.6, 4329586.0,      69.5,      98.9,       0.0);         ( 564411.6,
4329586.0,      72.5,      99.3,       0.0);
     ( 564511.6, 4329586.0,      96.7,      98.3,       0.0);         ( 564611.6,
4329586.0,      92.8,      98.5,       0.0);
     ( 564711.6, 4329586.0,      77.9,      99.3,       0.0);         ( 564811.6,
4329586.0,      78.6,      84.1,       0.0);
     ( 564911.6, 4329586.0,      76.8,      88.2,       0.0);         ( 565011.6,
4329586.0,      84.0,      85.2,       0.0);
     ( 565111.6, 4329586.0,      81.3,      81.3,       0.0);         ( 565211.6,
4329586.0,      72.3,      72.3,       0.0);
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                             ***       06:53:13
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(565311.6, 4329586.0, 67.0, 71.7, 0.0); (565411.6, 4329586.0, 71.6, 71.6, 0.0);
(565511.6, 4329586.0, 67.6, 77.8, 0.0); (565611.6, 4329586.0, 66.1, 77.3, 0.0);
(565711.6, 4329586.0, 75.0, 75.5, 0.0); (565811.6, 4329586.0, 64.3, 77.3, 0.0);
(565911.6, 4329586.0, 72.1, 72.1, 0.0); (566011.6, 4329586.0, 65.1, 72.3, 0.0);
(566111.6, 4329586.0, 65.5, 65.5, 0.0); (566211.6, 4329586.0, 59.6, 59.6, 0.0);
(566311.6, 4329586.0, 60.0, 60.0, 0.0); (566411.6, 4329586.0, 58.5, 58.5, 0.0);
(566511.6, 4329586.0, 58.5, 58.5, 0.0); (560111.6, 4329686.0, 90.6, 793.0, 0.0);
(560211.6, 4329686.0, 84.9, 793.0, 0.0); (560311.6, 4329686.0, 83.0, 793.0, 0.0);
(560411.6, 4329686.0, 81.4, 793.0, 0.0); (560511.6, 4329686.0, 79.1, 793.0, 0.0);
(560611.6, 4329686.0, 79.8, 793.0, 0.0); (560711.6, 4329686.0, 78.8, 793.0, 0.0);
(560811.6, 4329686.0, 77.5, 780.0, 0.0); (560911.6, 4329686.0, 76.6, 780.0, 0.0);
(561011.6, 4329686.0, 75.9, 780.0, 0.0); (561111.6, 4329686.0, 74.9, 780.0, 0.0);
(561211.6, 4329686.0, 74.5, 780.0, 0.0); (561311.6, 4329686.0, 72.9, 780.0, 0.0);
(561411.6, 4329686.0, 72.4, 710.1, 0.0); (561511.6, 4329686.0, 72.1, 710.1, 0.0);
(561611.6, 4329686.0, 71.7, 710.1, 0.0); (561711.6, 4329686.0, 71.8, 684.3, 0.0);
(561811.6, 4329686.0, 72.5, 684.3, 0.0); (561911.6, 4329686.0, 72.1, 674.8, 0.0);
(562011.6, 4329686.0, 73.1, 674.8, 0.0); (562111.6, 4329686.0, 74.4, 669.4, 0.0);
(562211.6, 4329686.0, 67.2, 669.4, 0.0); (562311.6, 4329686.0, 68.7, 662.3, 0.0);
(562411.6, 4329686.0, 71.9, 662.3, 0.0); (562511.6, 4329686.0, 82.3, 598.4, 0.0);
(562611.6, 4329686.0, 75.3, 588.7, 0.0); (562711.6, 4329686.0, 80.6, 80.6, 0.0);
(562811.6, 4329686.0, 78.5, 78.5, 0.0); (562911.6, 4329686.0, 75.5, 75.5, 0.0);
(563011.6, 4329686.0, 76.9, 76.9, 0.0); (563111.6, 4329686.0, 74.9, 74.9, 0.0);

```
     ( 563211.6, 4329686.0,      68.3,      68.3,       0.0);         ( 563311.6,
4329686.0,      67.1,      74.0,       0.0);
     ( 563411.6, 4329686.0,      75.1,      75.1,       0.0);         ( 563511.6,
4329686.0,      72.8,      72.8,       0.0);
     ( 563611.6, 4329686.0,      70.2,      70.2,       0.0);         ( 563711.6,
4329686.0,      68.7,      68.7,       0.0);
     ( 563811.6, 4329686.0,      71.6,      71.6,       0.0);         ( 563911.6,
4329686.0,      72.9,      72.9,       0.0);
     ( 564011.6, 4329686.0,      67.9,      67.9,       0.0);         ( 564111.6,
4329686.0,      67.5,      67.5,       0.0);
     ( 564211.6, 4329686.0,      65.6,      98.3,       0.0);         ( 564311.6,
4329686.0,      69.1,      98.9,       0.0);
     ( 564411.6, 4329686.0,      72.8,      98.9,       0.0);         ( 564511.6,
4329686.0,      88.9,      98.7,       0.0);
     ( 564611.6, 4329686.0,      81.2,      98.9,       0.0);         ( 564711.6,
4329686.0,      72.4,      98.9,       0.0);
     ( 564811.6, 4329686.0,      79.2,      80.2,       0.0);         ( 564911.6,
4329686.0,      72.8,      85.8,       0.0);
     ( 565011.6, 4329686.0,      73.2,      86.8,       0.0);         ( 565111.6,
4329686.0,      75.6,      78.4,       0.0);
     ( 565211.6, 4329686.0,      70.7,      70.7,       0.0);         ( 565311.6,
4329686.0,      69.2,      73.3,       0.0);
     ( 565411.6, 4329686.0,      71.9,      71.9,       0.0);         ( 565511.6,
4329686.0,      64.9,      64.9,       0.0);
     ( 565611.6, 4329686.0,      62.8,      62.8,       0.0);         ( 565711.6,
4329686.0,      63.3,      77.1,       0.0);
     ( 565811.6, 4329686.0,      65.1,      65.1,       0.0);         ( 565911.6,
4329686.0,      65.5,      65.5,       0.0);
     ( 566011.6, 4329686.0,      64.4,      64.4,       0.0);         ( 566111.6,
4329686.0,      61.4,      61.4,       0.0);
     ( 566211.6, 4329686.0,      58.6,      58.6,       0.0);         ( 566311.6,
4329686.0,      56.1,      59.1,       0.0);
     ( 566411.6, 4329686.0,      55.0,      55.0,       0.0);         ( 566511.6,
4329686.0,      57.3,      57.3,       0.0);
     ( 560111.6, 4329786.0,      89.7,     792.5,       0.0);         ( 560211.6,
4329786.0,      85.6,     793.0,       0.0);
     ( 560311.6, 4329786.0,      82.0,     793.0,       0.0);         ( 560411.6,
4329786.0,      80.9,     792.5,       0.0);
     ( 560511.6, 4329786.0,      78.1,     780.0,       0.0);         ( 560611.6,
4329786.0,      78.5,     780.0,       0.0);
     ( 560711.6, 4329786.0,      77.8,     780.0,       0.0);         ( 560811.6,
4329786.0,      76.8,     780.0,       0.0);
     ( 560911.6, 4329786.0,      75.6,     780.0,       0.0);         ( 561011.6,
4329786.0,      75.2,     780.0,       0.0);
     ( 561111.6, 4329786.0,      74.1,     780.0,       0.0);         ( 561211.6,
4329786.0,      73.5,     710.1,       0.0);
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                             ***       06:53:13
```

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(561311.6, 4329786.0, 72.6, 710.1, 0.0); (561411.6, 4329786.0, 71.1, 710.1, 0.0);
(561511.6, 4329786.0, 70.6, 684.3, 0.0); (561611.6, 4329786.0, 70.1, 684.3, 0.0);
(561711.6, 4329786.0, 68.8, 684.3, 0.0); (561811.6, 4329786.0, 69.6, 674.8, 0.0);
(561911.6, 4329786.0, 69.5, 674.8, 0.0); (562011.6, 4329786.0, 69.2, 674.8, 0.0);
(562111.6, 4329786.0, 67.6, 669.4, 0.0); (562211.6, 4329786.0, 66.4, 662.3, 0.0);
(562311.6, 4329786.0, 65.9, 662.3, 0.0); (562411.6, 4329786.0, 67.7, 661.3, 0.0);
(562511.6, 4329786.0, 71.5, 598.4, 0.0); (562611.6, 4329786.0, 71.4, 588.7, 0.0);
(562711.6, 4329786.0, 78.3, 580.9, 0.0); (562811.6, 4329786.0, 78.2, 78.2, 0.0);
(562911.6, 4329786.0, 76.4, 76.4, 0.0); (563011.6, 4329786.0, 76.0, 76.0, 0.0);
(563111.6, 4329786.0, 76.1, 76.1, 0.0); (563211.6, 4329786.0, 71.2, 71.2, 0.0);
(563311.6, 4329786.0, 65.3, 65.3, 0.0); (563411.6, 4329786.0, 68.9, 68.9, 0.0);
(563511.6, 4329786.0, 74.0, 74.0, 0.0); (563611.6, 4329786.0, 71.0, 71.0, 0.0);
(563711.6, 4329786.0, 67.1, 67.1, 0.0); (563811.6, 4329786.0, 70.2, 70.2, 0.0);
(563911.6, 4329786.0, 69.6, 69.6, 0.0); (564011.6, 4329786.0, 68.6, 68.6, 0.0);
(564111.6, 4329786.0, 65.0, 65.0, 0.0); (564211.6, 4329786.0, 64.8, 64.8, 0.0);
(564311.6, 4329786.0, 64.9, 98.9, 0.0); (564411.6, 4329786.0, 80.2, 84.7, 0.0);
(564511.6, 4329786.0, 79.7, 98.1, 0.0); (564611.6, 4329786.0, 81.1, 82.0, 0.0);
(564711.6, 4329786.0, 74.1, 83.7, 0.0); (564811.6, 4329786.0, 73.1, 79.4, 0.0);
(564911.6, 4329786.0, 71.6, 71.6, 0.0); (565011.6, 4329786.0, 67.3, 82.2, 0.0);
(565111.6, 4329786.0, 72.5, 77.0, 0.0); (565211.6, 4329786.0, 66.3, 66.3, 0.0);
(565311.6, 4329786.0, 64.3, 71.7, 0.0); (565411.6, 4329786.0, 71.9, 73.9, 0.0);

(565511.6, 4329786.0, 70.7, 70.7, 0.0); (565611.6, 4329786.0, 68.6, 71.9, 0.0);
(565711.6, 4329786.0, 63.1, 63.1, 0.0); (565811.6, 4329786.0, 60.2, 60.2, 0.0);
(565911.6, 4329786.0, 66.3, 66.3, 0.0); (566011.6, 4329786.0, 63.9, 63.9, 0.0);
(566111.6, 4329786.0, 59.9, 59.9, 0.0); (566211.6, 4329786.0, 59.6, 59.6, 0.0);
(566311.6, 4329786.0, 54.8, 54.8, 0.0); (566411.6, 4329786.0, 52.8, 52.8, 0.0);
(566511.6, 4329786.0, 53.6, 53.6, 0.0); (560111.6, 4329886.0, 88.2, 780.0, 0.0);
(560211.6, 4329886.0, 85.7, 780.0, 0.0); (560311.6, 4329886.0, 81.2, 780.0, 0.0);
(560411.6, 4329886.0, 79.0, 780.0, 0.0); (560511.6, 4329886.0, 76.4, 780.0, 0.0);
(560611.6, 4329886.0, 77.3, 780.0, 0.0); (560711.6, 4329886.0, 76.7, 780.0, 0.0);
(560811.6, 4329886.0, 75.9, 780.0, 0.0); (560911.6, 4329886.0, 74.8, 710.1, 0.0);
(561011.6, 4329886.0, 74.2, 710.1, 0.0); (561111.6, 4329886.0, 73.1, 710.1, 0.0);
(561211.6, 4329886.0, 72.9, 710.1, 0.0); (561311.6, 4329886.0, 71.9, 684.3, 0.0);
(561411.6, 4329886.0, 70.6, 684.3, 0.0); (561511.6, 4329886.0, 70.2, 684.3, 0.0);
(561611.6, 4329886.0, 69.7, 684.3, 0.0); (561711.6, 4329886.0, 69.2, 674.8, 0.0);
(561811.6, 4329886.0, 68.8, 674.8, 0.0); (561911.6, 4329886.0, 68.3, 669.4, 0.0);
(562011.6, 4329886.0, 66.4, 669.4, 0.0); (562111.6, 4329886.0, 65.5, 662.3, 0.0);
(562211.6, 4329886.0, 66.0, 662.3, 0.0); (562311.6, 4329886.0, 65.1, 662.3, 0.0);
(562411.6, 4329886.0, 65.1, 600.9, 0.0); (562511.6, 4329886.0, 65.3, 598.4, 0.0);
(562611.6, 4329886.0, 67.2, 588.7, 0.0); (562711.6, 4329886.0, 71.3, 588.7, 0.0);
(562811.6, 4329886.0, 69.9, 580.9, 0.0); (562911.6, 4329886.0, 72.4, 72.4, 0.0);
(563011.6, 4329886.0, 71.0, 71.0, 0.0); (563111.6, 4329886.0, 73.1, 73.1, 0.0);
(563211.6, 4329886.0, 73.2, 73.2, 0.0); (563311.6, 4329886.0, 67.5, 67.5, 0.0);
(563411.6, 4329886.0, 65.7, 71.4, 0.0); (563511.6, 4329886.0, 70.2, 70.2, 0.0);
(563611.6, 4329886.0, 70.6, 70.6, 0.0); (563711.6, 4329886.0, 67.9, 67.9, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(563811.6, 4329886.0, 65.0, 65.0, 0.0); (563911.6, 4329886.0, 66.0, 66.0, 0.0);
(564011.6, 4329886.0, 68.3, 68.3, 0.0); (564111.6, 4329886.0, 65.2, 65.2, 0.0);
(564211.6, 4329886.0, 63.5, 63.5, 0.0); (564311.6, 4329886.0, 64.5, 87.7, 0.0);
(564411.6, 4329886.0, 81.4, 81.4, 0.0); (564511.6, 4329886.0, 74.0, 74.0, 0.0);
(564611.6, 4329886.0, 73.5, 73.5, 0.0); (564711.6, 4329886.0, 69.2, 69.2, 0.0);
(564811.6, 4329886.0, 68.2, 75.6, 0.0); (564911.6, 4329886.0, 76.5, 76.5, 0.0);
(565011.6, 4329886.0, 72.1, 72.1, 0.0); (565111.6, 4329886.0, 66.7, 69.8, 0.0);
(565211.6, 4329886.0, 62.5, 62.5, 0.0); (565311.6, 4329886.0, 65.8, 71.9, 0.0);
(565411.6, 4329886.0, 68.4, 71.8, 0.0); (565511.6, 4329886.0, 66.1, 66.1, 0.0);
(565611.6, 4329886.0, 63.5, 71.9, 0.0); (565711.6, 4329886.0, 64.5, 66.6, 0.0);
(565811.6, 4329886.0, 58.3, 58.3, 0.0); (565911.6, 4329886.0, 61.3, 64.6, 0.0);
(566011.6, 4329886.0, 59.3, 60.3, 0.0); (566111.6, 4329886.0, 57.3, 59.2, 0.0);
(566211.6, 4329886.0, 58.5, 58.5, 0.0); (566311.6, 4329886.0, 55.5, 55.5, 0.0);
(566411.6, 4329886.0, 52.7, 52.7, 0.0); (566511.6, 4329886.0, 51.2, 51.2, 0.0);
(560111.6, 4329986.0, 88.4, 780.0, 0.0); (560211.6, 4329986.0, 84.9, 780.0, 0.0);
(560311.6, 4329986.0, 81.3, 780.0, 0.0); (560411.6, 4329986.0, 78.1, 780.0, 0.0);
(560511.6, 4329986.0, 76.3, 780.0, 0.0); (560611.6, 4329986.0, 74.7, 780.0, 0.0);
(560711.6, 4329986.0, 74.8, 710.1, 0.0); (560811.6, 4329986.0, 74.3, 710.1, 0.0);
(560911.6, 4329986.0, 74.4, 710.1, 0.0); (561011.6, 4329986.0, 73.0, 710.1, 0.0);
(561111.6, 4329986.0, 72.3, 684.3, 0.0); (561211.6, 4329986.0, 71.9, 684.3, 0.0);

```
     ( 561311.6, 4329986.0,      70.7,     684.3,       0.0);         ( 561411.6,
4329986.0,      70.1,     684.3,       0.0);
     ( 561511.6, 4329986.0,      69.7,     674.8,       0.0);         ( 561611.6,
4329986.0,      69.2,     674.8,       0.0);
     ( 561711.6, 4329986.0,      68.8,     674.8,       0.0);         ( 561811.6,
4329986.0,      68.3,     669.4,       0.0);
     ( 561911.6, 4329986.0,      67.9,     668.0,       0.0);         ( 562011.6,
4329986.0,      65.9,     662.3,       0.0);
     ( 562111.6, 4329986.0,      65.7,     662.3,       0.0);         ( 562211.6,
4329986.0,      65.4,     662.3,       0.0);
     ( 562311.6, 4329986.0,      64.6,     621.8,       0.0);         ( 562411.6,
4329986.0,      63.6,     598.4,       0.0);
     ( 562511.6, 4329986.0,      61.5,     598.4,       0.0);         ( 562611.6,
4329986.0,      63.3,     588.7,       0.0);
     ( 562711.6, 4329986.0,      64.0,     588.7,       0.0);         ( 562811.6,
4329986.0,      65.2,     588.7,       0.0);
     ( 562911.6, 4329986.0,      65.8,      68.7,       0.0);         ( 563011.6,
4329986.0,      66.8,      72.1,       0.0);
     ( 563111.6, 4329986.0,      67.7,      70.6,       0.0);         ( 563211.6,
4329986.0,      71.7,      71.7,       0.0);
     ( 563311.6, 4329986.0,      67.5,      67.5,       0.0);         ( 563411.6,
4329986.0,      62.7,      62.7,       0.0);
     ( 563511.6, 4329986.0,      65.5,      65.5,       0.0);         ( 563611.6,
4329986.0,      67.5,      67.5,       0.0);
     ( 563711.6, 4329986.0,      67.0,      67.0,       0.0);         ( 563811.6,
4329986.0,      65.1,      65.1,       0.0);
     ( 563911.6, 4329986.0,      63.8,      63.8,       0.0);         ( 564011.6,
4329986.0,      65.5,      65.5,       0.0);
     ( 564111.6, 4329986.0,      65.8,      65.8,       0.0);         ( 564211.6,
4329986.0,      61.4,      61.4,       0.0);
     ( 564311.6, 4329986.0,      63.4,      82.3,       0.0);         ( 564411.6,
4329986.0,      81.0,      81.0,       0.0);
     ( 564511.6, 4329986.0,      73.0,      80.2,       0.0);         ( 564611.6,
4329986.0,      68.6,      68.6,       0.0);
     ( 564711.6, 4329986.0,      64.5,      64.5,       0.0);         ( 564811.6,
4329986.0,      70.1,      70.1,       0.0);
     ( 564911.6, 4329986.0,      71.7,      71.7,       0.0);         ( 565011.6,
4329986.0,      71.3,      71.3,       0.0);
     ( 565111.6, 4329986.0,      70.3,      70.3,       0.0);         ( 565211.6,
4329986.0,      65.8,      65.8,       0.0);
     ( 565311.6, 4329986.0,      59.3,      62.3,       0.0);         ( 565411.6,
4329986.0,      61.5,      61.5,       0.0);
     ( 565511.6, 4329986.0,      64.6,      64.6,       0.0);         ( 565611.6,
4329986.0,      63.3,      65.9,       0.0);
     ( 565711.6, 4329986.0,      60.2,      65.9,       0.0);         ( 565811.6,
4329986.0,      58.4,      58.4,       0.0);
     ( 565911.6, 4329986.0,      58.4,      58.4,       0.0);         ( 566011.6,
4329986.0,      55.7,      55.7,       0.0);
     ( 566111.6, 4329986.0,      53.8,      53.8,       0.0);         ( 566211.6,
4329986.0,      54.4,      54.4,       0.0);
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(566311.6, 4329986.0, 53.1, 53.1, 0.0); (566411.6, 4329986.0, 50.8, 50.8, 0.0);
(566511.6, 4329986.0, 50.0, 50.0, 0.0); (560111.6, 4330086.0, 88.2, 710.1, 0.0);
(560211.6, 4330086.0, 84.4, 710.1, 0.0); (560311.6, 4330086.0, 80.5, 710.1, 0.0);
(560411.6, 4330086.0, 77.5, 710.1, 0.0); (560511.6, 4330086.0, 76.3, 710.1, 0.0);
(560611.6, 4330086.0, 75.9, 710.1, 0.0); (560711.6, 4330086.0, 74.2, 710.1, 0.0);
(560811.6, 4330086.0, 73.1, 710.1, 0.0); (560911.6, 4330086.0, 72.4, 684.3, 0.0);
(561011.6, 4330086.0, 72.7, 684.3, 0.0); (561111.6, 4330086.0, 71.8, 684.3, 0.0);
(561211.6, 4330086.0, 70.8, 684.3, 0.0); (561311.6, 4330086.0, 70.2, 674.8, 0.0);
(561411.6, 4330086.0, 69.6, 674.8, 0.0); (561511.6, 4330086.0, 69.1, 674.8, 0.0);
(561611.6, 4330086.0, 68.6, 674.6, 0.0); (561711.6, 4330086.0, 68.1, 669.4, 0.0);
(561811.6, 4330086.0, 67.6, 667.3, 0.0); (561911.6, 4330086.0, 67.2, 662.3, 0.0);
(562011.6, 4330086.0, 65.4, 662.3, 0.0); (562111.6, 4330086.0, 65.2, 661.3, 0.0);
(562211.6, 4330086.0, 65.0, 621.8, 0.0); (562311.6, 4330086.0, 64.2, 598.4, 0.0);
(562411.6, 4330086.0, 63.2, 598.4, 0.0); (562511.6, 4330086.0, 62.9, 588.7, 0.0);
(562611.6, 4330086.0, 62.7, 588.7, 0.0); (562711.6, 4330086.0, 62.4, 588.7, 0.0);
(562811.6, 4330086.0, 62.2, 588.7, 0.0); (562911.6, 4330086.0, 60.7, 580.9, 0.0);
(563011.6, 4330086.0, 61.6, 61.6, 0.0); (563111.6, 4330086.0, 61.8, 61.8, 0.0);
(563211.6, 4330086.0, 63.1, 63.1, 0.0); (563311.6, 4330086.0, 66.0, 66.0, 0.0);
(563411.6, 4330086.0, 66.2, 66.8, 0.0); (563511.6, 4330086.0, 62.1, 62.1, 0.0);

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     ( 563611.6, 4330086.0,      67.7,      67.7,       0.0);         ( 563711.6,
4330086.0,      65.6,      65.6,       0.0);
     ( 563811.6, 4330086.0,      61.9,      61.9,       0.0);         ( 563911.6,
4330086.0,      62.5,      62.5,       0.0);
     ( 564011.6, 4330086.0,      62.1,      62.1,       0.0);         ( 564111.6,
4330086.0,      63.5,      63.5,       0.0);
     ( 564211.6, 4330086.0,      60.8,      60.8,       0.0);         ( 564311.6,
4330086.0,      60.1,      81.6,       0.0);
     ( 564411.6, 4330086.0,      69.9,      81.3,       0.0);         ( 564511.6,
4330086.0,      69.5,      80.4,       0.0);
     ( 564611.6, 4330086.0,      64.8,      64.8,       0.0);         ( 564711.6,
4330086.0,      63.3,      63.3,       0.0);
     ( 564811.6, 4330086.0,      67.5,      67.5,       0.0);         ( 564911.6,
4330086.0,      61.6,      76.6,       0.0);
     ( 565011.6, 4330086.0,      60.8,      76.6,       0.0);         ( 565111.6,
4330086.0,      58.5,      70.7,       0.0);
     ( 565211.6, 4330086.0,      63.1,      63.1,       0.0);         ( 565311.6,
4330086.0,      60.9,      60.9,       0.0);
     ( 565411.6, 4330086.0,      58.4,      58.8,       0.0);         ( 565511.6,
4330086.0,      57.9,      57.9,       0.0);
     ( 565611.6, 4330086.0,      55.4,      55.4,       0.0);         ( 565711.6,
4330086.0,      57.4,      57.4,       0.0);
     ( 565811.6, 4330086.0,      54.1,      54.1,       0.0);         ( 565911.6,
4330086.0,      54.6,      54.6,       0.0);
     ( 566011.6, 4330086.0,      54.0,      54.0,       0.0);         ( 566111.6,
4330086.0,      51.6,      51.6,       0.0);
     ( 566211.6, 4330086.0,      50.4,      50.4,       0.0);         ( 566311.6,
4330086.0,      49.5,      49.5,       0.0);
     ( 566411.6, 4330086.0,      49.0,      49.0,       0.0);         ( 566511.6,
4330086.0,      48.7,      48.7,       0.0);
     ( 560111.6, 4330186.0,      85.6,     710.1,       0.0);         ( 560211.6,
4330186.0,      83.0,     710.1,       0.0);
     ( 560311.6, 4330186.0,      80.4,     710.1,       0.0);         ( 560411.6,
4330186.0,      77.0,     710.1,       0.0);
     ( 560511.6, 4330186.0,      74.9,     710.1,       0.0);         ( 560611.6,
4330186.0,      72.5,     684.3,       0.0);
     ( 560711.6, 4330186.0,      72.3,     684.3,       0.0);         ( 560811.6,
4330186.0,      72.3,     684.3,       0.0);
     ( 560911.6, 4330186.0,      71.2,     684.3,       0.0);         ( 561011.6,
4330186.0,      71.5,     684.3,       0.0);
     ( 561111.6, 4330186.0,      71.1,     674.8,       0.0);         ( 561211.6,
4330186.0,      70.5,     674.8,       0.0);
     ( 561311.6, 4330186.0,      69.5,     674.8,       0.0);         ( 561411.6,
4330186.0,      69.0,     674.8,       0.0);
     ( 561511.6, 4330186.0,      68.4,     669.4,       0.0);         ( 561611.6,
4330186.0,      67.8,     669.0,       0.0);
     ( 561711.6, 4330186.0,      67.3,     662.3,       0.0);         ( 561811.6,
4330186.0,      66.7,     662.3,       0.0);
     ( 561911.6, 4330186.0,      66.1,     662.3,       0.0);         ( 562011.6,
4330186.0,      64.9,     632.1,       0.0);
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(562111.6, 4330186.0, 64.7, 621.8, 0.0); (562211.6, 4330186.0, 64.4, 598.4, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(562311.6, 4330186.0, 63.6, 598.4, 0.0); (562411.6, 4330186.0, 62.6, 598.4, 0.0);
(562511.6, 4330186.0, 62.4, 588.7, 0.0); (562611.6, 4330186.0, 62.2, 588.7, 0.0);
(562711.6, 4330186.0, 62.0, 588.7, 0.0); (562811.6, 4330186.0, 61.8, 588.7, 0.0);
(562911.6, 4330186.0, 60.8, 588.2, 0.0); (563011.6, 4330186.0, 60.4, 60.4, 0.0);
(563111.6, 4330186.0, 59.9, 59.9, 0.0); (563211.6, 4330186.0, 59.4, 59.4, 0.0);
(563311.6, 4330186.0, 59.5, 60.3, 0.0); (563411.6, 4330186.0, 60.5, 67.3, 0.0);
(563511.6, 4330186.0, 58.7, 68.5, 0.0); (563611.6, 4330186.0, 63.2, 69.8, 0.0);
(563711.6, 4330186.0, 62.9, 62.9, 0.0); (563811.6, 4330186.0, 61.3, 64.7, 0.0);
(563911.6, 4330186.0, 58.1, 60.7, 0.0); (564011.6, 4330186.0, 59.9, 59.9, 0.0);
(564111.6, 4330186.0, 60.9, 60.9, 0.0); (564211.6, 4330186.0, 59.0, 59.0, 0.0);
(564311.6, 4330186.0, 60.9, 60.9, 0.0); (564411.6, 4330186.0, 64.7, 64.7, 0.0);
(564511.6, 4330186.0, 65.0, 65.0, 0.0); (564611.6, 4330186.0, 62.7, 62.7, 0.0);
(564711.6, 4330186.0, 60.0, 60.0, 0.0); (564811.6, 4330186.0, 59.6, 59.6, 0.0);
(564911.6, 4330186.0, 58.7, 62.9, 0.0); (565011.6, 4330186.0, 56.7, 56.7, 0.0);
(565111.6, 4330186.0, 56.2, 56.2, 0.0); (565211.6, 4330186.0, 58.1, 59.6, 0.0);
(565311.6, 4330186.0, 58.5, 58.6, 0.0); (565411.6, 4330186.0, 57.0, 57.0, 0.0);
(565511.6, 4330186.0, 54.5, 54.5, 0.0); (565611.6, 4330186.0, 53.6, 53.6, 0.0);
(565711.6, 4330186.0, 53.2, 53.2, 0.0); (565811.6, 4330186.0, 52.5, 52.5, 0.0);

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     ( 565911.6, 4330186.0,      52.0,      52.0,       0.0);         ( 566011.6,
4330186.0,      51.3,      51.3,       0.0);
     ( 566111.6, 4330186.0,      49.8,      49.8,       0.0);         ( 566211.6,
4330186.0,      48.7,      48.7,       0.0);
     ( 566311.6, 4330186.0,      48.4,      48.4,       0.0);         ( 566411.6,
4330186.0,      48.1,      48.1,       0.0);
     ( 566511.6, 4330186.0,      47.9,      47.9,       0.0);         ( 560111.6,
4330286.0,      85.7,     684.3,       0.0);
     ( 560211.6, 4330286.0,      84.1,     684.3,       0.0);         ( 560311.6,
4330286.0,      80.0,     684.3,       0.0);
     ( 560411.6, 4330286.0,      76.5,     684.3,       0.0);         ( 560511.6,
4330286.0,      74.8,     684.3,       0.0);
     ( 560611.6, 4330286.0,      73.1,     684.3,       0.0);         ( 560711.6,
4330286.0,      71.3,     684.3,       0.0);
     ( 560811.6, 4330286.0,      71.2,     684.3,       0.0);         ( 560911.6,
4330286.0,      70.5,     674.8,       0.0);
     ( 561011.6, 4330286.0,      69.9,     674.8,       0.0);         ( 561111.6,
4330286.0,      70.1,     674.8,       0.0);
     ( 561211.6, 4330286.0,      69.9,     674.8,       0.0);         ( 561311.6,
4330286.0,      69.3,     669.4,       0.0);
     ( 561411.6, 4330286.0,      68.8,     669.4,       0.0);         ( 561511.6,
4330286.0,      68.2,     667.5,       0.0);
     ( 561611.6, 4330286.0,      67.6,     662.3,       0.0);         ( 561711.6,
4330286.0,      67.0,     662.3,       0.0);
     ( 561811.6, 4330286.0,      66.5,     662.3,       0.0);         ( 561911.6,
4330286.0,      66.0,     631.7,       0.0);
     ( 562011.6, 4330286.0,      64.5,     621.8,       0.0);         ( 562111.6,
4330286.0,      64.2,     598.4,       0.0);
     ( 562211.6, 4330286.0,      63.9,     598.4,       0.0);         ( 562311.6,
4330286.0,      63.2,     598.4,       0.0);
     ( 562411.6, 4330286.0,      62.1,     588.7,       0.0);         ( 562511.6,
4330286.0,      61.9,     588.7,       0.0);
     ( 562611.6, 4330286.0,      61.7,     588.7,       0.0);         ( 562711.6,
4330286.0,      61.5,     588.7,       0.0);
     ( 562811.6, 4330286.0,      61.3,     588.7,       0.0);         ( 562911.6,
4330286.0,      60.6,     588.7,       0.0);
     ( 563011.6, 4330286.0,      60.2,      60.2,       0.0);         ( 563111.6,
4330286.0,      59.6,      59.6,       0.0);
     ( 563211.6, 4330286.0,      59.2,      59.2,       0.0);         ( 563311.6,
4330286.0,      59.1,      59.1,       0.0);
     ( 563411.6, 4330286.0,      58.1,      58.1,       0.0);         ( 563511.6,
4330286.0,      57.9,      57.9,       0.0);
     ( 563611.6, 4330286.0,      56.9,      56.9,       0.0);         ( 563711.6,
4330286.0,      59.7,      59.7,       0.0);
     ( 563811.6, 4330286.0,      60.5,      60.5,       0.0);         ( 563911.6,
4330286.0,      58.5,      58.5,       0.0);
     ( 564011.6, 4330286.0,      58.5,      58.5,       0.0);         ( 564111.6,
4330286.0,      58.7,      58.7,       0.0);
     ( 564211.6, 4330286.0,      57.9,      57.9,       0.0);         ( 564311.6,
4330286.0,      58.1,      58.1,       0.0);
```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(564811.6, 4330286.0, 58.4, 58.4, 0.0); (564911.6, 4330286.0, 57.1, 58.8, 0.0);
(565011.6, 4330286.0, 56.2, 59.2, 0.0); (565111.6, 4330286.0, 59.1, 59.1, 0.0);
(565211.6, 4330286.0, 53.9, 53.9, 0.0); (565311.6, 4330286.0, 53.3, 53.3, 0.0);
(565411.6, 4330286.0, 53.3, 53.3, 0.0); (565511.6, 4330286.0, 53.4, 53.4, 0.0);
(565611.6, 4330286.0, 52.5, 52.5, 0.0); (565711.6, 4330286.0, 52.1, 52.1, 0.0);
(565811.6, 4330286.0, 51.5, 51.5, 0.0); (565911.6, 4330286.0, 50.4, 50.4, 0.0);
(566011.6, 4330286.0, 50.1, 50.1, 0.0); (566111.6, 4330286.0, 49.1, 49.1, 0.0);
(566211.6, 4330286.0, 47.8, 47.8, 0.0); (566311.6, 4330286.0, 47.5, 47.5, 0.0);
(566411.6, 4330286.0, 47.2, 47.2, 0.0); (566511.6, 4330286.0, 46.9, 46.9, 0.0);
(542111.6, 4306586.0, 803.2, 973.9, 0.0); (543111.6, 4306586.0, 789.2, 973.9, 0.0);
(544111.6, 4306586.0, 796.6, 859.4, 0.0); (545111.6, 4306586.0, 784.5, 857.2, 0.0);
(546111.6, 4306586.0, 830.3, 853.8, 0.0); (547111.6, 4306586.0, 751.3, 927.7, 0.0);
(548111.6, 4306586.0, 783.2, 927.7, 0.0); (549111.6, 4306586.0, 883.0, 905.1, 0.0);
(550111.6, 4306586.0, 838.0, 953.7, 0.0); (551111.6, 4306586.0, 854.2, 953.7, 0.0);
(552111.6, 4306586.0, 713.7, 953.7, 0.0); (553111.6, 4306586.0, 437.7, 953.7, 0.0);
(554111.6, 4306586.0, 354.0, 953.7, 0.0); (555111.6, 4306586.0, 682.4, 824.6, 0.0);
(556111.6, 4306586.0, 570.8, 849.5, 0.0); (557111.6, 4306586.0, 497.5, 849.5, 0.0);

```
     ( 558111.6, 4306586.0,     526.1,     849.5,       0.0);         ( 559111.6,
4306586.0,     371.7,     874.0,       0.0);
     ( 560111.6, 4306586.0,     252.4,     924.9,       0.0);         ( 561111.6,
4306586.0,     499.3,     874.0,       0.0);
     ( 562111.6, 4306586.0,     344.5,     924.9,       0.0);         ( 563111.6,
4306586.0,     328.4,     924.9,       0.0);
     ( 564111.6, 4306586.0,     193.7,     924.9,       0.0);         ( 565111.6,
4306586.0,     144.1,     924.9,       0.0);
     ( 566111.6, 4306586.0,     235.8,     874.2,       0.0);         ( 567111.6,
4306586.0,     282.1,     874.0,       0.0);
     ( 568111.6, 4306586.0,     338.6,     540.7,       0.0);         ( 569111.6,
4306586.0,     449.9,     535.5,       0.0);
     ( 570111.6, 4306586.0,     437.0,     518.2,       0.0);         ( 571111.6,
4306586.0,     392.3,     526.1,       0.0);
     ( 572111.6, 4306586.0,     343.7,     550.6,       0.0);         ( 573111.6,
4306586.0,     317.1,     547.6,       0.0);
     ( 574111.6, 4306586.0,     272.0,     547.6,       0.0);         ( 575111.6,
4306586.0,     264.7,     287.2,       0.0);
     ( 576111.6, 4306586.0,     244.0,     264.9,       0.0);         ( 577111.6,
4306586.0,     211.2,     247.3,       0.0);
     ( 578111.6, 4306586.0,     169.4,     212.8,       0.0);         ( 579111.6,
4306586.0,     131.0,     148.9,       0.0);
     ( 580111.6, 4306586.0,     113.2,     113.2,       0.0);         ( 581111.6,
4306586.0,     103.4,     103.4,       0.0);
     ( 582111.6, 4306586.0,      87.7,      87.7,       0.0);         ( 583111.6,
4306586.0,      86.5,      86.5,       0.0);
     ( 584111.6, 4306586.0,      75.8,      82.3,       0.0);         ( 542111.6,
4307586.0,     841.2,     973.9,       0.0);
     ( 543111.6, 4307586.0,     888.4,     973.9,       0.0);         ( 544111.6,
4307586.0,     703.5,     973.9,       0.0);
     ( 545111.6, 4307586.0,     748.4,     921.0,       0.0);         ( 546111.6,
4307586.0,     778.0,     921.0,       0.0);
     ( 547111.6, 4307586.0,     815.8,     927.7,       0.0);         ( 548111.6,
4307586.0,     916.6,     927.4,       0.0);
     ( 549111.6, 4307586.0,     768.9,     953.7,       0.0);         ( 550111.6,
4307586.0,     662.9,     953.7,       0.0);
     ( 551111.6, 4307586.0,     623.6,     953.7,       0.0);         ( 552111.6,
4307586.0,     492.5,     953.7,       0.0);
     ( 553111.6, 4307586.0,     346.5,     953.7,       0.0);         ( 554111.6,
4307586.0,     398.1,     953.7,       0.0);
     ( 555111.6, 4307586.0,     448.3,     953.7,       0.0);         ( 556111.6,
4307586.0,     208.8,     953.7,       0.0);
     ( 557111.6, 4307586.0,     306.2,     939.0,       0.0);         ( 558111.6,
4307586.0,     358.1,     874.0,       0.0);
     ( 559111.6, 4307586.0,     186.9,     924.9,       0.0);         ( 560111.6,
4307586.0,     439.0,     874.0,       0.0);
     ( 561111.6, 4307586.0,     478.7,     874.0,       0.0);         ( 562111.6,
4307586.0,     324.5,     874.0,       0.0);
     ( 563111.6, 4307586.0,     248.2,     924.9,       0.0);         ( 564111.6,
4307586.0,     368.7,     874.0,       0.0);
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*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(571111.6, 4307586.0, 330.1, 522.4, 0.0); (572111.6, 4307586.0, 285.6, 522.4, 0.0);
(573111.6, 4307586.0, 324.2, 376.0, 0.0); (574111.6, 4307586.0, 287.0, 315.4, 0.0);
(575111.6, 4307586.0, 208.0, 317.9, 0.0); (576111.6, 4307586.0, 190.2, 259.4, 0.0);
(577111.6, 4307586.0, 174.7, 237.3, 0.0); (578111.6, 4307586.0, 155.8, 181.1, 0.0);
(579111.6, 4307586.0, 131.6, 131.6, 0.0); (580111.6, 4307586.0, 115.8, 115.8, 0.0);
(581111.6, 4307586.0, 99.8, 99.8, 0.0); (582111.6, 4307586.0, 89.2, 89.2, 0.0);
(583111.6, 4307586.0, 79.6, 79.6, 0.0); (584111.6, 4307586.0, 69.7, 69.7, 0.0);
(542111.6, 4308586.0, 756.4, 973.9, 0.0); (543111.6, 4308586.0, 794.2, 973.9, 0.0);
(544111.6, 4308586.0, 709.5, 973.9, 0.0); (545111.6, 4308586.0, 887.4, 921.0, 0.0);
(546111.6, 4308586.0, 795.7, 921.0, 0.0); (547111.6, 4308586.0, 840.6, 925.1, 0.0);
(548111.6, 4308586.0, 768.6, 927.7, 0.0); (549111.6, 4308586.0, 686.6, 953.7, 0.0);
(550111.6, 4308586.0, 452.6, 953.7, 0.0); (551111.6, 4308586.0, 430.5, 953.7, 0.0);
(552111.6, 4308586.0, 456.1, 953.7, 0.0); (553111.6, 4308586.0, 588.1, 953.7, 0.0);
(554111.6, 4308586.0, 306.7, 953.7, 0.0); (555111.6, 4308586.0, 272.7, 953.7, 0.0);
(556111.6, 4308586.0, 260.7, 953.7, 0.0); (557111.6, 4308586.0, 224.5, 953.7, 0.0);
(558111.6, 4308586.0, 253.5, 874.0, 0.0); (559111.6, 4308586.0, 291.1, 874.0, 0.0);

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     ( 560111.6, 4308586.0,     744.7,     755.6,       0.0);         ( 561111.6,
4308586.0,     670.1,     775.2,       0.0);
     ( 562111.6, 4308586.0,     669.1,     737.8,       0.0);         ( 563111.6,
4308586.0,     503.7,     775.2,       0.0);
     ( 564111.6, 4308586.0,     367.3,     874.0,       0.0);         ( 565111.6,
4308586.0,     361.2,     874.0,       0.0);
     ( 566111.6, 4308586.0,     350.2,     418.9,       0.0);         ( 567111.6,
4308586.0,     325.1,     433.5,       0.0);
     ( 568111.6, 4308586.0,     399.7,     433.5,       0.0);         ( 569111.6,
4308586.0,     361.4,     403.1,       0.0);
     ( 570111.6, 4308586.0,     296.0,     364.2,       0.0);         ( 571111.6,
4308586.0,     345.7,     369.9,       0.0);
     ( 572111.6, 4308586.0,     324.8,     351.1,       0.0);         ( 573111.6,
4308586.0,     255.1,     336.8,       0.0);
     ( 574111.6, 4308586.0,     229.7,     304.5,       0.0);         ( 575111.6,
4308586.0,     184.2,     301.5,       0.0);
     ( 576111.6, 4308586.0,     176.3,     258.5,       0.0);         ( 577111.6,
4308586.0,     160.0,     215.0,       0.0);
     ( 578111.6, 4308586.0,     146.8,     146.8,       0.0);         ( 579111.6,
4308586.0,     127.6,     127.6,       0.0);
     ( 580111.6, 4308586.0,     110.8,     110.8,       0.0);         ( 581111.6,
4308586.0,      98.4,      98.4,       0.0);
     ( 582111.6, 4308586.0,      87.1,      87.1,       0.0);         ( 583111.6,
4308586.0,      76.5,      76.5,       0.0);
     ( 584111.6, 4308586.0,      64.2,      64.2,       0.0);         ( 542111.6,
4309586.0,     757.6,     973.9,       0.0);
     ( 543111.6, 4309586.0,     762.3,     973.9,       0.0);         ( 544111.6,
4309586.0,     744.2,     973.9,       0.0);
     ( 545111.6, 4309586.0,     807.9,     916.1,       0.0);         ( 546111.6,
4309586.0,     752.8,     921.0,       0.0);
     ( 547111.6, 4309586.0,     733.8,     925.1,       0.0);         ( 548111.6,
4309586.0,     731.5,     927.7,       0.0);
     ( 549111.6, 4309586.0,     456.2,     953.7,       0.0);         ( 550111.6,
4309586.0,     457.8,     953.7,       0.0);
     ( 551111.6, 4309586.0,     357.7,     953.7,       0.0);         ( 552111.6,
4309586.0,     543.6,     953.7,       0.0);
     ( 553111.6, 4309586.0,     393.4,     953.7,       0.0);         ( 554111.6,
4309586.0,     230.1,     953.7,       0.0);
     ( 555111.6, 4309586.0,     408.0,     953.7,       0.0);         ( 556111.6,
4309586.0,     478.7,     799.6,       0.0);
     ( 557111.6, 4309586.0,     346.6,     849.5,       0.0);         ( 558111.6,
4309586.0,     316.4,     854.2,       0.0);
     ( 559111.6, 4309586.0,     587.9,     799.6,       0.0);         ( 560111.6,
4309586.0,     677.5,     799.6,       0.0);
     ( 561111.6, 4309586.0,     593.4,     799.6,       0.0);         ( 562111.6,
4309586.0,     582.9,     737.8,       0.0);
     ( 563111.6, 4309586.0,     362.4,     874.0,       0.0);         ( 564111.6,
4309586.0,     363.3,     775.2,       0.0);
     ( 565111.6, 4309586.0,     343.1,     737.8,       0.0);         ( 566111.6,
4309586.0,     355.4,     410.6,       0.0);
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(567111.6, 4309586.0, 301.9, 433.5, 0.0); (568111.6, 4309586.0, 362.4, 407.6, 0.0);
(569111.6, 4309586.0, 296.4, 433.5, 0.0); (570111.6, 4309586.0, 294.9, 370.3, 0.0);
(571111.6, 4309586.0, 222.9, 402.9, 0.0); (572111.6, 4309586.0, 189.7, 384.8, 0.0);
(573111.6, 4309586.0, 229.5, 326.8, 0.0); (574111.6, 4309586.0, 218.1, 312.3, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(575111.6, 4309586.0, 203.6, 287.8, 0.0); (576111.6, 4309586.0, 195.3, 202.8, 0.0);
(577111.6, 4309586.0, 162.2, 162.2, 0.0); (578111.6, 4309586.0, 144.2, 144.2, 0.0);
(579111.6, 4309586.0, 121.4, 121.4, 0.0); (580111.6, 4309586.0, 109.4, 109.4, 0.0);
(581111.6, 4309586.0, 94.2, 94.2, 0.0); (582111.6, 4309586.0, 83.0, 83.0, 0.0);
(583111.6, 4309586.0, 71.9, 71.9, 0.0); (584111.6, 4309586.0, 63.7, 63.7, 0.0);
(542111.6, 4310586.0, 761.8, 792.6, 0.0); (543111.6, 4310586.0, 707.5, 810.3, 0.0);
(544111.6, 4310586.0, 685.8, 888.1, 0.0); (545111.6, 4310586.0, 701.2, 921.0, 0.0);
(546111.6, 4310586.0, 672.5, 921.0, 0.0); (547111.6, 4310586.0, 545.7, 927.7, 0.0);
(548111.6, 4310586.0, 375.8, 973.9, 0.0); (549111.6, 4310586.0, 308.6, 953.7, 0.0);
(550111.6, 4310586.0, 352.8, 953.7, 0.0); (551111.6, 4310586.0, 246.5, 953.7, 0.0);
(552111.6, 4310586.0, 348.1, 953.7, 0.0); (553111.6, 4310586.0, 238.4, 953.7, 0.0);
(554111.6, 4310586.0, 507.4, 524.9, 0.0); (555111.6, 4310586.0, 459.0, 560.3, 0.0);
(556111.6, 4310586.0, 374.6, 822.5, 0.0); (557111.6, 4310586.0, 245.3, 854.2, 0.0);
(558111.6, 4310586.0, 441.0, 822.5, 0.0); (559111.6, 4310586.0, 752.3, 760.2, 0.0);
(560111.6, 4310586.0, 643.5, 799.6, 0.0); (561111.6, 4310586.0, 600.9, 731.1, 0.0);

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     ( 562111.6, 4310586.0,     526.0,     737.8,       0.0);         ( 563111.6,
4310586.0,     377.1,     806.6,       0.0);
     ( 564111.6, 4310586.0,     326.0,     775.2,       0.0);         ( 565111.6,
4310586.0,     266.8,     737.8,       0.0);
     ( 566111.6, 4310586.0,     336.8,     354.8,       0.0);         ( 567111.6,
4310586.0,     263.5,     406.6,       0.0);
     ( 568111.6, 4310586.0,     328.2,     409.2,       0.0);         ( 569111.6,
4310586.0,     358.1,     392.3,       0.0);
     ( 570111.6, 4310586.0,     300.7,     402.9,       0.0);         ( 571111.6,
4310586.0,     281.6,     402.9,       0.0);
     ( 572111.6, 4310586.0,     261.8,     350.7,       0.0);         ( 573111.6,
4310586.0,     243.0,     302.4,       0.0);
     ( 574111.6, 4310586.0,     175.4,     281.5,       0.0);         ( 575111.6,
4310586.0,     157.8,     261.7,       0.0);
     ( 576111.6, 4310586.0,     153.8,     153.8,       0.0);         ( 577111.6,
4310586.0,     134.9,     134.9,       0.0);
     ( 578111.6, 4310586.0,     131.0,     131.0,       0.0);         ( 579111.6,
4310586.0,     113.7,     113.7,       0.0);
     ( 580111.6, 4310586.0,     100.5,     100.5,       0.0);         ( 581111.6,
4310586.0,      89.9,      89.9,       0.0);
     ( 582111.6, 4310586.0,      78.2,      78.2,       0.0);         ( 583111.6,
4310586.0,      66.7,      66.7,       0.0);
     ( 584111.6, 4310586.0,      58.8,      58.8,       0.0);         ( 542111.6,
4311586.0,     696.3,     804.4,       0.0);
     ( 543111.6, 4311586.0,     651.9,     804.4,       0.0);         ( 544111.6,
4311586.0,     587.2,     921.0,       0.0);
     ( 545111.6, 4311586.0,     643.4,     888.1,       0.0);         ( 546111.6,
4311586.0,     561.7,     921.0,       0.0);
     ( 547111.6, 4311586.0,     358.3,     973.9,       0.0);         ( 548111.6,
4311586.0,     388.8,     953.7,       0.0);
     ( 549111.6, 4311586.0,     483.7,     927.7,       0.0);         ( 550111.6,
4311586.0,     296.2,     953.7,       0.0);
     ( 551111.6, 4311586.0,     413.4,     953.7,       0.0);         ( 552111.6,
4311586.0,     467.2,     664.0,       0.0);
     ( 553111.6, 4311586.0,     491.5,     647.6,       0.0);         ( 554111.6,
4311586.0,     392.5,     647.6,       0.0);
     ( 555111.6, 4311586.0,     394.4,     806.6,       0.0);         ( 556111.6,
4311586.0,     307.5,     854.2,       0.0);
     ( 557111.6, 4311586.0,     426.3,     854.2,       0.0);         ( 558111.6,
4311586.0,     547.8,     822.5,       0.0);
     ( 559111.6, 4311586.0,     715.7,     806.6,       0.0);         ( 560111.6,
4311586.0,     630.5,     806.6,       0.0);
     ( 561111.6, 4311586.0,     573.2,     806.6,       0.0);         ( 562111.6,
4311586.0,     473.5,     806.6,       0.0);
     ( 563111.6, 4311586.0,     266.0,     854.2,       0.0);         ( 564111.6,
4311586.0,     277.7,     806.6,       0.0);
     ( 565111.6, 4311586.0,     267.4,     737.8,       0.0);         ( 566111.6,
4311586.0,     291.1,     339.5,       0.0);
     ( 567111.6, 4311586.0,     282.5,     394.3,       0.0);         ( 568111.6,
4311586.0,     340.9,     399.8,       0.0);
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(569111.6, 4311586.0, 309.4, 372.8, 0.0); (570111.6, 4311586.0, 354.8, 369.5, 0.0);
(571111.6, 4311586.0, 288.2, 369.0, 0.0); (572111.6, 4311586.0, 236.5, 351.6, 0.0);
(573111.6, 4311586.0, 214.1, 325.2, 0.0); (574111.6, 4311586.0, 183.9, 280.3, 0.0);
(575111.6, 4311586.0, 190.8, 213.2, 0.0); (576111.6, 4311586.0, 151.0, 183.4, 0.0);
(577111.6, 4311586.0, 138.1, 138.1, 0.0); (578111.6, 4311586.0, 115.4, 115.4, 0.0);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(579111.6, 4311586.0, 105.7, 105.7, 0.0); (580111.6, 4311586.0, 96.0, 96.0, 0.0);
(581111.6, 4311586.0, 82.5, 82.5, 0.0); (582111.6, 4311586.0, 72.5, 72.5, 0.0);
(583111.6, 4311586.0, 63.3, 63.3, 0.0); (584111.6, 4311586.0, 54.7, 54.7, 0.0);
(542111.6, 4312586.0, 557.6, 832.5, 0.0); (543111.6, 4312586.0, 571.0, 804.4, 0.0);
(544111.6, 4312586.0, 378.9, 973.9, 0.0); (545111.6, 4312586.0, 487.7, 921.0, 0.0);
(546111.6, 4312586.0, 369.5, 973.9, 0.0); (547111.6, 4312586.0, 285.1, 973.9, 0.0);
(548111.6, 4312586.0, 326.4, 927.7, 0.0); (549111.6, 4312586.0, 457.0, 843.3, 0.0);
(550111.6, 4312586.0, 431.7, 843.6, 0.0); (551111.6, 4312586.0, 560.9, 664.0, 0.0);
(552111.6, 4312586.0, 546.8, 664.0, 0.0); (553111.6, 4312586.0, 477.2, 647.6, 0.0);
(554111.6, 4312586.0, 484.5, 520.6, 0.0); (555111.6, 4312586.0, 481.6, 552.2, 0.0);
(556111.6, 4312586.0, 459.2, 854.2, 0.0); (557111.6, 4312586.0, 270.8, 854.2, 0.0);
(558111.6, 4312586.0, 520.4, 854.2, 0.0); (559111.6, 4312586.0, 720.9, 816.7, 0.0);
(560111.6, 4312586.0, 574.6, 854.2, 0.0); (561111.6, 4312586.0, 564.0, 822.5, 0.0);
(562111.6, 4312586.0, 347.4, 854.2, 0.0); (563111.6, 4312586.0, 218.1, 854.2, 0.0);

```
     ( 564111.6, 4312586.0,     229.9,     854.2,       0.0);         ( 565111.6,
4312586.0,     245.3,     715.3,       0.0);
     ( 566111.6, 4312586.0,     267.1,     310.0,       0.0);         ( 567111.6,
4312586.0,     304.6,     377.5,       0.0);
     ( 568111.6, 4312586.0,     336.9,     399.8,       0.0);         ( 569111.6,
4312586.0,     298.2,     380.2,       0.0);
     ( 570111.6, 4312586.0,     282.8,     338.7,       0.0);         ( 571111.6,
4312586.0,     292.0,     316.2,       0.0);
     ( 572111.6, 4312586.0,     225.5,     322.1,       0.0);         ( 573111.6,
4312586.0,     230.6,     281.9,       0.0);
     ( 574111.6, 4312586.0,     217.2,     217.8,       0.0);         ( 575111.6,
4312586.0,     159.9,     199.1,       0.0);
     ( 576111.6, 4312586.0,     142.8,     147.3,       0.0);         ( 577111.6,
4312586.0,     118.1,     118.6,       0.0);
     ( 578111.6, 4312586.0,     106.8,     106.8,       0.0);         ( 579111.6,
4312586.0,      97.8,      97.8,       0.0);
     ( 580111.6, 4312586.0,      88.6,      88.6,       0.0);         ( 581111.6,
4312586.0,      80.3,      80.3,       0.0);
     ( 582111.6, 4312586.0,      71.5,      71.5,       0.0);         ( 583111.6,
4312586.0,      59.8,      59.8,       0.0);
     ( 584111.6, 4312586.0,      50.5,      50.5,       0.0);         ( 542111.6,
4313586.0,     445.5,     832.5,       0.0);
     ( 543111.6, 4313586.0,     415.8,     888.1,       0.0);         ( 544111.6,
4313586.0,     393.3,     921.0,       0.0);
     ( 545111.6, 4313586.0,     425.6,     888.1,       0.0);         ( 546111.6,
4313586.0,     274.1,     973.9,       0.0);
     ( 547111.6, 4313586.0,     348.0,     925.1,       0.0);         ( 548111.6,
4313586.0,     433.6,     637.9,       0.0);
     ( 549111.6, 4313586.0,     551.4,     586.3,       0.0);         ( 550111.6,
4313586.0,     432.7,     666.9,       0.0);
     ( 551111.6, 4313586.0,     603.8,     650.2,       0.0);         ( 552111.6,
4313586.0,     504.7,     664.0,       0.0);
     ( 553111.6, 4313586.0,     488.9,     522.9,       0.0);         ( 554111.6,
4313586.0,     467.4,     516.9,       0.0);
     ( 555111.6, 4313586.0,     444.1,     566.1,       0.0);         ( 556111.6,
4313586.0,     474.6,     854.2,       0.0);
     ( 557111.6, 4313586.0,     295.5,     854.2,       0.0);         ( 558111.6,
4313586.0,     500.3,     854.2,       0.0);
     ( 559111.6, 4313586.0,     801.9,     822.5,       0.0);         ( 560111.6,
4313586.0,     508.4,     854.2,       0.0);
     ( 561111.6, 4313586.0,     548.1,     854.2,       0.0);         ( 562111.6,
4313586.0,     365.4,     854.2,       0.0);
     ( 563111.6, 4313586.0,     223.0,     854.2,       0.0);         ( 564111.6,
4313586.0,     202.8,     854.2,       0.0);
     ( 565111.6, 4313586.0,     251.2,     256.2,       0.0);         ( 566111.6,
4313586.0,     219.6,     299.5,       0.0);
     ( 567111.6, 4313586.0,     295.3,     345.4,       0.0);         ( 568111.6,
4313586.0,     348.4,     369.9,       0.0);
     ( 569111.6, 4313586.0,     270.4,     380.2,       0.0);         ( 570111.6,
4313586.0,     264.0,     354.5,       0.0);
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*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(583111.6, 4313586.0, 55.0, 56.0, 0.0); (584111.6,
4313586.0, 47.5, 47.5, 0.0);
(542111.6, 4314586.0, 412.1, 804.4, 0.0); (543111.6,
4314586.0, 290.4, 973.9, 0.0);
(544111.6, 4314586.0, 382.2, 804.4, 0.0); (545111.6,
4314586.0, 293.8, 921.0, 0.0);
(546111.6, 4314586.0, 346.6, 888.1, 0.0); (547111.6,
4314586.0, 412.6, 641.9, 0.0);
(548111.6, 4314586.0, 416.2, 701.3, 0.0); (549111.6,
4314586.0, 558.2, 637.9, 0.0);
(550111.6, 4314586.0, 600.2, 666.9, 0.0); (551111.6,
4314586.0, 494.4, 666.9, 0.0);
(552111.6, 4314586.0, 429.4, 666.9, 0.0); (553111.6,
4314586.0, 400.0, 666.9, 0.0);
(554111.6, 4314586.0, 412.4, 605.5, 0.0); (555111.6,
4314586.0, 463.5, 466.3, 0.0);
(556111.6, 4314586.0, 384.1, 854.2, 0.0); (557111.6,
4314586.0, 314.2, 854.2, 0.0);
(558111.6, 4314586.0, 485.4, 854.2, 0.0); (559111.6,
4314586.0, 809.5, 854.2, 0.0);
(560111.6, 4314586.0, 523.3, 854.2, 0.0); (561111.6,
4314586.0, 476.0, 854.2, 0.0);
(562111.6, 4314586.0, 371.8, 854.2, 0.0); (563111.6,
4314586.0, 219.6, 854.2, 0.0);
(564111.6, 4314586.0, 186.1, 854.2, 0.0); (565111.6,
4314586.0, 233.4, 854.2, 0.0);

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     ( 566111.6, 4314586.0,     200.1,     282.4,       0.0);         ( 567111.6,
4314586.0,     254.7,     373.4,       0.0);
     ( 568111.6, 4314586.0,     347.9,     373.4,       0.0);         ( 569111.6,
4314586.0,     315.8,     366.1,       0.0);
     ( 570111.6, 4314586.0,     257.9,     358.0,       0.0);         ( 571111.6,
4314586.0,     226.9,     321.4,       0.0);
     ( 572111.6, 4314586.0,     210.5,     300.3,       0.0);         ( 573111.6,
4314586.0,     182.1,     231.0,       0.0);
     ( 574111.6, 4314586.0,     162.4,     188.8,       0.0);         ( 575111.6,
4314586.0,     138.1,     138.1,       0.0);
     ( 576111.6, 4314586.0,     121.0,     121.0,       0.0);         ( 577111.6,
4314586.0,     103.2,     103.2,       0.0);
     ( 578111.6, 4314586.0,      90.6,      90.6,       0.0);         ( 579111.6,
4314586.0,      82.7,      82.7,       0.0);
     ( 580111.6, 4314586.0,      73.9,      73.9,       0.0);         ( 581111.6,
4314586.0,      66.2,      66.2,       0.0);
     ( 582111.6, 4314586.0,      58.3,      58.3,       0.0);         ( 583111.6,
4314586.0,      47.1,      49.1,       0.0);
     ( 584111.6, 4314586.0,      38.9,      38.9,       0.0);         ( 542111.6,
4315586.0,     378.1,     588.3,       0.0);
     ( 543111.6, 4315586.0,     416.5,     588.3,       0.0);         ( 544111.6,
4315586.0,     379.8,     732.3,       0.0);
     ( 545111.6, 4315586.0,     285.9,     826.2,       0.0);         ( 546111.6,
4315586.0,     468.6,     642.1,       0.0);
     ( 547111.6, 4315586.0,     497.7,     642.1,       0.0);         ( 548111.6,
4315586.0,     485.3,     708.7,       0.0);
     ( 549111.6, 4315586.0,     508.1,     708.7,       0.0);         ( 550111.6,
4315586.0,     630.2,     659.8,       0.0);
     ( 551111.6, 4315586.0,     537.3,     701.3,       0.0);         ( 552111.6,
4315586.0,     452.8,     701.3,       0.0);
     ( 553111.6, 4315586.0,     447.1,     615.0,       0.0);         ( 554111.6,
4315586.0,     516.1,     591.8,       0.0);
     ( 555111.6, 4315586.0,     419.3,     854.2,       0.0);         ( 556111.6,
4315586.0,     308.1,     854.2,       0.0);
     ( 557111.6, 4315586.0,     497.7,     854.2,       0.0);         ( 558111.6,
4315586.0,     594.4,     854.2,       0.0);
     ( 559111.6, 4315586.0,     759.0,     854.2,       0.0);         ( 560111.6,
4315586.0,     518.7,     854.2,       0.0);
     ( 561111.6, 4315586.0,     525.6,     854.2,       0.0);         ( 562111.6,
4315586.0,     318.5,     854.2,       0.0);
     ( 563111.6, 4315586.0,     183.1,     854.2,       0.0);         ( 564111.6,
4315586.0,     211.0,     854.2,       0.0);
     ( 565111.6, 4315586.0,     230.2,     854.2,       0.0);         ( 566111.6,
4315586.0,     231.5,     234.5,       0.0);
     ( 567111.6, 4315586.0,     230.2,     366.7,       0.0);         ( 568111.6,
4315586.0,     295.7,     366.5,       0.0);
     ( 569111.6, 4315586.0,     259.1,     346.6,       0.0);         ( 570111.6,
4315586.0,     268.4,     304.0,       0.0);
     ( 571111.6, 4315586.0,     257.0,     260.9,       0.0);         ( 572111.6,
4315586.0,     181.4,     243.8,       0.0);
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(544111.6, 4316586.0, 398.4, 812.5, 0.0); (545111.6,
4316586.0, 485.9, 758.3, 0.0);
(546111.6, 4316586.0, 388.1, 785.1, 0.0); (547111.6,
4316586.0, 597.3, 642.1, 0.0);
(548111.6, 4316586.0, 533.8, 708.7, 0.0); (549111.6,
4316586.0, 578.2, 708.7, 0.0);
(550111.6, 4316586.0, 669.6, 701.3, 0.0); (551111.6,
4316586.0, 548.6, 701.3, 0.0);
(552111.6, 4316586.0, 458.8, 701.3, 0.0); (553111.6,
4316586.0, 514.0, 615.0, 0.0);
(554111.6, 4316586.0, 570.0, 593.9, 0.0); (555111.6,
4316586.0, 354.1, 854.2, 0.0);
(556111.6, 4316586.0, 324.8, 854.2, 0.0); (557111.6,
4316586.0, 495.0, 854.2, 0.0);
(558111.6, 4316586.0, 576.1, 854.2, 0.0); (559111.6,
4316586.0, 793.5, 830.3, 0.0);
(560111.6, 4316586.0, 543.2, 854.2, 0.0); (561111.6,
4316586.0, 517.3, 854.2, 0.0);
(562111.6, 4316586.0, 360.2, 854.2, 0.0); (563111.6,
4316586.0, 232.1, 854.2, 0.0);
(564111.6, 4316586.0, 151.5, 854.2, 0.0); (565111.6,
4316586.0, 229.6, 312.3, 0.0);
(566111.6, 4316586.0, 242.8, 314.1, 0.0); (567111.6,
4316586.0, 194.8, 305.8, 0.0);

```
     ( 568111.6, 4316586.0,     214.5,     348.0,       0.0);         ( 569111.6,
4316586.0,     251.8,     274.1,       0.0);
     ( 570111.6, 4316586.0,     235.8,     262.7,       0.0);         ( 571111.6,
4316586.0,     205.9,     245.7,       0.0);
     ( 572111.6, 4316586.0,     190.3,     213.3,       0.0);         ( 573111.6,
4316586.0,     176.2,     180.2,       0.0);
     ( 574111.6, 4316586.0,     145.3,     145.3,       0.0);         ( 575111.6,
4316586.0,     101.2,     111.0,       0.0);
     ( 576111.6, 4316586.0,      96.6,      96.6,       0.0);         ( 577111.6,
4316586.0,      83.7,      83.7,       0.0);
     ( 578111.6, 4316586.0,      73.2,      73.2,       0.0);         ( 579111.6,
4316586.0,      67.0,      67.0,       0.0);
     ( 580111.6, 4316586.0,      63.8,      63.8,       0.0);         ( 581111.6,
4316586.0,      58.3,      58.3,       0.0);
     ( 582111.6, 4316586.0,      51.4,      51.4,       0.0);         ( 583111.6,
4316586.0,      42.1,      42.1,       0.0);
     ( 584111.6, 4316586.0,      34.4,      34.4,       0.0);         ( 542111.6,
4317586.0,     424.8,     836.4,       0.0);
     ( 543111.6, 4317586.0,     460.7,     836.4,       0.0);         ( 544111.6,
4317586.0,     438.8,     836.4,       0.0);
     ( 545111.6, 4317586.0,     534.5,     770.4,       0.0);         ( 546111.6,
4317586.0,     523.6,     758.3,       0.0);
     ( 547111.6, 4317586.0,     466.5,     758.3,       0.0);         ( 548111.6,
4317586.0,     490.9,     758.3,       0.0);
     ( 549111.6, 4317586.0,     672.1,     708.7,       0.0);         ( 550111.6,
4317586.0,     578.4,     708.7,       0.0);
     ( 551111.6, 4317586.0,     609.2,     658.2,       0.0);         ( 552111.6,
4317586.0,     554.6,     600.7,       0.0);
     ( 553111.6, 4317586.0,     568.5,     577.0,       0.0);         ( 554111.6,
4317586.0,     478.6,     615.0,       0.0);
     ( 555111.6, 4317586.0,     436.3,     850.0,       0.0);         ( 556111.6,
4317586.0,     346.6,     854.2,       0.0);
     ( 557111.6, 4317586.0,     440.8,     854.2,       0.0);         ( 558111.6,
4317586.0,     610.2,     850.0,       0.0);
     ( 559111.6, 4317586.0,     703.0,     850.0,       0.0);         ( 560111.6,
4317586.0,     481.2,     854.2,       0.0);
     ( 561111.6, 4317586.0,     473.8,     854.2,       0.0);         ( 562111.6,
4317586.0,     277.8,     854.2,       0.0);
     ( 563111.6, 4317586.0,     185.5,     854.2,       0.0);         ( 564111.6,
4317586.0,     150.2,     854.2,       0.0);
     ( 565111.6, 4317586.0,     234.2,     308.1,       0.0);         ( 566111.6,
4317586.0,     284.7,     307.1,       0.0);
     ( 567111.6, 4317586.0,     266.1,     299.4,       0.0);         ( 568111.6,
4317586.0,     226.2,     289.4,       0.0);
     ( 569111.6, 4317586.0,     160.0,     274.1,       0.0);         ( 570111.6,
4317586.0,     172.1,     257.6,       0.0);
     ( 571111.6, 4317586.0,     190.4,     221.0,       0.0);         ( 572111.6,
4317586.0,     178.2,     187.4,       0.0);
     ( 573111.6, 4317586.0,     153.1,     153.1,       0.0);         ( 574111.6,
4317586.0,     121.8,     121.8,       0.0);
```

(548111.6, 4318586.0, 566.4, 758.3, 0.0); (549111.6,
4318586.0, 581.2, 737.2, 0.0);
(550111.6, 4318586.0, 647.7, 674.5, 0.0); (551111.6,
4318586.0, 603.3, 635.9, 0.0);
(552111.6, 4318586.0, 483.0, 658.2, 0.0); (553111.6,
4318586.0, 336.5, 689.5, 0.0);
(554111.6, 4318586.0, 387.7, 636.1, 0.0); (555111.6,
4318586.0, 372.9, 850.0, 0.0);
(556111.6, 4318586.0, 395.7, 850.0, 0.0); (557111.6,
4318586.0, 445.5, 850.0, 0.0);
(558111.6, 4318586.0, 563.6, 850.0, 0.0); (559111.6,
4318586.0, 714.5, 849.1, 0.0);
(560111.6, 4318586.0, 432.6, 854.2, 0.0); (561111.6,
4318586.0, 465.6, 850.0, 0.0);
(562111.6, 4318586.0, 225.7, 854.2, 0.0); (563111.6,
4318586.0, 164.3, 854.2, 0.0);
(564111.6, 4318586.0, 159.2, 854.2, 0.0); (565111.6,
4318586.0, 201.3, 850.0, 0.0);
(566111.6, 4318586.0, 239.8, 283.8, 0.0); (567111.6,
4318586.0, 261.6, 286.5, 0.0);
(568111.6, 4318586.0, 241.7, 275.1, 0.0); (569111.6,
4318586.0, 213.6, 257.7, 0.0);

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     ( 570111.6, 4318586.0,     167.4,     237.8,       0.0);         ( 571111.6,
4318586.0,     164.6,     213.5,       0.0);
     ( 572111.6, 4318586.0,     114.7,     184.7,       0.0);         ( 573111.6,
4318586.0,     114.4,     135.5,       0.0);
     ( 574111.6, 4318586.0,     107.1,     107.1,       0.0);         ( 575111.6,
4318586.0,      84.3,      84.3,       0.0);
     ( 576111.6, 4318586.0,      76.9,      76.9,       0.0);         ( 577111.6,
4318586.0,      68.3,      68.3,       0.0);
     ( 578111.6, 4318586.0,      59.8,      59.8,       0.0);         ( 579111.6,
4318586.0,      52.3,      52.3,       0.0);
     ( 580111.6, 4318586.0,      50.5,      50.5,       0.0);         ( 581111.6,
4318586.0,      46.2,      46.2,       0.0);
     ( 582111.6, 4318586.0,      40.8,      40.8,       0.0);         ( 583111.6,
4318586.0,      34.9,      34.9,       0.0);
     ( 584111.6, 4318586.0,      27.4,      27.4,       0.0);         ( 542111.6,
4319586.0,     576.0,     836.4,       0.0);
     ( 543111.6, 4319586.0,     646.5,     836.4,       0.0);         ( 544111.6,
4319586.0,     569.4,     860.4,       0.0);
     ( 545111.6, 4319586.0,     639.0,     830.9,       0.0);         ( 546111.6,
4319586.0,     568.4,     826.2,       0.0);
     ( 547111.6, 4319586.0,     597.3,     778.4,       0.0);         ( 548111.6,
4319586.0,     669.6,     737.2,       0.0);
     ( 549111.6, 4319586.0,     631.3,     737.2,       0.0);         ( 550111.6,
4319586.0,     540.3,     737.2,       0.0);
     ( 551111.6, 4319586.0,     518.2,     733.6,       0.0);         ( 552111.6,
4319586.0,     422.6,     733.6,       0.0);
     ( 553111.6, 4319586.0,     453.9,     637.0,       0.0);         ( 554111.6,
4319586.0,     489.7,     624.8,       0.0);
     ( 555111.6, 4319586.0,     383.3,     850.0,       0.0);         ( 556111.6,
4319586.0,     384.6,     850.0,       0.0);
     ( 557111.6, 4319586.0,     431.4,     850.0,       0.0);         ( 558111.6,
4319586.0,     584.8,     850.0,       0.0);
     ( 559111.6, 4319586.0,     619.0,     849.1,       0.0);         ( 560111.6,
4319586.0,     430.8,     850.0,       0.0);
     ( 561111.6, 4319586.0,     453.7,     850.0,       0.0);         ( 562111.6,
4319586.0,     218.0,     854.2,       0.0);
     ( 563111.6, 4319586.0,     159.9,     854.2,       0.0);         ( 564111.6,
4319586.0,     133.5,     854.2,       0.0);
     ( 565111.6, 4319586.0,     127.7,     850.0,       0.0);         ( 566111.6,
4319586.0,     189.8,     274.4,       0.0);
     ( 567111.6, 4319586.0,     254.2,     258.7,       0.0);         ( 568111.6,
4319586.0,     228.8,     251.7,       0.0);
     ( 569111.6, 4319586.0,     188.6,     262.2,       0.0);         ( 570111.6,
4319586.0,     154.0,     247.2,       0.0);
     ( 571111.6, 4319586.0,     138.7,     217.8,       0.0);         ( 572111.6,
4319586.0,     135.0,     156.5,       0.0);
     ( 573111.6, 4319586.0,     121.3,     121.3,       0.0);         ( 574111.6,
4319586.0,      89.1,      89.1,       0.0);
     ( 575111.6, 4319586.0,      79.8,      79.8,       0.0);         ( 576111.6,
4319586.0,      69.0,      69.0,       0.0);
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(552111.6, 4320586.0, 502.6, 637.0, 0.0); (553111.6, 4320586.0, 539.0, 637.0, 0.0);
(554111.6, 4320586.0, 419.1, 637.0, 0.0); (555111.6, 4320586.0, 372.8, 849.1, 0.0);
(556111.6, 4320586.0, 521.8, 849.1, 0.0); (557111.6, 4320586.0, 414.4, 850.0, 0.0);
(558111.6, 4320586.0, 594.7, 849.1, 0.0); (559111.6, 4320586.0, 677.7, 849.1, 0.0);
(560111.6, 4320586.0, 428.9, 850.0, 0.0); (561111.6, 4320586.0, 399.6, 850.0, 0.0);
(562111.6, 4320586.0, 248.5, 850.0, 0.0); (563111.6, 4320586.0, 164.8, 850.0, 0.0);
(564111.6, 4320586.0, 159.9, 850.0, 0.0); (565111.6, 4320586.0, 144.3, 849.1, 0.0);
(566111.6, 4320586.0, 117.1, 274.4, 0.0); (567111.6, 4320586.0, 218.4, 251.4, 0.0);
(568111.6, 4320586.0, 192.1, 241.4, 0.0); (569111.6, 4320586.0, 217.5, 217.5, 0.0);
(570111.6, 4320586.0, 184.8, 203.9, 0.0); (571111.6, 4320586.0, 161.4, 171.5, 0.0);

```
     ( 572111.6, 4320586.0,     115.1,     126.0,       0.0);         ( 573111.6,
4320586.0,      94.2,      94.2,       0.0);
     ( 574111.6, 4320586.0,      77.9,      77.9,       0.0);         ( 575111.6,
4320586.0,      74.8,      74.8,       0.0);
     ( 576111.6, 4320586.0,      66.2,      66.2,       0.0);         ( 577111.6,
4320586.0,      56.9,      56.9,       0.0);
     ( 578111.6, 4320586.0,      49.4,      49.4,       0.0);         ( 579111.6,
4320586.0,      43.9,      43.9,       0.0);
     ( 580111.6, 4320586.0,      38.9,      38.9,       0.0);         ( 581111.6,
4320586.0,      35.5,      35.5,       0.0);
     ( 582111.6, 4320586.0,      31.4,      31.4,       0.0);         ( 583111.6,
4320586.0,      26.8,      26.8,       0.0);
     ( 584111.6, 4320586.0,      20.8,      20.8,       0.0);         ( 542111.6,
4321586.0,     726.6,     751.8,       0.0);
     ( 543111.6, 4321586.0,     771.3,     814.4,       0.0);         ( 544111.6,
4321586.0,     721.6,     869.3,       0.0);
     ( 545111.6, 4321586.0,     722.8,     860.4,       0.0);         ( 546111.6,
4321586.0,     756.8,     802.0,       0.0);
     ( 547111.6, 4321586.0,     574.6,     815.7,       0.0);         ( 548111.6,
4321586.0,     445.5,    1074.3,       0.0);
     ( 549111.6, 4321586.0,     545.2,     600.5,       0.0);         ( 550111.6,
4321586.0,     488.2,     733.6,       0.0);
     ( 551111.6, 4321586.0,     373.6,     737.2,       0.0);         ( 552111.6,
4321586.0,     623.7,     623.7,       0.0);
     ( 553111.6, 4321586.0,     486.4,     637.0,       0.0);         ( 554111.6,
4321586.0,     378.0,     637.0,       0.0);
     ( 555111.6, 4321586.0,     428.0,     793.0,       0.0);         ( 556111.6,
4321586.0,     571.0,     574.4,       0.0);
     ( 557111.6, 4321586.0,     394.7,     849.1,       0.0);         ( 558111.6,
4321586.0,     619.5,     793.0,       0.0);
     ( 559111.6, 4321586.0,     614.0,     793.0,       0.0);         ( 560111.6,
4321586.0,     354.2,     850.0,       0.0);
     ( 561111.6, 4321586.0,     363.0,     849.1,       0.0);         ( 562111.6,
4321586.0,     193.9,     850.0,       0.0);
     ( 563111.6, 4321586.0,     178.8,     850.0,       0.0);         ( 564111.6,
4321586.0,     171.3,     849.1,       0.0);
     ( 565111.6, 4321586.0,     131.8,     849.1,       0.0);         ( 566111.6,
4321586.0,     143.6,     164.8,       0.0);
     ( 567111.6, 4321586.0,     112.7,     251.4,       0.0);         ( 568111.6,
4321586.0,     172.7,     227.2,       0.0);
     ( 569111.6, 4321586.0,     175.6,     211.2,       0.0);         ( 570111.6,
4321586.0,     162.7,     192.4,       0.0);
     ( 571111.6, 4321586.0,     121.3,     135.4,       0.0);         ( 572111.6,
4321586.0,      90.4,      90.4,       0.0);
     ( 573111.6, 4321586.0,      74.4,      74.4,       0.0);         ( 574111.6,
4321586.0,      68.3,      68.3,       0.0);
     ( 575111.6, 4321586.0,      66.8,      66.8,       0.0);         ( 576111.6,
4321586.0,      61.7,      61.7,       0.0);
     ( 577111.6, 4321586.0,      53.1,      53.1,       0.0);         ( 578111.6,
4321586.0,      44.2,      44.2,       0.0);
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(579111.6, 4321586.0, 39.1, 39.1, 0.0); (580111.6, 4321586.0, 35.2, 35.2, 0.0);
(581111.6, 4321586.0, 31.1, 31.1, 0.0); (582111.6, 4321586.0, 28.9, 28.9, 0.0);
(583111.6, 4321586.0, 23.0, 23.0, 0.0); (584111.6, 4321586.0, 19.0, 19.0, 0.0);
(542111.6, 4322586.0, 664.1, 874.1, 0.0); (543111.6, 4322586.0, 717.1, 894.3, 0.0);
(544111.6, 4322586.0, 808.2, 869.3, 0.0); (545111.6, 4322586.0, 779.7, 844.3, 0.0);
(546111.6, 4322586.0, 666.6, 865.6, 0.0); (547111.6, 4322586.0, 488.1, 1093.3, 0.0);
(548111.6, 4322586.0, 581.8, 781.3, 0.0); (549111.6, 4322586.0, 604.4, 623.5, 0.0);
(550111.6, 4322586.0, 477.7, 723.3, 0.0); (551111.6, 4322586.0, 376.6, 723.3, 0.0);
(552111.6, 4322586.0, 483.4, 635.9, 0.0); (553111.6, 4322586.0, 498.3, 629.9, 0.0);
(554111.6, 4322586.0, 452.9, 629.2, 0.0); (555111.6, 4322586.0, 522.3, 629.2, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(556111.6, 4322586.0, 480.9, 793.0, 0.0); (557111.6, 4322586.0, 385.7, 849.1, 0.0);
(558111.6, 4322586.0, 663.6, 793.0, 0.0); (559111.6, 4322586.0, 509.4, 793.0, 0.0);
(560111.6, 4322586.0, 351.6, 849.1, 0.0); (561111.6, 4322586.0, 260.0, 850.0, 0.0);
(562111.6, 4322586.0, 178.2, 850.0, 0.0); (563111.6, 4322586.0, 178.2, 849.1, 0.0);
(564111.6, 4322586.0, 161.1, 849.1, 0.0); (565111.6, 4322586.0, 183.2, 205.2, 0.0);
(566111.6, 4322586.0, 163.5, 178.2, 0.0); (567111.6, 4322586.0, 141.1, 168.4, 0.0);
(568111.6, 4322586.0, 114.7, 198.8, 0.0); (569111.6, 4322586.0, 91.1, 211.2, 0.0);
(570111.6, 4322586.0, 134.1, 147.9, 0.0); (571111.6, 4322586.0, 96.6, 98.7, 0.0);
(572111.6, 4322586.0, 67.5, 67.5, 0.0); (573111.6, 4322586.0, 61.8, 61.8, 0.0);

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     ( 574111.6, 4322586.0,      59.3,      59.3,       0.0);         ( 575111.6,
4322586.0,      59.0,      59.0,       0.0);
     ( 576111.6, 4322586.0,      53.6,      53.6,       0.0);         ( 577111.6,
4322586.0,      48.6,      48.6,       0.0);
     ( 578111.6, 4322586.0,      40.1,      40.1,       0.0);         ( 579111.6,
4322586.0,      34.5,      34.5,       0.0);
     ( 580111.6, 4322586.0,      30.9,      30.9,       0.0);         ( 581111.6,
4322586.0,      27.2,      27.2,       0.0);
     ( 582111.6, 4322586.0,      24.2,      24.2,       0.0);         ( 583111.6,
4322586.0,      22.1,      22.1,       0.0);
     ( 584111.6, 4322586.0,      18.7,      18.7,       0.0);         ( 542111.6,
4323586.0,     565.9,    1093.3,       0.0);
     ( 543111.6, 4323586.0,     752.6,    1074.1,       0.0);         ( 544111.6,
4323586.0,     837.3,     894.3,       0.0);
     ( 545111.6, 4323586.0,     686.0,    1079.4,       0.0);         ( 546111.6,
4323586.0,     613.5,    1093.3,       0.0);
     ( 547111.6, 4323586.0,     567.4,    1093.3,       0.0);         ( 548111.6,
4323586.0,     700.9,     717.2,       0.0);
     ( 549111.6, 4323586.0,     632.7,     635.6,       0.0);         ( 550111.6,
4323586.0,     451.9,     723.3,       0.0);
     ( 551111.6, 4323586.0,     444.4,     680.4,       0.0);         ( 552111.6,
4323586.0,     458.5,     562.9,       0.0);
     ( 553111.6, 4323586.0,     393.9,     633.7,       0.0);         ( 554111.6,
4323586.0,     494.4,     519.5,       0.0);
     ( 555111.6, 4323586.0,     536.0,     628.5,       0.0);         ( 556111.6,
4323586.0,     427.1,     793.0,       0.0);
     ( 557111.6, 4323586.0,     408.5,     793.0,       0.0);         ( 558111.6,
4323586.0,     706.7,     793.0,       0.0);
     ( 559111.6, 4323586.0,     436.7,     793.0,       0.0);         ( 560111.6,
4323586.0,     401.0,     793.0,       0.0);
     ( 561111.6, 4323586.0,     178.5,     849.1,       0.0);         ( 562111.6,
4323586.0,     153.2,     849.1,       0.0);
     ( 563111.6, 4323586.0,     138.4,     849.1,       0.0);         ( 564111.6,
4323586.0,     138.9,     849.1,       0.0);
     ( 565111.6, 4323586.0,     184.1,     193.0,       0.0);         ( 566111.6,
4323586.0,     170.9,     195.8,       0.0);
     ( 567111.6, 4323586.0,     141.0,     181.7,       0.0);         ( 568111.6,
4323586.0,     125.6,     155.9,       0.0);
     ( 569111.6, 4323586.0,      79.3,     160.5,       0.0);         ( 570111.6,
4323586.0,     101.2,     101.2,       0.0);
     ( 571111.6, 4323586.0,      71.6,      71.6,       0.0);         ( 572111.6,
4323586.0,      57.0,      57.0,       0.0);
     ( 573111.6, 4323586.0,      51.0,      51.0,       0.0);         ( 574111.6,
4323586.0,      50.4,      50.4,       0.0);
     ( 575111.6, 4323586.0,      50.1,      50.1,       0.0);         ( 576111.6,
4323586.0,      45.7,      45.7,       0.0);
     ( 577111.6, 4323586.0,      41.8,      41.8,       0.0);         ( 578111.6,
4323586.0,      36.8,      36.8,       0.0);
     ( 579111.6, 4323586.0,      30.3,      30.3,       0.0);         ( 580111.6,
4323586.0,      27.2,      27.2,       0.0);
```

(581111.6, 4323586.0, 25.3, 25.3, 0.0); (582111.6, 4323586.0, 21.8, 21.8, 0.0);
(583111.6, 4323586.0, 18.8, 18.8, 0.0); (584111.6, 4323586.0, 16.5, 16.5, 0.0);
(542111.6, 4324586.0, 569.1, 1093.3, 0.0); (543111.6, 4324586.0, 621.1, 1093.3, 0.0);
(544111.6, 4324586.0, 844.3, 1074.3, 0.0); (545111.6, 4324586.0, 760.0, 1093.3, 0.0);
(546111.6, 4324586.0, 646.2, 1093.3, 0.0); (547111.6, 4324586.0, 665.5, 1092.0, 0.0);
(548111.6, 4324586.0, 681.1, 681.1, 0.0); (549111.6, 4324586.0, 617.1, 684.3, 0.0);
(550111.6, 4324586.0, 409.5, 1093.3, 0.0); (551111.6, 4324586.0, 393.9, 717.0, 0.0);
(552111.6, 4324586.0, 487.7, 544.8, 0.0); (553111.6, 4324586.0, 342.8, 628.5, 0.0);
(554111.6, 4324586.0, 405.2, 628.5, 0.0); (555111.6, 4324586.0, 548.6, 585.2, 0.0);
(556111.6, 4324586.0, 330.5, 793.0, 0.0); (557111.6, 4324586.0, 325.3, 793.0, 0.0);
(558111.6, 4324586.0, 586.0, 793.0, 0.0); (559111.6, 4324586.0, 431.2, 793.0, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(567111.6, 4324586.0, 136.9, 176.8, 0.0); (568111.6, 4324586.0, 119.5, 154.6, 0.0);
(569111.6, 4324586.0, 74.1, 74.1, 0.0); (570111.6, 4324586.0, 84.8, 84.8, 0.0);
(571111.6, 4324586.0, 59.5, 73.4, 0.0); (572111.6, 4324586.0, 52.7, 52.7, 0.0);
(573111.6, 4324586.0, 45.9, 45.9, 0.0); (574111.6, 4324586.0, 43.7, 43.7, 0.0);
(575111.6, 4324586.0, 42.1, 42.1, 0.0); (576111.6, 4324586.0, 38.6, 38.6, 0.0);
(577111.6, 4324586.0, 34.9, 34.9, 0.0); (578111.6, 4324586.0, 31.5, 31.5, 0.0);
(579111.6, 4324586.0, 27.7, 27.7, 0.0); (580111.6, 4324586.0, 25.1, 25.1, 0.0);
(581111.6, 4324586.0, 22.6, 22.6, 0.0); (582111.6, 4324586.0, 19.8, 19.8, 0.0);

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     ( 583111.6, 4324586.0,      17.9,      17.9,       0.0);         ( 584111.6,
4324586.0,      15.4,      15.4,       0.0);
     ( 542111.6, 4325586.0,     582.9,    1093.3,       0.0);         ( 543111.6,
4325586.0,     643.0,    1093.3,       0.0);
     ( 544111.6, 4325586.0,     985.4,    1071.6,       0.0);         ( 545111.6,
4325586.0,     897.0,    1078.8,       0.0);
     ( 546111.6, 4325586.0,     852.9,    1074.3,       0.0);         ( 547111.6,
4325586.0,     720.0,    1093.3,       0.0);
     ( 548111.6, 4325586.0,     681.5,    1074.3,       0.0);         ( 549111.6,
4325586.0,     462.1,    1093.3,       0.0);
     ( 550111.6, 4325586.0,     408.5,    1093.3,       0.0);         ( 551111.6,
4325586.0,     395.7,    1072.6,       0.0);
     ( 552111.6, 4325586.0,     425.9,     549.0,       0.0);         ( 553111.6,
4325586.0,     363.8,     549.0,       0.0);
     ( 554111.6, 4325586.0,     398.0,     585.2,       0.0);         ( 555111.6,
4325586.0,     380.6,     793.0,       0.0);
     ( 556111.6, 4325586.0,     302.4,     793.0,       0.0);         ( 557111.6,
4325586.0,     303.1,     793.0,       0.0);
     ( 558111.6, 4325586.0,     522.6,     793.0,       0.0);         ( 559111.6,
4325586.0,     332.6,     793.0,       0.0);
     ( 567111.6, 4325586.0,     116.0,     163.9,       0.0);         ( 568111.6,
4325586.0,     110.1,     132.3,       0.0);
     ( 569111.6, 4325586.0,      78.0,      99.3,       0.0);         ( 570111.6,
4325586.0,      65.9,      65.9,       0.0);
     ( 571111.6, 4325586.0,      58.0,      58.0,       0.0);         ( 572111.6,
4325586.0,      47.4,      47.4,       0.0);
     ( 573111.6, 4325586.0,      41.6,      41.6,       0.0);         ( 574111.6,
4325586.0,      38.7,      38.7,       0.0);
     ( 575111.6, 4325586.0,      36.4,      36.4,       0.0);         ( 576111.6,
4325586.0,      33.0,      33.0,       0.0);
     ( 577111.6, 4325586.0,      30.3,      30.3,       0.0);         ( 578111.6,
4325586.0,      27.0,      27.0,       0.0);
     ( 579111.6, 4325586.0,      25.8,      25.8,       0.0);         ( 580111.6,
4325586.0,      23.3,      23.3,       0.0);
     ( 581111.6, 4325586.0,      21.4,      21.4,       0.0);         ( 582111.6,
4325586.0,      19.1,      19.1,       0.0);
     ( 583111.6, 4325586.0,      17.2,      17.2,       0.0);         ( 584111.6,
4325586.0,      14.7,      14.7,       0.0);
     ( 542111.6, 4326586.0,     564.5,    1093.3,       0.0);         ( 543111.6,
4326586.0,     722.1,    1093.3,       0.0);
     ( 544111.6, 4326586.0,    1004.6,    1078.8,       0.0);         ( 545111.6,
4326586.0,     914.7,    1093.3,       0.0);
     ( 546111.6, 4326586.0,     751.0,    1093.3,       0.0);         ( 547111.6,
4326586.0,     708.5,    1093.3,       0.0);
     ( 548111.6, 4326586.0,     624.2,    1093.3,       0.0);         ( 549111.6,
4326586.0,     409.5,    1093.3,       0.0);
     ( 550111.6, 4326586.0,     395.2,    1093.3,       0.0);         ( 551111.6,
4326586.0,     393.6,    1078.8,       0.0);
     ( 552111.6, 4326586.0,     346.0,     549.0,       0.0);         ( 553111.6,
4326586.0,     460.9,     502.0,       0.0);
```

(554111.6, 4326586.0, 248.8, 793.0, 0.0); (555111.6, 4326586.0, 288.2, 793.0, 0.0);
(556111.6, 4326586.0, 252.9, 793.0, 0.0); (557111.6, 4326586.0, 282.8, 793.0, 0.0);
(558111.6, 4326586.0, 563.0, 632.1, 0.0); (559111.6, 4326586.0, 273.4, 793.0, 0.0);
(567111.6, 4326586.0, 91.2, 111.8, 0.0); (568111.6, 4326586.0, 81.1, 90.5, 0.0);
(569111.6, 4326586.0, 68.2, 68.2, 0.0); (570111.6, 4326586.0, 58.3, 58.3, 0.0);
(571111.6, 4326586.0, 54.5, 54.5, 0.0); (572111.6, 4326586.0, 49.1, 49.1, 0.0);
(573111.6, 4326586.0, 42.0, 42.0, 0.0); (574111.6, 4326586.0, 37.1, 37.1, 0.0);
(575111.6, 4326586.0, 34.2, 34.2, 0.0); (576111.6, 4326586.0, 31.5, 31.5, 0.0);
(577111.6, 4326586.0, 28.6, 28.6, 0.0); (578111.6, 4326586.0, 26.1, 26.1, 0.0);
(579111.6, 4326586.0, 23.6, 23.6, 0.0); (580111.6, 4326586.0, 21.8, 21.8, 0.0);
(581111.6, 4326586.0, 20.4, 20.4, 0.0); (582111.6, 4326586.0, 18.4, 18.4, 0.0);
(583111.6, 4326586.0, 16.4, 16.4, 0.0); (584111.6, 4326586.0, 14.0, 14.0, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(542111.6, 4327586.0, 678.3, 1093.3, 0.0); (543111.6, 4327586.0, 834.0, 1093.3, 0.0);
(544111.6, 4327586.0, 1066.7, 1093.3, 0.0); (545111.6, 4327586.0, 935.0, 1093.3, 0.0);
(546111.6, 4327586.0, 791.5, 1093.3, 0.0); (547111.6, 4327586.0, 573.9, 1093.3, 0.0);
(548111.6, 4327586.0, 431.4, 1093.3, 0.0); (549111.6, 4327586.0, 407.9, 1093.3, 0.0);
(550111.6, 4327586.0, 398.3, 1093.3, 0.0); (551111.6, 4327586.0, 425.0, 525.6, 0.0);
(552111.6, 4327586.0, 349.5, 547.0, 0.0); (553111.6, 4327586.0, 414.7, 536.8, 0.0);
(554111.6, 4327586.0, 274.7, 541.9, 0.0); (555111.6, 4327586.0, 352.9, 506.4, 0.0);

```
     ( 556111.6, 4327586.0,     224.8,     793.0,       0.0);         ( 557111.6,
4327586.0,     265.4,     793.0,       0.0);
     ( 558111.6, 4327586.0,     504.6,     600.9,       0.0);         ( 559111.6,
4327586.0,     215.2,     793.0,       0.0);
     ( 567111.6, 4327586.0,      58.0,      58.0,       0.0);         ( 568111.6,
4327586.0,      68.1,      68.1,       0.0);
     ( 569111.6, 4327586.0,      53.9,      53.9,       0.0);         ( 570111.6,
4327586.0,      51.4,      51.4,       0.0);
     ( 571111.6, 4327586.0,      49.9,      49.9,       0.0);         ( 572111.6,
4327586.0,      43.9,      43.9,       0.0);
     ( 573111.6, 4327586.0,      40.5,      40.5,       0.0);         ( 574111.6,
4327586.0,      38.0,      38.0,       0.0);
     ( 575111.6, 4327586.0,      33.5,      33.5,       0.0);         ( 576111.6,
4327586.0,      30.6,      30.6,       0.0);
     ( 577111.6, 4327586.0,      28.1,      28.1,       0.0);         ( 578111.6,
4327586.0,      25.4,      25.4,       0.0);
     ( 579111.6, 4327586.0,      23.0,      23.0,       0.0);         ( 580111.6,
4327586.0,      21.1,      21.1,       0.0);
     ( 581111.6, 4327586.0,      19.7,      19.7,       0.0);         ( 582111.6,
4327586.0,      18.0,      18.0,       0.0);
     ( 583111.6, 4327586.0,      15.9,      15.9,       0.0);         ( 584111.6,
4327586.0,      14.1,      14.1,       0.0);
     ( 542111.6, 4328586.0,     692.0,    1093.3,       0.0);         ( 543111.6,
4328586.0,     923.1,    1093.3,       0.0);
     ( 544111.6, 4328586.0,     991.7,    1093.3,       0.0);         ( 545111.6,
4328586.0,     814.3,    1093.3,       0.0);
     ( 546111.6, 4328586.0,     715.0,    1093.3,       0.0);         ( 547111.6,
4328586.0,     604.6,    1093.3,       0.0);
     ( 548111.6, 4328586.0,     416.2,    1093.3,       0.0);         ( 549111.6,
4328586.0,     407.4,    1093.3,       0.0);
     ( 550111.6, 4328586.0,     398.4,    1093.3,       0.0);         ( 551111.6,
4328586.0,     494.3,     507.2,       0.0);
     ( 552111.6, 4328586.0,     386.4,     541.9,       0.0);         ( 553111.6,
4328586.0,     323.6,     541.9,       0.0);
     ( 554111.6, 4328586.0,     304.8,     541.9,       0.0);         ( 555111.6,
4328586.0,     372.5,     506.4,       0.0);
     ( 556111.6, 4328586.0,     191.3,     793.0,       0.0);         ( 557111.6,
4328586.0,     282.5,     674.8,       0.0);
     ( 558111.6, 4328586.0,     181.1,     793.0,       0.0);         ( 559111.6,
4328586.0,     199.4,     793.0,       0.0);
     ( 567111.6, 4328586.0,      69.7,      69.7,       0.0);         ( 568111.6,
4328586.0,      52.0,      52.0,       0.0);
     ( 569111.6, 4328586.0,      46.7,      46.7,       0.0);         ( 570111.6,
4328586.0,      44.1,      44.1,       0.0);
     ( 571111.6, 4328586.0,      46.2,      46.2,       0.0);         ( 572111.6,
4328586.0,      42.7,      42.7,       0.0);
     ( 573111.6, 4328586.0,      38.8,      38.8,       0.0);         ( 574111.6,
4328586.0,      35.2,      35.2,       0.0);
     ( 575111.6, 4328586.0,      33.0,      33.0,       0.0);         ( 576111.6,
4328586.0,      29.1,      29.1,       0.0);
```

(577111.6, 4328586.0, 26.5, 26.5, 0.0); (578111.6, 4328586.0, 25.4, 25.4, 0.0);
(579111.6, 4328586.0, 23.6, 23.6, 0.0); (580111.6, 4328586.0, 21.6, 21.6, 0.0);
(581111.6, 4328586.0, 20.0, 20.0, 0.0); (582111.6, 4328586.0, 17.3, 17.3, 0.0);
(583111.6, 4328586.0, 15.9, 15.9, 0.0); (584111.6, 4328586.0, 13.6, 13.6, 0.0);
(542111.6, 4329586.0, 680.9, 1093.3, 0.0); (543111.6, 4329586.0, 859.9, 1093.3, 0.0);
(544111.6, 4329586.0, 937.8, 1003.8, 0.0); (545111.6, 4329586.0, 704.0, 1093.3, 0.0);
(546111.6, 4329586.0, 710.8, 1093.3, 0.0); (547111.6, 4329586.0, 646.4, 1093.3, 0.0);
(548111.6, 4329586.0, 415.0, 1093.3, 0.0); (549111.6, 4329586.0, 403.1, 1093.3, 0.0);
(550111.6, 4329586.0, 398.3, 1093.3, 0.0); (551111.6, 4329586.0, 420.5, 530.7, 0.0);
(552111.6, 4329586.0, 467.1, 541.9, 0.0); (553111.6, 4329586.0, 304.1, 566.9, 0.0);
(554111.6, 4329586.0, 258.9, 566.9, 0.0); (555111.6, 4329586.0, 323.2, 506.4, 0.0);
(556111.6, 4329586.0, 194.7, 662.3, 0.0); (557111.6, 4329586.0, 328.7, 588.7, 0.0);
(558111.6, 4329586.0, 407.4, 588.7, 0.0); (559111.6, 4329586.0, 218.0, 669.4, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(567111.6, 4329586.0, 50.3, 50.3, 0.0); (568111.6, 4329586.0, 46.6, 46.6, 0.0);
(569111.6, 4329586.0, 42.5, 42.5, 0.0); (570111.6, 4329586.0, 40.5, 40.5, 0.0);
(571111.6, 4329586.0, 42.2, 42.2, 0.0); (572111.6, 4329586.0, 38.5, 38.5, 0.0);
(573111.6, 4329586.0, 36.5, 36.5, 0.0); (574111.6, 4329586.0, 34.9, 34.9, 0.0);
(575111.6, 4329586.0, 31.6, 31.6, 0.0); (576111.6, 4329586.0, 30.2, 30.2, 0.0);
(577111.6, 4329586.0, 26.0, 26.0, 0.0); (578111.6, 4329586.0, 24.5, 24.5, 0.0);

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     ( 579111.6, 4329586.0,      21.7,      21.7,       0.0);         ( 580111.6,
4329586.0,      20.4,      20.4,       0.0);
     ( 581111.6, 4329586.0,      19.8,      19.8,       0.0);         ( 582111.6,
4329586.0,      16.1,      16.1,       0.0);
     ( 583111.6, 4329586.0,      15.0,      15.0,       0.0);         ( 584111.6,
4329586.0,      12.8,      12.8,       0.0);
     ( 542111.6, 4330586.0,     710.8,    1093.3,       0.0);         ( 543111.6,
4330586.0,     952.6,     980.7,       0.0);
     ( 544111.6, 4330586.0,     887.8,     887.8,       0.0);         ( 545111.6,
4330586.0,     878.6,     922.8,       0.0);
     ( 546111.6, 4330586.0,     700.2,    1093.3,       0.0);         ( 547111.6,
4330586.0,     593.3,    1093.3,       0.0);
     ( 548111.6, 4330586.0,     412.1,    1093.3,       0.0);         ( 549111.6,
4330586.0,     403.0,    1093.3,       0.0);
     ( 550111.6, 4330586.0,     401.8,    1093.3,       0.0);         ( 551111.6,
4330586.0,     396.2,     613.2,       0.0);
     ( 552111.6, 4330586.0,     398.7,     585.6,       0.0);         ( 553111.6,
4330586.0,     221.8,     648.8,       0.0);
     ( 554111.6, 4330586.0,     195.2,     623.1,       0.0);         ( 555111.6,
4330586.0,     334.1,     588.7,       0.0);
     ( 556111.6, 4330586.0,     164.6,     598.4,       0.0);         ( 557111.6,
4330586.0,     399.6,     588.7,       0.0);
     ( 558111.6, 4330586.0,     341.5,     588.7,       0.0);         ( 559111.6,
4330586.0,     171.4,     621.8,       0.0);
     ( 560111.6, 4330586.0,      79.5,     674.8,       0.0);         ( 561111.6,
4330586.0,      67.4,     662.3,       0.0);
     ( 562111.6, 4330586.0,      62.9,     588.7,       0.0);         ( 563111.6,
4330586.0,      58.2,      58.2,       0.0);
     ( 564111.6, 4330586.0,      54.7,      54.7,       0.0);         ( 565111.6,
4330586.0,      52.1,      52.1,       0.0);
     ( 566111.6, 4330586.0,      47.2,      47.2,       0.0);         ( 567111.6,
4330586.0,      43.8,      43.8,       0.0);
     ( 568111.6, 4330586.0,      41.6,      41.6,       0.0);         ( 569111.6,
4330586.0,      40.7,      40.7,       0.0);
     ( 570111.6, 4330586.0,      37.5,      37.5,       0.0);         ( 571111.6,
4330586.0,      37.7,      37.7,       0.0);
     ( 572111.6, 4330586.0,      37.3,      37.3,       0.0);         ( 573111.6,
4330586.0,      33.8,      33.8,       0.0);
     ( 574111.6, 4330586.0,      30.7,      30.7,       0.0);         ( 575111.6,
4330586.0,      29.5,      29.5,       0.0);
     ( 576111.6, 4330586.0,      30.0,      30.0,       0.0);         ( 577111.6,
4330586.0,      26.0,      26.0,       0.0);
     ( 578111.6, 4330586.0,      24.3,      24.3,       0.0);         ( 579111.6,
4330586.0,      22.1,      22.1,       0.0);
     ( 580111.6, 4330586.0,      19.3,      19.3,       0.0);         ( 581111.6,
4330586.0,      18.2,      18.2,       0.0);
     ( 582111.6, 4330586.0,      16.0,      16.0,       0.0);         ( 583111.6,
4330586.0,      13.9,      13.9,       0.0);
     ( 584111.6, 4330586.0,      12.9,      12.9,       0.0);         ( 542111.6,
4331586.0,     717.7,    1038.0,       0.0);
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     ( 543111.6, 4331586.0,     846.3,    1038.0,       0.0);         ( 544111.6,
4331586.0,     849.1,    1038.0,       0.0);
     ( 545111.6, 4331586.0,     755.2,    1038.0,       0.0);         ( 546111.6,
4331586.0,     623.0,    1093.3,       0.0);
     ( 547111.6, 4331586.0,     468.6,    1093.3,       0.0);         ( 548111.6,
4331586.0,     429.6,    1093.3,       0.0);
     ( 549111.6, 4331586.0,     400.4,    1093.3,       0.0);         ( 550111.6,
4331586.0,     420.0,     648.8,       0.0);
     ( 551111.6, 4331586.0,     484.0,     623.1,       0.0);         ( 552111.6,
4331586.0,     329.7,     660.4,       0.0);
     ( 553111.6, 4331586.0,     200.6,     660.4,       0.0);         ( 554111.6,
4331586.0,     210.6,     660.4,       0.0);
     ( 555111.6, 4331586.0,     291.2,     588.7,       0.0);         ( 556111.6,
4331586.0,     151.4,     610.2,       0.0);
     ( 557111.6, 4331586.0,     279.3,     588.7,       0.0);         ( 558111.6,
4331586.0,     287.1,     588.7,       0.0);
     ( 559111.6, 4331586.0,      98.8,     610.2,       0.0);         ( 560111.6,
4331586.0,      75.8,     610.0,       0.0);
     ( 561111.6, 4331586.0,      64.6,     588.7,       0.0);         ( 562111.6,
4331586.0,      58.4,     588.7,       0.0);
     ( 563111.6, 4331586.0,      54.0,      54.0,       0.0);         ( 564111.6,
4331586.0,      50.8,      50.8,       0.0);
     ( 565111.6, 4331586.0,      47.6,      47.6,       0.0);         ( 566111.6,
4331586.0,      44.9,      44.9,       0.0);
     ( 567111.6, 4331586.0,      40.7,      40.7,       0.0);         ( 568111.6,
4331586.0,      38.0,      38.0,       0.0);
     ( 569111.6, 4331586.0,      36.1,      36.1,       0.0);         ( 570111.6,
4331586.0,      34.8,      34.8,       0.0);
↟ *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                           ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                          ***        06:53:13

                                     PAGE  55
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                          (METERS)

     ( 571111.6, 4331586.0,      33.3,      33.3,       0.0);         ( 572111.6,
4331586.0,      33.2,      33.2,       0.0);
     ( 573111.6, 4331586.0,      32.0,      32.0,       0.0);         ( 574111.6,
4331586.0,      30.2,      30.2,       0.0);
     ( 575111.6, 4331586.0,      27.7,      27.7,       0.0);         ( 576111.6,
4331586.0,      27.1,      27.1,       0.0);
     ( 577111.6, 4331586.0,      25.8,      25.8,       0.0);         ( 578111.6,
4331586.0,      23.8,      23.8,       0.0);
     ( 579111.6, 4331586.0,      20.4,      20.4,       0.0);         ( 580111.6,
4331586.0,      19.0,      19.0,       0.0);
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```
     ( 581111.6, 4331586.0,      17.2,      17.2,       0.0);         ( 582111.6,
4331586.0,      15.6,      15.6,       0.0);
     ( 583111.6, 4331586.0,      13.2,      13.2,       0.0);         ( 584111.6,
4331586.0,      13.0,      13.0,       0.0);
     ( 542111.6, 4332586.0,     688.9,    1038.0,       0.0);         ( 543111.6,
4332586.0,     988.8,    1038.0,       0.0);
     ( 544111.6, 4332586.0,     856.5,    1038.0,       0.0);         ( 545111.6,
4332586.0,     734.6,    1038.0,       0.0);
     ( 546111.6, 4332586.0,     667.8,    1038.0,       0.0);         ( 547111.6,
4332586.0,     426.2,    1093.3,       0.0);
     ( 548111.6, 4332586.0,     410.9,    1093.3,       0.0);         ( 549111.6,
4332586.0,     405.6,    1090.7,       0.0);
     ( 550111.6, 4332586.0,     466.0,     660.4,       0.0);         ( 551111.6,
4332586.0,     578.1,     623.1,       0.0);
     ( 552111.6, 4332586.0,     330.2,     660.4,       0.0);         ( 553111.6,
4332586.0,     330.2,     660.4,       0.0);
     ( 554111.6, 4332586.0,     291.3,     588.6,       0.0);         ( 555111.6,
4332586.0,     266.5,     576.7,       0.0);
     ( 556111.6, 4332586.0,     151.6,     630.6,       0.0);         ( 557111.6,
4332586.0,     161.4,     630.6,       0.0);
     ( 558111.6, 4332586.0,     203.9,     618.4,       0.0);         ( 559111.6,
4332586.0,     147.0,     618.4,       0.0);
     ( 560111.6, 4332586.0,      72.9,     618.4,       0.0);         ( 561111.6,
4332586.0,      69.8,     610.2,       0.0);
     ( 562111.6, 4332586.0,      55.4,     588.7,       0.0);         ( 563111.6,
4332586.0,      52.3,      52.3,       0.0);
     ( 564111.6, 4332586.0,      49.1,      49.1,       0.0);         ( 565111.6,
4332586.0,      44.1,      44.1,       0.0);
     ( 566111.6, 4332586.0,      41.2,      41.2,       0.0);         ( 567111.6,
4332586.0,      39.7,      39.7,       0.0);
     ( 568111.6, 4332586.0,      34.7,      34.7,       0.0);         ( 569111.6,
4332586.0,      33.4,      33.4,       0.0);
     ( 570111.6, 4332586.0,      31.9,      31.9,       0.0);         ( 571111.6,
4332586.0,      30.7,      30.7,       0.0);
     ( 572111.6, 4332586.0,      30.6,      30.6,       0.0);         ( 573111.6,
4332586.0,      31.5,      31.5,       0.0);
     ( 574111.6, 4332586.0,      29.0,      29.0,       0.0);         ( 575111.6,
4332586.0,      26.3,      26.3,       0.0);
     ( 576111.6, 4332586.0,      24.2,      24.2,       0.0);         ( 577111.6,
4332586.0,      23.1,      23.1,       0.0);
     ( 578111.6, 4332586.0,      21.7,      21.7,       0.0);         ( 579111.6,
4332586.0,      19.6,      19.6,       0.0);
     ( 580111.6, 4332586.0,      17.8,      17.8,       0.0);         ( 581111.6,
4332586.0,      15.9,      15.9,       0.0);
     ( 582111.6, 4332586.0,      15.4,      15.4,       0.0);         ( 583111.6,
4332586.0,      13.4,      13.4,       0.0);
     ( 584111.6, 4332586.0,      13.6,      13.6,       0.0);         ( 542111.6,
4333586.0,     735.7,    1038.0,       0.0);
     ( 543111.6, 4333586.0,     833.9,    1038.0,       0.0);         ( 544111.6,
4333586.0,     774.9,    1038.0,       0.0);
```

(545111.6, 4333586.0, 734.1, 1038.0, 0.0); (546111.6, 4333586.0, 605.4, 1038.0, 0.0);
(547111.6, 4333586.0, 421.9, 1093.3, 0.0); (548111.6, 4333586.0, 407.2, 1038.0, 0.0);
(549111.6, 4333586.0, 406.6, 1038.0, 0.0); (550111.6, 4333586.0, 531.9, 660.4, 0.0);
(551111.6, 4333586.0, 453.8, 660.4, 0.0); (552111.6, 4333586.0, 269.6, 660.4, 0.0);
(553111.6, 4333586.0, 196.3, 660.4, 0.0); (554111.6, 4333586.0, 217.0, 660.4, 0.0);
(555111.6, 4333586.0, 180.4, 660.4, 0.0); (556111.6, 4333586.0, 229.5, 634.0, 0.0);
(557111.6, 4333586.0, 230.7, 634.0, 0.0); (558111.6, 4333586.0, 235.3, 630.6, 0.0);
(559111.6, 4333586.0, 168.4, 630.6, 0.0); (560111.6, 4333586.0, 70.8, 634.0, 0.0);
(561111.6, 4333586.0, 62.9, 630.6, 0.0); (562111.6, 4333586.0, 52.0, 52.0, 0.0);
(563111.6, 4333586.0, 49.2, 49.2, 0.0); (564111.6, 4333586.0, 46.9, 46.9, 0.0);
(565111.6, 4333586.0, 43.7, 43.7, 0.0); (566111.6, 4333586.0, 39.4, 39.4, 0.0);
(567111.6, 4333586.0, 36.5, 36.5, 0.0); (568111.6, 4333586.0, 33.3, 33.3, 0.0);
(569111.6, 4333586.0, 31.2, 31.2, 0.0); (570111.6, 4333586.0, 29.3, 29.3, 0.0);
(571111.6, 4333586.0, 28.5, 28.5, 0.0); (572111.6, 4333586.0, 28.3, 28.3, 0.0);
(573111.6, 4333586.0, 28.1, 28.1, 0.0); (574111.6, 4333586.0, 26.4, 26.4, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(575111.6, 4333586.0, 24.1, 24.1, 0.0); (576111.6, 4333586.0, 22.8, 22.8, 0.0);
(577111.6, 4333586.0, 21.0, 21.0, 0.0); (578111.6, 4333586.0, 19.3, 19.3, 0.0);
(579111.6, 4333586.0, 18.1, 18.1, 0.0); (580111.6, 4333586.0, 16.6, 16.6, 0.0);
(581111.6, 4333586.0, 14.9, 14.9, 0.0); (582111.6, 4333586.0, 13.9, 13.9, 0.0);

```
     ( 583111.6, 4333586.0,      13.5,      13.5,       0.0);         ( 584111.6,
4333586.0,      13.4,      13.4,       0.0);
     ( 542111.6, 4334586.0,     648.3,    1038.0,       0.0);         ( 543111.6,
4334586.0,     700.2,    1038.0,       0.0);
     ( 544111.6, 4334586.0,     654.9,    1038.0,       0.0);         ( 545111.6,
4334586.0,     651.7,    1038.0,       0.0);
     ( 546111.6, 4334586.0,     453.9,    1038.0,       0.0);         ( 547111.6,
4334586.0,     415.9,    1038.0,       0.0);
     ( 548111.6, 4334586.0,     410.0,    1038.0,       0.0);         ( 549111.6,
4334586.0,     409.5,    1038.0,       0.0);
     ( 550111.6, 4334586.0,     557.3,     660.4,       0.0);         ( 551111.6,
4334586.0,     448.6,     660.4,       0.0);
     ( 552111.6, 4334586.0,     295.2,     660.4,       0.0);         ( 553111.6,
4334586.0,     357.7,     660.4,       0.0);
     ( 554111.6, 4334586.0,     272.5,     660.4,       0.0);         ( 555111.6,
4334586.0,     203.4,     634.0,       0.0);
     ( 556111.6, 4334586.0,     295.7,     634.0,       0.0);         ( 557111.6,
4334586.0,     513.8,     576.7,       0.0);
     ( 558111.6, 4334586.0,     251.3,     634.0,       0.0);         ( 559111.6,
4334586.0,      98.8,     634.0,       0.0);
     ( 560111.6, 4334586.0,      68.7,     634.0,       0.0);         ( 561111.6,
4334586.0,      60.8,     634.0,       0.0);
     ( 562111.6, 4334586.0,      47.9,     610.2,       0.0);         ( 563111.6,
4334586.0,      46.9,      46.9,       0.0);
     ( 564111.6, 4334586.0,      46.1,      46.1,       0.0);         ( 565111.6,
4334586.0,      43.3,      43.3,       0.0);
     ( 566111.6, 4334586.0,      39.9,      39.9,       0.0);         ( 567111.6,
4334586.0,      37.1,      37.1,       0.0);
     ( 568111.6, 4334586.0,      33.5,      33.5,       0.0);         ( 569111.6,
4334586.0,      31.7,      31.7,       0.0);
     ( 570111.6, 4334586.0,      29.1,      29.1,       0.0);         ( 571111.6,
4334586.0,      26.8,      26.8,       0.0);
     ( 572111.6, 4334586.0,      25.9,      25.9,       0.0);         ( 573111.6,
4334586.0,      25.3,      25.3,       0.0);
     ( 574111.6, 4334586.0,      25.1,      25.1,       0.0);         ( 575111.6,
4334586.0,      22.0,      22.0,       0.0);
     ( 576111.6, 4334586.0,      22.0,      22.0,       0.0);         ( 577111.6,
4334586.0,      20.0,      20.0,       0.0);
     ( 578111.6, 4334586.0,      18.1,      18.1,       0.0);         ( 579111.6,
4334586.0,      16.9,      16.9,       0.0);
     ( 580111.6, 4334586.0,      15.8,      15.8,       0.0);         ( 581111.6,
4334586.0,      14.8,      14.8,       0.0);
     ( 582111.6, 4334586.0,      14.2,      14.2,       0.0);         ( 583111.6,
4334586.0,      13.8,      13.8,       0.0);
     ( 584111.6, 4334586.0,      13.4,      13.4,       0.0);         ( 542111.6,
4335586.0,     533.3,    1038.0,       0.0);
     ( 543111.6, 4335586.0,     619.8,    1038.0,       0.0);         ( 544111.6,
4335586.0,     693.1,    1038.0,       0.0);
     ( 545111.6, 4335586.0,     733.9,     745.3,       0.0);         ( 546111.6,
4335586.0,     495.8,    1038.0,       0.0);
```

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     ( 547111.6, 4335586.0,     414.4,    1038.0,       0.0);         ( 548111.6,
4335586.0,     412.3,    1038.0,       0.0);
     ( 549111.6, 4335586.0,     414.2,     660.4,       0.0);         ( 550111.6,
4335586.0,     538.5,     575.4,       0.0);
     ( 551111.6, 4335586.0,     459.2,     660.4,       0.0);         ( 552111.6,
4335586.0,     329.4,     660.4,       0.0);
     ( 553111.6, 4335586.0,     281.4,     660.4,       0.0);         ( 554111.6,
4335586.0,     377.8,     436.0,       0.0);
     ( 555111.6, 4335586.0,     199.8,     634.0,       0.0);         ( 556111.6,
4335586.0,     334.8,     634.0,       0.0);
     ( 557111.6, 4335586.0,     491.3,     618.4,       0.0);         ( 558111.6,
4335586.0,     206.3,     634.0,       0.0);
     ( 559111.6, 4335586.0,      91.7,     634.0,       0.0);         ( 560111.6,
4335586.0,      66.3,     634.0,       0.0);
     ( 561111.6, 4335586.0,      63.5,     634.0,       0.0);         ( 562111.6,
4335586.0,      48.4,     630.6,       0.0);
     ( 563111.6, 4335586.0,      43.6,      43.6,       0.0);         ( 564111.6,
4335586.0,      42.9,      42.9,       0.0);
     ( 565111.6, 4335586.0,      40.1,      40.1,       0.0);         ( 566111.6,
4335586.0,      37.8,      37.8,       0.0);
     ( 567111.6, 4335586.0,      36.3,      36.3,       0.0);         ( 568111.6,
4335586.0,      34.1,      34.1,       0.0);
     ( 569111.6, 4335586.0,      30.7,      30.7,       0.0);         ( 570111.6,
4335586.0,      28.6,      28.6,       0.0);
     ( 571111.6, 4335586.0,      25.9,      25.9,       0.0);         ( 572111.6,
4335586.0,      24.4,      24.4,       0.0);
     ( 573111.6, 4335586.0,      24.8,      24.8,       0.0);         ( 574111.6,
4335586.0,      22.0,      22.0,       0.0);
     ( 575111.6, 4335586.0,      20.7,      20.7,       0.0);         ( 576111.6,
4335586.0,      20.2,      20.2,       0.0);
     ( 577111.6, 4335586.0,      19.2,      19.2,       0.0);         ( 578111.6,
4335586.0,      17.9,      17.9,       0.0);
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                          ***       06:53:13

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                                                  *** DISCRETE CARTESIAN RECEPTORS ***
                                                (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                             (METERS)

     ( 579111.6, 4335586.0,      16.9,      16.9,       0.0);         ( 580111.6,
4335586.0,      15.6,      15.6,       0.0);
     ( 581111.6, 4335586.0,      14.8,      14.8,       0.0);         ( 582111.6,
4335586.0,      14.0,      14.0,       0.0);
     ( 583111.6, 4335586.0,      14.0,      14.0,       0.0);         ( 584111.6,
4335586.0,      13.8,      13.8,       0.0);
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     ( 542111.6, 4336586.0,     589.9,    1038.0,       0.0);         ( 543111.6,
4336586.0,     577.4,    1038.0,       0.0);
     ( 544111.6, 4336586.0,     683.2,     723.7,       0.0);         ( 545111.6,
4336586.0,     722.5,     736.7,       0.0);
     ( 546111.6, 4336586.0,     470.5,    1038.0,       0.0);         ( 547111.6,
4336586.0,     416.7,    1038.0,       0.0);
     ( 548111.6, 4336586.0,     575.5,     593.8,       0.0);         ( 549111.6,
4336586.0,     419.5,     663.8,       0.0);
     ( 550111.6, 4336586.0,     537.6,     624.0,       0.0);         ( 551111.6,
4336586.0,     556.3,     624.0,       0.0);
     ( 552111.6, 4336586.0,     272.6,     660.4,       0.0);         ( 553111.6,
4336586.0,     213.4,     660.4,       0.0);
     ( 554111.6, 4336586.0,     217.5,     634.0,       0.0);         ( 555111.6,
4336586.0,     227.1,     634.0,       0.0);
     ( 556111.6, 4336586.0,     366.6,     634.0,       0.0);         ( 557111.6,
4336586.0,     450.5,     634.0,       0.0);
     ( 558111.6, 4336586.0,     220.0,     634.0,       0.0);         ( 559111.6,
4336586.0,     119.1,     634.0,       0.0);
     ( 560111.6, 4336586.0,      72.0,     634.0,       0.0);         ( 561111.6,
4336586.0,      53.2,     634.0,       0.0);
     ( 562111.6, 4336586.0,      46.5,     634.0,       0.0);         ( 563111.6,
4336586.0,      42.3,      42.3,       0.0);
     ( 564111.6, 4336586.0,      39.6,      39.6,       0.0);         ( 565111.6,
4336586.0,      37.6,      37.6,       0.0);
     ( 566111.6, 4336586.0,      36.5,      36.5,       0.0);         ( 567111.6,
4336586.0,      34.8,      34.8,       0.0);
     ( 568111.6, 4336586.0,      31.7,      31.7,       0.0);         ( 569111.6,
4336586.0,      30.3,      30.3,       0.0);
     ( 570111.6, 4336586.0,      27.6,      27.6,       0.0);         ( 571111.6,
4336586.0,      25.3,      25.3,       0.0);
     ( 572111.6, 4336586.0,      23.5,      23.5,       0.0);         ( 573111.6,
4336586.0,      22.4,      22.4,       0.0);
     ( 574111.6, 4336586.0,      21.9,      21.9,       0.0);         ( 575111.6,
4336586.0,      21.1,      21.1,       0.0);
     ( 576111.6, 4336586.0,      19.5,      19.5,       0.0);         ( 577111.6,
4336586.0,      18.2,      18.2,       0.0);
     ( 578111.6, 4336586.0,      17.9,      17.9,       0.0);         ( 579111.6,
4336586.0,      16.3,      16.3,       0.0);
     ( 580111.6, 4336586.0,      15.6,      15.6,       0.0);         ( 581111.6,
4336586.0,      14.9,      14.9,       0.0);
     ( 582111.6, 4336586.0,      14.4,      14.4,       0.0);         ( 583111.6,
4336586.0,      14.0,      14.0,       0.0);
     ( 584111.6, 4336586.0,      14.0,      14.0,       0.0);         ( 542111.6,
4337586.0,     655.9,     672.7,       0.0);
     ( 543111.6, 4337586.0,     656.4,     715.2,       0.0);         ( 544111.6,
4337586.0,     628.0,     722.1,       0.0);
     ( 545111.6, 4337586.0,     590.1,     736.7,       0.0);         ( 546111.6,
4337586.0,     426.4,    1038.0,       0.0);
     ( 547111.6, 4337586.0,     421.0,     745.8,       0.0);         ( 548111.6,
4337586.0,     604.0,     659.0,       0.0);
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     ( 549111.6, 4337586.0,     427.8,     663.8,       0.0);         ( 550111.6,
4337586.0,     445.8,     659.0,       0.0);
     ( 551111.6, 4337586.0,     482.1,     624.0,       0.0);         ( 552111.6,
4337586.0,     320.2,     655.8,       0.0);
     ( 553111.6, 4337586.0,     253.8,     668.6,       0.0);         ( 554111.6,
4337586.0,     331.1,     634.0,       0.0);
     ( 555111.6, 4337586.0,     244.6,     634.0,       0.0);         ( 556111.6,
4337586.0,     409.7,     634.0,       0.0);
     ( 557111.6, 4337586.0,     410.4,     634.0,       0.0);         ( 558111.6,
4337586.0,     168.1,     634.0,       0.0);
     ( 559111.6, 4337586.0,      86.1,     634.0,       0.0);         ( 560111.6,
4337586.0,      69.9,     634.0,       0.0);
     ( 561111.6, 4337586.0,      59.7,     634.0,       0.0);         ( 562111.6,
4337586.0,      43.6,     634.0,       0.0);
     ( 563111.6, 4337586.0,      40.5,      40.5,       0.0);         ( 564111.6,
4337586.0,      38.1,      38.1,       0.0);
     ( 565111.6, 4337586.0,      36.6,      36.6,       0.0);         ( 566111.6,
4337586.0,      33.9,      33.9,       0.0);
     ( 567111.6, 4337586.0,      33.4,      33.4,       0.0);         ( 568111.6,
4337586.0,      32.0,      32.0,       0.0);
     ( 569111.6, 4337586.0,      29.8,      30.6,       0.0);         ( 570111.6,
4337586.0,      26.4,      26.4,       0.0);
     ( 571111.6, 4337586.0,      24.7,      24.7,       0.0);         ( 572111.6,
4337586.0,      23.7,      23.7,       0.0);
     ( 573111.6, 4337586.0,      21.7,      21.7,       0.0);         ( 574111.6,
4337586.0,      20.8,      20.8,       0.0);
     ( 575111.6, 4337586.0,      19.8,      19.8,       0.0);         ( 576111.6,
4337586.0,      19.0,      19.0,       0.0);
     ( 577111.6, 4337586.0,      17.8,      17.8,       0.0);         ( 578111.6,
4337586.0,      16.8,      16.8,       0.0);
     ( 579111.6, 4337586.0,      15.8,      15.8,       0.0);         ( 580111.6,
4337586.0,      15.1,      15.1,       0.0);
     ( 581111.6, 4337586.0,      14.9,      14.9,       0.0);         ( 582111.6,
4337586.0,      14.2,      14.2,       0.0);
↟ *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                           ***         08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                           ***         06:53:13

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                                                 *** DISCRETE CARTESIAN RECEPTORS ***
                                               (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                           (METERS)

     ( 583111.6, 4337586.0,      14.0,      14.0,       0.0);         ( 584111.6,
4337586.0,      14.2,      14.2,       0.0);
     ( 542111.6, 4338586.0,     718.6,     757.3,       0.0);         ( 543111.6,
4338586.0,     686.9,     702.4,       0.0);
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     ( 544111.6, 4338586.0,     481.3,     811.0,       0.0);         ( 545111.6,
4338586.0,     445.1,     811.0,       0.0);
     ( 546111.6, 4338586.0,     423.6,     745.8,       0.0);         ( 547111.6,
4338586.0,     478.7,     663.8,       0.0);
     ( 548111.6, 4338586.0,     521.2,     663.8,       0.0);         ( 549111.6,
4338586.0,     489.5,     663.8,       0.0);
     ( 550111.6, 4338586.0,     455.8,     668.6,       0.0);         ( 551111.6,
4338586.0,     454.1,     655.8,       0.0);
     ( 552111.6, 4338586.0,     264.0,     692.9,       0.0);         ( 553111.6,
4338586.0,     298.7,     668.6,       0.0);
     ( 554111.6, 4338586.0,     310.7,     634.0,       0.0);         ( 555111.6,
4338586.0,     217.4,     634.0,       0.0);
     ( 556111.6, 4338586.0,     375.3,     634.0,       0.0);         ( 557111.6,
4338586.0,     362.4,     634.0,       0.0);
     ( 558111.6, 4338586.0,     173.7,     634.0,       0.0);         ( 559111.6,
4338586.0,      78.0,     634.0,       0.0);
     ( 560111.6, 4338586.0,      67.8,     634.0,       0.0);         ( 561111.6,
4338586.0,      51.2,     634.0,       0.0);
     ( 562111.6, 4338586.0,      41.5,     634.0,       0.0);         ( 563111.6,
4338586.0,      39.5,      39.5,       0.0);
     ( 564111.6, 4338586.0,      37.0,      37.0,       0.0);         ( 565111.6,
4338586.0,      34.2,      34.2,       0.0);
     ( 566111.6, 4338586.0,      32.0,      32.0,       0.0);         ( 567111.6,
4338586.0,      30.6,      30.6,       0.0);
     ( 568111.6, 4338586.0,      29.4,      29.4,       0.0);         ( 569111.6,
4338586.0,      28.2,      28.2,       0.0);
     ( 570111.6, 4338586.0,      25.5,      25.5,       0.0);         ( 571111.6,
4338586.0,      24.1,      24.1,       0.0);
     ( 572111.6, 4338586.0,      22.5,      22.5,       0.0);         ( 573111.6,
4338586.0,      21.4,      21.4,       0.0);
     ( 574111.6, 4338586.0,      20.3,      20.3,       0.0);         ( 575111.6,
4338586.0,      19.0,      19.0,       0.0);
     ( 576111.6, 4338586.0,      18.4,      18.4,       0.0);         ( 577111.6,
4338586.0,      17.5,      17.5,       0.0);
     ( 578111.6, 4338586.0,      16.4,      16.4,       0.0);         ( 579111.6,
4338586.0,      15.6,      15.6,       0.0);
     ( 580111.6, 4338586.0,      14.9,      14.9,       0.0);         ( 581111.6,
4338586.0,      14.9,      14.9,       0.0);
     ( 582111.6, 4338586.0,      14.9,      14.9,       0.0);         ( 583111.6,
4338586.0,      14.5,      14.5,       0.0);
     ( 584111.6, 4338586.0,      14.9,      14.9,       0.0);         ( 542111.6,
4339586.0,     711.5,     811.0,       0.0);
     ( 543111.6, 4339586.0,     580.9,     811.0,       0.0);         ( 544111.6,
4339586.0,     549.5,     811.0,       0.0);
     ( 545111.6, 4339586.0,     635.4,     658.7,       0.0);         ( 546111.6,
4339586.0,     426.8,     717.5,       0.0);
     ( 547111.6, 4339586.0,     463.1,     663.8,       0.0);         ( 548111.6,
4339586.0,     504.5,     668.0,       0.0);
     ( 549111.6, 4339586.0,     516.9,     668.6,       0.0);         ( 550111.6,
4339586.0,     492.1,     668.6,       0.0);
```

(551111.6, 4339586.0, 449.6, 668.6, 0.0); (552111.6, 4339586.0, 287.2, 723.8, 0.0);
(553111.6, 4339586.0, 343.2, 668.6, 0.0); (554111.6, 4339586.0, 260.8, 691.1, 0.0);
(555111.6, 4339586.0, 222.9, 634.0, 0.0); (556111.6, 4339586.0, 317.1, 634.0, 0.0);
(557111.6, 4339586.0, 327.0, 634.0, 0.0); (558111.6, 4339586.0, 169.3, 634.0, 0.0);
(559111.6, 4339586.0, 69.6, 634.0, 0.0); (560111.6, 4339586.0, 55.9, 634.0, 0.0);
(561111.6, 4339586.0, 47.4, 634.0, 0.0); (562111.6, 4339586.0, 42.8, 42.8, 0.0);
(563111.6, 4339586.0, 39.7, 39.7, 0.0); (564111.6, 4339586.0, 36.9, 36.9, 0.0);
(565111.6, 4339586.0, 34.2, 34.2, 0.0); (566111.6, 4339586.0, 30.9, 30.9, 0.0);
(567111.6, 4339586.0, 28.6, 28.6, 0.0); (568111.6, 4339586.0, 27.5, 27.5, 0.0);
(569111.6, 4339586.0, 26.3, 26.3, 0.0); (570111.6, 4339586.0, 24.3, 24.3, 0.0);
(571111.6, 4339586.0, 24.1, 24.1, 0.0); (572111.6, 4339586.0, 22.1, 22.1, 0.0);
(573111.6, 4339586.0, 21.1, 21.1, 0.0); (574111.6, 4339586.0, 20.0, 20.0, 0.0);
(575111.6, 4339586.0, 19.2, 19.2, 0.0); (576111.6, 4339586.0, 18.0, 18.0, 0.0);
(577111.6, 4339586.0, 17.0, 17.0, 0.0); (578111.6, 4339586.0, 16.0, 16.0, 0.0);
(579111.6, 4339586.0, 15.6, 15.6, 0.0); (580111.6, 4339586.0, 16.0, 16.0, 0.0);
(581111.6, 4339586.0, 14.6, 14.6, 0.0); (582111.6, 4339586.0, 14.5, 14.5, 0.0);
(583111.6, 4339586.0, 15.4, 15.4, 0.0); (584111.6, 4339586.0, 15.1, 15.1, 0.0);
(542111.6, 4340586.0, 708.5, 811.0, 0.0); (543111.6, 4340586.0, 543.3, 811.0, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(544111.6, 4340586.0, 639.4, 655.0, 0.0); (545111.6, 4340586.0, 480.0, 671.9, 0.0);

```
     ( 546111.6, 4340586.0,     446.9,     663.5,       0.0);         ( 547111.6,
4340586.0,     442.2,     668.0,       0.0);
     ( 548111.6, 4340586.0,     526.7,     668.0,       0.0);         ( 549111.6,
4340586.0,     596.2,     668.0,       0.0);
     ( 550111.6, 4340586.0,     610.2,     668.6,       0.0);         ( 551111.6,
4340586.0,     431.8,     723.8,       0.0);
     ( 552111.6, 4340586.0,     375.7,     723.8,       0.0);         ( 553111.6,
4340586.0,     409.6,     526.9,       0.0);
     ( 554111.6, 4340586.0,     221.6,     723.8,       0.0);         ( 555111.6,
4340586.0,     181.3,     692.9,       0.0);
     ( 556111.6, 4340586.0,     317.0,     634.0,       0.0);         ( 557111.6,
4340586.0,     333.1,     598.5,       0.0);
     ( 558111.6, 4340586.0,     118.5,     634.0,       0.0);         ( 559111.6,
4340586.0,      82.5,     634.0,       0.0);
     ( 560111.6, 4340586.0,      57.7,     634.0,       0.0);         ( 561111.6,
4340586.0,      47.4,     634.0,       0.0);
     ( 562111.6, 4340586.0,      41.3,      41.3,       0.0);         ( 563111.6,
4340586.0,      39.0,      39.0,       0.0);
     ( 564111.6, 4340586.0,      36.5,      36.5,       0.0);         ( 565111.6,
4340586.0,      34.1,      34.1,       0.0);
     ( 566111.6, 4340586.0,      31.7,      31.7,       0.0);         ( 567111.6,
4340586.0,      29.2,      29.2,       0.0);
     ( 568111.6, 4340586.0,      27.2,      27.2,       0.0);         ( 569111.6,
4340586.0,      25.1,      25.1,       0.0);
     ( 570111.6, 4340586.0,      23.6,      23.6,       0.0);         ( 571111.6,
4340586.0,      22.3,      22.3,       0.0);
     ( 572111.6, 4340586.0,      21.3,      21.3,       0.0);         ( 573111.6,
4340586.0,      20.5,      20.5,       0.0);
     ( 574111.6, 4340586.0,      19.3,      19.3,       0.0);         ( 575111.6,
4340586.0,      18.4,      18.4,       0.0);
     ( 576111.6, 4340586.0,      17.2,      17.2,       0.0);         ( 577111.6,
4340586.0,      16.4,      16.4,       0.0);
     ( 578111.6, 4340586.0,      15.7,      15.7,       0.0);         ( 579111.6,
4340586.0,      16.0,      16.0,       0.0);
     ( 580111.6, 4340586.0,      15.4,      15.4,       0.0);         ( 581111.6,
4340586.0,      14.8,      14.8,       0.0);
     ( 582111.6, 4340586.0,      15.2,      15.2,       0.0);         ( 583111.6,
4340586.0,      15.9,      15.9,       0.0);
     ( 584111.6, 4340586.0,      15.9,      15.9,       0.0);         ( 542111.6,
4341586.0,     597.9,     811.0,       0.0);
     ( 543111.6, 4341586.0,     543.5,     811.0,       0.0);         ( 544111.6,
4341586.0,     574.9,     645.3,       0.0);
     ( 545111.6, 4341586.0,     443.2,     811.0,       0.0);         ( 546111.6,
4341586.0,     490.5,     556.2,       0.0);
     ( 547111.6, 4341586.0,     452.3,     659.3,       0.0);         ( 548111.6,
4341586.0,     444.8,     692.9,       0.0);
     ( 549111.6, 4341586.0,     591.8,     659.3,       0.0);         ( 550111.6,
4341586.0,     623.8,     692.9,       0.0);
     ( 551111.6, 4341586.0,     529.0,     723.3,       0.0);         ( 552111.6,
4341586.0,     274.5,     743.9,       0.0);
```

```
     ( 553111.6, 4341586.0,     270.3,     723.8,       0.0);         ( 554111.6,
4341586.0,     189.5,     723.8,       0.0);
     ( 555111.6, 4341586.0,     200.6,     723.8,       0.0);         ( 556111.6,
4341586.0,     284.9,     578.2,       0.0);
     ( 557111.6, 4341586.0,     249.3,     592.2,       0.0);         ( 558111.6,
4341586.0,     169.8,     634.0,       0.0);
     ( 559111.6, 4341586.0,     146.8,     634.0,       0.0);         ( 560111.6,
4341586.0,      65.1,     634.0,       0.0);
     ( 561111.6, 4341586.0,      49.4,     578.2,       0.0);         ( 562111.6,
4341586.0,      41.7,      41.7,       0.0);
     ( 563111.6, 4341586.0,      40.0,      40.0,       0.0);         ( 564111.6,
4341586.0,      36.4,      36.4,       0.0);
     ( 565111.6, 4341586.0,      34.0,      34.0,       0.0);         ( 566111.6,
4341586.0,      31.8,      31.8,       0.0);
     ( 567111.6, 4341586.0,      29.5,      29.5,       0.0);         ( 568111.6,
4341586.0,      27.5,      27.5,       0.0);
     ( 569111.6, 4341586.0,      25.5,      25.5,       0.0);         ( 570111.6,
4341586.0,      24.9,      24.9,       0.0);
     ( 571111.6, 4341586.0,      20.4,      20.4,       0.0);         ( 572111.6,
4341586.0,      21.2,      21.2,       0.0);
     ( 573111.6, 4341586.0,      19.8,      19.8,       0.0);         ( 574111.6,
4341586.0,      18.6,      18.6,       0.0);
     ( 575111.6, 4341586.0,      17.5,      17.5,       0.0);         ( 576111.6,
4341586.0,      16.8,      16.8,       0.0);
     ( 577111.6, 4341586.0,      16.3,      16.3,       0.0);         ( 578111.6,
4341586.0,      15.7,      15.7,       0.0);
     ( 579111.6, 4341586.0,      15.4,      15.4,       0.0);         ( 580111.6,
4341586.0,      15.3,      15.3,       0.0);
     ( 581111.6, 4341586.0,      15.1,      15.1,       0.0);         ( 582111.6,
4341586.0,      15.2,      15.2,       0.0);
     ( 583111.6, 4341586.0,      16.1,      16.1,       0.0);         ( 584111.6,
4341586.0,      16.7,      16.7,       0.0);
     ( 542111.6, 4342586.0,     622.5,    1029.6,       0.0);         ( 543111.6,
4342586.0,     588.1,     589.2,       0.0);
     ( 544111.6, 4342586.0,     550.0,     673.8,       0.0);         ( 545111.6,
4342586.0,     490.5,     645.3,       0.0);
     ( 546111.6, 4342586.0,     422.0,     643.6,       0.0);         ( 547111.6,
4342586.0,     440.2,     673.0,       0.0);
↟ *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***         08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                         ***         06:53:13

                                     PAGE  60
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                                        *** DISCRETE CARTESIAN RECEPTORS ***
                                     (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                  (METERS)
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```
     ( 548111.6, 4342586.0,     514.2,     673.0,       0.0);         ( 549111.6,
4342586.0,     563.3,     723.8,       0.0);
     ( 550111.6, 4342586.0,     563.5,     723.8,       0.0);         ( 551111.6,
4342586.0,     477.4,     723.8,       0.0);
     ( 552111.6, 4342586.0,     295.4,     743.9,       0.0);         ( 553111.6,
4342586.0,     229.6,     743.9,       0.0);
     ( 554111.6, 4342586.0,     293.4,     723.8,       0.0);         ( 555111.6,
4342586.0,     187.9,     723.8,       0.0);
     ( 556111.6, 4342586.0,     227.0,     527.5,       0.0);         ( 557111.6,
4342586.0,     284.0,     527.5,       0.0);
     ( 558111.6, 4342586.0,     186.2,     566.3,       0.0);         ( 559111.6,
4342586.0,     152.5,     527.5,       0.0);
     ( 560111.6, 4342586.0,      63.5,     578.2,       0.0);         ( 561111.6,
4342586.0,      53.7,      53.7,       0.0);
     ( 562111.6, 4342586.0,      45.0,      45.0,       0.0);         ( 563111.6,
4342586.0,      40.9,      40.9,       0.0);
     ( 564111.6, 4342586.0,      37.6,      37.6,       0.0);         ( 565111.6,
4342586.0,      34.8,      34.8,       0.0);
     ( 566111.6, 4342586.0,      32.6,      32.6,       0.0);         ( 567111.6,
4342586.0,      29.9,      29.9,       0.0);
     ( 568111.6, 4342586.0,      28.6,      28.6,       0.0);         ( 569111.6,
4342586.0,      25.9,      25.9,       0.0);
     ( 570111.6, 4342586.0,      24.6,      24.6,       0.0);         ( 571111.6,
4342586.0,      22.4,      22.4,       0.0);
     ( 572111.6, 4342586.0,      20.6,      20.6,       0.0);         ( 573111.6,
4342586.0,      19.4,      19.4,       0.0);
     ( 574111.6, 4342586.0,      17.7,      17.7,       0.0);         ( 575111.6,
4342586.0,      17.1,      17.1,       0.0);
     ( 576111.6, 4342586.0,      16.5,      16.5,       0.0);         ( 577111.6,
4342586.0,      16.9,      16.9,       0.0);
     ( 578111.6, 4342586.0,      16.6,      16.6,       0.0);         ( 579111.6,
4342586.0,      15.3,      15.3,       0.0);
     ( 580111.6, 4342586.0,      15.1,      15.1,       0.0);         ( 581111.6,
4342586.0,      15.9,      15.9,       0.0);
     ( 582111.6, 4342586.0,      15.5,      15.5,       0.0);         ( 583111.6,
4342586.0,      16.3,      16.3,       0.0);
     ( 584111.6, 4342586.0,      17.1,      17.1,       0.0);         ( 542111.6,
4343586.0,     598.8,    1040.8,       0.0);
     ( 543111.6, 4343586.0,     602.5,     673.8,       0.0);         ( 544111.6,
4343586.0,     508.5,     673.8,       0.0);
     ( 545111.6, 4343586.0,     444.4,     673.8,       0.0);         ( 546111.6,
4343586.0,     407.4,     695.6,       0.0);
     ( 547111.6, 4343586.0,     427.7,     695.6,       0.0);         ( 548111.6,
4343586.0,     588.4,     673.0,       0.0);
     ( 549111.6, 4343586.0,     502.8,     743.9,       0.0);         ( 550111.6,
4343586.0,     602.9,     723.8,       0.0);
     ( 551111.6, 4343586.0,     495.9,     743.9,       0.0);         ( 552111.6,
4343586.0,     314.7,     743.9,       0.0);
     ( 553111.6, 4343586.0,     303.1,     743.9,       0.0);         ( 554111.6,
4343586.0,     242.7,     743.9,       0.0);
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```
     ( 555111.6, 4343586.0,     152.3,     743.9,       0.0);         ( 556111.6,
4343586.0,     239.8,     527.5,       0.0);
     ( 557111.6, 4343586.0,     303.0,     464.9,       0.0);         ( 558111.6,
4343586.0,     130.8,     527.5,       0.0);
     ( 559111.6, 4343586.0,      73.5,     527.5,       0.0);         ( 560111.6,
4343586.0,      64.8,     527.5,       0.0);
     ( 561111.6, 4343586.0,      50.7,      50.7,       0.0);         ( 562111.6,
4343586.0,      45.5,      45.5,       0.0);
     ( 563111.6, 4343586.0,      41.7,      41.7,       0.0);         ( 564111.6,
4343586.0,      38.6,      38.6,       0.0);
     ( 565111.6, 4343586.0,      35.4,      35.4,       0.0);         ( 566111.6,
4343586.0,      33.6,      33.6,       0.0);
     ( 567111.6, 4343586.0,      31.1,      31.1,       0.0);         ( 568111.6,
4343586.0,      29.4,      29.4,       0.0);
     ( 569111.6, 4343586.0,      26.7,      26.7,       0.0);         ( 570111.6,
4343586.0,      23.7,      23.7,       0.0);
     ( 571111.6, 4343586.0,      22.3,      22.3,       0.0);         ( 572111.6,
4343586.0,      20.7,      20.7,       0.0);
     ( 573111.6, 4343586.0,      19.3,      19.3,       0.0);         ( 574111.6,
4343586.0,      18.5,      18.5,       0.0);
     ( 575111.6, 4343586.0,      17.1,      17.1,       0.0);         ( 576111.6,
4343586.0,      16.5,      16.5,       0.0);
     ( 577111.6, 4343586.0,      16.3,      16.3,       0.0);         ( 578111.6,
4343586.0,      16.0,      16.0,       0.0);
     ( 579111.6, 4343586.0,      16.1,      16.1,       0.0);         ( 580111.6,
4343586.0,      15.4,      15.4,       0.0);
     ( 581111.6, 4343586.0,      15.7,      15.7,       0.0);         ( 582111.6,
4343586.0,      15.6,      15.6,       0.0);
     ( 583111.6, 4343586.0,      16.1,      16.1,       0.0);         ( 584111.6,
4343586.0,      17.1,      17.1,       0.0);
     ( 542111.6, 4344586.0,     602.9,    1040.8,       0.0);         ( 543111.6,
4344586.0,     447.8,    1105.6,       0.0);
     ( 544111.6, 4344586.0,     503.7,     673.8,       0.0);         ( 545111.6,
4344586.0,     404.9,     695.6,       0.0);
     ( 546111.6, 4344586.0,     404.4,     695.6,       0.0);         ( 547111.6,
4344586.0,     448.1,     743.9,       0.0);
     ( 548111.6, 4344586.0,     611.3,     678.4,       0.0);         ( 549111.6,
4344586.0,     527.8,     743.9,       0.0);
     ( 550111.6, 4344586.0,     633.3,     743.9,       0.0);         ( 551111.6,
4344586.0,     467.9,     743.9,       0.0);
```


↟ *** AERMOD - VERSION 23132 ***   *** Janus Solar and Battery Strorage Project-
DPM   ***   08/02/24
 *** AERMET - VERSION 19191 ***   *** Met data: Oroville 2015-2019
                          ***   06:53:13

                                     PAGE 61
 *** MODELOPTs: RegDFAULT CONC ELEV RURAL
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*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
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(METERS)

(552111.6, 4344586.0, 427.3, 743.9, 0.0); (553111.6, 4344586.0, 456.4, 468.3, 0.0);
(554111.6, 4344586.0, 219.3, 743.9, 0.0); (555111.6, 4344586.0, 135.0, 743.9, 0.0);
(556111.6, 4344586.0, 258.1, 464.9, 0.0); (557111.6, 4344586.0, 290.0, 464.9, 0.0);
(558111.6, 4344586.0, 96.8, 527.5, 0.0); (559111.6, 4344586.0, 76.2, 464.9, 0.0);
(560111.6, 4344586.0, 73.8, 464.9, 0.0); (561111.6, 4344586.0, 62.1, 74.3, 0.0);
(562111.6, 4344586.0, 47.8, 47.8, 0.0); (563111.6, 4344586.0, 42.6, 42.6, 0.0);
(564111.6, 4344586.0, 39.2, 39.2, 0.0); (565111.6, 4344586.0, 37.0, 37.0, 0.0);
(566111.6, 4344586.0, 34.4, 34.4, 0.0); (567111.6, 4344586.0, 32.7, 32.7, 0.0);
(568111.6, 4344586.0, 29.8, 29.8, 0.0); (569111.6, 4344586.0, 27.3, 27.3, 0.0);
(570111.6, 4344586.0, 24.5, 24.5, 0.0); (571111.6, 4344586.0, 22.7, 22.7, 0.0);
(572111.6, 4344586.0, 21.1, 21.1, 0.0); (573111.6, 4344586.0, 20.3, 20.3, 0.0);
(574111.6, 4344586.0, 18.2, 18.2, 0.0); (575111.6, 4344586.0, 16.9, 16.9, 0.0);
(576111.6, 4344586.0, 17.2, 17.2, 0.0); (577111.6, 4344586.0, 16.9, 16.9, 0.0);
(578111.6, 4344586.0, 16.9, 16.9, 0.0); (579111.6, 4344586.0, 16.4, 16.4, 0.0);
(580111.6, 4344586.0, 15.8, 15.8, 0.0); (581111.6, 4344586.0, 15.9, 15.9, 0.0);
(582111.6, 4344586.0, 15.7, 15.7, 0.0); (583111.6, 4344586.0, 17.0, 17.0, 0.0);
(584111.6, 4344586.0, 17.4, 17.4, 0.0); (542111.6, 4345586.0, 482.2, 1108.3, 0.0);
(543111.6, 4345586.0, 422.1, 1105.6, 0.0); (544111.6, 4345586.0, 397.0, 1029.2, 0.0);
(545111.6, 4345586.0, 392.2, 695.6, 0.0); (546111.6, 4345586.0, 414.6, 707.9, 0.0);
(547111.6, 4345586.0, 504.2, 708.8, 0.0); (548111.6, 4345586.0, 595.0, 708.8, 0.0);
(549111.6, 4345586.0, 684.5, 708.8, 0.0); (550111.6, 4345586.0, 630.3, 743.9, 0.0);
(551111.6, 4345586.0, 428.1, 743.9, 0.0); (552111.6, 4345586.0, 415.4, 743.9, 0.0);
(553111.6, 4345586.0, 302.2, 743.9, 0.0); (554111.6, 4345586.0, 205.1, 743.9, 0.0);
(555111.6, 4345586.0, 128.0, 743.9, 0.0); (556111.6, 4345586.0, 193.2, 581.2, 0.0);

```
     ( 557111.6, 4345586.0,     329.7,     391.2,       0.0);         ( 558111.6,
4345586.0,     192.7,     429.8,       0.0);
     ( 559111.6, 4345586.0,      96.0,     464.9,       0.0);         ( 560111.6,
4345586.0,      65.4,     391.2,       0.0);
     ( 561111.6, 4345586.0,      57.7,      80.5,       0.0);         ( 562111.6,
4345586.0,      55.3,      55.3,       0.0);
     ( 563111.6, 4345586.0,      43.0,      43.0,       0.0);         ( 564111.6,
4345586.0,      41.1,      41.1,       0.0);
     ( 565111.6, 4345586.0,      38.4,      38.4,       0.0);         ( 566111.6,
4345586.0,      35.2,      35.2,       0.0);
     ( 567111.6, 4345586.0,      32.4,      32.4,       0.0);         ( 568111.6,
4345586.0,      28.9,      29.6,       0.0);
     ( 569111.6, 4345586.0,      28.7,      28.7,       0.0);         ( 570111.6,
4345586.0,      26.2,      26.2,       0.0);
     ( 571111.6, 4345586.0,      24.1,      24.1,       0.0);         ( 572111.6,
4345586.0,      22.6,      22.6,       0.0);
     ( 573111.6, 4345586.0,      20.4,      20.4,       0.0);         ( 574111.6,
4345586.0,      19.5,      19.5,       0.0);
     ( 575111.6, 4345586.0,      17.8,      17.8,       0.0);         ( 576111.6,
4345586.0,      17.1,      17.1,       0.0);
     ( 577111.6, 4345586.0,      17.2,      17.2,       0.0);         ( 578111.6,
4345586.0,      16.4,      16.4,       0.0);
     ( 579111.6, 4345586.0,      16.7,      16.7,       0.0);         ( 580111.6,
4345586.0,      16.7,      16.7,       0.0);
     ( 581111.6, 4345586.0,      16.0,      16.0,       0.0);         ( 582111.6,
4345586.0,      16.0,      16.0,       0.0);
     ( 583111.6, 4345586.0,      18.2,      18.2,       0.0);         ( 584111.6,
4345586.0,      18.1,      18.1,       0.0);
     ( 542111.6, 4346586.0,     503.9,    1098.9,       0.0);         ( 543111.6,
4346586.0,     404.5,    1105.6,       0.0);
     ( 544111.6, 4346586.0,     389.2,     389.2,       0.0);         ( 545111.6,
4346586.0,     392.3,     695.6,       0.0);
     ( 546111.6, 4346586.0,     418.9,     707.9,       0.0);         ( 547111.6,
4346586.0,     547.9,     695.6,       0.0);
     ( 548111.6, 4346586.0,     526.0,     743.9,       0.0);         ( 549111.6,
4346586.0,     588.0,     743.9,       0.0);
     ( 550111.6, 4346586.0,     611.3,     743.9,       0.0);         ( 551111.6,
4346586.0,     393.9,     743.9,       0.0);
     ( 552111.6, 4346586.0,     411.4,     743.9,       0.0);         ( 553111.6,
4346586.0,     434.9,     581.2,       0.0);
     ( 554111.6, 4346586.0,     255.0,     743.9,       0.0);         ( 555111.6,
4346586.0,     117.8,     743.9,       0.0);
↟ *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                           ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                          ***        06:53:13

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL
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*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(556111.6, 4346586.0, 137.2, 581.2, 0.0); (557111.6, 4346586.0, 289.6, 368.8, 0.0);
(558111.6, 4346586.0, 149.0, 391.2, 0.0); (559111.6, 4346586.0, 100.2, 391.2, 0.0);
(560111.6, 4346586.0, 84.3, 90.1, 0.0); (561111.6, 4346586.0, 71.0, 91.5, 0.0);
(562111.6, 4346586.0, 48.3, 48.3, 0.0); (563111.6, 4346586.0, 41.5, 41.5, 0.0);
(564111.6, 4346586.0, 39.3, 39.3, 0.0); (565111.6, 4346586.0, 38.0, 38.0, 0.0);
(566111.6, 4346586.0, 34.7, 34.7, 0.0); (567111.6, 4346586.0, 32.6, 32.6, 0.0);
(568111.6, 4346586.0, 30.5, 30.5, 0.0); (569111.6, 4346586.0, 27.6, 27.6, 0.0);
(570111.6, 4346586.0, 26.3, 26.3, 0.0); (571111.6, 4346586.0, 24.3, 24.3, 0.0);
(572111.6, 4346586.0, 22.9, 22.9, 0.0); (573111.6, 4346586.0, 20.7, 20.7, 0.0);
(574111.6, 4346586.0, 19.4, 19.4, 0.0); (575111.6, 4346586.0, 18.3, 18.3, 0.0);
(576111.6, 4346586.0, 17.5, 17.5, 0.0); (577111.6, 4346586.0, 17.0, 17.0, 0.0);
(578111.6, 4346586.0, 16.8, 16.8, 0.0); (579111.6, 4346586.0, 16.7, 16.7, 0.0);
(580111.6, 4346586.0, 17.6, 17.6, 0.0); (581111.6, 4346586.0, 16.5, 16.5, 0.0);
(582111.6, 4346586.0, 16.6, 16.6, 0.0); (583111.6, 4346586.0, 18.6, 18.6, 0.0);
(584111.6, 4346586.0, 20.1, 20.1, 0.0); (542111.6, 4347586.0, 403.5, 1108.3, 0.0);
(543111.6, 4347586.0, 395.9, 1084.1, 0.0); (544111.6, 4347586.0, 384.1, 384.1, 0.0);
(545111.6, 4347586.0, 396.9, 689.8, 0.0); (546111.6, 4347586.0, 491.2, 689.8, 0.0);
(547111.6, 4347586.0, 654.7, 684.5, 0.0); (548111.6, 4347586.0, 494.9, 707.9, 0.0);
(549111.6, 4347586.0, 515.0, 743.9, 0.0); (550111.6, 4347586.0, 537.0, 702.1, 0.0);
(551111.6, 4347586.0, 367.0, 743.9, 0.0); (552111.6, 4347586.0, 440.8, 702.1, 0.0);
(553111.6, 4347586.0, 220.2, 743.9, 0.0); (554111.6, 4347586.0, 153.7, 743.9, 0.0);
(555111.6, 4347586.0, 129.9, 743.9, 0.0); (556111.6, 4347586.0, 129.6, 581.2, 0.0);
(557111.6, 4347586.0, 291.7, 368.8, 0.0); (558111.6, 4347586.0, 224.8, 378.8, 0.0);

```
     ( 559111.6, 4347586.0,     129.8,     378.8,       0.0);         ( 560111.6,
4347586.0,      82.8,     335.1,       0.0);
     ( 561111.6, 4347586.0,      52.6,      52.6,       0.0);         ( 562111.6,
4347586.0,      47.1,      47.1,       0.0);
     ( 563111.6, 4347586.0,      43.1,      43.1,       0.0);         ( 564111.6,
4347586.0,      39.3,      39.3,       0.0);
     ( 565111.6, 4347586.0,      37.7,      37.7,       0.0);         ( 566111.6,
4347586.0,      36.6,      36.6,       0.0);
     ( 567111.6, 4347586.0,      33.5,      33.5,       0.0);         ( 568111.6,
4347586.0,      30.9,      30.9,       0.0);
     ( 569111.6, 4347586.0,      29.0,      29.0,       0.0);         ( 570111.6,
4347586.0,      26.5,      26.5,       0.0);
     ( 571111.6, 4347586.0,      24.6,      24.6,       0.0);         ( 572111.6,
4347586.0,      22.9,      22.9,       0.0);
     ( 573111.6, 4347586.0,      21.0,      21.0,       0.0);         ( 574111.6,
4347586.0,      19.7,      19.7,       0.0);
     ( 575111.6, 4347586.0,      18.5,      18.5,       0.0);         ( 576111.6,
4347586.0,      17.9,      17.9,       0.0);
     ( 577111.6, 4347586.0,      17.1,      17.1,       0.0);         ( 578111.6,
4347586.0,      16.9,      16.9,       0.0);
     ( 579111.6, 4347586.0,      17.3,      17.3,       0.0);         ( 580111.6,
4347586.0,      18.1,      18.1,       0.0);
     ( 581111.6, 4347586.0,      17.3,      17.3,       0.0);         ( 582111.6,
4347586.0,      16.9,      16.9,       0.0);
     ( 583111.6, 4347586.0,      18.7,      18.7,       0.0);         ( 584111.6,
4347586.0,      20.3,      20.3,       0.0);
     ( 542111.6, 4348586.0,     399.7,    1084.1,       0.0);         ( 543111.6,
4348586.0,     381.6,     723.6,       0.0);
     ( 544111.6, 4348586.0,     377.2,     662.8,       0.0);         ( 545111.6,
4348586.0,     393.2,     689.8,       0.0);
     ( 546111.6, 4348586.0,     496.6,     689.8,       0.0);         ( 547111.6,
4348586.0,     598.9,     684.7,       0.0);
     ( 548111.6, 4348586.0,     652.0,     678.9,       0.0);         ( 549111.6,
4348586.0,     513.8,     702.1,       0.0);
     ( 550111.6, 4348586.0,     436.7,     707.9,       0.0);         ( 551111.6,
4348586.0,     313.0,     743.9,       0.0);
     ( 552111.6, 4348586.0,     401.2,     702.1,       0.0);         ( 553111.6,
4348586.0,     339.7,     581.2,       0.0);
     ( 554111.6, 4348586.0,     181.0,     743.9,       0.0);         ( 555111.6,
4348586.0,     119.6,     743.9,       0.0);
     ( 556111.6, 4348586.0,     110.6,     581.2,       0.0);         ( 557111.6,
4348586.0,     305.4,     378.8,       0.0);
     ( 558111.6, 4348586.0,     261.8,     378.8,       0.0);         ( 559111.6,
4348586.0,      78.5,     378.8,       0.0);
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                          ***        06:53:13
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(560111.6, 4348586.0, 69.8, 378.8, 0.0); (561111.6, 4348586.0, 53.1, 53.1, 0.0);
(562111.6, 4348586.0, 65.9, 65.9, 0.0); (563111.6, 4348586.0, 42.6, 42.6, 0.0);
(564111.6, 4348586.0, 41.1, 41.1, 0.0); (565111.6, 4348586.0, 38.1, 38.1, 0.0);
(566111.6, 4348586.0, 35.5, 35.5, 0.0); (567111.6, 4348586.0, 32.9, 32.9, 0.0);
(568111.6, 4348586.0, 31.5, 31.5, 0.0); (569111.6, 4348586.0, 29.3, 29.3, 0.0);
(570111.6, 4348586.0, 27.1, 27.1, 0.0); (571111.6, 4348586.0, 24.4, 24.4, 0.0);
(572111.6, 4348586.0, 22.7, 22.7, 0.0); (573111.6, 4348586.0, 20.4, 20.4, 0.0);
(574111.6, 4348586.0, 19.8, 19.8, 0.0); (575111.6, 4348586.0, 19.4, 19.4, 0.0);
(576111.6, 4348586.0, 18.4, 18.4, 0.0); (577111.6, 4348586.0, 17.9, 17.9, 0.0);
(578111.6, 4348586.0, 17.5, 17.5, 0.0); (579111.6, 4348586.0, 16.9, 16.9, 0.0);
(580111.6, 4348586.0, 17.2, 17.2, 0.0); (581111.6, 4348586.0, 18.2, 18.2, 0.0);
(582111.6, 4348586.0, 17.3, 17.3, 0.0); (583111.6, 4348586.0, 19.1, 19.1, 0.0);
(584111.6, 4348586.0, 20.1, 20.1, 0.0); (562146.9, 4328276.9, 93.8, 793.0, 0.0);
(564540.1, 4328281.9, 91.4, 110.6, 0.0); (564535.1, 4327110.5, 83.4, 104.7, 0.0);
(564313.9, 4327115.5, 79.3, 104.7, 0.0); (564218.4, 4327040.1, 79.7, 99.8, 0.0);
(564042.4, 4327040.1, 82.2, 780.0, 0.0); (563861.4, 4326828.9, 84.4, 793.0, 0.0);
(562911.2, 4326678.1, 96.4, 793.0, 0.0); (562921.2, 4326597.6, 99.7, 793.0, 0.0);
(562131.8, 4326617.8, 102.5, 793.0, 0.0); (562166.9, 4328277.0, 93.8, 793.0, 0.0);
(562186.8, 4328277.0, 93.7, 793.0, 0.0); (562206.8, 4328277.0, 93.7, 793.0, 0.0);
(562226.7, 4328277.1, 93.8, 793.0, 0.0); (562246.7, 4328277.1, 94.0, 793.0, 0.0);
(562266.6, 4328277.2, 94.3, 793.0, 0.0); (562286.5, 4328277.2, 94.6, 793.0, 0.0);
(562306.5, 4328277.2, 94.7, 793.0, 0.0); (562326.4, 4328277.3, 94.7, 793.0, 0.0);

```
     ( 562346.4, 4328277.3,      94.8,     793.0,       0.0);         ( 562366.3,
4328277.4,      94.8,     793.0,       0.0);
     ( 562386.2, 4328277.4,      94.5,     793.0,       0.0);         ( 562406.2,
4328277.5,      94.2,     793.0,       0.0);
     ( 562426.1, 4328277.5,      93.9,     793.0,       0.0);         ( 562446.1,
4328277.5,      93.6,     793.0,       0.0);
     ( 562466.0, 4328277.6,      93.4,     793.0,       0.0);         ( 562486.0,
4328277.6,      93.1,     793.0,       0.0);
     ( 562505.9, 4328277.7,      92.4,     793.0,       0.0);         ( 562525.9,
4328277.7,      91.6,     793.0,       0.0);
     ( 562545.8, 4328277.8,      91.3,     793.0,       0.0);         ( 562565.7,
4328277.8,      91.9,     793.0,       0.0);
     ( 562585.7, 4328277.8,      92.9,     793.0,       0.0);         ( 562605.6,
4328277.9,      93.7,     793.0,       0.0);
     ( 562625.6, 4328277.9,      94.1,     793.0,       0.0);         ( 562645.5,
4328278.0,      94.4,     793.0,       0.0);
     ( 562665.5, 4328278.0,      94.5,     793.0,       0.0);         ( 562685.4,
4328278.0,      94.4,     793.0,       0.0);
     ( 562705.4, 4328278.1,      94.4,     793.0,       0.0);         ( 562725.3,
4328278.1,      94.4,     793.0,       0.0);
     ( 562745.2, 4328278.2,      94.7,     793.0,       0.0);         ( 562765.2,
4328278.2,      94.7,     793.0,       0.0);
     ( 562785.1, 4328278.3,      94.9,     780.0,       0.0);         ( 562805.1,
4328278.3,      94.8,     780.0,       0.0);
     ( 562825.0, 4328278.3,      94.8,     780.0,       0.0);         ( 562845.0,
4328278.4,      94.7,     780.0,       0.0);
     ( 562864.9, 4328278.4,      94.5,     780.0,       0.0);         ( 562884.8,
4328278.5,      94.4,     780.0,       0.0);
     ( 562904.8, 4328278.5,      94.3,     780.0,       0.0);         ( 562924.7,
4328278.5,      94.3,     780.0,       0.0);
     ( 562944.7, 4328278.6,      94.3,     780.0,       0.0);         ( 562964.6,
4328278.6,      94.3,     780.0,       0.0);
     ( 562984.6, 4328278.7,      94.5,     780.0,       0.0);         ( 563004.5,
4328278.7,      94.5,     684.3,       0.0);
     ( 563024.4, 4328278.8,      94.5,     674.8,       0.0);         ( 563044.4,
4328278.8,      94.4,     674.8,       0.0);
     ( 563064.3, 4328278.8,      94.5,     674.8,       0.0);         ( 563084.3,
4328278.9,      94.5,     674.6,       0.0);
     ( 563104.2, 4328278.9,      94.5,     667.7,       0.0);         ( 563124.2,
4328279.0,      94.5,     662.3,       0.0);
     ( 563144.1, 4328279.0,      94.5,     662.3,       0.0);         ( 563164.0,
4328279.0,      94.5,     662.3,       0.0);
     ( 563184.0, 4328279.1,      94.3,     662.3,       0.0);         ( 563203.9,
4328279.1,      94.2,     662.3,       0.0);
     ( 563223.9, 4328279.2,      94.3,     662.3,       0.0);         ( 563243.8,
4328279.2,      94.6,     662.1,       0.0);
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                             ***       06:53:13
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(563263.8, 4328279.3, 95.0, 95.0, 0.0); (563283.7, 4328279.3, 95.2, 95.2, 0.0);
(563303.7, 4328279.3, 95.3, 95.3, 0.0); (563323.6, 4328279.4, 95.0, 95.0, 0.0);
(563343.5, 4328279.4, 94.7, 94.7, 0.0); (563363.5, 4328279.5, 94.8, 94.8, 0.0);
(563383.4, 4328279.5, 95.1, 95.1, 0.0); (563403.4, 4328279.6, 95.2, 95.2, 0.0);
(563423.3, 4328279.6, 95.3, 95.3, 0.0); (563443.2, 4328279.6, 96.0, 96.0, 0.0);
(563463.2, 4328279.7, 96.8, 96.8, 0.0); (563483.1, 4328279.7, 97.6, 97.6, 0.0);
(563503.1, 4328279.8, 97.9, 97.9, 0.0); (563523.0, 4328279.8, 97.3, 97.3, 0.0);
(563543.0, 4328279.8, 96.5, 96.5, 0.0); (563562.9, 4328279.9, 96.0, 96.0, 0.0);
(563582.9, 4328279.9, 95.6, 95.6, 0.0); (563602.8, 4328280.0, 95.5, 95.5, 0.0);
(563622.7, 4328280.0, 95.4, 95.4, 0.0); (563642.7, 4328280.1, 95.5, 95.5, 0.0);
(563662.6, 4328280.1, 95.8, 95.8, 0.0); (563682.6, 4328280.1, 96.4, 96.4, 0.0);
(563702.5, 4328280.2, 97.2, 97.2, 0.0); (563722.5, 4328280.2, 98.1, 98.1, 0.0);
(563742.4, 4328280.3, 98.4, 98.4, 0.0); (563762.4, 4328280.3, 98.2, 99.5, 0.0);
(563782.3, 4328280.3, 97.3, 101.3, 0.0); (563802.2, 4328280.4, 95.7, 102.0, 0.0);
(563822.2, 4328280.4, 94.4, 101.7, 0.0); (563842.1, 4328280.5, 93.6, 93.6, 0.0);
(563862.1, 4328280.5, 93.3, 93.3, 0.0); (563882.0, 4328280.6, 94.4, 97.3, 0.0);
(563902.0, 4328280.6, 95.7, 96.6, 0.0); (563921.9, 4328280.6, 96.2, 96.2, 0.0);
(563941.8, 4328280.7, 95.3, 95.3, 0.0); (563961.8, 4328280.7, 93.5, 96.8, 0.0);
(563981.7, 4328280.8, 91.3, 100.6, 0.0); (564001.7, 4328280.8, 89.5, 101.6, 0.0);
(564021.6, 4328280.8, 88.5, 101.5, 0.0); (564041.6, 4328280.9, 87.9, 103.2, 0.0);
(564061.5, 4328280.9, 87.5, 103.2, 0.0); (564081.4, 4328281.0, 86.9, 103.4, 0.0);

(564101.4, 4328281.0, 86.5, 103.4, 0.0); (564121.3, 4328281.1, 86.2, 103.4, 0.0);
(564141.3, 4328281.1, 86.2, 103.1, 0.0); (564161.2, 4328281.1, 86.7, 93.7, 0.0);
(564181.2, 4328281.2, 87.8, 92.5, 0.0); (564201.1, 4328281.2, 87.8, 89.3, 0.0);
(564221.1, 4328281.3, 87.0, 87.0, 0.0); (564241.0, 4328281.3, 86.7, 86.7, 0.0);
(564260.9, 4328281.3, 87.3, 91.9, 0.0); (564280.9, 4328281.4, 88.9, 92.5, 0.0);
(564300.8, 4328281.4, 90.7, 91.9, 0.0); (564320.8, 4328281.5, 92.3, 92.3, 0.0);
(564340.7, 4328281.5, 92.9, 92.9, 0.0); (564360.7, 4328281.6, 92.6, 92.6, 0.0);
(564380.6, 4328281.6, 92.2, 93.0, 0.0); (564400.5, 4328281.6, 90.9, 93.3, 0.0);
(564420.5, 4328281.7, 88.0, 110.0, 0.0); (564440.4, 4328281.7, 83.8, 110.6, 0.0);
(564460.4, 4328281.8, 81.1, 110.6, 0.0); (564480.3, 4328281.8, 81.3, 110.6, 0.0);
(564500.2, 4328281.9, 83.6, 110.6, 0.0); (564520.2, 4328281.9, 87.1, 110.6, 0.0);
(564540.1, 4328262.1, 92.4, 110.6, 0.0); (564540.0, 4328242.2, 91.8, 110.6, 0.0);
(564539.9, 4328222.4, 89.8, 110.6, 0.0); (564539.8, 4328202.5, 87.6, 110.6, 0.0);
(564539.7, 4328182.7, 86.3, 110.6, 0.0); (564539.6, 4328162.8, 86.5, 115.3, 0.0);
(564539.5, 4328143.0, 85.9, 115.3, 0.0); (564539.5, 4328123.1, 84.7, 115.3, 0.0);
(564539.4, 4328103.2, 84.3, 115.3, 0.0); (564539.3, 4328083.4, 85.7, 115.3, 0.0);
(564539.2, 4328063.5, 87.8, 115.3, 0.0); (564539.1, 4328043.7, 89.9, 115.3, 0.0);
(564539.0, 4328023.8, 92.2, 115.3, 0.0); (564539.0, 4328004.0, 93.0, 115.3, 0.0);
(564538.9, 4327984.1, 93.4, 115.3, 0.0); (564538.8, 4327964.3, 95.0, 115.3, 0.0);
(564538.7, 4327944.4, 95.7, 115.3, 0.0); (564538.6, 4327924.5, 94.1, 115.3, 0.0);
(564538.5, 4327904.7, 91.8, 115.3, 0.0); (564538.4, 4327884.8, 91.8, 115.3, 0.0);
(564538.4, 4327865.0, 94.5, 115.3, 0.0); (564538.3, 4327845.1, 95.3, 115.3, 0.0);
(564538.2, 4327825.3, 94.9, 115.3, 0.0); (564538.1, 4327805.4, 95.7, 115.3, 0.0);
(564538.0, 4327785.6, 95.4, 115.1, 0.0); (564537.9, 4327765.7, 93.3, 115.3, 0.0);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(564537.8, 4327745.8, 90.9, 115.3, 0.0); (564537.8, 4327726.0, 90.8, 115.3, 0.0);
(564537.7, 4327706.1, 93.4, 114.9, 0.0); (564537.6, 4327686.3, 96.2, 96.2, 0.0);
(564537.5, 4327666.4, 96.6, 96.6, 0.0); (564537.4, 4327646.6, 95.6, 95.6, 0.0);
(564537.3, 4327626.7, 94.3, 94.3, 0.0); (564537.2, 4327606.9, 93.7, 95.9, 0.0);
(564537.2, 4327587.0, 93.9, 96.2, 0.0); (564537.1, 4327567.1, 94.4, 95.9, 0.0);
(564537.0, 4327547.3, 95.8, 95.8, 0.0); (564536.9, 4327527.4, 96.8, 96.8, 0.0);
(564536.8, 4327507.6, 97.0, 97.0, 0.0); (564536.7, 4327487.7, 96.6, 96.6, 0.0);
(564536.6, 4327467.9, 95.4, 97.0, 0.0); (564536.6, 4327448.0, 93.3, 97.0, 0.0);
(564536.5, 4327428.2, 90.6, 99.0, 0.0); (564536.4, 4327408.3, 88.3, 99.0, 0.0);
(564536.3, 4327388.5, 87.4, 104.6, 0.0); (564536.2, 4327368.6, 84.7, 104.7, 0.0);
(564536.1, 4327348.7, 84.3, 104.7, 0.0); (564536.1, 4327328.9, 84.9, 104.7, 0.0);
(564536.0, 4327309.0, 87.5, 104.7, 0.0); (564535.9, 4327289.2, 90.9, 104.7, 0.0);
(564535.8, 4327269.3, 92.2, 104.7, 0.0); (564535.7, 4327249.5, 90.6, 104.7, 0.0);
(564535.6, 4327229.6, 90.1, 104.7, 0.0); (564535.5, 4327209.8, 93.3, 103.7, 0.0);
(564535.5, 4327189.9, 97.4, 99.3, 0.0); (564535.4, 4327170.0, 98.8, 98.8, 0.0);
(564535.3, 4327150.2, 95.8, 99.5, 0.0); (564535.2, 4327130.3, 89.3, 102.9, 0.0);
(564516.7, 4327110.9, 82.7, 104.7, 0.0); (564498.2, 4327111.3, 81.9, 104.7, 0.0);
(564479.8, 4327111.7, 81.3, 104.7, 0.0); (564461.4, 4327112.2, 80.9, 104.7, 0.0);
(564442.9, 4327112.6, 80.7, 104.7, 0.0); (564424.5, 4327113.0, 80.6, 104.7, 0.0);
(564406.1, 4327113.4, 80.7, 104.7, 0.0); (564387.6, 4327113.8, 80.8, 104.7, 0.0);

```
     ( 564369.2, 4327114.2,      80.5,     104.7,       0.0);         ( 564350.8,
4327114.7,      79.8,     104.7,       0.0);
     ( 564332.3, 4327115.1,      79.2,     104.7,       0.0);         ( 564300.2,
4327104.7,      79.6,     104.7,       0.0);
     ( 564286.6, 4327094.0,      79.8,     104.7,       0.0);         ( 564273.0,
4327083.2,      80.1,     104.7,       0.0);
     ( 564259.3, 4327072.4,      81.1,     104.4,       0.0);         ( 564245.7,
4327061.6,      81.3,      98.1,       0.0);
     ( 564232.0, 4327050.9,      80.5,      99.5,       0.0);         ( 564198.8,
4327040.1,      80.1,      99.8,       0.0);
     ( 564179.3, 4327040.1,      80.7,      99.8,       0.0);         ( 564159.7,
4327040.1,      81.1,     780.0,       0.0);
     ( 564140.2, 4327040.1,      81.6,     780.0,       0.0);         ( 564120.6,
4327040.1,      82.0,     780.0,       0.0);
     ( 564101.1, 4327040.1,      81.7,     780.0,       0.0);         ( 564081.5,
4327040.1,      81.4,     780.0,       0.0);
     ( 564061.9, 4327040.1,      81.8,     780.0,       0.0);         ( 564029.5,
4327025.0,      82.3,     793.0,       0.0);
     ( 564016.5, 4327009.9,      82.5,     793.0,       0.0);         ( 564003.6,
4326994.8,      82.7,     793.0,       0.0);
     ( 563990.7, 4326979.8,      82.8,     793.0,       0.0);         ( 563977.8,
4326964.7,      83.0,     793.0,       0.0);
     ( 563964.8, 4326949.6,      83.2,     793.0,       0.0);         ( 563951.9,
4326934.5,      83.4,     793.0,       0.0);
     ( 563939.0, 4326919.4,      83.5,     793.0,       0.0);         ( 563926.0,
4326904.3,      83.6,     793.0,       0.0);
     ( 563913.1, 4326889.2,      83.8,     793.0,       0.0);         ( 563900.2,
4326874.2,      84.0,     793.0,       0.0);
     ( 563887.2, 4326859.1,      84.3,     793.0,       0.0);         ( 563874.3,
4326844.0,      84.5,     793.0,       0.0);
     ( 563842.0, 4326825.8,      84.6,     793.0,       0.0);         ( 563822.6,
4326822.8,      84.8,     793.0,       0.0);
     ( 563803.2, 4326819.7,      84.9,     793.0,       0.0);         ( 563783.8,
4326816.6,      85.0,     793.0,       0.0);
     ( 563764.4, 4326813.5,      85.5,     793.0,       0.0);         ( 563745.0,
4326810.5,      85.4,     793.0,       0.0);
     ( 563725.6, 4326807.4,      85.5,     793.0,       0.0);         ( 563706.2,
4326804.3,      85.9,     793.0,       0.0);
     ( 563686.9, 4326801.2,      86.6,     793.0,       0.0);         ( 563667.5,
4326798.1,      86.9,     793.0,       0.0);
     ( 563648.1, 4326795.1,      87.2,     793.0,       0.0);         ( 563628.7,
4326792.0,      87.4,     793.0,       0.0);
     ( 563609.3, 4326788.9,      87.7,     793.0,       0.0);         ( 563589.9,
4326785.8,      87.9,     793.0,       0.0);
     ( 563570.5, 4326782.8,      88.1,     793.0,       0.0);         ( 563551.1,
4326779.7,      88.3,     793.0,       0.0);
     ( 563531.7, 4326776.6,      88.5,     793.0,       0.0);         ( 563512.3,
4326773.5,      88.7,     793.0,       0.0);
     ( 563492.9, 4326770.4,      88.6,     793.0,       0.0);         ( 563473.5,
4326767.4,      88.5,     793.0,       0.0);
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(563454.1, 4326764.3, 88.7, 793.0, 0.0); (563434.8, 4326761.2, 88.5, 793.0, 0.0);
(563415.4, 4326758.1, 89.5, 793.0, 0.0); (563396.0, 4326755.0, 89.5, 793.0, 0.0);
(563376.6, 4326752.0, 89.6, 793.0, 0.0); (563357.2, 4326748.9, 89.8, 793.0, 0.0);
(563337.8, 4326745.8, 91.0, 793.0, 0.0); (563318.4, 4326742.7, 92.8, 793.0, 0.0);
(563299.0, 4326739.6, 93.1, 793.0, 0.0); (563279.6, 4326736.6, 91.9, 793.0, 0.0);
(563260.2, 4326733.5, 90.5, 793.0, 0.0); (563240.8, 4326730.4, 90.8, 793.0, 0.0);
(563221.4, 4326727.3, 91.2, 793.0, 0.0); (563202.0, 4326724.3, 95.2, 793.0, 0.0);
(563182.7, 4326721.2, 98.6, 793.0, 0.0); (563163.2, 4326718.1, 99.9, 793.0, 0.0);
(563143.9, 4326715.0, 99.0, 793.0, 0.0); (563124.5, 4326712.0, 96.8, 793.0, 0.0);
(563105.1, 4326708.9, 94.0, 793.0, 0.0); (563085.7, 4326705.8, 95.5, 793.0, 0.0);
(563066.3, 4326702.7, 97.8, 793.0, 0.0); (563046.9, 4326699.6, 98.6, 793.0, 0.0);
(563027.5, 4326696.6, 98.4, 793.0, 0.0); (563008.1, 4326693.5, 98.2, 793.0, 0.0);
(562988.7, 4326690.4, 98.2, 793.0, 0.0); (562969.3, 4326687.3, 97.6, 793.0, 0.0);
(562949.9, 4326684.2, 95.3, 793.0, 0.0); (562930.5, 4326681.2, 95.6, 793.0, 0.0);
(562913.2, 4326662.0, 94.8, 793.0, 0.0); (562915.2, 4326645.9, 96.5, 793.0, 0.0);
(562917.2, 4326629.8, 98.0, 793.0, 0.0); (562919.2, 4326613.7, 98.9, 793.0, 0.0);
(562901.5, 4326598.1, 99.7, 793.0, 0.0); (562881.7, 4326598.7, 101.4, 793.0, 0.0);
(562862.0, 4326599.2, 102.2, 793.0, 0.0); (562842.3, 4326599.7, 101.3, 793.0, 0.0);
(562822.5, 4326600.2, 100.4, 793.0, 0.0); (562802.8, 4326600.7, 99.8, 793.0, 0.0);

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     ( 562783.1, 4326601.2,      98.9,     793.0,       0.0);         ( 562763.3,
4326601.7,      98.4,     793.0,       0.0);
     ( 562743.6, 4326602.2,      98.6,     793.0,       0.0);         ( 562723.9,
4326602.7,      99.0,     793.0,       0.0);
     ( 562704.1, 4326603.2,      99.2,     793.0,       0.0);         ( 562684.4,
4326603.7,      99.5,     793.0,       0.0);
     ( 562664.7, 4326604.2,      99.6,     793.0,       0.0);         ( 562644.9,
4326604.7,      99.8,     793.0,       0.0);
     ( 562625.2, 4326605.2,      99.8,     793.0,       0.0);         ( 562605.5,
4326605.7,     100.0,     793.0,       0.0);
     ( 562585.7, 4326606.2,     100.5,     793.0,       0.0);         ( 562566.0,
4326606.7,     101.5,     793.0,       0.0);
     ( 562546.2, 4326607.2,     101.3,     793.0,       0.0);         ( 562526.5,
4326607.7,     100.5,     793.0,       0.0);
     ( 562506.8, 4326608.2,     101.1,     793.0,       0.0);         ( 562487.1,
4326608.7,     101.1,     793.0,       0.0);
     ( 562467.3, 4326609.2,     101.2,     793.0,       0.0);         ( 562447.6,
4326609.7,     101.3,     793.0,       0.0);
     ( 562427.9, 4326610.2,     101.3,     793.0,       0.0);         ( 562408.1,
4326610.7,     101.4,     793.0,       0.0);
     ( 562388.4, 4326611.2,     101.5,     793.0,       0.0);         ( 562368.7,
4326611.7,     101.5,     793.0,       0.0);
     ( 562348.9, 4326612.2,     101.6,     793.0,       0.0);         ( 562329.2,
4326612.7,     101.7,     793.0,       0.0);
     ( 562309.5, 4326613.2,     101.8,     793.0,       0.0);         ( 562289.7,
4326613.7,     101.9,     793.0,       0.0);
     ( 562270.0, 4326614.2,     102.0,     793.0,       0.0);         ( 562250.2,
4326614.7,     102.1,     793.0,       0.0);
     ( 562230.5, 4326615.2,     102.2,     793.0,       0.0);         ( 562210.8,
4326615.8,     102.3,     793.0,       0.0);
     ( 562191.0, 4326616.2,     102.4,     793.0,       0.0);         ( 562171.3,
4326616.8,     102.5,     793.0,       0.0);
     ( 562151.6, 4326617.3,     102.5,     793.0,       0.0);         ( 562132.0,
4326637.8,     102.5,     793.0,       0.0);
     ( 562132.2, 4326657.7,     102.3,     793.0,       0.0);         ( 562132.4,
4326677.7,     101.9,     793.0,       0.0);
     ( 562132.6, 4326697.7,     101.7,     793.0,       0.0);         ( 562132.8,
4326717.7,     101.7,     793.0,       0.0);
     ( 562132.9, 4326737.7,     101.6,     793.0,       0.0);         ( 562133.1,
4326757.7,     101.5,     793.0,       0.0);
     ( 562133.3, 4326777.7,     101.4,     793.0,       0.0);         ( 562133.5,
4326797.7,     101.2,     793.0,       0.0);
     ( 562133.7, 4326817.7,     101.1,     793.0,       0.0);         ( 562133.8,
4326837.6,     101.0,     793.0,       0.0);
     ( 562134.0, 4326857.6,     100.8,     793.0,       0.0);         ( 562134.2,
4326877.6,     100.7,     793.0,       0.0);
     ( 562134.4, 4326897.6,     100.5,     793.0,       0.0);         ( 562134.6,
4326917.6,     100.4,     793.0,       0.0);
     ( 562134.8, 4326937.6,     100.3,     793.0,       0.0);         ( 562134.9,
4326957.6,     100.2,     793.0,       0.0);
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*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(562135.5, 4327017.6, 99.8, 793.0, 0.0); (562135.7,
4327037.5, 99.7, 793.0, 0.0);
(562135.8, 4327057.5, 99.5, 793.0, 0.0); (562136.0,
4327077.5, 99.4, 793.0, 0.0);
(562136.2, 4327097.5, 99.3, 793.0, 0.0); (562136.4,
4327117.5, 99.2, 793.0, 0.0);
(562136.6, 4327137.5, 99.1, 793.0, 0.0); (562136.8,
4327157.5, 98.9, 793.0, 0.0);
(562136.9, 4327177.5, 98.8, 793.0, 0.0); (562137.1,
4327197.5, 98.6, 793.0, 0.0);
(562137.3, 4327217.5, 98.4, 793.0, 0.0); (562137.5,
4327237.5, 98.2, 793.0, 0.0);
(562137.7, 4327257.4, 98.0, 793.0, 0.0); (562137.8,
4327277.4, 97.7, 793.0, 0.0);
(562138.0, 4327297.4, 97.6, 793.0, 0.0); (562138.2,
4327317.4, 97.4, 793.0, 0.0);
(562138.4, 4327337.4, 97.3, 793.0, 0.0); (562138.6,
4327357.4, 97.2, 793.0, 0.0);
(562138.8, 4327377.4, 97.1, 793.0, 0.0); (562138.9,
4327397.4, 97.0, 793.0, 0.0);
(562139.1, 4327417.4, 97.0, 793.0, 0.0); (562139.3,
4327437.3, 96.7, 793.0, 0.0);
(562139.5, 4327457.3, 96.5, 793.0, 0.0); (562139.7,
4327477.3, 96.2, 793.0, 0.0);
(562139.8, 4327497.3, 96.1, 793.0, 0.0); (562140.0,
4327517.3, 96.0, 793.0, 0.0);
(562140.2, 4327537.3, 96.1, 793.0, 0.0); (562140.4,
4327557.3, 96.1, 793.0, 0.0);
(562140.6, 4327577.3, 96.1, 793.0, 0.0); (562140.8,
4327597.3, 95.8, 793.0, 0.0);
(562140.9, 4327617.2, 95.2, 793.0, 0.0); (562141.1,
4327637.2, 94.5, 793.0, 0.0);
(562141.3, 4327657.2, 94.0, 793.0, 0.0); (562141.5,
4327677.2, 93.9, 793.0, 0.0);
(562141.7, 4327697.2, 93.8, 793.0, 0.0); (562141.8,
4327717.2, 93.7, 793.0, 0.0);

(562142.0, 4327737.2, 93.5, 793.0, 0.0); (562142.2,
4327757.2, 93.4, 793.0, 0.0);
(562142.4, 4327777.2, 93.3, 793.0, 0.0); (562142.6,
4327797.2, 93.2, 793.0, 0.0);
(562142.8, 4327817.1, 93.1, 793.0, 0.0); (562142.9,
4327837.1, 93.0, 793.0, 0.0);
(562143.1, 4327857.1, 92.9, 793.0, 0.0); (562143.3,
4327877.1, 92.7, 793.0, 0.0);
(562143.5, 4327897.1, 92.5, 793.0, 0.0); (562143.7,
4327917.1, 92.5, 793.0, 0.0);
(562143.8, 4327937.1, 92.3, 793.0, 0.0); (562144.0,
4327957.1, 92.2, 793.0, 0.0);
(562144.2, 4327977.1, 92.0, 793.0, 0.0); (562144.4,
4327997.1, 92.8, 793.0, 0.0);
(562144.6, 4328017.0, 93.8, 793.0, 0.0); (562144.8,
4328037.0, 94.3, 793.0, 0.0);
(562144.9, 4328057.0, 94.2, 793.0, 0.0); (562145.1,
4328077.0, 94.0, 793.0, 0.0);
(562145.3, 4328097.0, 93.6, 793.0, 0.0); (562145.5,
4328117.0, 93.1, 793.0, 0.0);
(562145.7, 4328137.0, 92.6, 793.0, 0.0); (562145.8,
4328157.0, 92.4, 793.0, 0.0);
(562146.0, 4328177.0, 92.2, 793.0, 0.0); (562146.2,
4328197.0, 92.3, 793.0, 0.0);
(562146.4, 4328217.0, 92.5, 793.0, 0.0); (562146.6,
4328236.9, 93.0, 793.0, 0.0);
(562146.8, 4328256.9, 93.3, 793.0, 0.0);

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***

(1=YES; 0=NO)

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\Met data\2015-2019 Aermet Data Oroville.SFC
Met Version: 19191
Profile file: ..\Met data\2015-2019 Aermet Data Oroville.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 93210 Name: UNKNOWN Year: 2015

Upper air station no.: 23230 Name: OAKLAND/WSO_AP Year: 2015

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
15	01	01	1	01	-12.7	0.118	-9.000	-9.000	-999.	97.	11.7	0.18	0.58	1.00	2.36	291.	10.0	277.0	2.0
15	01	01	1	02	-16.0	0.138	-9.000	-9.000	-999.	123.	14.9	0.07	0.58	1.00	2.86	148.	10.0	275.9	2.0

```
 15 01 01   1 03  -21.8  0.187 -9.000 -9.000 -999.  194.     27.2  0.14   0.58
1.00    2.86   74.   10.0  274.2    2.0
 15 01 01   1 04   -5.2  0.072 -9.000 -9.000 -999.   57.      6.4  0.07   0.58
1.00    1.76  183.   10.0  274.2    2.0
 15 01 01   1 05  -11.6  0.110 -9.000 -9.000 -999.   88.     10.5  0.14   0.58
1.00    2.36   83.   10.0  273.1    2.0
 15 01 01   1 06 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.16   0.58
1.00    0.00    0.   10.0  273.1    2.0
 15 01 01   1 07   -6.4  0.082 -9.000 -9.000 -999.   57.      7.8  0.14   0.58
1.00    1.76   75.   10.0  272.5    2.0
 15 01 01   1 08  -29.8  0.255 -9.000 -9.000 -999.  310.     50.6  0.14   0.58
1.00    3.36   83.   10.0  273.8    2.0
 15 01 01   1 09   -6.4  0.200 -9.000 -9.000 -999.  216.    114.6  0.14   0.58
0.41    2.36   87.   10.0  277.0    2.0
 15 01 01   1 10   27.5  0.413  0.602  0.006  287.  638.   -233.1  0.08   0.58
0.28    4.86  171.   10.0  279.2    2.0
 15 01 01   1 11   53.4  0.422  0.825  0.006  380.  657.   -127.2  0.08   0.58
0.23    4.86  154.   10.0  279.9    2.0
 15 01 01   1 12   67.9  0.349  0.913  0.007  406.  498.    -56.6  0.08   0.58
0.21    3.86  166.   10.0  280.4    2.0
 15 01 01   1 13   70.1  0.382  0.942  0.005  431.  566.    -72.0  0.07   0.58
0.21    4.36  143.   10.0  280.9    2.0
 15 01 01   1 14   59.7  0.417  0.929  0.006  485.  646.   -109.8  0.07   0.58
0.22    4.86  149.   10.0  281.4    2.0
 15 01 01   1 15   37.4  0.298  0.809  0.006  512.  400.    -64.0  0.07   0.58
0.26    3.36  182.   10.0  281.4    2.0
 15 01 01   1 16    5.7  0.243  0.432  0.006  514.  289.   -229.7  0.08   0.58
0.35    2.86  174.   10.0  281.4    2.0
 15 01 01   1 17  -16.5  0.156 -9.000 -9.000 -999.  150.     20.7  0.07   0.58
0.62    2.86  121.   10.0  279.9    2.0
 15 01 01   1 18  -21.7  0.189 -9.000 -9.000 -999.  198.     28.3  0.14   0.58
1.00    2.86   87.   10.0  278.8    2.0
 15 01 01   1 19   -6.4  0.082 -9.000 -9.000 -999.   64.      7.9  0.14   0.58
1.00    1.76   84.   10.0  277.5    2.0
 15 01 01   1 20   -6.4  0.082 -9.000 -9.000 -999.   57.      7.9  0.14   0.58
1.00    1.76   67.   10.0  277.0    2.0
 15 01 01   1 21  -13.0  0.120 -9.000 -9.000 -999.   99.     11.9  0.19   0.58
1.00    2.36   40.   10.0  275.4    2.0
 15 01 01   1 22  -24.8  0.214 -9.000 -9.000 -999.  238.     35.8  0.19   0.58
1.00    2.86   52.   10.0  275.9    2.0
 15 01 01   1 23   -6.4  0.082 -9.000 -9.000 -999.   72.      7.9  0.14   0.58
1.00    1.76   80.   10.0  275.9    2.0
 15 01 01   1 24   -7.2  0.089 -9.000 -9.000 -999.   64.      8.9  0.19   0.58
1.00    1.76   50.   10.0  275.4    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 15 01 01 01   10.0 1  291.    2.36   277.1   99.0  -99.00  -99.00
```

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
562162.00	4326589.00	0.00209	563523.00	4326392.00	0.00228
561352.00	4328174.00	0.00131	564143.00	4330100.00	0.00055
564144.00	4333548.00	0.00017	570497.00	4332064.00	0.00007
571703.00	4326731.00	0.00016	572581.00	4333193.00	0.00006
572606.00	4334093.00	0.00005	572804.00	4334125.00	0.00005
562111.63	4326586.05	0.00196	562211.63	4326586.05	0.00236
562311.63	4326586.05	0.00291	562411.63	4326586.05	0.00328
562511.63	4326586.05	0.00369	562611.63	4326586.05	0.00419
562711.63	4326586.05	0.00449	562811.63	4326586.05	0.00404
562911.63	4326586.05	0.00437	563011.63	4326586.05	0.00204
563111.63	4326586.05	0.00249	563211.63	4326586.05	0.00210
563311.63	4326586.05	0.00305	563411.63	4326586.05	0.00332
563511.63	4326586.05	0.00239	563611.63	4326586.05	0.00259
563711.63	4326586.05	0.00316	563811.63		

4326586.05 0.00304
563911.63 4326586.05 0.00231 564011.63
4326586.05 0.00278
564111.63 4326586.05 0.00240 564211.63
4326586.05 0.00225
564311.63 4326586.05 0.00216 564411.63
4326586.05 0.00209
564511.63 4326586.05 0.00197 562111.63
4326686.05 0.00267
563011.63 4326686.05 0.00592 563111.63
4326686.05 0.00608
563211.63 4326686.05 0.00545 563311.63
4326686.05 0.00391
563411.63 4326686.05 0.00487 563511.63
4326686.05 0.00365
563611.63 4326686.05 0.00426 563711.63
4326686.05 0.00283
563811.63 4326686.05 0.00258 563911.63
4326686.05 0.00284
564011.63 4326686.05 0.00336 564111.63
4326686.05 0.00280
564211.63 4326686.05 0.00256 564311.63
4326686.05 0.00239
564411.63 4326686.05 0.00223 564511.63
4326686.05 0.00211
562111.63 4326786.05 0.00351 563611.63
4326786.05 0.00647
563711.63 4326786.05 0.00553 563811.63
4326786.05 0.00488
563911.63 4326786.05 0.00429 564011.63
4326786.05 0.00372
564111.63 4326786.05 0.00329 564211.63
4326786.05 0.00297
564311.63 4326786.05 0.00272 564411.63
4326786.05 0.00252
564511.63 4326786.05 0.00235 562111.63
4326886.05 0.00413
563911.63 4326886.05 0.00671 564011.63
4326886.05 0.00471
564111.63 4326886.05 0.00397 564211.63
4326886.05 0.00351
564311.63 4326886.05 0.00319 564411.63
4326886.05 0.00291
564511.63 4326886.05 0.00268 562111.63
4326986.05 0.00465
564011.63 4326986.05 0.00649 564111.63
4326986.05 0.00498
564211.63 4326986.05 0.00440 564311.63
4326986.05 0.00392
564411.63 4326986.05 0.00348 564511.63

4326986.05 0.00314
562111.63 4327086.05 0.00505 564311.63 4327086.05 0.00558
*** AERMOD - VERSION 23132 *** *** Janus Solar and Battery Strorage Project-DPM *** 08/02/24
*** AERMET - VERSION 19191 *** *** Met data: Oroville 2015-2019 *** 06:53:13

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564411.63	4327086.05	0.00463	564511.63	4327086.05	0.00419
562111.63	4327186.05	0.00546	562111.63	4327286.05	0.00602
562111.63	4327386.05	0.00621	562111.63	4327486.05	0.00634
562111.63	4327586.05	0.00642	562111.63	4327686.05	0.00655
562111.63	4327786.05	0.00649	562111.63	4327886.05	0.00632
562111.63	4327986.05	0.00611	562111.63	4328086.05	0.00602
562111.63	4328186.05	0.00552	562111.63	4328286.05	0.00484
562211.63	4328286.05	0.00759	562311.63	4328286.05	0.00829
562411.63	4328286.05	0.00872	562511.63	4328286.05	0.00862
562611.63	4328286.05	0.00915	562711.63	4328286.05	0.00924
562811.63	4328286.05	0.00928	562911.63	4328286.05	0.00940
563011.63	4328286.05	0.00940	563111.63	4328286.05	0.00941
563211.63	4328286.05	0.00942	563311.63		

4328286.05 0.00928
563411.63 4328286.05 0.00929 563511.63
4328286.05 0.00874
563611.63 4328286.05 0.00911 563711.63
4328286.05 0.00850
563811.63 4328286.05 0.00898 563911.63
4328286.05 0.00879
564011.63 4328286.05 0.00771 564111.63
4328286.05 0.00725
564211.63 4328286.05 0.00709 564311.63
4328286.05 0.00731
564411.63 4328286.05 0.00617 564511.63
4328286.05 0.00463
560111.63 4324586.05 0.00001 560211.63
4324586.05 0.00001
560311.63 4324586.05 0.00001 560411.63
4324586.05 0.00001
560511.63 4324586.05 0.00001 560611.63
4324586.05 0.00001
560711.63 4324586.05 0.00001 560811.63
4324586.05 0.00002
560911.63 4324586.05 0.00002 561011.63
4324586.05 0.00003
561111.63 4324586.05 0.00003 561211.63
4324586.05 0.00004
561311.63 4324586.05 0.00005 561411.63
4324586.05 0.00006
561511.63 4324586.05 0.00003 561611.63
4324586.05 0.00003
561711.63 4324586.05 0.00003 561811.63
4324586.05 0.00006
561911.63 4324586.05 0.00007 562011.63
4324586.05 0.00007
562111.63 4324586.05 0.00007 562211.63
4324586.05 0.00005
562311.63 4324586.05 0.00003 562411.63
4324586.05 0.00003
562511.63 4324586.05 0.00005 562611.63
4324586.05 0.00003
562711.63 4324586.05 0.00003 562811.63
4324586.05 0.00005
562911.63 4324586.05 0.00006 563011.63
4324586.05 0.00006
563111.63 4324586.05 0.00007 563211.63
4324586.05 0.00006
563311.63 4324586.05 0.00008 563411.63
4324586.05 0.00004
563511.63 4324586.05 0.00006 563611.63
4324586.05 0.00011
563711.63 4324586.05 0.00006 563811.63

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5
YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS
***

** CONC OF DPM IN MICROGRAMS/M**3
**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564311.63	4324586.05	0.00009	564411.63	4324586.05	0.00028
564511.63	4324586.05	0.00033	564611.63	4324586.05	0.00034
564711.63	4324586.05	0.00029	564811.63	4324586.05	0.00009
564911.63	4324586.05	0.00023	565011.63	4324586.05	0.00018
565111.63	4324586.05	0.00009	565211.63	4324586.05	0.00020
565311.63	4324586.05	0.00011	565411.63	4324586.05	0.00010
565511.63	4324586.05	0.00010	565611.63	4324586.05	0.00010
565711.63	4324586.05	0.00010	565811.63	4324586.05	0.00010
565911.63	4324586.05	0.00012	566011.63	4324586.05	0.00010
566111.63	4324586.05	0.00010	566211.63	4324586.05	0.00010
566311.63	4324586.05	0.00010	566411.63	4324586.05	0.00011
566511.63	4324586.05	0.00010	560111.63		

4324686.05 0.00001
560211.63 4324686.05 0.00001 560311.63
4324686.05 0.00001
560411.63 4324686.05 0.00001 560511.63
4324686.05 0.00001
560611.63 4324686.05 0.00001 560711.63
4324686.05 0.00001
560811.63 4324686.05 0.00002 560911.63
4324686.05 0.00003
561011.63 4324686.05 0.00003 561111.63
4324686.05 0.00004
561211.63 4324686.05 0.00004 561311.63
4324686.05 0.00004
561411.63 4324686.05 0.00006 561511.63
4324686.05 0.00005
561611.63 4324686.05 0.00006 561711.63
4324686.05 0.00003
561811.63 4324686.05 0.00008 561911.63
4324686.05 0.00009
562011.63 4324686.05 0.00007 562111.63
4324686.05 0.00008
562211.63 4324686.05 0.00006 562311.63
4324686.05 0.00004
562411.63 4324686.05 0.00004 562511.63
4324686.05 0.00004
562611.63 4324686.05 0.00006 562711.63
4324686.05 0.00005
562811.63 4324686.05 0.00003 562911.63
4324686.05 0.00005
563011.63 4324686.05 0.00006 563111.63
4324686.05 0.00009
563211.63 4324686.05 0.00010 563311.63
4324686.05 0.00012
563411.63 4324686.05 0.00011 563511.63
4324686.05 0.00010
563611.63 4324686.05 0.00012 563711.63
4324686.05 0.00006
563811.63 4324686.05 0.00011 563911.63
4324686.05 0.00008
564011.63 4324686.05 0.00007 564111.63
4324686.05 0.00006
564211.63 4324686.05 0.00008 564311.63
4324686.05 0.00021
564411.63 4324686.05 0.00011 564511.63
4324686.05 0.00038
564611.63 4324686.05 0.00037 564711.63
4324686.05 0.00037
564811.63 4324686.05 0.00029 564911.63
4324686.05 0.00034
565011.63 4324686.05 0.00010 565111.63

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5
YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS
***

** CONC OF DPM IN MICROGRAMS/M**3
**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
565811.63	4324686.05	0.00010	565911.63	4324686.05	0.00011
566011.63	4324686.05	0.00014	566111.63	4324686.05	0.00011
566211.63	4324686.05	0.00010	566311.63	4324686.05	0.00011
566411.63	4324686.05	0.00010	566511.63	4324686.05	0.00011
560111.63	4324786.05	0.00001	560211.63	4324786.05	0.00001
560311.63	4324786.05	0.00001	560411.63	4324786.05	0.00001
560511.63	4324786.05	0.00001	560611.63	4324786.05	0.00001
560711.63	4324786.05	0.00001	560811.63	4324786.05	0.00002
560911.63	4324786.05	0.00003	561011.63	4324786.05	0.00004
561111.63	4324786.05	0.00005	561211.63	4324786.05	0.00005
561311.63	4324786.05	0.00003	561411.63		

4324786.05 0.00005
561511.63 4324786.05 0.00007 561611.63
4324786.05 0.00008
561711.63 4324786.05 0.00003 561811.63
4324786.05 0.00008
561911.63 4324786.05 0.00009 562011.63
4324786.05 0.00009
562111.63 4324786.05 0.00006 562211.63
4324786.05 0.00005
562311.63 4324786.05 0.00005 562411.63
4324786.05 0.00006
562511.63 4324786.05 0.00004 562611.63
4324786.05 0.00005
562711.63 4324786.05 0.00008 562811.63
4324786.05 0.00005
562911.63 4324786.05 0.00004 563011.63
4324786.05 0.00005
563111.63 4324786.05 0.00005 563211.63
4324786.05 0.00005
563311.63 4324786.05 0.00008 563411.63
4324786.05 0.00010
563511.63 4324786.05 0.00014 563611.63
4324786.05 0.00021
563711.63 4324786.05 0.00009 563811.63
4324786.05 0.00008
563911.63 4324786.05 0.00017 564011.63
4324786.05 0.00011
564111.63 4324786.05 0.00011 564211.63
4324786.05 0.00009
564311.63 4324786.05 0.00030 564411.63
4324786.05 0.00011
564511.63 4324786.05 0.00013 564611.63
4324786.05 0.00040
564711.63 4324786.05 0.00042 564811.63
4324786.05 0.00042
564911.63 4324786.05 0.00032 565011.63
4324786.05 0.00015
565111.63 4324786.05 0.00021 565211.63
4324786.05 0.00015
565311.63 4324786.05 0.00013 565411.63
4324786.05 0.00013
565511.63 4324786.05 0.00011 565611.63
4324786.05 0.00011
565711.63 4324786.05 0.00012 565811.63
4324786.05 0.00013
565911.63 4324786.05 0.00013 566011.63
4324786.05 0.00013
566111.63 4324786.05 0.00015 566211.63
4324786.05 0.00016
566311.63 4324786.05 0.00016 566411.63

4324786.05 0.00015
 566511.63 4324786.05 0.00013 560111.63
4324886.05 0.00001
 560211.63 4324886.05 0.00001 560311.63
4324886.05 0.00001
 560411.63 4324886.05 0.00001 560511.63
4324886.05 0.00001
 560611.63 4324886.05 0.00001 560711.63
4324886.05 0.00002

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
560811.63	4324886.05	0.00003	560911.63	4324886.05	0.00003
561011.63	4324886.05	0.00004	561111.63	4324886.05	0.00006
561211.63	4324886.05	0.00006	561311.63	4324886.05	0.00003
561411.63	4324886.05	0.00003	561511.63	4324886.05	0.00006
561611.63	4324886.05	0.00011	561711.63	4324886.05	0.00007
561811.63	4324886.05	0.00010	561911.63	4324886.05	0.00011
562011.63	4324886.05	0.00008	562111.63	4324886.05	0.00005
562211.63	4324886.05	0.00007	562311.63	4324886.05	0.00005
562411.63	4324886.05	0.00006	562511.63	4324886.05	0.00006
562611.63	4324886.05	0.00004	562711.63		

4324886.05 0.00007
562811.63 4324886.05 0.00008 562911.63
4324886.05 0.00005
563011.63 4324886.05 0.00005 563111.63
4324886.05 0.00005
563211.63 4324886.05 0.00006 563311.63
4324886.05 0.00008
563411.63 4324886.05 0.00012 563511.63
4324886.05 0.00006
563611.63 4324886.05 0.00011 563711.63
4324886.05 0.00027
563811.63 4324886.05 0.00009 563911.63
4324886.05 0.00013
564011.63 4324886.05 0.00027 564111.63
4324886.05 0.00021
564211.63 4324886.05 0.00009 564311.63
4324886.05 0.00024
564411.63 4324886.05 0.00038 564511.63
4324886.05 0.00021
564611.63 4324886.05 0.00035 564711.63
4324886.05 0.00045
564811.63 4324886.05 0.00045 564911.63
4324886.05 0.00043
565011.63 4324886.05 0.00021 565111.63
4324886.05 0.00037
565211.63 4324886.05 0.00021 565311.63
4324886.05 0.00018
565411.63 4324886.05 0.00012 565511.63
4324886.05 0.00013
565611.63 4324886.05 0.00011 565711.63
4324886.05 0.00012
565811.63 4324886.05 0.00011 565911.63
4324886.05 0.00012
566011.63 4324886.05 0.00012 566111.63
4324886.05 0.00012
566211.63 4324886.05 0.00015 566311.63
4324886.05 0.00016
566411.63 4324886.05 0.00014 566511.63
4324886.05 0.00018
560111.63 4324986.05 0.00001 560211.63
4324986.05 0.00001
560311.63 4324986.05 0.00001 560411.63
4324986.05 0.00001
560511.63 4324986.05 0.00001 560611.63
4324986.05 0.00001
560711.63 4324986.05 0.00002 560811.63
4324986.05 0.00003
560911.63 4324986.05 0.00003 561011.63
4324986.05 0.00005
561111.63 4324986.05 0.00006 561211.63

4324986.05   0.00007
         561311.63   4324986.05   0.00003   561411.63
4324986.05   0.00003
         561511.63   4324986.05   0.00003   561611.63
4324986.05   0.00011
         561711.63   4324986.05   0.00012   561811.63
4324986.05   0.00012
         561911.63   4324986.05   0.00012   562011.63
4324986.05   0.00011
         562111.63   4324986.05   0.00009   562211.63
4324986.05   0.00006

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                    *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                                ** CONC OF DPM   IN MICROGRAMS/M**3
                     **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         562311.63   4324986.05   0.00006   562411.63
4324986.05   0.00008
         562511.63   4324986.05   0.00006   562611.63
4324986.05   0.00007
         562711.63   4324986.05   0.00006   562811.63
4324986.05   0.00009
         562911.63   4324986.05   0.00011   563011.63
4324986.05   0.00011
         563111.63   4324986.05   0.00011   563211.63
4324986.05   0.00011
         563311.63   4324986.05   0.00017   563411.63
4324986.05   0.00022
         563511.63   4324986.05   0.00024   563611.63
4324986.05   0.00025
         563711.63   4324986.05   0.00025   563811.63
4324986.05   0.00033
         563911.63   4324986.05   0.00030   564011.63

4324986.05 0.00029
564111.63 4324986.05 0.00033 564211.63
4324986.05 0.00031
564311.63 4324986.05 0.00041 564411.63
4324986.05 0.00045
564511.63 4324986.05 0.00047 564611.63
4324986.05 0.00048
564711.63 4324986.05 0.00049 564811.63
4324986.05 0.00050
564911.63 4324986.05 0.00049 565011.63
4324986.05 0.00048
565111.63 4324986.05 0.00038 565211.63
4324986.05 0.00036
565311.63 4324986.05 0.00015 565411.63
4324986.05 0.00018
565511.63 4324986.05 0.00015 565611.63
4324986.05 0.00014
565711.63 4324986.05 0.00015 565811.63
4324986.05 0.00015
565911.63 4324986.05 0.00013 566011.63
4324986.05 0.00013
566111.63 4324986.05 0.00014 566211.63
4324986.05 0.00012
566311.63 4324986.05 0.00012 566411.63
4324986.05 0.00014
566511.63 4324986.05 0.00011 560111.63
4325086.05 0.00001
560211.63 4325086.05 0.00001 560311.63
4325086.05 0.00001
560411.63 4325086.05 0.00001 560511.63
4325086.05 0.00001
560611.63 4325086.05 0.00001 560711.63
4325086.05 0.00002
560811.63 4325086.05 0.00003 560911.63
4325086.05 0.00004
561011.63 4325086.05 0.00006 561111.63
4325086.05 0.00007
561211.63 4325086.05 0.00007 561311.63
4325086.05 0.00003
561411.63 4325086.05 0.00005 561511.63
4325086.05 0.00005
561611.63 4325086.05 0.00007 561711.63
4325086.05 0.00015
561811.63 4325086.05 0.00015 561911.63
4325086.05 0.00014
562011.63 4325086.05 0.00010 562111.63
4325086.05 0.00007
562211.63 4325086.05 0.00007 562311.63
4325086.05 0.00008
562411.63 4325086.05 0.00010 562511.63

4325086.05 0.00009
 562611.63 4325086.05 0.00006 562711.63 4325086.05 0.00011
 562811.63 4325086.05 0.00007 562911.63 4325086.05 0.00006
 563011.63 4325086.05 0.00010 563111.63 4325086.05 0.00016
 563211.63 4325086.05 0.00016 563311.63 4325086.05 0.00014
 563411.63 4325086.05 0.00011 563511.63 4325086.05 0.00012
 563611.63 4325086.05 0.00014 563711.63 4325086.05 0.00016

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
563811.63	4325086.05	0.00027	563911.63	4325086.05	0.00033
564011.63	4325086.05	0.00022	564111.63	4325086.05	0.00042
564211.63	4325086.05	0.00044	564311.63	4325086.05	0.00046
564411.63	4325086.05	0.00045	564511.63	4325086.05	0.00038
564611.63	4325086.05	0.00035	564711.63	4325086.05	0.00050
564811.63	4325086.05	0.00054	564911.63	4325086.05	0.00056
565011.63	4325086.05	0.00054	565111.63	4325086.05	0.00044
565211.63	4325086.05	0.00023	565311.63		

4325086.05 0.00042
565411.63 4325086.05 0.00017 565511.63
4325086.05 0.00015
565611.63 4325086.05 0.00025 565711.63
4325086.05 0.00016
565811.63 4325086.05 0.00024 565911.63
4325086.05 0.00015
566011.63 4325086.05 0.00013 566111.63
4325086.05 0.00013
566211.63 4325086.05 0.00013 566311.63
4325086.05 0.00011
566411.63 4325086.05 0.00012 566511.63
4325086.05 0.00013
560111.63 4325186.05 0.00001 560211.63
4325186.05 0.00001
560311.63 4325186.05 0.00001 560411.63
4325186.05 0.00001
560511.63 4325186.05 0.00001 560611.63
4325186.05 0.00001
560711.63 4325186.05 0.00002 560811.63
4325186.05 0.00002
560911.63 4325186.05 0.00003 561011.63
4325186.05 0.00005
561111.63 4325186.05 0.00009 561211.63
4325186.05 0.00005
561311.63 4325186.05 0.00003 561411.63
4325186.05 0.00005
561511.63 4325186.05 0.00010 561611.63
4325186.05 0.00011
561711.63 4325186.05 0.00015 561811.63
4325186.05 0.00017
561911.63 4325186.05 0.00017 562011.63
4325186.05 0.00015
562111.63 4325186.05 0.00015 562211.63
4325186.05 0.00013
562311.63 4325186.05 0.00011 562411.63
4325186.05 0.00008
562511.63 4325186.05 0.00008 562611.63
4325186.05 0.00008
562711.63 4325186.05 0.00018 562811.63
4325186.05 0.00012
562911.63 4325186.05 0.00011 563011.63
4325186.05 0.00014
563111.63 4325186.05 0.00013 563211.63
4325186.05 0.00009
563311.63 4325186.05 0.00009 563411.63
4325186.05 0.00008
563511.63 4325186.05 0.00014 563611.63
4325186.05 0.00013
563711.63 4325186.05 0.00017 563811.63

4325186.05 0.00028
563911.63 4325186.05 0.00016 564011.63
4325186.05 0.00018
564111.63 4325186.05 0.00029 564211.63
4325186.05 0.00022
564311.63 4325186.05 0.00039 564411.63
4325186.05 0.00040
564511.63 4325186.05 0.00020 564611.63
4325186.05 0.00018
564711.63 4325186.05 0.00044 564811.63
4325186.05 0.00047
564911.63 4325186.05 0.00058 565011.63
4325186.05 0.00060
565111.63 4325186.05 0.00060 565211.63
4325186.05 0.00052

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
565311.63	4325186.05	0.00054	565411.63	4325186.05	0.00028
565511.63	4325186.05	0.00019	565611.63	4325186.05	0.00018
565711.63	4325186.05	0.00047	565811.63	4325186.05	0.00035
565911.63	4325186.05	0.00017	566011.63	4325186.05	0.00019
566111.63	4325186.05	0.00018	566211.63	4325186.05	0.00013
566311.63	4325186.05	0.00013	566411.63	4325186.05	0.00013
566511.63	4325186.05	0.00013	560111.63		

4325286.05 0.00001
560211.63 4325286.05 0.00001 560311.63
4325286.05 0.00001
560411.63 4325286.05 0.00001 560511.63
4325286.05 0.00001
560611.63 4325286.05 0.00002 560711.63
4325286.05 0.00004
560811.63 4325286.05 0.00004 560911.63
4325286.05 0.00003
561011.63 4325286.05 0.00006 561111.63
4325286.05 0.00010
561211.63 4325286.05 0.00005 561311.63
4325286.05 0.00005
561411.63 4325286.05 0.00006 561511.63
4325286.05 0.00010
561611.63 4325286.05 0.00016 561711.63
4325286.05 0.00020
561811.63 4325286.05 0.00019 561911.63
4325286.05 0.00021
562011.63 4325286.05 0.00020 562111.63
4325286.05 0.00009
562211.63 4325286.05 0.00009 562311.63
4325286.05 0.00010
562411.63 4325286.05 0.00014 562511.63
4325286.05 0.00018
562611.63 4325286.05 0.00021 562711.63
4325286.05 0.00023
562811.63 4325286.05 0.00018 562911.63
4325286.05 0.00013
563011.63 4325286.05 0.00010 563111.63
4325286.05 0.00009
563211.63 4325286.05 0.00010 563311.63
4325286.05 0.00009
563411.63 4325286.05 0.00010 563511.63
4325286.05 0.00016
563611.63 4325286.05 0.00010 563711.63
4325286.05 0.00015
563811.63 4325286.05 0.00024 563911.63
4325286.05 0.00012
564011.63 4325286.05 0.00020 564111.63
4325286.05 0.00016
564211.63 4325286.05 0.00022 564311.63
4325286.05 0.00038
564411.63 4325286.05 0.00024 564511.63
4325286.05 0.00017
564611.63 4325286.05 0.00020 564711.63
4325286.05 0.00021
564811.63 4325286.05 0.00025 564911.63
4325286.05 0.00054
565011.63 4325286.05 0.00065 565111.63

4325286.05   0.00065
         565211.63   4325286.05   0.00065   565311.63
4325286.05   0.00052
         565411.63   4325286.05   0.00044   565511.63
4325286.05   0.00037
         565611.63   4325286.05   0.00026   565711.63
4325286.05   0.00044
         565811.63   4325286.05   0.00047   565911.63
4325286.05   0.00039
         566011.63   4325286.05   0.00017   566111.63
4325286.05   0.00014
         566211.63   4325286.05   0.00014   566311.63
4325286.05   0.00017
         566411.63   4325286.05   0.00014   566511.63
4325286.05   0.00017
         560111.63   4325386.05   0.00001   560211.63
4325386.05   0.00001

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF DPM   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         560311.63   4325386.05   0.00001   560411.63
4325386.05   0.00001
         560511.63   4325386.05   0.00001   560611.63
4325386.05   0.00004
         560711.63   4325386.05   0.00006   560811.63
4325386.05   0.00008
         560911.63   4325386.05   0.00009   561011.63
4325386.05   0.00010
         561111.63   4325386.05   0.00013   561211.63
4325386.05   0.00011
         561311.63   4325386.05   0.00005   561411.63

4325386.05 0.00008
561511.63 4325386.05 0.00009 561611.63
4325386.05 0.00009
561711.63 4325386.05 0.00022 561811.63
4325386.05 0.00022
561911.63 4325386.05 0.00023 562011.63
4325386.05 0.00019
562111.63 4325386.05 0.00010 562211.63
4325386.05 0.00009
562311.63 4325386.05 0.00009 562411.63
4325386.05 0.00014
562511.63 4325386.05 0.00010 562611.63
4325386.05 0.00013
562711.63 4325386.05 0.00028 562811.63
4325386.05 0.00008
562911.63 4325386.05 0.00014 563011.63
4325386.05 0.00008
563111.63 4325386.05 0.00010 563211.63
4325386.05 0.00011
563311.63 4325386.05 0.00009 563411.63
4325386.05 0.00011
563511.63 4325386.05 0.00011 563611.63
4325386.05 0.00010
563711.63 4325386.05 0.00013 563811.63
4325386.05 0.00020
563911.63 4325386.05 0.00016 564011.63
4325386.05 0.00027
564111.63 4325386.05 0.00015 564211.63
4325386.05 0.00018
564311.63 4325386.05 0.00031 564411.63
4325386.05 0.00015
564511.63 4325386.05 0.00021 564611.63
4325386.05 0.00020
564711.63 4325386.05 0.00015 564811.63
4325386.05 0.00024
564911.63 4325386.05 0.00025 565011.63
4325386.05 0.00059
565111.63 4325386.05 0.00069 565211.63
4325386.05 0.00069
565311.63 4325386.05 0.00068 565411.63
4325386.05 0.00066
565511.63 4325386.05 0.00050 565611.63
4325386.05 0.00046
565711.63 4325386.05 0.00064 565811.63
4325386.05 0.00023
565911.63 4325386.05 0.00020 566011.63
4325386.05 0.00018
566111.63 4325386.05 0.00019 566211.63
4325386.05 0.00020
566311.63 4325386.05 0.00023 566411.63

4325386.05   0.00014
         566511.63   4325386.05   0.00014   560111.63
4325486.05   0.00001
         560211.63   4325486.05   0.00001   560311.63
4325486.05   0.00001
         560411.63   4325486.05   0.00002   560511.63
4325486.05   0.00002
         560611.63   4325486.05   0.00005   560711.63
4325486.05   0.00007
         560811.63   4325486.05   0.00007   560911.63
4325486.05   0.00009
         561011.63   4325486.05   0.00011   561111.63
4325486.05   0.00013
         561211.63   4325486.05   0.00016   561311.63
4325486.05   0.00016
         561411.63   4325486.05   0.00007   561511.63
4325486.05   0.00009
         561611.63   4325486.05   0.00008   561711.63
4325486.05   0.00020

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF DPM   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         561811.63   4325486.05   0.00025   561911.63
4325486.05   0.00027
         562011.63   4325486.05   0.00029   562111.63
4325486.05   0.00011
         562211.63   4325486.05   0.00015   562311.63
4325486.05   0.00017
         562411.63   4325486.05   0.00017   562511.63
4325486.05   0.00012
         562611.63   4325486.05   0.00027   562711.63

4325486.05 0.00031
562811.63 4325486.05 0.00013 562911.63
4325486.05 0.00020
563011.63 4325486.05 0.00009 563111.63
4325486.05 0.00009
563211.63 4325486.05 0.00019 563311.63
4325486.05 0.00009
563411.63 4325486.05 0.00012 563511.63
4325486.05 0.00013
563611.63 4325486.05 0.00017 563711.63
4325486.05 0.00021
563811.63 4325486.05 0.00016 563911.63
4325486.05 0.00023
564011.63 4325486.05 0.00017 564111.63
4325486.05 0.00019
564211.63 4325486.05 0.00021 564311.63
4325486.05 0.00020
564411.63 4325486.05 0.00016 564511.63
4325486.05 0.00015
564611.63 4325486.05 0.00021 564711.63
4325486.05 0.00020
564811.63 4325486.05 0.00020 564911.63
4325486.05 0.00029
565011.63 4325486.05 0.00029 565111.63
4325486.05 0.00043
565211.63 4325486.05 0.00073 565311.63
4325486.05 0.00072
565411.63 4325486.05 0.00071 565511.63
4325486.05 0.00070
565611.63 4325486.05 0.00069 565711.63
4325486.05 0.00067
565811.63 4325486.05 0.00058 565911.63
4325486.05 0.00032
566011.63 4325486.05 0.00021 566111.63
4325486.05 0.00034
566211.63 4325486.05 0.00043 566311.63
4325486.05 0.00016
566411.63 4325486.05 0.00015 566511.63
4325486.05 0.00017
560111.63 4325586.05 0.00001 560211.63
4325586.05 0.00001
560311.63 4325586.05 0.00001 560411.63
4325586.05 0.00001
560511.63 4325586.05 0.00002 560611.63
4325586.05 0.00005
560711.63 4325586.05 0.00007 560811.63
4325586.05 0.00007
560911.63 4325586.05 0.00009 561011.63
4325586.05 0.00013
561111.63 4325586.05 0.00013 561211.63

4325586.05   0.00018
         561311.63   4325586.05   0.00022   561411.63
4325586.05   0.00023
         561511.63   4325586.05   0.00027   561611.63
4325586.05   0.00029
         561711.63   4325586.05   0.00033   561811.63
4325586.05   0.00031
         561911.63   4325586.05   0.00032   562011.63
4325586.05   0.00033
         562111.63   4325586.05   0.00036   562211.63
4325586.05   0.00013
         562311.63   4325586.05   0.00029   562411.63
4325586.05   0.00021
         562511.63   4325586.05   0.00011   562611.63
4325586.05   0.00036
         562711.63   4325586.05   0.00040   562811.63
4325586.05   0.00023
         562911.63   4325586.05   0.00020   563011.63
4325586.05   0.00013
         563111.63   4325586.05   0.00023   563211.63
4325586.05   0.00019

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF DPM   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         563311.63   4325586.05   0.00018   563411.63
4325586.05   0.00014
         563511.63   4325586.05   0.00014   563611.63
4325586.05   0.00015
         563711.63   4325586.05   0.00023   563811.63
4325586.05   0.00035
         563911.63   4325586.05   0.00025   564011.63

4325586.05 0.00018
564111.63 4325586.05 0.00019 564211.63
4325586.05 0.00018
564311.63 4325586.05 0.00028 564411.63
4325586.05 0.00020
564511.63 4325586.05 0.00026 564611.63
4325586.05 0.00028
564711.63 4325586.05 0.00032 564811.63
4325586.05 0.00028
564911.63 4325586.05 0.00022 565011.63
4325586.05 0.00028
565111.63 4325586.05 0.00022 565211.63
4325586.05 0.00068
565311.63 4325586.05 0.00077 565411.63
4325586.05 0.00076
565511.63 4325586.05 0.00074 565611.63
4325586.05 0.00073
565711.63 4325586.05 0.00071 565811.63
4325586.05 0.00069
565911.63 4325586.05 0.00067 566011.63
4325586.05 0.00063
566111.63 4325586.05 0.00059 566211.63
4325586.05 0.00041
566311.63 4325586.05 0.00028 566411.63
4325586.05 0.00025
566511.63 4325586.05 0.00021 560111.63
4325686.05 0.00001
560211.63 4325686.05 0.00001 560311.63
4325686.05 0.00001
560411.63 4325686.05 0.00002 560511.63
4325686.05 0.00003
560611.63 4325686.05 0.00005 560711.63
4325686.05 0.00009
560811.63 4325686.05 0.00007 560911.63
4325686.05 0.00012
561011.63 4325686.05 0.00016 561111.63
4325686.05 0.00013
561211.63 4325686.05 0.00019 561311.63
4325686.05 0.00025
561411.63 4325686.05 0.00027 561511.63
4325686.05 0.00029
561611.63 4325686.05 0.00033 561711.63
4325686.05 0.00037
561811.63 4325686.05 0.00037 561911.63
4325686.05 0.00038
562011.63 4325686.05 0.00039 562111.63
4325686.05 0.00039
562211.63 4325686.05 0.00040 562311.63
4325686.05 0.00038
562411.63 4325686.05 0.00030 562511.63

4325686.05 0.00041
562611.63 4325686.05 0.00035 562711.63
4325686.05 0.00050
562811.63 4325686.05 0.00020 562911.63
4325686.05 0.00034
563011.63 4325686.05 0.00017 563111.63
4325686.05 0.00017
563211.63 4325686.05 0.00044 563311.63
4325686.05 0.00019
563411.63 4325686.05 0.00037 563511.63
4325686.05 0.00017
563611.63 4325686.05 0.00026 563711.63
4325686.05 0.00035
563811.63 4325686.05 0.00033 563911.63
4325686.05 0.00022
564011.63 4325686.05 0.00022 564111.63
4325686.05 0.00021
564211.63 4325686.05 0.00024 564311.63
4325686.05 0.00022
564411.63 4325686.05 0.00019 564511.63
4325686.05 0.00021
564611.63 4325686.05 0.00029 564711.63
4325686.05 0.00034

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564811.63	4325686.05	0.00051	564911.63	4325686.05	0.00050
565011.63	4325686.05	0.00027	565111.63	4325686.05	0.00025
565211.63	4325686.05	0.00025	565311.63		

4325686.05 0.00050
565411.63 4325686.05 0.00075 565511.63
4325686.05 0.00077
565611.63 4325686.05 0.00076 565711.63
4325686.05 0.00075
565811.63 4325686.05 0.00072 565911.63
4325686.05 0.00070
566011.63 4325686.05 0.00068 566111.63
4325686.05 0.00066
566211.63 4325686.05 0.00064 566311.63
4325686.05 0.00061
566411.63 4325686.05 0.00048 566511.63
4325686.05 0.00018
560111.63 4325786.05 0.00001 560211.63
4325786.05 0.00001
560311.63 4325786.05 0.00002 560411.63
4325786.05 0.00002
560511.63 4325786.05 0.00002 560611.63
4325786.05 0.00007
560711.63 4325786.05 0.00010 560811.63
4325786.05 0.00013
560911.63 4325786.05 0.00014 561011.63
4325786.05 0.00017
561111.63 4325786.05 0.00022 561211.63
4325786.05 0.00025
561311.63 4325786.05 0.00030 561411.63
4325786.05 0.00032
561511.63 4325786.05 0.00035 561611.63
4325786.05 0.00038
561711.63 4325786.05 0.00042 561811.63
4325786.05 0.00041
561911.63 4325786.05 0.00043 562011.63
4325786.05 0.00045
562111.63 4325786.05 0.00045 562211.63
4325786.05 0.00046
562311.63 4325786.05 0.00050 562411.63
4325786.05 0.00052
562511.63 4325786.05 0.00055 562611.63
4325786.05 0.00057
562711.63 4325786.05 0.00063 562811.63
4325786.05 0.00026
562911.63 4325786.05 0.00055 563011.63
4325786.05 0.00028
563111.63 4325786.05 0.00041 563211.63
4325786.05 0.00065
563311.63 4325786.05 0.00032 563411.63
4325786.05 0.00052
563511.63 4325786.05 0.00030 563611.63
4325786.05 0.00027
563711.63 4325786.05 0.00053 563811.63

4325786.05   0.00044
         563911.63   4325786.05   0.00026   564011.63
4325786.05   0.00022
         564111.63   4325786.05   0.00035   564211.63
4325786.05   0.00028
         564311.63   4325786.05   0.00032   564411.63
4325786.05   0.00024
         564511.63   4325786.05   0.00023   564611.63
4325786.05   0.00022
         564711.63   4325786.05   0.00028   564811.63
4325786.05   0.00030
         564911.63   4325786.05   0.00072   565011.63
4325786.05   0.00036
         565111.63   4325786.05   0.00029   565211.63
4325786.05   0.00033
         565311.63   4325786.05   0.00030   565411.63
4325786.05   0.00035
         565511.63   4325786.05   0.00038   565611.63
4325786.05   0.00061
         565711.63   4325786.05   0.00046   565811.63
4325786.05   0.00068
         565911.63   4325786.05   0.00069   566011.63
4325786.05   0.00070
         566111.63   4325786.05   0.00068   566211.63
4325786.05   0.00066

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                               ** CONC OF DPM   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         566311.63   4325786.05   0.00063   566411.63
4325786.05   0.00061
         566511.63   4325786.05   0.00058   560111.63

4325886.05 0.00001
560211.63 4325886.05 0.00002 560311.63
4325886.05 0.00002
560411.63 4325886.05 0.00002 560511.63
4325886.05 0.00003
560611.63 4325886.05 0.00008 560711.63
4325886.05 0.00009
560811.63 4325886.05 0.00013 560911.63
4325886.05 0.00016
561011.63 4325886.05 0.00019 561111.63
4325886.05 0.00022
561211.63 4325886.05 0.00025 561311.63
4325886.05 0.00031
561411.63 4325886.05 0.00038 561511.63
4325886.05 0.00040
561611.63 4325886.05 0.00044 561711.63
4325886.05 0.00046
561811.63 4325886.05 0.00047 561911.63
4325886.05 0.00050
562011.63 4325886.05 0.00052 562111.63
4325886.05 0.00053
562211.63 4325886.05 0.00058 562311.63
4325886.05 0.00057
562411.63 4325886.05 0.00060 562511.63
4325886.05 0.00064
562611.63 4325886.05 0.00069 562711.63
4325886.05 0.00075
562811.63 4325886.05 0.00076 562911.63
4325886.05 0.00072
563011.63 4325886.05 0.00075 563111.63
4325886.05 0.00078
563211.63 4325886.05 0.00081 563311.63
4325886.05 0.00086
563411.63 4325886.05 0.00071 563511.63
4325886.05 0.00033
563611.63 4325886.05 0.00033 563711.63
4325886.05 0.00073
563811.63 4325886.05 0.00056 563911.63
4325886.05 0.00028
564011.63 4325886.05 0.00042 564111.63
4325886.05 0.00051
564211.63 4325886.05 0.00031 564311.63
4325886.05 0.00054
564411.63 4325886.05 0.00059 564511.63
4325886.05 0.00060
564611.63 4325886.05 0.00057 564711.63
4325886.05 0.00070
564811.63 4325886.05 0.00086 564911.63
4325886.05 0.00036
565011.63 4325886.05 0.00033 565111.63

4325886.05   0.00032
         565211.63   4325886.05   0.00050   565311.63
4325886.05   0.00059
         565411.63   4325886.05   0.00067   565511.63
4325886.05   0.00054
         565611.63   4325886.05   0.00052   565711.63
4325886.05   0.00045
         565811.63   4325886.05   0.00054   565911.63
4325886.05   0.00067
         566011.63   4325886.05   0.00074   566111.63
4325886.05   0.00071
         566211.63   4325886.05   0.00069   566311.63
4325886.05   0.00066
         566411.63   4325886.05   0.00061   566511.63
4325886.05   0.00060
         560111.63   4325986.05   0.00001   560211.63
4325986.05   0.00002
         560311.63   4325986.05   0.00002   560411.63
4325986.05   0.00002
         560511.63   4325986.05   0.00004   560611.63
4325986.05   0.00008
         560711.63   4325986.05   0.00012   560811.63
4325986.05   0.00013
         560911.63   4325986.05   0.00018   561011.63
4325986.05   0.00021
         561111.63   4325986.05   0.00026   561211.63
4325986.05   0.00029

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                    *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                   INCLUDING SOURCE(S):   PAREA1   ,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF DPM   IN MICROGRAMS/M**3
                     **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         561311.63   4325986.05   0.00034   561411.63

4325986.05 0.00040
561511.63 4325986.05 0.00045 561611.63
4325986.05 0.00051
561711.63 4325986.05 0.00053 561811.63
4325986.05 0.00055
561911.63 4325986.05 0.00057 562011.63
4325986.05 0.00060
562111.63 4325986.05 0.00061 562211.63
4325986.05 0.00068
562311.63 4325986.05 0.00063 562411.63
4325986.05 0.00066
562511.63 4325986.05 0.00072 562611.63
4325986.05 0.00078
562711.63 4325986.05 0.00085 562811.63
4325986.05 0.00092
562911.63 4325986.05 0.00097 563011.63
4325986.05 0.00103
563111.63 4325986.05 0.00106 563211.63
4325986.05 0.00107
563311.63 4325986.05 0.00112 563411.63
4325986.05 0.00101
563511.63 4325986.05 0.00070 563611.63
4325986.05 0.00062
563711.63 4325986.05 0.00087 563811.63
4325986.05 0.00035
563911.63 4325986.05 0.00033 564011.63
4325986.05 0.00063
564111.63 4325986.05 0.00069 564211.63
4325986.05 0.00034
564311.63 4325986.05 0.00035 564411.63
4325986.05 0.00036
564511.63 4325986.05 0.00044 564611.63
4325986.05 0.00067
564711.63 4325986.05 0.00110 564811.63
4325986.05 0.00054
564911.63 4325986.05 0.00030 565011.63
4325986.05 0.00036
565111.63 4325986.05 0.00042 565211.63
4325986.05 0.00030
565311.63 4325986.05 0.00039 565411.63
4325986.05 0.00030
565511.63 4325986.05 0.00032 565611.63
4325986.05 0.00047
565711.63 4325986.05 0.00077 565811.63
4325986.05 0.00057
565911.63 4325986.05 0.00060 566011.63
4325986.05 0.00034
566111.63 4325986.05 0.00054 566211.63
4325986.05 0.00069
566311.63 4325986.05 0.00046 566411.63

4325986.05   0.00065
         566511.63   4325986.05   0.00061   560111.63
4326086.05   0.00002
         560211.63   4326086.05   0.00002   560311.63
4326086.05   0.00002
         560411.63   4326086.05   0.00003   560511.63
4326086.05   0.00005
         560611.63   4326086.05   0.00008   560711.63
4326086.05   0.00012
         560811.63   4326086.05   0.00015   560911.63
4326086.05   0.00020
         561011.63   4326086.05   0.00024   561111.63
4326086.05   0.00029
         561211.63   4326086.05   0.00035   561311.63
4326086.05   0.00039
         561411.63   4326086.05   0.00046   561511.63
4326086.05   0.00052
         561611.63   4326086.05   0.00058   561711.63
4326086.05   0.00061
         561811.63   4326086.05   0.00064   561911.63
4326086.05   0.00067
         562011.63   4326086.05   0.00069   562111.63
4326086.05   0.00071
         562211.63   4326086.05   0.00072   562311.63
4326086.05   0.00076
         562411.63   4326086.05   0.00075   562511.63
4326086.05   0.00083
         562611.63   4326086.05   0.00092   562711.63
4326086.05   0.00101

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                           ** CONC OF DPM   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -

- -
562811.63 4326086.05 0.00109 562911.63
4326086.05 0.00116
563011.63 4326086.05 0.00123 563111.63
4326086.05 0.00128
563211.63 4326086.05 0.00132 563311.63
4326086.05 0.00137
563411.63 4326086.05 0.00138 563511.63
4326086.05 0.00138
563611.63 4326086.05 0.00136 563711.63
4326086.05 0.00066
563811.63 4326086.05 0.00041 563911.63
4326086.05 0.00040
564011.63 4326086.05 0.00061 564111.63
4326086.05 0.00122
564211.63 4326086.05 0.00075 564311.63
4326086.05 0.00039
564411.63 4326086.05 0.00045 564511.63
4326086.05 0.00046
564611.63 4326086.05 0.00039 564711.63
4326086.05 0.00122
564811.63 4326086.05 0.00039 564911.63
4326086.05 0.00035
565011.63 4326086.05 0.00035 565111.63
4326086.05 0.00036
565211.63 4326086.05 0.00051 565311.63
4326086.05 0.00034
565411.63 4326086.05 0.00040 565511.63
4326086.05 0.00031
565611.63 4326086.05 0.00029 565711.63
4326086.05 0.00046
565811.63 4326086.05 0.00029 565911.63
4326086.05 0.00030
566011.63 4326086.05 0.00053 566111.63
4326086.05 0.00051
566211.63 4326086.05 0.00029 566311.63
4326086.05 0.00054
566411.63 4326086.05 0.00062 566511.63
4326086.05 0.00064
560111.63 4326186.05 0.00002 560211.63
4326186.05 0.00002
560311.63 4326186.05 0.00002 560411.63
4326186.05 0.00003
560511.63 4326186.05 0.00006 560611.63
4326186.05 0.00009
560711.63 4326186.05 0.00013 560811.63
4326186.05 0.00017
560911.63 4326186.05 0.00022 561011.63
4326186.05 0.00026
561111.63 4326186.05 0.00031 561211.63

4326186.05 0.00045
  561311.63 4326186.05 0.00046 561411.63 4326186.05 0.00052
  561511.63 4326186.05 0.00058 561611.63 4326186.05 0.00065
  561711.63 4326186.05 0.00075 561811.63 4326186.05 0.00073
  561911.63 4326186.05 0.00078 562011.63 4326186.05 0.00081
  562111.63 4326186.05 0.00085 562211.63 4326186.05 0.00087
  562311.63 4326186.05 0.00094 562411.63 4326186.05 0.00092
  562511.63 4326186.05 0.00098 562611.63 4326186.05 0.00109
  562711.63 4326186.05 0.00121 562811.63 4326186.05 0.00131
  562911.63 4326186.05 0.00140 563011.63 4326186.05 0.00148
  563111.63 4326186.05 0.00154 563211.63 4326186.05 0.00160
  563311.63 4326186.05 0.00161 563411.63 4326186.05 0.00161
  563511.63 4326186.05 0.00161 563611.63 4326186.05 0.00160
  563711.63 4326186.05 0.00155 563811.63 4326186.05 0.00099
  563911.63 4326186.05 0.00082 564011.63 4326186.05 0.00087
  564111.63 4326186.05 0.00153 564211.63 4326186.05 0.00114

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)

Y-COORD (M)   CONC
- -
- -
564311.63   4326186.05   0.00056   564411.63
4326186.05   0.00069
564511.63   4326186.05   0.00063   564611.63
4326186.05   0.00043
564711.63   4326186.05   0.00134   564811.63
4326186.05   0.00083
564911.63   4326186.05   0.00050   565011.63
4326186.05   0.00069
565111.63   4326186.05   0.00098   565211.63
4326186.05   0.00108
565311.63   4326186.05   0.00087   565411.63
4326186.05   0.00054
565511.63   4326186.05   0.00064   565611.63
4326186.05   0.00050
565711.63   4326186.05   0.00033   565811.63
4326186.05   0.00056
565911.63   4326186.05   0.00068   566011.63
4326186.05   0.00045
566111.63   4326186.05   0.00040   566211.63
4326186.05   0.00067
566311.63   4326186.05   0.00053   566411.63
4326186.05   0.00045
566511.63   4326186.05   0.00057   560111.63
4326286.05   0.00002
560211.63   4326286.05   0.00002   560311.63
4326286.05   0.00003
560411.63   4326286.05   0.00005   560511.63
4326286.05   0.00009
560611.63   4326286.05   0.00010   560711.63
4326286.05   0.00013
560811.63   4326286.05   0.00018   560911.63
4326286.05   0.00023
561011.63   4326286.05   0.00025   561111.63
4326286.05   0.00032
561211.63   4326286.05   0.00042   561311.63
4326286.05   0.00049
561411.63   4326286.05   0.00057   561511.63
4326286.05   0.00064
561611.63   4326286.05   0.00071   561711.63
4326286.05   0.00078
561811.63   4326286.05   0.00091   561911.63
4326286.05   0.00091
562011.63   4326286.05   0.00097   562111.63
4326286.05   0.00101
562211.63   4326286.05   0.00106   562311.63
4326286.05   0.00115
562411.63   4326286.05   0.00115   562511.63

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4326286.05        0.00114
         562611.63    4326286.05        0.00134                      562711.63
4326286.05        0.00147
         562811.63    4326286.05        0.00160                      562911.63
4326286.05        0.00162
         563011.63    4326286.05        0.00180                      563111.63
4326286.05        0.00187
         563211.63    4326286.05        0.00193                      563311.63
4326286.05        0.00192
         563411.63    4326286.05        0.00191                      563511.63
4326286.05        0.00190
         563611.63    4326286.05        0.00188                      563711.63
4326286.05        0.00184
         563811.63    4326286.05        0.00182                      563911.63
4326286.05        0.00180
         564011.63    4326286.05        0.00173                      564111.63
4326286.05        0.00173
         564211.63    4326286.05        0.00169                      564311.63
4326286.05        0.00135
         564411.63    4326286.05        0.00154                      564511.63
4326286.05        0.00111
         564611.63    4326286.05        0.00096                      564711.63
4326286.05        0.00147
         564811.63    4326286.05        0.00066                      564911.63
4326286.05        0.00053
         565011.63    4326286.05        0.00061                      565111.63
4326286.05        0.00052
         565211.63    4326286.05        0.00050                      565311.63
4326286.05        0.00106
         565411.63    4326286.05        0.00112                      565511.63
4326286.05        0.00083
         565611.63    4326286.05        0.00036                      565711.63
4326286.05        0.00047
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                          ***        06:53:13

                                    PAGE  86
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL      ***
                                    INCLUDING SOURCE(S):     PAREA1      ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                           ** CONC OF DPM      IN MICROGRAMS/M**3
                    **
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X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
565811.63	4326286.05	0.00034	565911.63	4326286.05	0.00042
566011.63	4326286.05	0.00042	566111.63	4326286.05	0.00050
566211.63	4326286.05	0.00043	566311.63	4326286.05	0.00033
566411.63	4326286.05	0.00051	566511.63	4326286.05	0.00061
560111.63	4326386.05	0.00003	560211.63	4326386.05	0.00003
560311.63	4326386.05	0.00005	560411.63	4326386.05	0.00004
560511.63	4326386.05	0.00010	560611.63	4326386.05	0.00012
560711.63	4326386.05	0.00015	560811.63	4326386.05	0.00021
560911.63	4326386.05	0.00025	561011.63	4326386.05	0.00032
561111.63	4326386.05	0.00038	561211.63	4326386.05	0.00044
561311.63	4326386.05	0.00051	561411.63	4326386.05	0.00060
561511.63	4326386.05	0.00067	561611.63	4326386.05	0.00074
561711.63	4326386.05	0.00085	561811.63	4326386.05	0.00097
561911.63	4326386.05	0.00110	562011.63	4326386.05	0.00115
562111.63	4326386.05	0.00122	562211.63	4326386.05	0.00128
562311.63	4326386.05	0.00136	562411.63	4326386.05	0.00146
562511.63	4326386.05	0.00151	562611.63	4326386.05	0.00168
562711.63	4326386.05	0.00185	562811.63	4326386.05	0.00178
562911.63	4326386.05	0.00188	563011.63	4326386.05	0.00223
563111.63	4326386.05	0.00218	563211.63	4326386.05	0.00235
563311.63	4326386.05	0.00233	563411.63	4326386.05	0.00230
563511.63	4326386.05	0.00226	563611.63	4326386.05	0.00222
563711.63	4326386.05	0.00215	563811.63		

4326386.05   0.00204
         563911.63   4326386.05   0.00196   564011.63
4326386.05   0.00191
         564111.63   4326386.05   0.00191   564211.63
4326386.05   0.00178
         564311.63   4326386.05   0.00177   564411.63
4326386.05   0.00178
         564511.63   4326386.05   0.00172   564611.63
4326386.05   0.00166
         564711.63   4326386.05   0.00156   564811.63
4326386.05   0.00154
         564911.63   4326386.05   0.00146   565011.63
4326386.05   0.00143
         565111.63   4326386.05   0.00136   565211.63
4326386.05   0.00130
         565311.63   4326386.05   0.00124   565411.63
4326386.05   0.00103
         565511.63   4326386.05   0.00070   565611.63
4326386.05   0.00047
         565711.63   4326386.05   0.00043   565811.63
4326386.05   0.00074
         565911.63   4326386.05   0.00036   566011.63
4326386.05   0.00036
         566111.63   4326386.05   0.00036   566211.63
4326386.05   0.00032
         566311.63   4326386.05   0.00037   566411.63
4326386.05   0.00036
         566511.63   4326386.05   0.00046   560111.63
4326486.05   0.00003
         560211.63   4326486.05   0.00004   560311.63
4326486.05   0.00004
         560411.63   4326486.05   0.00006   560511.63
4326486.05   0.00011
         560611.63   4326486.05   0.00016   560711.63
4326486.05   0.00019

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
560811.63	4326486.05	0.00030	560911.63	4326486.05	0.00031
561011.63	4326486.05	0.00035	561111.63	4326486.05	0.00040
561211.63	4326486.05	0.00047	561311.63	4326486.05	0.00054
561411.63	4326486.05	0.00062	561511.63	4326486.05	0.00069
561611.63	4326486.05	0.00080	561711.63	4326486.05	0.00094
561811.63	4326486.05	0.00108	561911.63	4326486.05	0.00123
562011.63	4326486.05	0.00144	562111.63	4326486.05	0.00152
562211.63	4326486.05	0.00165	562311.63	4326486.05	0.00185
562411.63	4326486.05	0.00202	562511.63	4326486.05	0.00226
562611.63	4326486.05	0.00222	562711.63	4326486.05	0.00246
562811.63	4326486.05	0.00198	562911.63	4326486.05	0.00219
563011.63	4326486.05	0.00225	563111.63	4326486.05	0.00254
563211.63	4326486.05	0.00257	563311.63	4326486.05	0.00248
563411.63	4326486.05	0.00248	563511.63	4326486.05	0.00275
563611.63	4326486.05	0.00267	563711.63	4326486.05	0.00255
563811.63	4326486.05	0.00240	563911.63	4326486.05	0.00233
564011.63	4326486.05	0.00224	564111.63	4326486.05	0.00208
564211.63	4326486.05	0.00199	564311.63	4326486.05	0.00193
564411.63	4326486.05	0.00193	564511.63	4326486.05	0.00187
564611.63	4326486.05	0.00180	564711.63	4326486.05	0.00170
564811.63	4326486.05	0.00163	564911.63	4326486.05	0.00147
565011.63	4326486.05	0.00143	565111.63		

4326486.05   0.00139
         565211.63   4326486.05   0.00134   565311.63
4326486.05   0.00124
         565411.63   4326486.05   0.00114   565511.63
4326486.05   0.00111
         565611.63   4326486.05   0.00106   565711.63
4326486.05   0.00099
         565811.63   4326486.05   0.00098   565911.63
4326486.05   0.00072
         566011.63   4326486.05   0.00060   566111.63
4326486.05   0.00068
         566211.63   4326486.05   0.00047   566311.63
4326486.05   0.00052
         566411.63   4326486.05   0.00060   566511.63
4326486.05   0.00066
         560111.63   4326586.05   0.00003   560211.63
4326586.05   0.00003
         560311.63   4326586.05   0.00004   560411.63
4326586.05   0.00006
         560511.63   4326586.05   0.00013   560611.63
4326586.05   0.00019
         560711.63   4326586.05   0.00022   560811.63
4326586.05   0.00036
         560911.63   4326586.05   0.00030   561011.63
4326586.05   0.00039
         561111.63   4326586.05   0.00047   561211.63
4326586.05   0.00051
         561311.63   4326586.05   0.00059   561411.63
4326586.05   0.00067
         561511.63   4326586.05   0.00076   561611.63
4326586.05   0.00088
         561711.63   4326586.05   0.00103   561811.63
4326586.05   0.00120
         561911.63   4326586.05   0.00141   562011.63
4326586.05   0.00167
         564611.63   4326586.05   0.00190   564711.63
4326586.05   0.00189

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS

***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564811.63	4326586.05	0.00172	564911.63	4326586.05	0.00157
565011.63	4326586.05	0.00147	565111.63	4326586.05	0.00138
565211.63	4326586.05	0.00129	565311.63	4326586.05	0.00123
565411.63	4326586.05	0.00115	565511.63	4326586.05	0.00108
565611.63	4326586.05	0.00101	565711.63	4326586.05	0.00097
565811.63	4326586.05	0.00093	565911.63	4326586.05	0.00088
566011.63	4326586.05	0.00084	566111.63	4326586.05	0.00082
566211.63	4326586.05	0.00079	566311.63	4326586.05	0.00065
566411.63	4326586.05	0.00062	566511.63	4326586.05	0.00054
560111.63	4326686.05	0.00003	560211.63	4326686.05	0.00003
560311.63	4326686.05	0.00005	560411.63	4326686.05	0.00007
560511.63	4326686.05	0.00016	560611.63	4326686.05	0.00022
560711.63	4326686.05	0.00027	560811.63	4326686.05	0.00033
560911.63	4326686.05	0.00028	561011.63	4326686.05	0.00046
561111.63	4326686.05	0.00053	561211.63	4326686.05	0.00058
561311.63	4326686.05	0.00064	561411.63	4326686.05	0.00077
561511.63	4326686.05	0.00085	561611.63	4326686.05	0.00097
561711.63	4326686.05	0.00113	561811.63	4326686.05	0.00134
561911.63	4326686.05	0.00160	562011.63	4326686.05	0.00198
564611.63	4326686.05	0.00198	564711.63	4326686.05	0.00189
564811.63	4326686.05	0.00184	564911.63		

4326686.05   0.00168
         565011.63   4326686.05   0.00156   565111.63
4326686.05   0.00145
         565211.63   4326686.05   0.00135   565311.63
4326686.05   0.00126
         565411.63   4326686.05   0.00118   565511.63
4326686.05   0.00110
         565611.63   4326686.05   0.00103   565711.63
4326686.05   0.00097
         565811.63   4326686.05   0.00091   565911.63
4326686.05   0.00086
         566011.63   4326686.05   0.00081   566111.63
4326686.05   0.00078
         566211.63   4326686.05   0.00073   566311.63
4326686.05   0.00071
         566411.63   4326686.05   0.00071   566511.63
4326686.05   0.00058
         560111.63   4326786.05   0.00003   560211.63
4326786.05   0.00004
         560311.63   4326786.05   0.00006   560411.63
4326786.05   0.00009
         560511.63   4326786.05   0.00017   560611.63
4326786.05   0.00023
         560711.63   4326786.05   0.00030   560811.63
4326786.05   0.00037
         560911.63   4326786.05   0.00045   561011.63
4326786.05   0.00055
         561111.63   4326786.05   0.00061   561211.63
4326786.05   0.00067
         561311.63   4326786.05   0.00073   561411.63
4326786.05   0.00084
         561511.63   4326786.05   0.00090   561611.63
4326786.05   0.00105
         561711.63   4326786.05   0.00126   561811.63
4326786.05   0.00150
         561911.63   4326786.05   0.00180   562011.63
4326786.05   0.00231
         564611.63   4326786.05   0.00220   564711.63
4326786.05   0.00206

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564811.63	4326786.05	0.00193	564911.63	4326786.05	0.00179
565011.63	4326786.05	0.00166	565111.63	4326786.05	0.00153
565211.63	4326786.05	0.00141	565311.63	4326786.05	0.00131
565411.63	4326786.05	0.00122	565511.63	4326786.05	0.00113
565611.63	4326786.05	0.00105	565711.63	4326786.05	0.00099
565811.63	4326786.05	0.00092	565911.63	4326786.05	0.00087
566011.63	4326786.05	0.00081	566111.63	4326786.05	0.00076
566211.63	4326786.05	0.00073	566311.63	4326786.05	0.00069
566411.63	4326786.05	0.00066	566511.63	4326786.05	0.00065
560111.63	4326886.05	0.00003	560211.63	4326886.05	0.00004
560311.63	4326886.05	0.00006	560411.63	4326886.05	0.00009
560511.63	4326886.05	0.00019	560611.63	4326886.05	0.00026
560711.63	4326886.05	0.00036	560811.63	4326886.05	0.00045
560911.63	4326886.05	0.00054	561011.63	4326886.05	0.00061
561111.63	4326886.05	0.00068	561211.63	4326886.05	0.00075
561311.63	4326886.05	0.00082	561411.63	4326886.05	0.00093
561511.63	4326886.05	0.00101	561611.63	4326886.05	0.00113
561711.63	4326886.05	0.00134	561811.63	4326886.05	0.00165
561911.63	4326886.05	0.00204	562011.63	4326886.05	0.00266
564611.63	4326886.05	0.00248	564711.63		

4326886.05 0.00230
564811.63 4326886.05 0.00211 564911.63
4326886.05 0.00192
565011.63 4326886.05 0.00176 565111.63
4326886.05 0.00161
565211.63 4326886.05 0.00147 565311.63
4326886.05 0.00136
565411.63 4326886.05 0.00125 565511.63
4326886.05 0.00116
565611.63 4326886.05 0.00108 565711.63
4326886.05 0.00100
565811.63 4326886.05 0.00093 565911.63
4326886.05 0.00087
566011.63 4326886.05 0.00082 566111.63
4326886.05 0.00077
566211.63 4326886.05 0.00073 566311.63
4326886.05 0.00069
566411.63 4326886.05 0.00065 566511.63
4326886.05 0.00062
560111.63 4326986.05 0.00003 560211.63
4326986.05 0.00004
560311.63 4326986.05 0.00007 560411.63
4326986.05 0.00012
560511.63 4326986.05 0.00020 560611.63
4326986.05 0.00030
560711.63 4326986.05 0.00040 560811.63
4326986.05 0.00051
560911.63 4326986.05 0.00060 561011.63
4326986.05 0.00068
561111.63 4326986.05 0.00075 561211.63
4326986.05 0.00083
561311.63 4326986.05 0.00092 561411.63
4326986.05 0.00105
561511.63 4326986.05 0.00116 561611.63
4326986.05 0.00128
561711.63 4326986.05 0.00147 561811.63
4326986.05 0.00177
561911.63 4326986.05 0.00225 562011.63
4326986.05 0.00301
564611.63 4326986.05 0.00287 564711.63
4326986.05 0.00258

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5

YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564811.63	4326986.05	0.00229	564911.63	4326986.05	0.00206
565011.63	4326986.05	0.00185	565111.63	4326986.05	0.00175
565211.63	4326986.05	0.00164	565311.63	4326986.05	0.00147
565411.63	4326986.05	0.00133	565511.63	4326986.05	0.00121
565611.63	4326986.05	0.00112	565711.63	4326986.05	0.00103
565811.63	4326986.05	0.00094	565911.63	4326986.05	0.00088
566011.63	4326986.05	0.00082	566111.63	4326986.05	0.00077
566211.63	4326986.05	0.00073	566311.63	4326986.05	0.00069
566411.63	4326986.05	0.00065	566511.63	4326986.05	0.00062
560111.63	4327086.05	0.00004	560211.63	4327086.05	0.00005
560311.63	4327086.05	0.00007	560411.63	4327086.05	0.00013
560511.63	4327086.05	0.00023	560611.63	4327086.05	0.00034
560711.63	4327086.05	0.00046	560811.63	4327086.05	0.00056
560911.63	4327086.05	0.00067	561011.63	4327086.05	0.00074
561111.63	4327086.05	0.00082	561211.63	4327086.05	0.00091
561311.63	4327086.05	0.00102	561411.63	4327086.05	0.00115
561511.63	4327086.05	0.00131	561611.63	4327086.05	0.00146
561711.63	4327086.05	0.00164	561811.63	4327086.05	0.00196
561911.63	4327086.05	0.00248	562011.63		

4327086.05 0.00333
564611.63 4327086.05 0.00347 564711.63
4327086.05 0.00289
564811.63 4327086.05 0.00248 564911.63
4327086.05 0.00221
565011.63 4327086.05 0.00200 565111.63
4327086.05 0.00199
565211.63 4327086.05 0.00160 565311.63
4327086.05 0.00163
565411.63 4327086.05 0.00145 565511.63
4327086.05 0.00130
565611.63 4327086.05 0.00123 565711.63
4327086.05 0.00107
565811.63 4327086.05 0.00098 565911.63
4327086.05 0.00090
566011.63 4327086.05 0.00088 566111.63
4327086.05 0.00079
566211.63 4327086.05 0.00073 566311.63
4327086.05 0.00069
566411.63 4327086.05 0.00065 566511.63
4327086.05 0.00062
560111.63 4327186.05 0.00004 560211.63
4327186.05 0.00004
560311.63 4327186.05 0.00008 560411.63
4327186.05 0.00016
560511.63 4327186.05 0.00025 560611.63
4327186.05 0.00036
560711.63 4327186.05 0.00053 560811.63
4327186.05 0.00055
560911.63 4327186.05 0.00072 561011.63
4327186.05 0.00080
561111.63 4327186.05 0.00089 561211.63
4327186.05 0.00099
561311.63 4327186.05 0.00110 561411.63
4327186.05 0.00126
561511.63 4327186.05 0.00140 561611.63
4327186.05 0.00158
561711.63 4327186.05 0.00182 561811.63
4327186.05 0.00220
561911.63 4327186.05 0.00271 562011.63
4327186.05 0.00363
564611.63 4327186.05 0.00412 564711.63
4327186.05 0.00317

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564811.63	4327186.05	0.00296	564911.63	4327186.05	0.00260
565011.63	4327186.05	0.00228	565111.63	4327186.05	0.00198
565211.63	4327186.05	0.00174	565311.63	4327186.05	0.00164
565411.63	4327186.05	0.00149	565511.63	4327186.05	0.00134
565611.63	4327186.05	0.00114	565711.63	4327186.05	0.00112
565811.63	4327186.05	0.00105	565911.63	4327186.05	0.00099
566011.63	4327186.05	0.00092	566111.63	4327186.05	0.00083
566211.63	4327186.05	0.00077	566311.63	4327186.05	0.00071
566411.63	4327186.05	0.00066	566511.63	4327186.05	0.00062
560111.63	4327286.05	0.00004	560211.63	4327286.05	0.00005
560311.63	4327286.05	0.00010	560411.63	4327286.05	0.00016
560511.63	4327286.05	0.00030	560611.63	4327286.05	0.00042
560711.63	4327286.05	0.00061	560811.63	4327286.05	0.00064
560911.63	4327286.05	0.00077	561011.63	4327286.05	0.00085
561111.63	4327286.05	0.00094	561211.63	4327286.05	0.00105
561311.63	4327286.05	0.00118	561411.63	4327286.05	0.00133
561511.63	4327286.05	0.00150	561611.63	4327286.05	0.00171
561711.63	4327286.05	0.00200	561811.63		

4327286.05 0.00240
561911.63 4327286.05 0.00297 562011.63
4327286.05 0.00392
564611.63 4327286.05 0.00472 564711.63
4327286.05 0.00343
564811.63 4327286.05 0.00256 564911.63
4327286.05 0.00179
565011.63 4327286.05 0.00214 565111.63
4327286.05 0.00203
565211.63 4327286.05 0.00170 565311.63
4327286.05 0.00143
565411.63 4327286.05 0.00132 565511.63
4327286.05 0.00128
565611.63 4327286.05 0.00120 565711.63
4327286.05 0.00114
565811.63 4327286.05 0.00106 565911.63
4327286.05 0.00097
566011.63 4327286.05 0.00093 566111.63
4327286.05 0.00084
566211.63 4327286.05 0.00077 566311.63
4327286.05 0.00070
566411.63 4327286.05 0.00067 566511.63
4327286.05 0.00062
560111.63 4327386.05 0.00005 560211.63
4327386.05 0.00007
560311.63 4327386.05 0.00012 560411.63
4327386.05 0.00018
560511.63 4327386.05 0.00037 560611.63
4327386.05 0.00049
560711.63 4327386.05 0.00063 560811.63
4327386.05 0.00057
560911.63 4327386.05 0.00080 561011.63
4327386.05 0.00089
561111.63 4327386.05 0.00099 561211.63
4327386.05 0.00111
561311.63 4327386.05 0.00124 561411.63
4327386.05 0.00139
561511.63 4327386.05 0.00158 561611.63
4327386.05 0.00181
561711.63 4327386.05 0.00213 561811.63
4327386.05 0.00256
561911.63 4327386.05 0.00316 562011.63
4327386.05 0.00422
564611.63 4327386.05 0.00473 564711.63
4327386.05 0.00348

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564811.63	4327386.05	0.00211	564911.63	4327386.05	0.00202
565011.63	4327386.05	0.00226	565111.63	4327386.05	0.00189
565211.63	4327386.05	0.00147	565311.63	4327386.05	0.00160
565411.63	4327386.05	0.00141	565511.63	4327386.05	0.00130
565611.63	4327386.05	0.00121	565711.63	4327386.05	0.00106
565811.63	4327386.05	0.00101	565911.63	4327386.05	0.00097
566011.63	4327386.05	0.00085	566111.63	4327386.05	0.00085
566211.63	4327386.05	0.00078	566311.63	4327386.05	0.00072
566411.63	4327386.05	0.00066	566511.63	4327386.05	0.00064
560111.63	4327486.05	0.00005	560211.63	4327486.05	0.00007
560311.63	4327486.05	0.00012	560411.63	4327486.05	0.00024
560511.63	4327486.05	0.00037	560611.63	4327486.05	0.00055
560711.63	4327486.05	0.00058	560811.63	4327486.05	0.00073
560911.63	4327486.05	0.00083	561011.63	4327486.05	0.00092
561111.63	4327486.05	0.00103	561211.63	4327486.05	0.00115
561311.63	4327486.05	0.00129	561411.63	4327486.05	0.00145
561511.63	4327486.05	0.00165	561611.63		

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4327486.05        0.00190
         561711.63    4327486.05        0.00224                     561811.63
4327486.05        0.00269
         561911.63    4327486.05        0.00337                     562011.63
4327486.05        0.00434
         564611.63    4327486.05        0.00486                     564711.63
4327486.05        0.00372
         564811.63    4327486.05        0.00172                     564911.63
4327486.05        0.00228
         565011.63    4327486.05        0.00207                     565111.63
4327486.05        0.00138
         565211.63    4327486.05        0.00150                     565311.63
4327486.05        0.00155
         565411.63    4327486.05        0.00135                     565511.63
4327486.05        0.00126
         565611.63    4327486.05        0.00107                     565711.63
4327486.05        0.00092
         565811.63    4327486.05        0.00093                     565911.63
4327486.05        0.00094
         566011.63    4327486.05        0.00084                     566111.63
4327486.05        0.00083
         566211.63    4327486.05        0.00077                     566311.63
4327486.05        0.00070
         566411.63    4327486.05        0.00064                     566511.63
4327486.05        0.00062
         560111.63    4327586.05        0.00005                     560211.63
4327586.05        0.00009
         560311.63    4327586.05        0.00016                     560411.63
4327586.05        0.00028
         560511.63    4327586.05        0.00043                     560611.63
4327586.05        0.00056
         560711.63    4327586.05        0.00067                     560811.63
4327586.05        0.00075
         560911.63    4327586.05        0.00085                     561011.63
4327586.05        0.00095
         561111.63    4327586.05        0.00105                     561211.63
4327586.05        0.00118
         561311.63    4327586.05        0.00132                     561411.63
4327586.05        0.00149
         561511.63    4327586.05        0.00169                     561611.63
4327586.05        0.00196
         561711.63    4327586.05        0.00235                     561811.63
4327586.05        0.00281
         561911.63    4327586.05        0.00345                     562011.63
4327586.05        0.00444
         564611.63    4327586.05        0.00521                     564711.63
4327586.05        0.00318
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564811.63	4327586.05	0.00179	564911.63	4327586.05	0.00239
565011.63	4327586.05	0.00188	565111.63	4327586.05	0.00175
565211.63	4327586.05	0.00163	565311.63	4327586.05	0.00142
565411.63	4327586.05	0.00122	565511.63	4327586.05	0.00122
565611.63	4327586.05	0.00102	565711.63	4327586.05	0.00100
565811.63	4327586.05	0.00097	565911.63	4327586.05	0.00090
566011.63	4327586.05	0.00082	566111.63	4327586.05	0.00080
566211.63	4327586.05	0.00075	566311.63	4327586.05	0.00066
566411.63	4327586.05	0.00064	566511.63	4327586.05	0.00059
560111.63	4327686.05	0.00006	560211.63	4327686.05	0.00010
560311.63	4327686.05	0.00017	560411.63	4327686.05	0.00030
560511.63	4327686.05	0.00045	560611.63	4327686.05	0.00058
560711.63	4327686.05	0.00066	560811.63	4327686.05	0.00074
560911.63	4327686.05	0.00085	561011.63	4327686.05	0.00095
561111.63	4327686.05	0.00106	561211.63	4327686.05	0.00119
561311.63	4327686.05	0.00133	561411.63		

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4327686.05        0.00151
         561511.63    4327686.05        0.00172                    561611.63
4327686.05        0.00202
         561711.63    4327686.05        0.00237                    561811.63
4327686.05        0.00284
         561911.63    4327686.05        0.00349                    562011.63
4327686.05        0.00448
         564611.63    4327686.05        0.00504                    564711.63
4327686.05        0.00232
         564811.63    4327686.05        0.00202                    564911.63
4327686.05        0.00205
         565011.63    4327686.05        0.00142                    565111.63
4327686.05        0.00122
         565211.63    4327686.05        0.00158                    565311.63
4327686.05        0.00107
         565411.63    4327686.05        0.00114                    565511.63
4327686.05        0.00111
         565611.63    4327686.05        0.00080                    565711.63
4327686.05        0.00079
         565811.63    4327686.05        0.00068                    565911.63
4327686.05        0.00079
         566011.63    4327686.05        0.00081                    566111.63
4327686.05        0.00076
         566211.63    4327686.05        0.00070                    566311.63
4327686.05        0.00067
         566411.63    4327686.05        0.00062                    566511.63
4327686.05        0.00058
         560111.63    4327786.05        0.00005                    560211.63
4327786.05        0.00009
         560311.63    4327786.05        0.00020                    560411.63
4327786.05        0.00040
         560511.63    4327786.05        0.00050                    560611.63
4327786.05        0.00062
         560711.63    4327786.05        0.00064                    560811.63
4327786.05        0.00071
         560911.63    4327786.05        0.00082                    561011.63
4327786.05        0.00095
         561111.63    4327786.05        0.00106                    561211.63
4327786.05        0.00119
         561311.63    4327786.05        0.00135                    561411.63
4327786.05        0.00153
         561511.63    4327786.05        0.00174                    561611.63
4327786.05        0.00201
         561711.63    4327786.05        0.00237                    561811.63
4327786.05        0.00283
         561911.63    4327786.05        0.00348                    562011.63
4327786.05        0.00448
         564611.63    4327786.05        0.00480                    564711.63
4327786.05        0.00189
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564811.63	4327786.05	0.00181	564911.63	4327786.05	0.00147
565011.63	4327786.05	0.00113	565111.63	4327786.05	0.00160
565211.63	4327786.05	0.00119	565311.63	4327786.05	0.00070
565411.63	4327786.05	0.00076	565511.63	4327786.05	0.00070
565611.63	4327786.05	0.00077	565711.63	4327786.05	0.00085
565811.63	4327786.05	0.00088	565911.63	4327786.05	0.00081
566011.63	4327786.05	0.00077	566111.63	4327786.05	0.00071
566211.63	4327786.05	0.00069	566311.63	4327786.05	0.00063
566411.63	4327786.05	0.00058	566511.63	4327786.05	0.00056
560111.63	4327886.05	0.00006	560211.63	4327886.05	0.00010
560311.63	4327886.05	0.00026	560411.63	4327886.05	0.00044
560511.63	4327886.05	0.00054	560611.63	4327886.05	0.00064
560711.63	4327886.05	0.00067	560811.63	4327886.05	0.00075
560911.63	4327886.05	0.00086	561011.63	4327886.05	0.00095
561111.63	4327886.05	0.00107	561211.63		

4327886.05 0.00119
561311.63 4327886.05 0.00133 561411.63
4327886.05 0.00151
561511.63 4327886.05 0.00172 561611.63
4327886.05 0.00199
561711.63 4327886.05 0.00234 561811.63
4327886.05 0.00280
561911.63 4327886.05 0.00344 562011.63
4327886.05 0.00440
564611.63 4327886.05 0.00459 564711.63
4327886.05 0.00168
564811.63 4327886.05 0.00166 564911.63
4327886.05 0.00183
565011.63 4327886.05 0.00096 565111.63
4327886.05 0.00138
565211.63 4327886.05 0.00093 565311.63
4327886.05 0.00100
565411.63 4327886.05 0.00101 565511.63
4327886.05 0.00071
565611.63 4327886.05 0.00087 565711.63
4327886.05 0.00070
565811.63 4327886.05 0.00064 565911.63
4327886.05 0.00077
566011.63 4327886.05 0.00070 566111.63
4327886.05 0.00067
566211.63 4327886.05 0.00060 566311.63
4327886.05 0.00061
566411.63 4327886.05 0.00057 566511.63
4327886.05 0.00053
560111.63 4327986.05 0.00006 560211.63
4327986.05 0.00013
560311.63 4327986.05 0.00027 560411.63
4327986.05 0.00046
560511.63 4327986.05 0.00057 560611.63
4327986.05 0.00065
560711.63 4327986.05 0.00071 560811.63
4327986.05 0.00077
560911.63 4327986.05 0.00086 561011.63
4327986.05 0.00095
561111.63 4327986.05 0.00105 561211.63
4327986.05 0.00117
561311.63 4327986.05 0.00131 561411.63
4327986.05 0.00147
561511.63 4327986.05 0.00168 561611.63
4327986.05 0.00195
561711.63 4327986.05 0.00229 561811.63
4327986.05 0.00273
561911.63 4327986.05 0.00335 562011.63
4327986.05 0.00426
564611.63 4327986.05 0.00421 564711.63

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564811.63	4327986.05	0.00200	564911.63	4327986.05	0.00128
565011.63	4327986.05	0.00095	565111.63	4327986.05	0.00100
565211.63	4327986.05	0.00101	565311.63	4327986.05	0.00110
565411.63	4327986.05	0.00104	565511.63	4327986.05	0.00093
565611.63	4327986.05	0.00089	565711.63	4327986.05	0.00067
565811.63	4327986.05	0.00070	565911.63	4327986.05	0.00066
566011.63	4327986.05	0.00066	566111.63	4327986.05	0.00062
566211.63	4327986.05	0.00062	566311.63	4327986.05	0.00059
566411.63	4327986.05	0.00057	566511.63	4327986.05	0.00054
560111.63	4328086.05	0.00007	560211.63	4328086.05	0.00017
560311.63	4328086.05	0.00036	560411.63	4328086.05	0.00051
560511.63	4328086.05	0.00057	560611.63	4328086.05	0.00065
560711.63	4328086.05	0.00071	560811.63	4328086.05	0.00077
560911.63	4328086.05	0.00085	561011.63		

4328086.05 0.00093
561111.63 4328086.05 0.00103 561211.63
4328086.05 0.00114
561311.63 4328086.05 0.00128 561411.63
4328086.05 0.00144
561511.63 4328086.05 0.00164 561611.63
4328086.05 0.00189
561711.63 4328086.05 0.00221 561811.63
4328086.05 0.00262
561911.63 4328086.05 0.00320 562011.63
4328086.05 0.00411
564611.63 4328086.05 0.00411 564711.63
4328086.05 0.00216
564811.63 4328086.05 0.00131 564911.63
4328086.05 0.00146
565011.63 4328086.05 0.00107 565111.63
4328086.05 0.00073
565211.63 4328086.05 0.00095 565311.63
4328086.05 0.00076
565411.63 4328086.05 0.00084 565511.63
4328086.05 0.00080
565611.63 4328086.05 0.00081 565711.63
4328086.05 0.00077
565811.63 4328086.05 0.00072 565911.63
4328086.05 0.00068
566011.63 4328086.05 0.00065 566111.63
4328086.05 0.00060
566211.63 4328086.05 0.00057 566311.63
4328086.05 0.00056
566411.63 4328086.05 0.00053 566511.63
4328086.05 0.00051
560111.63 4328186.05 0.00008 560211.63
4328186.05 0.00025
560311.63 4328186.05 0.00041 560411.63
4328186.05 0.00053
560511.63 4328186.05 0.00058 560611.63
4328186.05 0.00065
560711.63 4328186.05 0.00069 560811.63
4328186.05 0.00076
560911.63 4328186.05 0.00083 561011.63
4328186.05 0.00092
561111.63 4328186.05 0.00101 561211.63
4328186.05 0.00112
561311.63 4328186.05 0.00125 561411.63
4328186.05 0.00140
561511.63 4328186.05 0.00159 561611.63
4328186.05 0.00182
561711.63 4328186.05 0.00211 561811.63
4328186.05 0.00248
561911.63 4328186.05 0.00301 562011.63

4328186.05 0.00383
 564611.63 4328186.05 0.00262 564711.63
4328186.05 0.00213

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564811.63	4328186.05	0.00157	564911.63	4328186.05	0.00153
565011.63	4328186.05	0.00127	565111.63	4328186.05	0.00100
565211.63	4328186.05	0.00105	565311.63	4328186.05	0.00096
565411.63	4328186.05	0.00088	565511.63	4328186.05	0.00080
565611.63	4328186.05	0.00074	565711.63	4328186.05	0.00063
565811.63	4328186.05	0.00062	565911.63	4328186.05	0.00061
566011.63	4328186.05	0.00061	566111.63	4328186.05	0.00058
566211.63	4328186.05	0.00054	566311.63	4328186.05	0.00050
566411.63	4328186.05	0.00050	566511.63	4328186.05	0.00049
560111.63	4328286.05	0.00012	560211.63	4328286.05	0.00037
560311.63	4328286.05	0.00046	560411.63	4328286.05	0.00054
560511.63	4328286.05	0.00060	560611.63	4328286.05	0.00066
560711.63	4328286.05	0.00069	560811.63		

```
4328286.05        0.00076
         560911.63    4328286.05        0.00082                    561011.63
4328286.05        0.00091
         561111.63    4328286.05        0.00100                    561211.63
4328286.05        0.00108
         561311.63    4328286.05        0.00122                    561411.63
4328286.05        0.00137
         561511.63    4328286.05        0.00154                    561611.63
4328286.05        0.00176
         561711.63    4328286.05        0.00202                    561811.63
4328286.05        0.00235
         561911.63    4328286.05        0.00281                    562011.63
4328286.05        0.00348
         564611.63    4328286.05        0.00157                    564711.63
4328286.05        0.00134
         564811.63    4328286.05        0.00149                    564911.63
4328286.05        0.00134
         565011.63    4328286.05        0.00116                    565111.63
4328286.05        0.00101
         565211.63    4328286.05        0.00090                    565311.63
4328286.05        0.00081
         565411.63    4328286.05        0.00079                    565511.63
4328286.05        0.00075
         565611.63    4328286.05        0.00068                    565711.63
4328286.05        0.00066
         565811.63    4328286.05        0.00059                    565911.63
4328286.05        0.00060
         566011.63    4328286.05        0.00057                    566111.63
4328286.05        0.00054
         566211.63    4328286.05        0.00052                    566311.63
4328286.05        0.00048
         566411.63    4328286.05        0.00045                    566511.63
4328286.05        0.00043
         560111.63    4328386.05        0.00026                    560211.63
4328386.05        0.00037
         560311.63    4328386.05        0.00047                    560411.63
4328386.05        0.00053
         560511.63    4328386.05        0.00060                    560611.63
4328386.05        0.00065
         560711.63    4328386.05        0.00070                    560811.63
4328386.05        0.00075
         560911.63    4328386.05        0.00082                    561011.63
4328386.05        0.00090
         561111.63    4328386.05        0.00099                    561211.63
4328386.05        0.00107
         561311.63    4328386.05        0.00120                    561411.63
4328386.05        0.00134
         561511.63    4328386.05        0.00151                    561611.63
4328386.05        0.00171
         561711.63    4328386.05        0.00195                    561811.63
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4328386.05 0.00225
561911.63 4328386.05 0.00264 562011.63
4328386.05 0.00318
562111.63 4328386.05 0.00392 562211.63
4328386.05 0.00460

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
562311.63	4328386.05	0.00503	562411.63	4328386.05	0.00530
562511.63	4328386.05	0.00544	562611.63	4328386.05	0.00558
562711.63	4328386.05	0.00569	562811.63	4328386.05	0.00573
562911.63	4328386.05	0.00565	563011.63	4328386.05	0.00564
563111.63	4328386.05	0.00540	563211.63	4328386.05	0.00556
563311.63	4328386.05	0.00569	563411.63	4328386.05	0.00545
563511.63	4328386.05	0.00545	563611.63	4328386.05	0.00512
563711.63	4328386.05	0.00542	563811.63	4328386.05	0.00533
563911.63	4328386.05	0.00478	564011.63	4328386.05	0.00479
564111.63	4328386.05	0.00463	564211.63	4328386.05	0.00447
564311.63	4328386.05	0.00393	564411.63	4328386.05	0.00297
564511.63	4328386.05	0.00249	564611.63		

4328386.05 0.00137
564711.63 4328386.05 0.00159 564811.63
4328386.05 0.00132
564911.63 4328386.05 0.00104 565011.63
4328386.05 0.00103
565111.63 4328386.05 0.00087 565211.63
4328386.05 0.00082
565311.63 4328386.05 0.00078 565411.63
4328386.05 0.00068
565511.63 4328386.05 0.00067 565611.63
4328386.05 0.00061
565711.63 4328386.05 0.00061 565811.63
4328386.05 0.00057
565911.63 4328386.05 0.00053 566011.63
4328386.05 0.00049
566111.63 4328386.05 0.00049 566211.63
4328386.05 0.00046
566311.63 4328386.05 0.00045 566411.63
4328386.05 0.00039
566511.63 4328386.05 0.00038 560111.63
4328486.05 0.00031
560211.63 4328486.05 0.00040 560311.63
4328486.05 0.00047
560411.63 4328486.05 0.00054 560511.63
4328486.05 0.00060
560611.63 4328486.05 0.00065 560711.63
4328486.05 0.00070
560811.63 4328486.05 0.00076 560911.63
4328486.05 0.00082
561011.63 4328486.05 0.00090 561111.63
4328486.05 0.00098
561211.63 4328486.05 0.00105 561311.63
4328486.05 0.00119
561411.63 4328486.05 0.00132 561511.63
4328486.05 0.00148
561611.63 4328486.05 0.00166 561711.63
4328486.05 0.00188
561811.63 4328486.05 0.00215 561911.63
4328486.05 0.00247
562011.63 4328486.05 0.00286 562111.63
4328486.05 0.00327
562211.63 4328486.05 0.00362 562311.63
4328486.05 0.00391
562411.63 4328486.05 0.00413 562511.63
4328486.05 0.00427
562611.63 4328486.05 0.00437 562711.63
4328486.05 0.00443
562811.63 4328486.05 0.00450 562911.63
4328486.05 0.00438
563011.63 4328486.05 0.00415 563111.63

4328486.05 0.00410
563211.63 4328486.05 0.00448 563311.63 4328486.05 0.00408
563411.63 4328486.05 0.00424 563511.63 4328486.05 0.00407
563611.63 4328486.05 0.00425 563711.63 4328486.05 0.00409

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
563811.63	4328486.05	0.00398	563911.63	4328486.05	0.00387
564011.63	4328486.05	0.00355	564111.63	4328486.05	0.00327
564211.63	4328486.05	0.00279	564311.63	4328486.05	0.00248
564411.63	4328486.05	0.00215	564511.63	4328486.05	0.00198
564611.63	4328486.05	0.00109	564711.63	4328486.05	0.00140
564811.63	4328486.05	0.00118	564911.63	4328486.05	0.00093
565011.63	4328486.05	0.00086	565111.63	4328486.05	0.00082
565211.63	4328486.05	0.00075	565311.63	4328486.05	0.00071
565411.63	4328486.05	0.00061	565511.63	4328486.05	0.00062
565611.63	4328486.05	0.00055	565711.63	4328486.05	0.00054
565811.63	4328486.05	0.00053	565911.63		

4328486.05 0.00051
566011.63 4328486.05 0.00047 566111.63
4328486.05 0.00042
566211.63 4328486.05 0.00040 566311.63
4328486.05 0.00038
566411.63 4328486.05 0.00037 566511.63
4328486.05 0.00035
560111.63 4328586.05 0.00034 560211.63
4328586.05 0.00043
560311.63 4328586.05 0.00050 560411.63
4328586.05 0.00055
560511.63 4328586.05 0.00060 560611.63
4328586.05 0.00065
560711.63 4328586.05 0.00070 560811.63
4328586.05 0.00074
560911.63 4328586.05 0.00079 561011.63
4328586.05 0.00085
561111.63 4328586.05 0.00097 561211.63
4328586.05 0.00101
561311.63 4328586.05 0.00118 561411.63
4328586.05 0.00130
561511.63 4328586.05 0.00145 561611.63
4328586.05 0.00162
561711.63 4328586.05 0.00181 561811.63
4328586.05 0.00204
561911.63 4328586.05 0.00229 562011.63
4328586.05 0.00257
562111.63 4328586.05 0.00282 562211.63
4328586.05 0.00303
562311.63 4328586.05 0.00326 562411.63
4328586.05 0.00341
562511.63 4328586.05 0.00353 562611.63
4328586.05 0.00361
562711.63 4328586.05 0.00370 562811.63
4328586.05 0.00366
562911.63 4328586.05 0.00356 563011.63
4328586.05 0.00349
563111.63 4328586.05 0.00360 563211.63
4328586.05 0.00364
563311.63 4328586.05 0.00287 563411.63
4328586.05 0.00362
563511.63 4328586.05 0.00346 563611.63
4328586.05 0.00350
563711.63 4328586.05 0.00338 563811.63
4328586.05 0.00326
563911.63 4328586.05 0.00290 564011.63
4328586.05 0.00281
564111.63 4328586.05 0.00259 564211.63
4328586.05 0.00239
564311.63 4328586.05 0.00197 564411.63

4328586.05 0.00176
564511.63 4328586.05 0.00173 564611.63 4328586.05 0.00112
564711.63 4328586.05 0.00126 564811.63 4328586.05 0.00108
564911.63 4328586.05 0.00095 565011.63 4328586.05 0.00085
565111.63 4328586.05 0.00074 565211.63 4328586.05 0.00067

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
565311.63	4328586.05	0.00061	565411.63	4328586.05	0.00055
565511.63	4328586.05	0.00056	565611.63	4328586.05	0.00052
565711.63	4328586.05	0.00051	565811.63	4328586.05	0.00048
565911.63	4328586.05	0.00043	566011.63	4328586.05	0.00041
566111.63	4328586.05	0.00038	566211.63	4328586.05	0.00037
566311.63	4328586.05	0.00036	566411.63	4328586.05	0.00035
566511.63	4328586.05	0.00033	560111.63	4328686.05	0.00039
560211.63	4328686.05	0.00045	560311.63	4328686.05	0.00049
560411.63	4328686.05	0.00055	560511.63	4328686.05	0.00061
560611.63	4328686.05	0.00065	560711.63		

4328686.05 0.00070
560811.63 4328686.05 0.00074 560911.63
4328686.05 0.00080
561011.63 4328686.05 0.00084 561111.63
4328686.05 0.00094
561211.63 4328686.05 0.00101 561311.63
4328686.05 0.00113
561411.63 4328686.05 0.00127 561511.63
4328686.05 0.00141
561611.63 4328686.05 0.00157 561711.63
4328686.05 0.00173
561811.63 4328686.05 0.00192 561911.63
4328686.05 0.00212
562011.63 4328686.05 0.00232 562111.63
4328686.05 0.00251
562211.63 4328686.05 0.00265 562311.63
4328686.05 0.00282
562411.63 4328686.05 0.00295 562511.63
4328686.05 0.00306
562611.63 4328686.05 0.00312 562711.63
4328686.05 0.00303
562811.63 4328686.05 0.00322 562911.63
4328686.05 0.00316
563011.63 4328686.05 0.00294 563111.63
4328686.05 0.00312
563211.63 4328686.05 0.00319 563311.63
4328686.05 0.00313
563411.63 4328686.05 0.00285 563511.63
4328686.05 0.00299
563611.63 4328686.05 0.00295 563711.63
4328686.05 0.00282
563811.63 4328686.05 0.00244 563911.63
4328686.05 0.00233
564011.63 4328686.05 0.00232 564111.63
4328686.05 0.00204
564211.63 4328686.05 0.00185 564311.63
4328686.05 0.00167
564411.63 4328686.05 0.00155 564511.63
4328686.05 0.00146
564611.63 4328686.05 0.00117 564711.63
4328686.05 0.00114
564811.63 4328686.05 0.00101 564911.63
4328686.05 0.00088
565011.63 4328686.05 0.00078 565111.63
4328686.05 0.00069
565211.63 4328686.05 0.00063 565311.63
4328686.05 0.00055
565411.63 4328686.05 0.00052 565511.63
4328686.05 0.00048
565611.63 4328686.05 0.00047 565711.63

4328686.05   0.00043
         565811.63   4328686.05   0.00041   565911.63
4328686.05   0.00039
         566011.63   4328686.05   0.00037   566111.63
4328686.05   0.00037
         566211.63   4328686.05   0.00035   566311.63
4328686.05   0.00035
         566411.63   4328686.05   0.00033   566511.63
4328686.05   0.00032
         560111.63   4328786.05   0.00043   560211.63
4328786.05   0.00047

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                               ** CONC OF DPM   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         560311.63   4328786.05   0.00051   560411.63
4328786.05   0.00055
         560511.63   4328786.05   0.00061   560611.63
4328786.05   0.00065
         560711.63   4328786.05   0.00070   560811.63
4328786.05   0.00075
         560911.63   4328786.05   0.00081   561011.63
4328786.05   0.00085
         561111.63   4328786.05   0.00090   561211.63
4328786.05   0.00099
         561311.63   4328786.05   0.00108   561411.63
4328786.05   0.00119
         561511.63   4328786.05   0.00135   561611.63
4328786.05   0.00143
         561711.63   4328786.05   0.00165   561811.63
4328786.05   0.00181
         561911.63   4328786.05   0.00197   562011.63

4328786.05 0.00212
562111.63 4328786.05 0.00225 562211.63
4328786.05 0.00237
562311.63 4328786.05 0.00246 562411.63
4328786.05 0.00252
562511.63 4328786.05 0.00267 562611.63
4328786.05 0.00262
562711.63 4328786.05 0.00270 562811.63
4328786.05 0.00282
562911.63 4328786.05 0.00281 563011.63
4328786.05 0.00256
563111.63 4328786.05 0.00254 563211.63
4328786.05 0.00277
563311.63 4328786.05 0.00250 563411.63
4328786.05 0.00252
563511.63 4328786.05 0.00245 563611.63
4328786.05 0.00228
563711.63 4328786.05 0.00245 563811.63
4328786.05 0.00233
563911.63 4328786.05 0.00203 564011.63
4328786.05 0.00184
564111.63 4328786.05 0.00169 564211.63
4328786.05 0.00153
564311.63 4328786.05 0.00149 564411.63
4328786.05 0.00137
564511.63 4328786.05 0.00120 564611.63
4328786.05 0.00118
564711.63 4328786.05 0.00106 564811.63
4328786.05 0.00094
564911.63 4328786.05 0.00083 565011.63
4328786.05 0.00073
565111.63 4328786.05 0.00065 565211.63
4328786.05 0.00061
565311.63 4328786.05 0.00056 565411.63
4328786.05 0.00051
565511.63 4328786.05 0.00045 565611.63
4328786.05 0.00042
565711.63 4328786.05 0.00040 565811.63
4328786.05 0.00039
565911.63 4328786.05 0.00038 566011.63
4328786.05 0.00038
566111.63 4328786.05 0.00034 566211.63
4328786.05 0.00035
566311.63 4328786.05 0.00034 566411.63
4328786.05 0.00031
566511.63 4328786.05 0.00031 560111.63
4328886.05 0.00047
560211.63 4328886.05 0.00048 560311.63
4328886.05 0.00053
560411.63 4328886.05 0.00056 560511.63

4328886.05 0.00061
 560611.63 4328886.05 0.00065 560711.63
4328886.05 0.00070
 560811.63 4328886.05 0.00075 560911.63
4328886.05 0.00079
 561011.63 4328886.05 0.00083 561111.63
4328886.05 0.00087
 561211.63 4328886.05 0.00095 561311.63
4328886.05 0.00101
 561411.63 4328886.05 0.00111 561511.63
4328886.05 0.00125
 561611.63 4328886.05 0.00134 561711.63
4328886.05 0.00157

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
561811.63	4328886.05	0.00164	561911.63	4328886.05	0.00183
562011.63	4328886.05	0.00192	562111.63	4328886.05	0.00199
562211.63	4328886.05	0.00200	562311.63	4328886.05	0.00221
562411.63	4328886.05	0.00220	562511.63	4328886.05	0.00236
562611.63	4328886.05	0.00235	562711.63	4328886.05	0.00245
562811.63	4328886.05	0.00236	562911.63	4328886.05	0.00248
563011.63	4328886.05	0.00243	563111.63	4328886.05	0.00218
563211.63	4328886.05	0.00244	563311.63		

4328886.05 0.00242
563411.63 4328886.05 0.00235 563511.63
4328886.05 0.00204
563611.63 4328886.05 0.00211 563711.63
4328886.05 0.00212
563811.63 4328886.05 0.00204 563911.63
4328886.05 0.00182
564011.63 4328886.05 0.00168 564111.63
4328886.05 0.00154
564211.63 4328886.05 0.00135 564311.63
4328886.05 0.00126
564411.63 4328886.05 0.00116 564511.63
4328886.05 0.00112
564611.63 4328886.05 0.00105 564711.63
4328886.05 0.00098
564811.63 4328886.05 0.00085 564911.63
4328886.05 0.00077
565011.63 4328886.05 0.00071 565111.63
4328886.05 0.00064
565211.63 4328886.05 0.00056 565311.63
4328886.05 0.00052
565411.63 4328886.05 0.00046 565511.63
4328886.05 0.00044
565611.63 4328886.05 0.00043 565711.63
4328886.05 0.00042
565811.63 4328886.05 0.00041 565911.63
4328886.05 0.00037
566011.63 4328886.05 0.00034 566111.63
4328886.05 0.00034
566211.63 4328886.05 0.00033 566311.63
4328886.05 0.00031
566411.63 4328886.05 0.00030 566511.63
4328886.05 0.00029
560111.63 4328986.05 0.00047 560211.63
4328986.05 0.00050
560311.63 4328986.05 0.00053 560411.63
4328986.05 0.00056
560511.63 4328986.05 0.00060 560611.63
4328986.05 0.00065
560711.63 4328986.05 0.00070 560811.63
4328986.05 0.00074
560911.63 4328986.05 0.00078 561011.63
4328986.05 0.00084
561111.63 4328986.05 0.00093 561211.63
4328986.05 0.00101
561311.63 4328986.05 0.00109 561411.63
4328986.05 0.00105
561511.63 4328986.05 0.00114 561611.63
4328986.05 0.00133
561711.63 4328986.05 0.00146 561811.63

```
4328986.05        0.00151
         561911.63    4328986.05        0.00168                        562011.63
4328986.05        0.00179
         562111.63    4328986.05        0.00175                        562211.63
4328986.05        0.00194
         562311.63    4328986.05        0.00189                        562411.63
4328986.05        0.00200
         562511.63    4328986.05        0.00196                        562611.63
4328986.05        0.00202
         562711.63    4328986.05        0.00210                        562811.63
4328986.05        0.00203
         562911.63    4328986.05        0.00212                        563011.63
4328986.05        0.00218
         563111.63    4328986.05        0.00193                        563211.63
4328986.05        0.00199
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                              ***        06:53:13

                                     PAGE 102
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                    *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL      ***
                                    INCLUDING SOURCE(S):     PAREA1      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                             ** CONC OF DPM      IN MICROGRAMS/M**3
                     **

       X-COORD (M)   Y-COORD (M)        CONC                         X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         563311.63    4328986.05        0.00199                        563411.63
4328986.05        0.00197
         563511.63    4328986.05        0.00192                        563611.63
4328986.05        0.00176
         563711.63    4328986.05        0.00172                        563811.63
4328986.05        0.00173
         563911.63    4328986.05        0.00167                        564011.63
4328986.05        0.00152
         564111.63    4328986.05        0.00138                        564211.63
4328986.05        0.00119
         564311.63    4328986.05        0.00111                        564411.63
4328986.05        0.00104
         564511.63    4328986.05        0.00096                        564611.63
```

4328986.05 0.00101
564711.63 4328986.05 0.00090 564811.63
4328986.05 0.00078
564911.63 4328986.05 0.00069 565011.63
4328986.05 0.00064
565111.63 4328986.05 0.00058 565211.63
4328986.05 0.00053
565311.63 4328986.05 0.00047 565411.63
4328986.05 0.00044
565511.63 4328986.05 0.00046 565611.63
4328986.05 0.00042
565711.63 4328986.05 0.00040 565811.63
4328986.05 0.00037
565911.63 4328986.05 0.00035 566011.63
4328986.05 0.00034
566111.63 4328986.05 0.00033 566211.63
4328986.05 0.00032
566311.63 4328986.05 0.00030 566411.63
4328986.05 0.00029
566511.63 4328986.05 0.00028 560111.63
4329086.05 0.00047
560211.63 4329086.05 0.00046 560311.63
4329086.05 0.00053
560411.63 4329086.05 0.00057 560511.63
4329086.05 0.00060
560611.63 4329086.05 0.00064 560711.63
4329086.05 0.00069
560811.63 4329086.05 0.00075 560911.63
4329086.05 0.00080
561011.63 4329086.05 0.00086 561111.63
4329086.05 0.00092
561211.63 4329086.05 0.00099 561311.63
4329086.05 0.00106
561411.63 4329086.05 0.00106 561511.63
4329086.05 0.00109
561611.63 4329086.05 0.00132 561711.63
4329086.05 0.00141
561811.63 4329086.05 0.00139 561911.63
4329086.05 0.00148
562011.63 4329086.05 0.00165 562111.63
4329086.05 0.00157
562211.63 4329086.05 0.00174 562311.63
4329086.05 0.00183
562411.63 4329086.05 0.00182 562511.63
4329086.05 0.00182
562611.63 4329086.05 0.00182 562711.63
4329086.05 0.00176
562811.63 4329086.05 0.00178 562911.63
4329086.05 0.00188
563011.63 4329086.05 0.00195 563111.63

4329086.05 0.00176
563211.63 4329086.05 0.00186 563311.63
4329086.05 0.00183
563411.63 4329086.05 0.00167 563511.63
4329086.05 0.00163
563611.63 4329086.05 0.00164 563711.63
4329086.05 0.00154
563811.63 4329086.05 0.00142 563911.63
4329086.05 0.00140
564011.63 4329086.05 0.00136 564111.63
4329086.05 0.00130
564211.63 4329086.05 0.00108 564311.63
4329086.05 0.00101
564411.63 4329086.05 0.00097 564511.63
4329086.05 0.00089
564611.63 4329086.05 0.00093 564711.63
4329086.05 0.00086

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564811.63	4329086.05	0.00077	564911.63	4329086.05	0.00069
565011.63	4329086.05	0.00060	565111.63	4329086.05	0.00054
565211.63	4329086.05	0.00049	565311.63	4329086.05	0.00045
565411.63	4329086.05	0.00045	565511.63	4329086.05	0.00044
565611.63	4329086.05	0.00039	565711.63	4329086.05	0.00037
565811.63	4329086.05	0.00036	565911.63		

4329086.05 0.00035
566011.63 4329086.05 0.00032 566111.63
4329086.05 0.00031
566211.63 4329086.05 0.00029 566311.63
4329086.05 0.00028
566411.63 4329086.05 0.00027 566511.63
4329086.05 0.00026
560111.63 4329186.05 0.00047 560211.63
4329186.05 0.00050
560311.63 4329186.05 0.00054 560411.63
4329186.05 0.00056
560511.63 4329186.05 0.00059 560611.63
4329186.05 0.00063
560711.63 4329186.05 0.00069 560811.63
4329186.05 0.00072
560911.63 4329186.05 0.00079 561011.63
4329186.05 0.00084
561111.63 4329186.05 0.00090 561211.63
4329186.05 0.00095
561311.63 4329186.05 0.00103 561411.63
4329186.05 0.00105
561511.63 4329186.05 0.00104 561611.63
4329186.05 0.00116
561711.63 4329186.05 0.00127 561811.63
4329186.05 0.00133
561911.63 4329186.05 0.00137 562011.63
4329186.05 0.00153
562111.63 4329186.05 0.00142 562211.63
4329186.05 0.00163
562311.63 4329186.05 0.00168 562411.63
4329186.05 0.00169
562511.63 4329186.05 0.00169 562611.63
4329186.05 0.00170
562711.63 4329186.05 0.00163 562811.63
4329186.05 0.00159
562911.63 4329186.05 0.00158 563011.63
4329186.05 0.00161
563111.63 4329186.05 0.00156 563211.63
4329186.05 0.00157
563311.63 4329186.05 0.00160 563411.63
4329186.05 0.00155
563511.63 4329186.05 0.00148 563611.63
4329186.05 0.00141
563711.63 4329186.05 0.00137 563811.63
4329186.05 0.00128
563911.63 4329186.05 0.00119 564011.63
4329186.05 0.00112
564111.63 4329186.05 0.00105 564211.63
4329186.05 0.00097
564311.63 4329186.05 0.00090 564411.63

4329186.05 0.00085
564511.63 4329186.05 0.00080 564611.63
4329186.05 0.00085
564711.63 4329186.05 0.00076 564811.63
4329186.05 0.00068
564911.63 4329186.05 0.00063 565011.63
4329186.05 0.00057
565111.63 4329186.05 0.00052 565211.63
4329186.05 0.00048
565311.63 4329186.05 0.00045 565411.63
4329186.05 0.00042
565511.63 4329186.05 0.00042 565611.63
4329186.05 0.00039
565711.63 4329186.05 0.00036 565811.63
4329186.05 0.00034
565911.63 4329186.05 0.00033 566011.63
4329186.05 0.00031
566111.63 4329186.05 0.00029 566211.63
4329186.05 0.00027

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
566311.63	4329186.05	0.00027	566411.63	4329186.05	0.00026
566511.63	4329186.05	0.00025	560111.63	4329286.05	0.00047
560211.63	4329286.05	0.00051	560311.63	4329286.05	0.00054
560411.63	4329286.05	0.00056	560511.63	4329286.05	0.00059
560611.63	4329286.05	0.00062	560711.63		

4329286.05 0.00066
560811.63 4329286.05 0.00071 560911.63
4329286.05 0.00074
561011.63 4329286.05 0.00078 561111.63
4329286.05 0.00084
561211.63 4329286.05 0.00089 561311.63
4329286.05 0.00099
561411.63 4329286.05 0.00105 561511.63
4329286.05 0.00104
561611.63 4329286.05 0.00105 561711.63
4329286.05 0.00111
561811.63 4329286.05 0.00125 561911.63
4329286.05 0.00122
562011.63 4329286.05 0.00139 562111.63
4329286.05 0.00130
562211.63 4329286.05 0.00151 562311.63
4329286.05 0.00149
562411.63 4329286.05 0.00154 562511.63
4329286.05 0.00152
562611.63 4329286.05 0.00150 562711.63
4329286.05 0.00154
562811.63 4329286.05 0.00158 562911.63
4329286.05 0.00154
563011.63 4329286.05 0.00145 563111.63
4329286.05 0.00140
563211.63 4329286.05 0.00146 563311.63
4329286.05 0.00141
563411.63 4329286.05 0.00142 563511.63
4329286.05 0.00133
563611.63 4329286.05 0.00125 563711.63
4329286.05 0.00124
563811.63 4329286.05 0.00116 563911.63
4329286.05 0.00110
564011.63 4329286.05 0.00102 564111.63
4329286.05 0.00095
564211.63 4329286.05 0.00089 564311.63
4329286.05 0.00083
564411.63 4329286.05 0.00079 564511.63
4329286.05 0.00075
564611.63 4329286.05 0.00081 564711.63
4329286.05 0.00072
564811.63 4329286.05 0.00064 564911.63
4329286.05 0.00061
565011.63 4329286.05 0.00056 565111.63
4329286.05 0.00053
565211.63 4329286.05 0.00044 565311.63
4329286.05 0.00044
565411.63 4329286.05 0.00040 565511.63
4329286.05 0.00040
565611.63 4329286.05 0.00036 565711.63

4329286.05   0.00033
        565811.63   4329286.05   0.00032   565911.63
4329286.05   0.00032
        566011.63   4329286.05   0.00029   566111.63
4329286.05   0.00028
        566211.63   4329286.05   0.00026   566311.63
4329286.05   0.00026
        566411.63   4329286.05   0.00025   566511.63
4329286.05   0.00024
        560111.63   4329386.05   0.00048   560211.63
4329386.05   0.00051
        560311.63   4329386.05   0.00053   560411.63
4329386.05   0.00055
        560511.63   4329386.05   0.00058   560611.63
4329386.05   0.00061
        560711.63   4329386.05   0.00065   560811.63
4329386.05   0.00068
        560911.63   4329386.05   0.00071   561011.63
4329386.05   0.00074
        561111.63   4329386.05   0.00078   561211.63
4329386.05   0.00085

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5 YEARS FOR SOURCE GROUP: ALL   ***
INCLUDING SOURCE(S):   PAREA1   ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM   IN MICROGRAMS/M**3 **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
- -
        561311.63   4329386.05   0.00096   561411.63
4329386.05   0.00103
        561511.63   4329386.05   0.00103   561611.63
4329386.05   0.00104
        561711.63   4329386.05   0.00106   561811.63
4329386.05   0.00108
        561911.63   4329386.05   0.00111   562011.63

4329386.05 0.00116
562111.63 4329386.05 0.00121 562211.63
4329386.05 0.00124
562311.63 4329386.05 0.00135 562411.63
4329386.05 0.00143
562511.63 4329386.05 0.00144 562611.63
4329386.05 0.00143
562711.63 4329386.05 0.00149 562811.63
4329386.05 0.00144
562911.63 4329386.05 0.00137 563011.63
4329386.05 0.00142
563111.63 4329386.05 0.00128 563211.63
4329386.05 0.00130
563311.63 4329386.05 0.00126 563411.63
4329386.05 0.00129
563511.63 4329386.05 0.00124 563611.63
4329386.05 0.00114
563711.63 4329386.05 0.00117 563811.63
4329386.05 0.00109
563911.63 4329386.05 0.00100 564011.63
4329386.05 0.00093
564111.63 4329386.05 0.00089 564211.63
4329386.05 0.00082
564311.63 4329386.05 0.00078 564411.63
4329386.05 0.00076
564511.63 4329386.05 0.00072 564611.63
4329386.05 0.00077
564711.63 4329386.05 0.00070 564811.63
4329386.05 0.00063
564911.63 4329386.05 0.00061 565011.63
4329386.05 0.00057
565111.63 4329386.05 0.00051 565211.63
4329386.05 0.00044
565311.63 4329386.05 0.00041 565411.63
4329386.05 0.00037
565511.63 4329386.05 0.00036 565611.63
4329386.05 0.00033
565711.63 4329386.05 0.00032 565811.63
4329386.05 0.00030
565911.63 4329386.05 0.00030 566011.63
4329386.05 0.00028
566111.63 4329386.05 0.00027 566211.63
4329386.05 0.00025
566311.63 4329386.05 0.00025 566411.63
4329386.05 0.00024
566511.63 4329386.05 0.00023 560111.63
4329486.05 0.00048
560211.63 4329486.05 0.00051 560311.63
4329486.05 0.00052
560411.63 4329486.05 0.00054 560511.63

4329486.05 0.00057
560611.63 4329486.05 0.00060 560711.63
4329486.05 0.00063
560811.63 4329486.05 0.00066 560911.63
4329486.05 0.00069
561011.63 4329486.05 0.00073 561111.63
4329486.05 0.00076
561211.63 4329486.05 0.00080 561311.63
4329486.05 0.00084
561411.63 4329486.05 0.00093 561511.63
4329486.05 0.00102
561611.63 4329486.05 0.00102 561711.63
4329486.05 0.00109
561811.63 4329486.05 0.00110 561911.63
4329486.05 0.00113
562011.63 4329486.05 0.00108 562111.63
4329486.05 0.00112
562211.63 4329486.05 0.00113 562311.63
4329486.05 0.00118
562411.63 4329486.05 0.00124 562511.63
4329486.05 0.00131
562611.63 4329486.05 0.00128 562711.63
4329486.05 0.00132

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
562811.63	4329486.05	0.00129	562911.63	4329486.05	0.00124
563011.63	4329486.05	0.00123	563111.63	4329486.05	0.00119
563211.63	4329486.05	0.00118	563311.63		

4329486.05 0.00115
563411.63 4329486.05 0.00117 563511.63
4329486.05 0.00111
563611.63 4329486.05 0.00105 563711.63
4329486.05 0.00106
563811.63 4329486.05 0.00098 563911.63
4329486.05 0.00093
564011.63 4329486.05 0.00086 564111.63
4329486.05 0.00084
564211.63 4329486.05 0.00076 564311.63
4329486.05 0.00073
564411.63 4329486.05 0.00070 564511.63
4329486.05 0.00074
564611.63 4329486.05 0.00073 564711.63
4329486.05 0.00060
564811.63 4329486.05 0.00062 564911.63
4329486.05 0.00055
565011.63 4329486.05 0.00055 565111.63
4329486.05 0.00048
565211.63 4329486.05 0.00042 565311.63
4329486.05 0.00039
565411.63 4329486.05 0.00036 565511.63
4329486.05 0.00034
565611.63 4329486.05 0.00031 565711.63
4329486.05 0.00031
565811.63 4329486.05 0.00029 565911.63
4329486.05 0.00028
566011.63 4329486.05 0.00027 566111.63
4329486.05 0.00026
566211.63 4329486.05 0.00024 566311.63
4329486.05 0.00024
566411.63 4329486.05 0.00023 566511.63
4329486.05 0.00022
560111.63 4329586.05 0.00048 560211.63
4329586.05 0.00049
560311.63 4329586.05 0.00052 560411.63
4329586.05 0.00053
560511.63 4329586.05 0.00056 560611.63
4329586.05 0.00059
560711.63 4329586.05 0.00062 560811.63
4329586.05 0.00064
560911.63 4329586.05 0.00068 561011.63
4329586.05 0.00070
561111.63 4329586.05 0.00074 561211.63
4329586.05 0.00078
561311.63 4329586.05 0.00081 561411.63
4329586.05 0.00085
561511.63 4329586.05 0.00088 561611.63
4329586.05 0.00093
561711.63 4329586.05 0.00098 561811.63

4329586.05 0.00105
561911.63 4329586.05 0.00110 562011.63
4329586.05 0.00113
562111.63 4329586.05 0.00103 562211.63
4329586.05 0.00104
562311.63 4329586.05 0.00108 562411.63
4329586.05 0.00110
562511.63 4329586.05 0.00119 562611.63
4329586.05 0.00113
562711.63 4329586.05 0.00119 562811.63
4329586.05 0.00118
562911.63 4329586.05 0.00115 563011.63
4329586.05 0.00111
563111.63 4329586.05 0.00108 563211.63
4329586.05 0.00106
563311.63 4329586.05 0.00105 563411.63
4329586.05 0.00104
563511.63 4329586.05 0.00101 563611.63
4329586.05 0.00096
563711.63 4329586.05 0.00094 563811.63
4329586.05 0.00090
563911.63 4329586.05 0.00089 564011.63
4329586.05 0.00080
564111.63 4329586.05 0.00076 564211.63
4329586.05 0.00071

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564311.63	4329586.05	0.00068	564411.63	4329586.05	0.00066
564511.63	4329586.05	0.00073	564611.63		

4329586.05 0.00069
564711.63 4329586.05 0.00058 564811.63
4329586.05 0.00055
564911.63 4329586.05 0.00051 565011.63
4329586.05 0.00052
565111.63 4329586.05 0.00047 565211.63
4329586.05 0.00041
565311.63 4329586.05 0.00037 565411.63
4329586.05 0.00035
565511.63 4329586.05 0.00032 565611.63
4329586.05 0.00030
565711.63 4329586.05 0.00030 565811.63
4329586.05 0.00028
565911.63 4329586.05 0.00027 566011.63
4329586.05 0.00026
566111.63 4329586.05 0.00025 566211.63
4329586.05 0.00024
566311.63 4329586.05 0.00023 566411.63
4329586.05 0.00022
566511.63 4329586.05 0.00022 560111.63
4329686.05 0.00048
560211.63 4329686.05 0.00049 560311.63
4329686.05 0.00051
560411.63 4329686.05 0.00053 560511.63
4329686.05 0.00055
560611.63 4329686.05 0.00058 560711.63
4329686.05 0.00060
560811.63 4329686.05 0.00063 560911.63
4329686.05 0.00066
561011.63 4329686.05 0.00069 561111.63
4329686.05 0.00072
561211.63 4329686.05 0.00075 561311.63
4329686.05 0.00078
561411.63 4329686.05 0.00081 561511.63
4329686.05 0.00084
561611.63 4329686.05 0.00087 561711.63
4329686.05 0.00090
561811.63 4329686.05 0.00093 561911.63
4329686.05 0.00094
562011.63 4329686.05 0.00096 562111.63
4329686.05 0.00099
562211.63 4329686.05 0.00097 562311.63
4329686.05 0.00099
562411.63 4329686.05 0.00101 562511.63
4329686.05 0.00109
562611.63 4329686.05 0.00104 562711.63
4329686.05 0.00108
562811.63 4329686.05 0.00107 562911.63
4329686.05 0.00104
563011.63 4329686.05 0.00105 563111.63

4329686.05   0.00103
         563211.63   4329686.05   0.00099   563311.63
4329686.05   0.00096
         563411.63   4329686.05   0.00097   563511.63
4329686.05   0.00093
         563611.63   4329686.05   0.00089   563711.63
4329686.05   0.00085
         563811.63   4329686.05   0.00083   563911.63
4329686.05   0.00079
         564011.63   4329686.05   0.00074   564111.63
4329686.05   0.00070
         564211.63   4329686.05   0.00067   564311.63
4329686.05   0.00065
         564411.63   4329686.05   0.00063   564511.63
4329686.05   0.00068
         564611.63   4329686.05   0.00060   564711.63
4329686.05   0.00053
         564811.63   4329686.05   0.00053   564911.63
4329686.05   0.00048
         565011.63   4329686.05   0.00046   565111.63
4329686.05   0.00044
         565211.63   4329686.05   0.00039   565311.63
4329686.05   0.00036
         565411.63   4329686.05   0.00034   565511.63
4329686.05   0.00031
         565611.63   4329686.05   0.00029   565711.63
4329686.05   0.00028

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                    *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                              ** CONC OF DPM   IN MICROGRAMS/M**3
                     **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         565811.63   4329686.05   0.00027   565911.63

4329686.05 0.00026
566011.63 4329686.05 0.00025 566111.63
4329686.05 0.00024
566211.63 4329686.05 0.00023 566311.63
4329686.05 0.00022
566411.63 4329686.05 0.00022 566511.63
4329686.05 0.00021
560111.63 4329786.05 0.00047 560211.63
4329786.05 0.00049
560311.63 4329786.05 0.00050 560411.63
4329786.05 0.00052
560511.63 4329786.05 0.00053 560611.63
4329786.05 0.00056
560711.63 4329786.05 0.00059 560811.63
4329786.05 0.00061
560911.63 4329786.05 0.00064 561011.63
4329786.05 0.00067
561111.63 4329786.05 0.00069 561211.63
4329786.05 0.00072
561311.63 4329786.05 0.00075 561411.63
4329786.05 0.00078
561511.63 4329786.05 0.00080 561611.63
4329786.05 0.00083
561711.63 4329786.05 0.00084 561811.63
4329786.05 0.00086
561911.63 4329786.05 0.00088 562011.63
4329786.05 0.00089
562111.63 4329786.05 0.00090 562211.63
4329786.05 0.00091
562311.63 4329786.05 0.00092 562411.63
4329786.05 0.00093
562511.63 4329786.05 0.00095 562611.63
4329786.05 0.00095
562711.63 4329786.05 0.00099 562811.63
4329786.05 0.00099
562911.63 4329786.05 0.00098 563011.63
4329786.05 0.00097
563111.63 4329786.05 0.00096 563211.63
4329786.05 0.00093
563311.63 4329786.05 0.00089 563411.63
4329786.05 0.00088
563511.63 4329786.05 0.00088 563611.63
4329786.05 0.00083
563711.63 4329786.05 0.00079 563811.63
4329786.05 0.00077
563911.63 4329786.05 0.00073 564011.63
4329786.05 0.00070
564111.63 4329786.05 0.00066 564211.63
4329786.05 0.00063
564311.63 4329786.05 0.00060 564411.63

4329786.05   0.00063
         564511.63   4329786.05   0.00060   564611.63
4329786.05   0.00058
         564711.63   4329786.05   0.00052   564811.63
4329786.05   0.00049
         564911.63   4329786.05   0.00046   565011.63
4329786.05   0.00043
         565111.63   4329786.05   0.00042   565211.63
4329786.05   0.00038
         565311.63   4329786.05   0.00035   565411.63
4329786.05   0.00034
         565511.63   4329786.05   0.00031   565611.63
4329786.05   0.00029
         565711.63   4329786.05   0.00027   565811.63
4329786.05   0.00026
         565911.63   4329786.05   0.00025   566011.63
4329786.05   0.00024
         566111.63   4329786.05   0.00023   566211.63
4329786.05   0.00022
         566311.63   4329786.05   0.00022   566411.63
4329786.05   0.00021
         566511.63   4329786.05   0.00020   560111.63
4329886.05   0.00047
         560211.63   4329886.05   0.00048   560311.63
4329886.05   0.00049
         560411.63   4329886.05   0.00051   560511.63
4329886.05   0.00052
         560611.63   4329886.05   0.00055   560711.63
4329886.05   0.00057

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF DPM   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -

- -
560811.63 4329886.05 0.00060 560911.63
4329886.05 0.00062
561011.63 4329886.05 0.00065 561111.63
4329886.05 0.00067
561211.63 4329886.05 0.00070 561311.63
4329886.05 0.00072
561411.63 4329886.05 0.00074 561511.63
4329886.05 0.00077
561611.63 4329886.05 0.00079 561711.63
4329886.05 0.00080
561811.63 4329886.05 0.00082 561911.63
4329886.05 0.00083
562011.63 4329886.05 0.00083 562111.63
4329886.05 0.00084
562211.63 4329886.05 0.00085 562311.63
4329886.05 0.00086
562411.63 4329886.05 0.00087 562511.63
4329886.05 0.00087
562611.63 4329886.05 0.00087 562711.63
4329886.05 0.00089
562811.63 4329886.05 0.00088 562911.63
4329886.05 0.00089
563011.63 4329886.05 0.00088 563111.63
4329886.05 0.00088
563211.63 4329886.05 0.00087 563311.63
4329886.05 0.00083
563411.63 4329886.05 0.00081 563511.63
4329886.05 0.00080
563611.63 4329886.05 0.00078 563711.63
4329886.05 0.00074
563811.63 4329886.05 0.00071 563911.63
4329886.05 0.00068
564011.63 4329886.05 0.00066 564111.63
4329886.05 0.00062
564211.63 4329886.05 0.00060 564311.63
4329886.05 0.00057
564411.63 4329886.05 0.00061 564511.63
4329886.05 0.00055
564611.63 4329886.05 0.00052 564711.63
4329886.05 0.00048
564811.63 4329886.05 0.00046 564911.63
4329886.05 0.00046
565011.63 4329886.05 0.00042 565111.63
4329886.05 0.00039
565211.63 4329886.05 0.00036 565311.63
4329886.05 0.00034
565411.63 4329886.05 0.00032 565511.63
4329886.05 0.00030
565611.63 4329886.05 0.00028 565711.63

4329886.05 0.00027
565811.63 4329886.05 0.00025 565911.63
4329886.05 0.00024
566011.63 4329886.05 0.00023 566111.63
4329886.05 0.00023
566211.63 4329886.05 0.00022 566311.63
4329886.05 0.00021
566411.63 4329886.05 0.00020 566511.63
4329886.05 0.00020
560111.63 4329986.05 0.00046 560211.63
4329986.05 0.00048
560311.63 4329986.05 0.00049 560411.63
4329986.05 0.00050
560511.63 4329986.05 0.00051 560611.63
4329986.05 0.00053
560711.63 4329986.05 0.00056 560811.63
4329986.05 0.00058
560911.63 4329986.05 0.00061 561011.63
4329986.05 0.00063
561111.63 4329986.05 0.00065 561211.63
4329986.05 0.00067
561311.63 4329986.05 0.00069 561411.63
4329986.05 0.00071
561511.63 4329986.05 0.00073 561611.63
4329986.05 0.00075
561711.63 4329986.05 0.00076 561811.63
4329986.05 0.00077
561911.63 4329986.05 0.00078 562011.63
4329986.05 0.00079
562111.63 4329986.05 0.00079 562211.63
4329986.05 0.00080

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)

Y-COORD (M)   CONC
- -

562311.63 4329986.05 0.00081 562411.63
4329986.05 0.00081
562511.63 4329986.05 0.00081 562611.63
4329986.05 0.00081
562711.63 4329986.05 0.00081 562811.63
4329986.05 0.00081
562911.63 4329986.05 0.00081 563011.63
4329986.05 0.00081
563111.63 4329986.05 0.00080 563211.63
4329986.05 0.00081
563311.63 4329986.05 0.00078 563411.63
4329986.05 0.00075
563511.63 4329986.05 0.00074 563611.63
4329986.05 0.00072
563711.63 4329986.05 0.00070 563811.63
4329986.05 0.00067
563911.63 4329986.05 0.00064 564011.63
4329986.05 0.00062
564111.63 4329986.05 0.00059 564211.63
4329986.05 0.00056
564311.63 4329986.05 0.00054 564411.63
4329986.05 0.00058
564511.63 4329986.05 0.00052 564611.63
4329986.05 0.00049
564711.63 4329986.05 0.00046 564811.63
4329986.05 0.00045
564911.63 4329986.05 0.00043 565011.63
4329986.05 0.00041
565111.63 4329986.05 0.00039 565211.63
4329986.05 0.00036
565311.63 4329986.05 0.00033 565411.63
4329986.05 0.00031
565511.63 4329986.05 0.00029 565611.63
4329986.05 0.00027
565711.63 4329986.05 0.00026 565811.63
4329986.05 0.00025
565911.63 4329986.05 0.00024 566011.63
4329986.05 0.00023
566111.63 4329986.05 0.00022 566211.63
4329986.05 0.00021
566311.63 4329986.05 0.00021 566411.63
4329986.05 0.00020
566511.63 4329986.05 0.00019 560111.63
4330086.05 0.00046
560211.63 4330086.05 0.00047 560311.63
4330086.05 0.00048
560411.63 4330086.05 0.00049 560511.63

4330086.05   0.00050
         560611.63   4330086.05   0.00053   560711.63
4330086.05   0.00054
         560811.63   4330086.05   0.00056   560911.63
4330086.05   0.00058
         561011.63   4330086.05   0.00061   561111.63
4330086.05   0.00063
         561211.63   4330086.05   0.00065   561311.63
4330086.05   0.00067
         561411.63   4330086.05   0.00068   561511.63
4330086.05   0.00070
         561611.63   4330086.05   0.00071   561711.63
4330086.05   0.00073
         561811.63   4330086.05   0.00073   561911.63
4330086.05   0.00074
         562011.63   4330086.05   0.00074   562111.63
4330086.05   0.00075
         562211.63   4330086.05   0.00076   562311.63
4330086.05   0.00076
         562411.63   4330086.05   0.00076   562511.63
4330086.05   0.00076
         562611.63   4330086.05   0.00076   562711.63
4330086.05   0.00076
         562811.63   4330086.05   0.00075   562911.63
4330086.05   0.00075
         563011.63   4330086.05   0.00074   563111.63
4330086.05   0.00074
         563211.63   4330086.05   0.00073   563311.63
4330086.05   0.00073
         563411.63   4330086.05   0.00071   563511.63
4330086.05   0.00069
         563611.63   4330086.05   0.00068   563711.63
4330086.05   0.00065

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                               ** CONC OF DPM   IN MICROGRAMS/M**3
                    **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
563811.63	4330086.05	0.00062	563911.63	4330086.05	0.00060
564011.63	4330086.05	0.00058	564111.63	4330086.05	0.00056
564211.63	4330086.05	0.00054	564311.63	4330086.05	0.00052
564411.63	4330086.05	0.00051	564511.63	4330086.05	0.00049
564611.63	4330086.05	0.00046	564711.63	4330086.05	0.00044
564811.63	4330086.05	0.00043	564911.63	4330086.05	0.00040
565011.63	4330086.05	0.00038	565111.63	4330086.05	0.00036
565211.63	4330086.05	0.00035	565311.63	4330086.05	0.00033
565411.63	4330086.05	0.00030	565511.63	4330086.05	0.00028
565611.63	4330086.05	0.00027	565711.63	4330086.05	0.00025
565811.63	4330086.05	0.00024	565911.63	4330086.05	0.00023
566011.63	4330086.05	0.00022	566111.63	4330086.05	0.00021
566211.63	4330086.05	0.00021	566311.63	4330086.05	0.00020
566411.63	4330086.05	0.00019	566511.63	4330086.05	0.00019
560111.63	4330186.05	0.00045	560211.63	4330186.05	0.00046
560311.63	4330186.05	0.00047	560411.63	4330186.05	0.00048
560511.63	4330186.05	0.00049	560611.63	4330186.05	0.00051
560711.63	4330186.05	0.00053	560811.63	4330186.05	0.00055
560911.63	4330186.05	0.00056	561011.63	4330186.05	0.00059
561111.63	4330186.05	0.00061	561211.63	4330186.05	0.00062
561311.63	4330186.05	0.00064	561411.63	4330186.05	0.00065
561511.63	4330186.05	0.00067	561611.63	4330186.05	0.00068
561711.63	4330186.05	0.00069	561811.63		

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4330186.05        0.00070
         561911.63    4330186.05        0.00070                        562011.63
4330186.05        0.00071
         562111.63    4330186.05        0.00071                        562211.63
4330186.05        0.00072
         562311.63    4330186.05        0.00072                        562411.63
4330186.05        0.00072
         562511.63    4330186.05        0.00072                        562611.63
4330186.05        0.00072
         562711.63    4330186.05        0.00071                        562811.63
4330186.05        0.00071
         562911.63    4330186.05        0.00070                        563011.63
4330186.05        0.00069
         563111.63    4330186.05        0.00069                        563211.63
4330186.05        0.00068
         563311.63    4330186.05        0.00067                        563411.63
4330186.05        0.00066
         563511.63    4330186.05        0.00064                        563611.63
4330186.05        0.00063
         563711.63    4330186.05        0.00061                        563811.63
4330186.05        0.00059
         563911.63    4330186.05        0.00057                        564011.63
4330186.05        0.00055
         564111.63    4330186.05        0.00053                        564211.63
4330186.05        0.00051
         564311.63    4330186.05        0.00049                        564411.63
4330186.05        0.00048
         564511.63    4330186.05        0.00046                        564611.63
4330186.05        0.00044
         564711.63    4330186.05        0.00042                        564811.63
4330186.05        0.00040
         564911.63    4330186.05        0.00038                        565011.63
4330186.05        0.00037
         565111.63    4330186.05        0.00035                        565211.63
4330186.05        0.00033
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                          ***        06:53:13

                                    PAGE 112
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL      ***
                                    INCLUDING SOURCE(S):     PAREA1      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***
```

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
565311.63	4330186.05	0.00032	565411.63	4330186.05	0.00030
565511.63	4330186.05	0.00028	565611.63	4330186.05	0.00026
565711.63	4330186.05	0.00025	565811.63	4330186.05	0.00023
565911.63	4330186.05	0.00022	566011.63	4330186.05	0.00021
566111.63	4330186.05	0.00021	566211.63	4330186.05	0.00020
566311.63	4330186.05	0.00019	566411.63	4330186.05	0.00019
566511.63	4330186.05	0.00018	560111.63	4330286.05	0.00044
560211.63	4330286.05	0.00045	560311.63	4330286.05	0.00046
560411.63	4330286.05	0.00047	560511.63	4330286.05	0.00048
560611.63	4330286.05	0.00050	560711.63	4330286.05	0.00051
560811.63	4330286.05	0.00053	560911.63	4330286.05	0.00055
561011.63	4330286.05	0.00056	561111.63	4330286.05	0.00058
561211.63	4330286.05	0.00060	561311.63	4330286.05	0.00062
561411.63	4330286.05	0.00063	561511.63	4330286.05	0.00064
561611.63	4330286.05	0.00065	561711.63	4330286.05	0.00066
561811.63	4330286.05	0.00066	561911.63	4330286.05	0.00067
562011.63	4330286.05	0.00067	562111.63	4330286.05	0.00067
562211.63	4330286.05	0.00068	562311.63	4330286.05	0.00068
562411.63	4330286.05	0.00068	562511.63	4330286.05	0.00068
562611.63	4330286.05	0.00068	562711.63	4330286.05	0.00067
562811.63	4330286.05	0.00067	562911.63	4330286.05	0.00066
563011.63	4330286.05	0.00065	563111.63		

4330286.05 0.00064
563211.63 4330286.05 0.00064 563311.63
4330286.05 0.00063
563411.63 4330286.05 0.00062 563511.63
4330286.05 0.00060
563611.63 4330286.05 0.00059 563711.63
4330286.05 0.00057
563811.63 4330286.05 0.00056 563911.63
4330286.05 0.00054
564011.63 4330286.05 0.00052 564111.63
4330286.05 0.00050
564211.63 4330286.05 0.00049 564311.63
4330286.05 0.00047
564411.63 4330286.05 0.00046 564511.63
4330286.05 0.00044
564611.63 4330286.05 0.00042 564711.63
4330286.05 0.00040
564811.63 4330286.05 0.00039 564911.63
4330286.05 0.00037
565011.63 4330286.05 0.00035 565111.63
4330286.05 0.00034
565211.63 4330286.05 0.00032 565311.63
4330286.05 0.00031
565411.63 4330286.05 0.00029 565511.63
4330286.05 0.00027
565611.63 4330286.05 0.00026 565711.63
4330286.05 0.00024
565811.63 4330286.05 0.00023 565911.63
4330286.05 0.00022
566011.63 4330286.05 0.00021 566111.63
4330286.05 0.00020
566211.63 4330286.05 0.00020 566311.63
4330286.05 0.00019
566411.63 4330286.05 0.00018 566511.63
4330286.05 0.00018
542111.63 4306586.05 0.00000 543111.63
4306586.05 0.00000

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
544111.63	4306586.05	0.00000	545111.63	4306586.05	0.00000
546111.63	4306586.05	0.00000	547111.63	4306586.05	0.00000
548111.63	4306586.05	0.00000	549111.63	4306586.05	0.00000
550111.63	4306586.05	0.00000	551111.63	4306586.05	0.00000
552111.63	4306586.05	0.00000	553111.63	4306586.05	0.00000
554111.63	4306586.05	0.00000	555111.63	4306586.05	0.00000
556111.63	4306586.05	0.00000	557111.63	4306586.05	0.00000
558111.63	4306586.05	0.00000	559111.63	4306586.05	0.00000
560111.63	4306586.05	0.00000	561111.63	4306586.05	0.00000
562111.63	4306586.05	0.00000	563111.63	4306586.05	0.00000
564111.63	4306586.05	0.00000	565111.63	4306586.05	0.00001
566111.63	4306586.05	0.00000	567111.63	4306586.05	0.00000
568111.63	4306586.05	0.00000	569111.63	4306586.05	0.00000
570111.63	4306586.05	0.00000	571111.63	4306586.05	0.00000
572111.63	4306586.05	0.00000	573111.63	4306586.05	0.00000
574111.63	4306586.05	0.00000	575111.63	4306586.05	0.00000
576111.63	4306586.05	0.00000	577111.63	4306586.05	0.00001
578111.63	4306586.05	0.00001	579111.63	4306586.05	0.00002
580111.63	4306586.05	0.00002	581111.63	4306586.05	0.00002
582111.63	4306586.05	0.00002	583111.63	4306586.05	0.00002
584111.63	4306586.05	0.00002	542111.63		

```
4307586.05        0.00000
         543111.63    4307586.05        0.00000                     544111.63
4307586.05        0.00000
         545111.63    4307586.05        0.00000                     546111.63
4307586.05        0.00000
         547111.63    4307586.05        0.00000                     548111.63
4307586.05        0.00000
         549111.63    4307586.05        0.00000                     550111.63
4307586.05        0.00000
         551111.63    4307586.05        0.00000                     552111.63
4307586.05        0.00000
         553111.63    4307586.05        0.00000                     554111.63
4307586.05        0.00000
         555111.63    4307586.05        0.00000                     556111.63
4307586.05        0.00000
         557111.63    4307586.05        0.00000                     558111.63
4307586.05        0.00000
         559111.63    4307586.05        0.00000                     560111.63
4307586.05        0.00000
         561111.63    4307586.05        0.00000                     562111.63
4307586.05        0.00000
         563111.63    4307586.05        0.00000                     564111.63
4307586.05        0.00000
         565111.63    4307586.05        0.00000                     566111.63
4307586.05        0.00000
         567111.63    4307586.05        0.00000                     568111.63
4307586.05        0.00000
         569111.63    4307586.05        0.00000                     570111.63
4307586.05        0.00000
         571111.63    4307586.05        0.00000                     572111.63
4307586.05        0.00000
         573111.63    4307586.05        0.00000                     574111.63
4307586.05        0.00000
         575111.63    4307586.05        0.00001                     576111.63
4307586.05        0.00001
         577111.63    4307586.05        0.00001                     578111.63
4307586.05        0.00001
         579111.63    4307586.05        0.00002                     580111.63
4307586.05        0.00002
♠ *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                        ***       08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                         ***       06:53:13

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL      ***
                                    INCLUDING SOURCE(S):     PAREA1      ,
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*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
581111.63	4307586.05	0.00002	582111.63	4307586.05	0.00002
583111.63	4307586.05	0.00002	584111.63	4307586.05	0.00002
542111.63	4308586.05	0.00000	543111.63	4308586.05	0.00000
544111.63	4308586.05	0.00000	545111.63	4308586.05	0.00000
546111.63	4308586.05	0.00000	547111.63	4308586.05	0.00000
548111.63	4308586.05	0.00000	549111.63	4308586.05	0.00000
550111.63	4308586.05	0.00000	551111.63	4308586.05	0.00000
552111.63	4308586.05	0.00000	553111.63	4308586.05	0.00000
554111.63	4308586.05	0.00000	555111.63	4308586.05	0.00000
556111.63	4308586.05	0.00000	557111.63	4308586.05	0.00000
558111.63	4308586.05	0.00000	559111.63	4308586.05	0.00000
560111.63	4308586.05	0.00000	561111.63	4308586.05	0.00000
562111.63	4308586.05	0.00000	563111.63	4308586.05	0.00000
564111.63	4308586.05	0.00000	565111.63	4308586.05	0.00000
566111.63	4308586.05	0.00000	567111.63	4308586.05	0.00000
568111.63	4308586.05	0.00000	569111.63	4308586.05	0.00000
570111.63	4308586.05	0.00000	571111.63	4308586.05	0.00000
572111.63	4308586.05	0.00000	573111.63	4308586.05	0.00000
574111.63	4308586.05	0.00001	575111.63	4308586.05	0.00001
576111.63	4308586.05	0.00001	577111.63		

4308586.05 0.00001
578111.63 4308586.05 0.00002 579111.63
4308586.05 0.00002
580111.63 4308586.05 0.00003 581111.63
4308586.05 0.00002
582111.63 4308586.05 0.00002 583111.63
4308586.05 0.00002
584111.63 4308586.05 0.00002 542111.63
4309586.05 0.00000
543111.63 4309586.05 0.00000 544111.63
4309586.05 0.00000
545111.63 4309586.05 0.00000 546111.63
4309586.05 0.00000
547111.63 4309586.05 0.00000 548111.63
4309586.05 0.00000
549111.63 4309586.05 0.00000 550111.63
4309586.05 0.00000
551111.63 4309586.05 0.00000 552111.63
4309586.05 0.00000
553111.63 4309586.05 0.00000 554111.63
4309586.05 0.00000
555111.63 4309586.05 0.00000 556111.63
4309586.05 0.00000
557111.63 4309586.05 0.00000 558111.63
4309586.05 0.00000
559111.63 4309586.05 0.00000 560111.63
4309586.05 0.00000
561111.63 4309586.05 0.00000 562111.63
4309586.05 0.00000
563111.63 4309586.05 0.00000 564111.63
4309586.05 0.00000
565111.63 4309586.05 0.00000 566111.63
4309586.05 0.00000
567111.63 4309586.05 0.00000 568111.63
4309586.05 0.00000
569111.63 4309586.05 0.00000 570111.63
4309586.05 0.00000
571111.63 4309586.05 0.00000 572111.63
4309586.05 0.00001
573111.63 4309586.05 0.00001 574111.63
4309586.05 0.00001

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5

YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
575111.63	4309586.05	0.00001	576111.63	4309586.05	0.00001
577111.63	4309586.05	0.00002	578111.63	4309586.05	0.00002
579111.63	4309586.05	0.00003	580111.63	4309586.05	0.00003
581111.63	4309586.05	0.00003	582111.63	4309586.05	0.00003
583111.63	4309586.05	0.00003	584111.63	4309586.05	0.00003
542111.63	4310586.05	0.00000	543111.63	4310586.05	0.00000
544111.63	4310586.05	0.00000	545111.63	4310586.05	0.00000
546111.63	4310586.05	0.00000	547111.63	4310586.05	0.00000
548111.63	4310586.05	0.00000	549111.63	4310586.05	0.00000
550111.63	4310586.05	0.00000	551111.63	4310586.05	0.00000
552111.63	4310586.05	0.00000	553111.63	4310586.05	0.00000
554111.63	4310586.05	0.00000	555111.63	4310586.05	0.00000
556111.63	4310586.05	0.00000	557111.63	4310586.05	0.00000
558111.63	4310586.05	0.00000	559111.63	4310586.05	0.00000
560111.63	4310586.05	0.00000	561111.63	4310586.05	0.00000
562111.63	4310586.05	0.00000	563111.63	4310586.05	0.00000
564111.63	4310586.05	0.00000	565111.63	4310586.05	0.00000
566111.63	4310586.05	0.00000	567111.63	4310586.05	0.00000
568111.63	4310586.05	0.00000	569111.63		

4310586.05 0.00000
570111.63 4310586.05 0.00000 571111.63
4310586.05 0.00000
572111.63 4310586.05 0.00000 573111.63
4310586.05 0.00001
574111.63 4310586.05 0.00001 575111.63
4310586.05 0.00002
576111.63 4310586.05 0.00002 577111.63
4310586.05 0.00003
578111.63 4310586.05 0.00003 579111.63
4310586.05 0.00003
580111.63 4310586.05 0.00003 581111.63
4310586.05 0.00003
582111.63 4310586.05 0.00003 583111.63
4310586.05 0.00003
584111.63 4310586.05 0.00003 542111.63
4311586.05 0.00000
543111.63 4311586.05 0.00000 544111.63
4311586.05 0.00000
545111.63 4311586.05 0.00000 546111.63
4311586.05 0.00000
547111.63 4311586.05 0.00000 548111.63
4311586.05 0.00000
549111.63 4311586.05 0.00000 550111.63
4311586.05 0.00000
551111.63 4311586.05 0.00000 552111.63
4311586.05 0.00000
553111.63 4311586.05 0.00000 554111.63
4311586.05 0.00000
555111.63 4311586.05 0.00000 556111.63
4311586.05 0.00000
557111.63 4311586.05 0.00000 558111.63
4311586.05 0.00000
559111.63 4311586.05 0.00000 560111.63
4311586.05 0.00000
561111.63 4311586.05 0.00000 562111.63
4311586.05 0.00000
563111.63 4311586.05 0.00000 564111.63
4311586.05 0.00000
565111.63 4311586.05 0.00000 566111.63
4311586.05 0.00000
567111.63 4311586.05 0.00000 568111.63
4311586.05 0.00000

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
569111.63	4311586.05	0.00000	570111.63	4311586.05	0.00000
571111.63	4311586.05	0.00000	572111.63	4311586.05	0.00001
573111.63	4311586.05	0.00001	574111.63	4311586.05	0.00001
575111.63	4311586.05	0.00001	576111.63	4311586.05	0.00002
577111.63	4311586.05	0.00003	578111.63	4311586.05	0.00003
579111.63	4311586.05	0.00003	580111.63	4311586.05	0.00003
581111.63	4311586.05	0.00003	582111.63	4311586.05	0.00003
583111.63	4311586.05	0.00003	584111.63	4311586.05	0.00003
542111.63	4312586.05	0.00000	543111.63	4312586.05	0.00000
544111.63	4312586.05	0.00000	545111.63	4312586.05	0.00000
546111.63	4312586.05	0.00000	547111.63	4312586.05	0.00000
548111.63	4312586.05	0.00000	549111.63	4312586.05	0.00000
550111.63	4312586.05	0.00000	551111.63	4312586.05	0.00000
552111.63	4312586.05	0.00000	553111.63	4312586.05	0.00000
554111.63	4312586.05	0.00000	555111.63	4312586.05	0.00000
556111.63	4312586.05	0.00000	557111.63	4312586.05	0.00000
558111.63	4312586.05	0.00000	559111.63	4312586.05	0.00000
560111.63	4312586.05	0.00000	561111.63		

```
4312586.05        0.00000
         562111.63    4312586.05        0.00000                     563111.63
4312586.05        0.00000
         564111.63    4312586.05        0.00000                     565111.63
4312586.05        0.00000
         566111.63    4312586.05        0.00000                     567111.63
4312586.05        0.00000
         568111.63    4312586.05        0.00000                     569111.63
4312586.05        0.00000
         570111.63    4312586.05        0.00000                     571111.63
4312586.05        0.00000
         572111.63    4312586.05        0.00001                     573111.63
4312586.05        0.00001
         574111.63    4312586.05        0.00001                     575111.63
4312586.05        0.00002
         576111.63    4312586.05        0.00003                     577111.63
4312586.05        0.00003
         578111.63    4312586.05        0.00003                     579111.63
4312586.05        0.00003
         580111.63    4312586.05        0.00003                     581111.63
4312586.05        0.00003
         582111.63    4312586.05        0.00003                     583111.63
4312586.05        0.00003
         584111.63    4312586.05        0.00003                     542111.63
4313586.05        0.00000
         543111.63    4313586.05        0.00000                     544111.63
4313586.05        0.00000
         545111.63    4313586.05        0.00000                     546111.63
4313586.05        0.00000
         547111.63    4313586.05        0.00000                     548111.63
4313586.05        0.00000
         549111.63    4313586.05        0.00000                     550111.63
4313586.05        0.00000
         551111.63    4313586.05        0.00000                     552111.63
4313586.05        0.00000
         553111.63    4313586.05        0.00000                     554111.63
4313586.05        0.00000
         555111.63    4313586.05        0.00000                     556111.63
4313586.05        0.00000
         557111.63    4313586.05        0.00000                     558111.63
4313586.05        0.00000
         559111.63    4313586.05        0.00000                     560111.63
4313586.05        0.00000
         561111.63    4313586.05        0.00000                     562111.63
4313586.05        0.00000
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                          ***       06:53:13
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
563111.63	4313586.05	0.00000	564111.63	4313586.05	0.00000
565111.63	4313586.05	0.00000	566111.63	4313586.05	0.00000
567111.63	4313586.05	0.00000	568111.63	4313586.05	0.00000
569111.63	4313586.05	0.00000	570111.63	4313586.05	0.00000
571111.63	4313586.05	0.00001	572111.63	4313586.05	0.00001
573111.63	4313586.05	0.00002	574111.63	4313586.05	0.00002
575111.63	4313586.05	0.00003	576111.63	4313586.05	0.00004
577111.63	4313586.05	0.00004	578111.63	4313586.05	0.00004
579111.63	4313586.05	0.00004	580111.63	4313586.05	0.00004
581111.63	4313586.05	0.00004	582111.63	4313586.05	0.00004
583111.63	4313586.05	0.00003	584111.63	4313586.05	0.00003
542111.63	4314586.05	0.00000	543111.63	4314586.05	0.00000
544111.63	4314586.05	0.00000	545111.63	4314586.05	0.00000
546111.63	4314586.05	0.00000	547111.63	4314586.05	0.00000
548111.63	4314586.05	0.00000	549111.63	4314586.05	0.00000
550111.63	4314586.05	0.00000	551111.63	4314586.05	0.00000
552111.63	4314586.05	0.00000	553111.63		

```
4314586.05        0.00000
         554111.63    4314586.05        0.00000                     555111.63
4314586.05        0.00000
         556111.63    4314586.05        0.00000                     557111.63
4314586.05        0.00000
         558111.63    4314586.05        0.00000                     559111.63
4314586.05        0.00000
         560111.63    4314586.05        0.00000                     561111.63
4314586.05        0.00000
         562111.63    4314586.05        0.00000                     563111.63
4314586.05        0.00000
         564111.63    4314586.05        0.00001                     565111.63
4314586.05        0.00000
         566111.63    4314586.05        0.00001                     567111.63
4314586.05        0.00000
         568111.63    4314586.05        0.00000                     569111.63
4314586.05        0.00000
         570111.63    4314586.05        0.00001                     571111.63
4314586.05        0.00001
         572111.63    4314586.05        0.00001                     573111.63
4314586.05        0.00002
         574111.63    4314586.05        0.00002                     575111.63
4314586.05        0.00004
         576111.63    4314586.05        0.00004                     577111.63
4314586.05        0.00004
         578111.63    4314586.05        0.00004                     579111.63
4314586.05        0.00004
         580111.63    4314586.05        0.00004                     581111.63
4314586.05        0.00004
         582111.63    4314586.05        0.00004                     583111.63
4314586.05        0.00003
         584111.63    4314586.05        0.00003                     542111.63
4315586.05        0.00000
         543111.63    4315586.05        0.00000                     544111.63
4315586.05        0.00000
         545111.63    4315586.05        0.00000                     546111.63
4315586.05        0.00000
         547111.63    4315586.05        0.00000                     548111.63
4315586.05        0.00000
         549111.63    4315586.05        0.00000                     550111.63
4315586.05        0.00000
         551111.63    4315586.05        0.00000                     552111.63
4315586.05        0.00000
         553111.63    4315586.05        0.00000                     554111.63
4315586.05        0.00000
         555111.63    4315586.05        0.00000                     556111.63
4315586.05        0.00000
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***         08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
557111.63	4315586.05	0.00000	558111.63	4315586.05	0.00000
559111.63	4315586.05	0.00000	560111.63	4315586.05	0.00000
561111.63	4315586.05	0.00000	562111.63	4315586.05	0.00000
563111.63	4315586.05	0.00000	564111.63	4315586.05	0.00000
565111.63	4315586.05	0.00000	566111.63	4315586.05	0.00000
567111.63	4315586.05	0.00000	568111.63	4315586.05	0.00000
569111.63	4315586.05	0.00001	570111.63	4315586.05	0.00001
571111.63	4315586.05	0.00001	572111.63	4315586.05	0.00002
573111.63	4315586.05	0.00003	574111.63	4315586.05	0.00003
575111.63	4315586.05	0.00004	576111.63	4315586.05	0.00005
577111.63	4315586.05	0.00005	578111.63	4315586.05	0.00005
579111.63	4315586.05	0.00005	580111.63	4315586.05	0.00004
581111.63	4315586.05	0.00004	582111.63	4315586.05	0.00004
583111.63	4315586.05	0.00003	584111.63	4315586.05	0.00003
542111.63	4316586.05	0.00000	543111.63	4316586.05	0.00000
544111.63	4316586.05	0.00000	545111.63		

```
4316586.05        0.00000
         546111.63    4316586.05        0.00000                     547111.63
4316586.05        0.00000
         548111.63    4316586.05        0.00000                     549111.63
4316586.05        0.00000
         550111.63    4316586.05        0.00000                     551111.63
4316586.05        0.00000
         552111.63    4316586.05        0.00000                     553111.63
4316586.05        0.00000
         554111.63    4316586.05        0.00000                     555111.63
4316586.05        0.00000
         556111.63    4316586.05        0.00000                     557111.63
4316586.05        0.00000
         558111.63    4316586.05        0.00000                     559111.63
4316586.05        0.00000
         560111.63    4316586.05        0.00000                     561111.63
4316586.05        0.00000
         562111.63    4316586.05        0.00000                     563111.63
4316586.05        0.00000
         564111.63    4316586.05        0.00001                     565111.63
4316586.05        0.00000
         566111.63    4316586.05        0.00000                     567111.63
4316586.05        0.00001
         568111.63    4316586.05        0.00001                     569111.63
4316586.05        0.00001
         570111.63    4316586.05        0.00001                     571111.63
4316586.05        0.00001
         572111.63    4316586.05        0.00002                     573111.63
4316586.05        0.00002
         574111.63    4316586.05        0.00004                     575111.63
4316586.05        0.00005
         576111.63    4316586.05        0.00005                     577111.63
4316586.05        0.00005
         578111.63    4316586.05        0.00005                     579111.63
4316586.05        0.00005
         580111.63    4316586.05        0.00004                     581111.63
4316586.05        0.00004
         582111.63    4316586.05        0.00004                     583111.63
4316586.05        0.00003
         584111.63    4316586.05        0.00003                     542111.63
4317586.05        0.00000
         543111.63    4317586.05        0.00000                     544111.63
4317586.05        0.00000
         545111.63    4317586.05        0.00000                     546111.63
4317586.05        0.00000
         547111.63    4317586.05        0.00000                     548111.63
4317586.05        0.00000
         549111.63    4317586.05        0.00000                     550111.63
4317586.05        0.00000
```

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
551111.63	4317586.05	0.00000	552111.63	4317586.05	0.00000
553111.63	4317586.05	0.00000	554111.63	4317586.05	0.00000
555111.63	4317586.05	0.00000	556111.63	4317586.05	0.00000
557111.63	4317586.05	0.00000	558111.63	4317586.05	0.00000
559111.63	4317586.05	0.00000	560111.63	4317586.05	0.00000
561111.63	4317586.05	0.00000	562111.63	4317586.05	0.00000
563111.63	4317586.05	0.00001	564111.63	4317586.05	0.00002
565111.63	4317586.05	0.00000	566111.63	4317586.05	0.00000
567111.63	4317586.05	0.00000	568111.63	4317586.05	0.00001
569111.63	4317586.05	0.00002	570111.63	4317586.05	0.00002
571111.63	4317586.05	0.00002	572111.63	4317586.05	0.00003
573111.63	4317586.05	0.00004	574111.63	4317586.05	0.00006
575111.63	4317586.05	0.00006	576111.63	4317586.05	0.00006
577111.63	4317586.05	0.00006	578111.63	4317586.05	0.00005
579111.63	4317586.05	0.00005	580111.63		

4317586.05 0.00004
581111.63 4317586.05 0.00004 582111.63
4317586.05 0.00004
583111.63 4317586.05 0.00003 584111.63
4317586.05 0.00003
542111.63 4318586.05 0.00000 543111.63
4318586.05 0.00000
544111.63 4318586.05 0.00000 545111.63
4318586.05 0.00000
546111.63 4318586.05 0.00000 547111.63
4318586.05 0.00000
548111.63 4318586.05 0.00000 549111.63
4318586.05 0.00000
550111.63 4318586.05 0.00000 551111.63
4318586.05 0.00000
552111.63 4318586.05 0.00000 553111.63
4318586.05 0.00000
554111.63 4318586.05 0.00000 555111.63
4318586.05 0.00000
556111.63 4318586.05 0.00000 557111.63
4318586.05 0.00000
558111.63 4318586.05 0.00000 559111.63
4318586.05 0.00000
560111.63 4318586.05 0.00000 561111.63
4318586.05 0.00000
562111.63 4318586.05 0.00000 563111.63
4318586.05 0.00001
564111.63 4318586.05 0.00001 565111.63
4318586.05 0.00001
566111.63 4318586.05 0.00001 567111.63
4318586.05 0.00001
568111.63 4318586.05 0.00001 569111.63
4318586.05 0.00002
570111.63 4318586.05 0.00003 571111.63
4318586.05 0.00003
572111.63 4318586.05 0.00007 573111.63
4318586.05 0.00007
574111.63 4318586.05 0.00007 575111.63
4318586.05 0.00007
576111.63 4318586.05 0.00007 577111.63
4318586.05 0.00006
578111.63 4318586.05 0.00005 579111.63
4318586.05 0.00005
580111.63 4318586.05 0.00004 581111.63
4318586.05 0.00004
582111.63 4318586.05 0.00004 583111.63
4318586.05 0.00003
584111.63 4318586.05 0.00003 542111.63
4319586.05 0.00000
543111.63 4319586.05 0.00000 544111.63

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
545111.63	4319586.05	0.00000	546111.63	4319586.05	0.00000
547111.63	4319586.05	0.00000	548111.63	4319586.05	0.00000
549111.63	4319586.05	0.00000	550111.63	4319586.05	0.00000
551111.63	4319586.05	0.00000	552111.63	4319586.05	0.00000
553111.63	4319586.05	0.00000	554111.63	4319586.05	0.00000
555111.63	4319586.05	0.00000	556111.63	4319586.05	0.00000
557111.63	4319586.05	0.00000	558111.63	4319586.05	0.00000
559111.63	4319586.05	0.00000	560111.63	4319586.05	0.00000
561111.63	4319586.05	0.00000	562111.63	4319586.05	0.00000
563111.63	4319586.05	0.00001	564111.63	4319586.05	0.00003
565111.63	4319586.05	0.00004	566111.63	4319586.05	0.00001
567111.63	4319586.05	0.00001	568111.63	4319586.05	0.00001
569111.63	4319586.05	0.00002	570111.63	4319586.05	0.00005
571111.63	4319586.05	0.00006	572111.63		

4319586.05 0.00007
573111.63 4319586.05 0.00008 574111.63
4319586.05 0.00008
575111.63 4319586.05 0.00007 576111.63
4319586.05 0.00007
577111.63 4319586.05 0.00006 578111.63
4319586.05 0.00005
579111.63 4319586.05 0.00005 580111.63
4319586.05 0.00004
581111.63 4319586.05 0.00004 582111.63
4319586.05 0.00004
583111.63 4319586.05 0.00004 584111.63
4319586.05 0.00004
542111.63 4320586.05 0.00000 543111.63
4320586.05 0.00000
544111.63 4320586.05 0.00000 545111.63
4320586.05 0.00000
546111.63 4320586.05 0.00000 547111.63
4320586.05 0.00000
548111.63 4320586.05 0.00000 549111.63
4320586.05 0.00000
550111.63 4320586.05 0.00000 551111.63
4320586.05 0.00000
552111.63 4320586.05 0.00000 553111.63
4320586.05 0.00000
554111.63 4320586.05 0.00000 555111.63
4320586.05 0.00000
556111.63 4320586.05 0.00000 557111.63
4320586.05 0.00000
558111.63 4320586.05 0.00000 559111.63
4320586.05 0.00000
560111.63 4320586.05 0.00000 561111.63
4320586.05 0.00000
562111.63 4320586.05 0.00000 563111.63
4320586.05 0.00001
564111.63 4320586.05 0.00002 565111.63
4320586.05 0.00003
566111.63 4320586.05 0.00008 567111.63
4320586.05 0.00002
568111.63 4320586.05 0.00003 569111.63
4320586.05 0.00003
570111.63 4320586.05 0.00004 571111.63
4320586.05 0.00005
572111.63 4320586.05 0.00010 573111.63
4320586.05 0.00010
574111.63 4320586.05 0.00009 575111.63
4320586.05 0.00007
576111.63 4320586.05 0.00006 577111.63
4320586.05 0.00006
578111.63 4320586.05 0.00005 579111.63

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
582111.63	4320586.05	0.00004	583111.63	4320586.05	0.00004
584111.63	4320586.05	0.00004	542111.63	4321586.05	0.00000
543111.63	4321586.05	0.00000	544111.63	4321586.05	0.00000
545111.63	4321586.05	0.00000	546111.63	4321586.05	0.00000
547111.63	4321586.05	0.00000	548111.63	4321586.05	0.00000
549111.63	4321586.05	0.00000	550111.63	4321586.05	0.00000
551111.63	4321586.05	0.00000	552111.63	4321586.05	0.00000
553111.63	4321586.05	0.00000	554111.63	4321586.05	0.00000
555111.63	4321586.05	0.00000	556111.63	4321586.05	0.00000
557111.63	4321586.05	0.00000	558111.63	4321586.05	0.00000
559111.63	4321586.05	0.00000	560111.63	4321586.05	0.00000
561111.63	4321586.05	0.00000	562111.63	4321586.05	0.00001
563111.63	4321586.05	0.00001	564111.63		

4321586.05 0.00001
565111.63 4321586.05 0.00006 566111.63
4321586.05 0.00005
567111.63 4321586.05 0.00012 568111.63
4321586.05 0.00004
569111.63 4321586.05 0.00005 570111.63
4321586.05 0.00005
571111.63 4321586.05 0.00011 572111.63
4321586.05 0.00012
573111.63 4321586.05 0.00010 574111.63
4321586.05 0.00008
575111.63 4321586.05 0.00007 576111.63
4321586.05 0.00007
577111.63 4321586.05 0.00006 578111.63
4321586.05 0.00006
579111.63 4321586.05 0.00006 580111.63
4321586.05 0.00005
581111.63 4321586.05 0.00005 582111.63
4321586.05 0.00005
583111.63 4321586.05 0.00005 584111.63
4321586.05 0.00004
542111.63 4322586.05 0.00000 543111.63
4322586.05 0.00000
544111.63 4322586.05 0.00000 545111.63
4322586.05 0.00000
546111.63 4322586.05 0.00000 547111.63
4322586.05 0.00000
548111.63 4322586.05 0.00000 549111.63
4322586.05 0.00000
550111.63 4322586.05 0.00000 551111.63
4322586.05 0.00000
552111.63 4322586.05 0.00000 553111.63
4322586.05 0.00000
554111.63 4322586.05 0.00000 555111.63
4322586.05 0.00000
556111.63 4322586.05 0.00000 557111.63
4322586.05 0.00000
558111.63 4322586.05 0.00000 559111.63
4322586.05 0.00000
560111.63 4322586.05 0.00000 561111.63
4322586.05 0.00000
562111.63 4322586.05 0.00001 563111.63
4322586.05 0.00001
564111.63 4322586.05 0.00002 565111.63
4322586.05 0.00002
566111.63 4322586.05 0.00004 567111.63
4322586.05 0.00009
568111.63 4322586.05 0.00017 569111.63
4322586.05 0.00018
570111.63 4322586.05 0.00011 571111.63

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
576111.63	4322586.05	0.00007	577111.63	4322586.05	0.00007
578111.63	4322586.05	0.00007	579111.63	4322586.05	0.00006
580111.63	4322586.05	0.00006	581111.63	4322586.05	0.00006
582111.63	4322586.05	0.00005	583111.63	4322586.05	0.00005
584111.63	4322586.05	0.00005	542111.63	4323586.05	0.00000
543111.63	4323586.05	0.00000	544111.63	4323586.05	0.00000
545111.63	4323586.05	0.00000	546111.63	4323586.05	0.00000
547111.63	4323586.05	0.00000	548111.63	4323586.05	0.00000
549111.63	4323586.05	0.00000	550111.63	4323586.05	0.00000
551111.63	4323586.05	0.00000	552111.63	4323586.05	0.00000
553111.63	4323586.05	0.00000	554111.63	4323586.05	0.00000
555111.63	4323586.05	0.00000	556111.63		

4323586.05 0.00000
557111.63 4323586.05 0.00000 558111.63
4323586.05 0.00000
559111.63 4323586.05 0.00000 560111.63
4323586.05 0.00000
561111.63 4323586.05 0.00001 562111.63
4323586.05 0.00003
563111.63 4323586.05 0.00005 564111.63
4323586.05 0.00006
565111.63 4323586.05 0.00003 566111.63
4323586.05 0.00006
567111.63 4323586.05 0.00012 568111.63
4323586.05 0.00018
569111.63 4323586.05 0.00021 570111.63
4323586.05 0.00017
571111.63 4323586.05 0.00014 572111.63
4323586.05 0.00012
573111.63 4323586.05 0.00010 574111.63
4323586.05 0.00010
575111.63 4323586.05 0.00009 576111.63
4323586.05 0.00009
577111.63 4323586.05 0.00008 578111.63
4323586.05 0.00007
579111.63 4323586.05 0.00007 580111.63
4323586.05 0.00006
581111.63 4323586.05 0.00006 582111.63
4323586.05 0.00005
583111.63 4323586.05 0.00005 584111.63
4323586.05 0.00005
542111.63 4324586.05 0.00000 543111.63
4324586.05 0.00000
544111.63 4324586.05 0.00000 545111.63
4324586.05 0.00000
546111.63 4324586.05 0.00000 547111.63
4324586.05 0.00000
548111.63 4324586.05 0.00000 549111.63
4324586.05 0.00000
550111.63 4324586.05 0.00000 551111.63
4324586.05 0.00000
552111.63 4324586.05 0.00000 553111.63
4324586.05 0.00000
554111.63 4324586.05 0.00000 555111.63
4324586.05 0.00000
556111.63 4324586.05 0.00000 557111.63
4324586.05 0.00000
558111.63 4324586.05 0.00000 559111.63
4324586.05 0.00000
567111.63 4324586.05 0.00017 568111.63
4324586.05 0.00024
569111.63 4324586.05 0.00022 570111.63

4324586.05 0.00019
571111.63 4324586.05 0.00015 572111.63 4324586.05 0.00014
573111.63 4324586.05 0.00012 574111.63 4324586.05 0.00011
575111.63 4324586.05 0.00010 576111.63 4324586.05 0.00009

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
577111.63	4324586.05	0.00008	578111.63	4324586.05	0.00007
579111.63	4324586.05	0.00007	580111.63	4324586.05	0.00006
581111.63	4324586.05	0.00006	582111.63	4324586.05	0.00006
583111.63	4324586.05	0.00005	584111.63	4324586.05	0.00005
542111.63	4325586.05	0.00000	543111.63	4325586.05	0.00000
544111.63	4325586.05	0.00000	545111.63	4325586.05	0.00000
546111.63	4325586.05	0.00000	547111.63	4325586.05	0.00000
548111.63	4325586.05	0.00000	549111.63	4325586.05	0.00000
550111.63	4325586.05	0.00000	551111.63	4325586.05	0.00000
552111.63	4325586.05	0.00000	553111.63	4325586.05	0.00001
554111.63	4325586.05	0.00001	555111.63		

4325586.05 0.00001
556111.63 4325586.05 0.00001 557111.63
4325586.05 0.00001
558111.63 4325586.05 0.00001 559111.63
4325586.05 0.00001
567111.63 4325586.05 0.00037 568111.63
4325586.05 0.00031
569111.63 4325586.05 0.00026 570111.63
4325586.05 0.00021
571111.63 4325586.05 0.00018 572111.63
4325586.05 0.00015
573111.63 4325586.05 0.00013 574111.63
4325586.05 0.00011
575111.63 4325586.05 0.00010 576111.63
4325586.05 0.00009
577111.63 4325586.05 0.00008 578111.63
4325586.05 0.00008
579111.63 4325586.05 0.00007 580111.63
4325586.05 0.00006
581111.63 4325586.05 0.00006 582111.63
4325586.05 0.00006
583111.63 4325586.05 0.00005 584111.63
4325586.05 0.00005
542111.63 4326586.05 0.00000 543111.63
4326586.05 0.00000
544111.63 4326586.05 0.00000 545111.63
4326586.05 0.00000
546111.63 4326586.05 0.00000 547111.63
4326586.05 0.00000
548111.63 4326586.05 0.00000 549111.63
4326586.05 0.00000
550111.63 4326586.05 0.00000 551111.63
4326586.05 0.00000
552111.63 4326586.05 0.00000 553111.63
4326586.05 0.00000
554111.63 4326586.05 0.00001 555111.63
4326586.05 0.00001
556111.63 4326586.05 0.00001 557111.63
4326586.05 0.00001
558111.63 4326586.05 0.00001 559111.63
4326586.05 0.00002
567111.63 4326586.05 0.00053 568111.63
4326586.05 0.00037
569111.63 4326586.05 0.00028 570111.63
4326586.05 0.00021
571111.63 4326586.05 0.00018 572111.63
4326586.05 0.00015
573111.63 4326586.05 0.00013 574111.63
4326586.05 0.00011
575111.63 4326586.05 0.00010 576111.63

4326586.05 0.00009
577111.63 4326586.05 0.00008 578111.63
4326586.05 0.00007
579111.63 4326586.05 0.00007 580111.63
4326586.05 0.00006
581111.63 4326586.05 0.00006 582111.63
4326586.05 0.00005
583111.63 4326586.05 0.00005 584111.63
4326586.05 0.00005

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
542111.63	4327586.05	0.00000	543111.63	4327586.05	0.00000
544111.63	4327586.05	0.00000	545111.63	4327586.05	0.00000
546111.63	4327586.05	0.00000	547111.63	4327586.05	0.00000
548111.63	4327586.05	0.00000	549111.63	4327586.05	0.00000
550111.63	4327586.05	0.00000	551111.63	4327586.05	0.00000
552111.63	4327586.05	0.00001	553111.63	4327586.05	0.00001
554111.63	4327586.05	0.00001	555111.63	4327586.05	0.00001
556111.63	4327586.05	0.00001	557111.63	4327586.05	0.00001
558111.63	4327586.05	0.00001	559111.63	4327586.05	0.00003
567111.63	4327586.05	0.00043	568111.63		

4327586.05 0.00033
569111.63 4327586.05 0.00024 570111.63
4327586.05 0.00020
571111.63 4327586.05 0.00016 572111.63
4327586.05 0.00014
573111.63 4327586.05 0.00012 574111.63
4327586.05 0.00011
575111.63 4327586.05 0.00009 576111.63
4327586.05 0.00008
577111.63 4327586.05 0.00008 578111.63
4327586.05 0.00007
579111.63 4327586.05 0.00006 580111.63
4327586.05 0.00006
581111.63 4327586.05 0.00005 582111.63
4327586.05 0.00005
583111.63 4327586.05 0.00005 584111.63
4327586.05 0.00004
542111.63 4328586.05 0.00000 543111.63
4328586.05 0.00000
544111.63 4328586.05 0.00000 545111.63
4328586.05 0.00000
546111.63 4328586.05 0.00000 547111.63
4328586.05 0.00000
548111.63 4328586.05 0.00000 549111.63
4328586.05 0.00000
550111.63 4328586.05 0.00000 551111.63
4328586.05 0.00000
552111.63 4328586.05 0.00001 553111.63
4328586.05 0.00001
554111.63 4328586.05 0.00001 555111.63
4328586.05 0.00001
556111.63 4328586.05 0.00002 557111.63
4328586.05 0.00002
558111.63 4328586.05 0.00004 559111.63
4328586.05 0.00004
567111.63 4328586.05 0.00029 568111.63
4328586.05 0.00022
569111.63 4328586.05 0.00018 570111.63
4328586.05 0.00015
571111.63 4328586.05 0.00014 572111.63
4328586.05 0.00012
573111.63 4328586.05 0.00011 574111.63
4328586.05 0.00010
575111.63 4328586.05 0.00009 576111.63
4328586.05 0.00008
577111.63 4328586.05 0.00007 578111.63
4328586.05 0.00007
579111.63 4328586.05 0.00006 580111.63
4328586.05 0.00006
581111.63 4328586.05 0.00005 582111.63

4328586.05   0.00005
         583111.63   4328586.05   0.00005   584111.63
4328586.05   0.00005
         542111.63   4329586.05   0.00000   543111.63
4329586.05   0.00000
         544111.63   4329586.05   0.00000   545111.63
4329586.05   0.00000
         546111.63   4329586.05   0.00000   547111.63
4329586.05   0.00000
         548111.63   4329586.05   0.00000   549111.63
4329586.05   0.00000

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                               ** CONC OF DPM   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         550111.63   4329586.05   0.00000   551111.63
4329586.05   0.00001
         552111.63   4329586.05   0.00001   553111.63
4329586.05   0.00001
         554111.63   4329586.05   0.00001   555111.63
4329586.05   0.00001
         556111.63   4329586.05   0.00002   557111.63
4329586.05   0.00002
         558111.63   4329586.05   0.00002   559111.63
4329586.05   0.00005
         567111.63   4329586.05   0.00018   568111.63
4329586.05   0.00015
         569111.63   4329586.05   0.00013   570111.63
4329586.05   0.00011
         571111.63   4329586.05   0.00010   572111.63
4329586.05   0.00009
         573111.63   4329586.05   0.00008   574111.63

4329586.05 0.00008
575111.63 4329586.05 0.00007 576111.63
4329586.05 0.00007
577111.63 4329586.05 0.00006 578111.63
4329586.05 0.00006
579111.63 4329586.05 0.00005 580111.63
4329586.05 0.00005
581111.63 4329586.05 0.00005 582111.63
4329586.05 0.00005
583111.63 4329586.05 0.00004 584111.63
4329586.05 0.00004
542111.63 4330586.05 0.00000 543111.63
4330586.05 0.00000
544111.63 4330586.05 0.00000 545111.63
4330586.05 0.00000
546111.63 4330586.05 0.00000 547111.63
4330586.05 0.00000
548111.63 4330586.05 0.00000 549111.63
4330586.05 0.00000
550111.63 4330586.05 0.00001 551111.63
4330586.05 0.00001
552111.63 4330586.05 0.00001 553111.63
4330586.05 0.00001
554111.63 4330586.05 0.00002 555111.63
4330586.05 0.00001
556111.63 4330586.05 0.00004 557111.63
4330586.05 0.00002
558111.63 4330586.05 0.00003 559111.63
4330586.05 0.00008
560111.63 4330586.05 0.00040 561111.63
4330586.05 0.00052
562111.63 4330586.05 0.00058 563111.63
4330586.05 0.00054
564111.63 4330586.05 0.00044 565111.63
4330586.05 0.00031
566111.63 4330586.05 0.00019 567111.63
4330586.05 0.00015
568111.63 4330586.05 0.00012 569111.63
4330586.05 0.00010
570111.63 4330586.05 0.00009 571111.63
4330586.05 0.00008
572111.63 4330586.05 0.00008 573111.63
4330586.05 0.00007
574111.63 4330586.05 0.00006 575111.63
4330586.05 0.00006
576111.63 4330586.05 0.00005 577111.63
4330586.05 0.00005
578111.63 4330586.05 0.00005 579111.63
4330586.05 0.00005
580111.63 4330586.05 0.00004 581111.63

4330586.05 0.00004
582111.63 4330586.05 0.00004 583111.63
4330586.05 0.00004
584111.63 4330586.05 0.00004 542111.63
4331586.05 0.00000
543111.63 4331586.05 0.00000 544111.63
4331586.05 0.00000
545111.63 4331586.05 0.00000 546111.63
4331586.05 0.00000
547111.63 4331586.05 0.00000 548111.63
4331586.05 0.00000
549111.63 4331586.05 0.00001 550111.63
4331586.05 0.00001

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
551111.63	4331586.05	0.00001	552111.63	4331586.05	0.00001
553111.63	4331586.05	0.00002	554111.63	4331586.05	0.00002
555111.63	4331586.05	0.00002	556111.63	4331586.05	0.00005
557111.63	4331586.05	0.00003	558111.63	4331586.05	0.00004
559111.63	4331586.05	0.00026	560111.63	4331586.05	0.00033
561111.63	4331586.05	0.00039	562111.63	4331586.05	0.00038
563111.63	4331586.05	0.00033	564111.63	4331586.05	0.00031
565111.63	4331586.05	0.00024	566111.63		

4331586.05 0.00017
567111.63 4331586.05 0.00012 568111.63
4331586.05 0.00010
569111.63 4331586.05 0.00009 570111.63
4331586.05 0.00008
571111.63 4331586.05 0.00007 572111.63
4331586.05 0.00006
573111.63 4331586.05 0.00006 574111.63
4331586.05 0.00006
575111.63 4331586.05 0.00005 576111.63
4331586.05 0.00005
577111.63 4331586.05 0.00005 578111.63
4331586.05 0.00004
579111.63 4331586.05 0.00004 580111.63
4331586.05 0.00004
581111.63 4331586.05 0.00004 582111.63
4331586.05 0.00004
583111.63 4331586.05 0.00003 584111.63
4331586.05 0.00003
542111.63 4332586.05 0.00000 543111.63
4332586.05 0.00000
544111.63 4332586.05 0.00000 545111.63
4332586.05 0.00000
546111.63 4332586.05 0.00000 547111.63
4332586.05 0.00000
548111.63 4332586.05 0.00000 549111.63
4332586.05 0.00001
550111.63 4332586.05 0.00001 551111.63
4332586.05 0.00001
552111.63 4332586.05 0.00001 553111.63
4332586.05 0.00001
554111.63 4332586.05 0.00001 555111.63
4332586.05 0.00002
556111.63 4332586.05 0.00006 557111.63
4332586.05 0.00006
558111.63 4332586.05 0.00006 559111.63
4332586.05 0.00012
560111.63 4332586.05 0.00027 561111.63
4332586.05 0.00030
562111.63 4332586.05 0.00026 563111.63
4332586.05 0.00023
564111.63 4332586.05 0.00022 565111.63
4332586.05 0.00020
566111.63 4332586.05 0.00016 567111.63
4332586.05 0.00011
568111.63 4332586.05 0.00009 569111.63
4332586.05 0.00008
570111.63 4332586.05 0.00007 571111.63
4332586.05 0.00007
572111.63 4332586.05 0.00006 573111.63

```
4332586.05        0.00005
         574111.63    4332586.05        0.00005                       575111.63
4332586.05        0.00005
         576111.63    4332586.05        0.00004                       577111.63
4332586.05        0.00004
         578111.63    4332586.05        0.00004                       579111.63
4332586.05        0.00004
         580111.63    4332586.05        0.00004                       581111.63
4332586.05        0.00003
         582111.63    4332586.05        0.00003                       583111.63
4332586.05        0.00003
         584111.63    4332586.05        0.00003                       542111.63
4333586.05        0.00000
         543111.63    4333586.05        0.00000                       544111.63
4333586.05        0.00000
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                              ***        06:53:13

                                     PAGE 127
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                    *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL      ***
                                    INCLUDING SOURCE(S):     PAREA1      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                             ** CONC OF DPM      IN MICROGRAMS/M**3
                     **

       X-COORD (M)   Y-COORD (M)        CONC                          X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         545111.63    4333586.05        0.00000                       546111.63
4333586.05        0.00000
         547111.63    4333586.05        0.00000                       548111.63
4333586.05        0.00001
         549111.63    4333586.05        0.00001                       550111.63
4333586.05        0.00001
         551111.63    4333586.05        0.00001                       552111.63
4333586.05        0.00001
         553111.63    4333586.05        0.00002                       554111.63
4333586.05        0.00002
         555111.63    4333586.05        0.00003                       556111.63
4333586.05        0.00003
         557111.63    4333586.05        0.00004                       558111.63
```

4333586.05 0.00005
559111.63 4333586.05 0.00009 560111.63
4333586.05 0.00022
561111.63 4333586.05 0.00022 562111.63
4333586.05 0.00020
563111.63 4333586.05 0.00018 564111.63
4333586.05 0.00017
565111.63 4333586.05 0.00016 566111.63
4333586.05 0.00014
567111.63 4333586.05 0.00010 568111.63
4333586.05 0.00008
569111.63 4333586.05 0.00007 570111.63
4333586.05 0.00006
571111.63 4333586.05 0.00006 572111.63
4333586.05 0.00005
573111.63 4333586.05 0.00005 574111.63
4333586.05 0.00005
575111.63 4333586.05 0.00004 576111.63
4333586.05 0.00004
577111.63 4333586.05 0.00004 578111.63
4333586.05 0.00004
579111.63 4333586.05 0.00004 580111.63
4333586.05 0.00003
581111.63 4333586.05 0.00003 582111.63
4333586.05 0.00003
583111.63 4333586.05 0.00003 584111.63
4333586.05 0.00003
542111.63 4334586.05 0.00000 543111.63
4334586.05 0.00000
544111.63 4334586.05 0.00000 545111.63
4334586.05 0.00000
546111.63 4334586.05 0.00000 547111.63
4334586.05 0.00000
548111.63 4334586.05 0.00001 549111.63
4334586.05 0.00001
550111.63 4334586.05 0.00001 551111.63
4334586.05 0.00001
552111.63 4334586.05 0.00001 553111.63
4334586.05 0.00001
554111.63 4334586.05 0.00002 555111.63
4334586.05 0.00003
556111.63 4334586.05 0.00003 557111.63
4334586.05 0.00002
558111.63 4334586.05 0.00005 559111.63
4334586.05 0.00018
560111.63 4334586.05 0.00019 561111.63
4334586.05 0.00017
562111.63 4334586.05 0.00015 563111.63
4334586.05 0.00014
564111.63 4334586.05 0.00014 565111.63

4334586.05 0.00013
566111.63 4334586.05 0.00013 567111.63
4334586.05 0.00010
568111.63 4334586.05 0.00007 569111.63
4334586.05 0.00006
570111.63 4334586.05 0.00006 571111.63
4334586.05 0.00005
572111.63 4334586.05 0.00005 573111.63
4334586.05 0.00005
574111.63 4334586.05 0.00004 575111.63
4334586.05 0.00004
576111.63 4334586.05 0.00004 577111.63
4334586.05 0.00003
578111.63 4334586.05 0.00003 579111.63
4334586.05 0.00003
580111.63 4334586.05 0.00003 581111.63
4334586.05 0.00003

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
582111.63	4334586.05	0.00003	583111.63	4334586.05	0.00003
584111.63	4334586.05	0.00003	542111.63	4335586.05	0.00000
543111.63	4335586.05	0.00000	544111.63	4335586.05	0.00000
545111.63	4335586.05	0.00000	546111.63	4335586.05	0.00000
547111.63	4335586.05	0.00001	548111.63	4335586.05	0.00001
549111.63	4335586.05	0.00001	550111.63		

4335586.05 0.00001
551111.63 4335586.05 0.00001 552111.63
4335586.05 0.00001
553111.63 4335586.05 0.00002 554111.63
4335586.05 0.00002
555111.63 4335586.05 0.00003 556111.63
4335586.05 0.00003
557111.63 4335586.05 0.00003 558111.63
4335586.05 0.00006
559111.63 4335586.05 0.00016 560111.63
4335586.05 0.00015
561111.63 4335586.05 0.00014 562111.63
4335586.05 0.00012
563111.63 4335586.05 0.00012 564111.63
4335586.05 0.00011
565111.63 4335586.05 0.00011 566111.63
4335586.05 0.00011
567111.63 4335586.05 0.00010 568111.63
4335586.05 0.00007
569111.63 4335586.05 0.00006 570111.63
4335586.05 0.00005
571111.63 4335586.05 0.00005 572111.63
4335586.05 0.00004
573111.63 4335586.05 0.00004 574111.63
4335586.05 0.00004
575111.63 4335586.05 0.00004 576111.63
4335586.05 0.00004
577111.63 4335586.05 0.00004 578111.63
4335586.05 0.00003
579111.63 4335586.05 0.00003 580111.63
4335586.05 0.00003
581111.63 4335586.05 0.00003 582111.63
4335586.05 0.00003
583111.63 4335586.05 0.00003 584111.63
4335586.05 0.00003
542111.63 4336586.05 0.00000 543111.63
4336586.05 0.00000
544111.63 4336586.05 0.00000 545111.63
4336586.05 0.00000
546111.63 4336586.05 0.00000 547111.63
4336586.05 0.00001
548111.63 4336586.05 0.00000 549111.63
4336586.05 0.00001
550111.63 4336586.05 0.00001 551111.63
4336586.05 0.00001
552111.63 4336586.05 0.00002 553111.63
4336586.05 0.00002
554111.63 4336586.05 0.00003 555111.63
4336586.05 0.00003
556111.63 4336586.05 0.00003 557111.63

4336586.05 0.00003
 558111.63 4336586.05 0.00005 559111.63 4336586.05 0.00012
 560111.63 4336586.05 0.00013 561111.63 4336586.05 0.00012
 562111.63 4336586.05 0.00010 563111.63 4336586.05 0.00010
 564111.63 4336586.05 0.00010 565111.63 4336586.05 0.00009
 566111.63 4336586.05 0.00010 567111.63 4336586.05 0.00009
 568111.63 4336586.05 0.00007 569111.63 4336586.05 0.00005
 570111.63 4336586.05 0.00005 571111.63 4336586.05 0.00004
 572111.63 4336586.05 0.00004 573111.63 4336586.05 0.00004
 574111.63 4336586.05 0.00004 575111.63 4336586.05 0.00003

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
576111.63	4336586.05	0.00003	577111.63	4336586.05	0.00003
578111.63	4336586.05	0.00003	579111.63	4336586.05	0.00003
580111.63	4336586.05	0.00003	581111.63	4336586.05	0.00003
582111.63	4336586.05	0.00002	583111.63	4336586.05	0.00002
584111.63	4336586.05	0.00002	542111.63		

4337586.05 0.00000
543111.63 4337586.05 0.00000 544111.63
4337586.05 0.00000
545111.63 4337586.05 0.00000 546111.63
4337586.05 0.00000
547111.63 4337586.05 0.00001 548111.63
4337586.05 0.00001
549111.63 4337586.05 0.00001 550111.63
4337586.05 0.00001
551111.63 4337586.05 0.00001 552111.63
4337586.05 0.00001
553111.63 4337586.05 0.00002 554111.63
4337586.05 0.00002
555111.63 4337586.05 0.00003 556111.63
4337586.05 0.00003
557111.63 4337586.05 0.00003 558111.63
4337586.05 0.00006
559111.63 4337586.05 0.00012 560111.63
4337586.05 0.00011
561111.63 4337586.05 0.00010 562111.63
4337586.05 0.00009
563111.63 4337586.05 0.00009 564111.63
4337586.05 0.00009
565111.63 4337586.05 0.00008 566111.63
4337586.05 0.00008
567111.63 4337586.05 0.00008 568111.63
4337586.05 0.00007
569111.63 4337586.05 0.00005 570111.63
4337586.05 0.00004
571111.63 4337586.05 0.00004 572111.63
4337586.05 0.00004
573111.63 4337586.05 0.00004 574111.63
4337586.05 0.00003
575111.63 4337586.05 0.00003 576111.63
4337586.05 0.00003
577111.63 4337586.05 0.00003 578111.63
4337586.05 0.00003
579111.63 4337586.05 0.00003 580111.63
4337586.05 0.00003
581111.63 4337586.05 0.00003 582111.63
4337586.05 0.00002
583111.63 4337586.05 0.00002 584111.63
4337586.05 0.00002
542111.63 4338586.05 0.00000 543111.63
4338586.05 0.00000
544111.63 4338586.05 0.00000 545111.63
4338586.05 0.00000
546111.63 4338586.05 0.00001 547111.63
4338586.05 0.00001
548111.63 4338586.05 0.00001 549111.63

4338586.05 0.00001
 550111.63 4338586.05 0.00001 551111.63 4338586.05 0.00001
 552111.63 4338586.05 0.00002 553111.63 4338586.05 0.00002
 554111.63 4338586.05 0.00002 555111.63 4338586.05 0.00003
 556111.63 4338586.05 0.00003 557111.63 4338586.05 0.00003
 558111.63 4338586.05 0.00005 559111.63 4338586.05 0.00010
 560111.63 4338586.05 0.00010 561111.63 4338586.05 0.00008
 562111.63 4338586.05 0.00008 563111.63 4338586.05 0.00008
 564111.63 4338586.05 0.00008 565111.63 4338586.05 0.00007
 566111.63 4338586.05 0.00007 567111.63 4338586.05 0.00007
 568111.63 4338586.05 0.00007 569111.63 4338586.05 0.00005

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
570111.63	4338586.05	0.00004	571111.63	4338586.05	0.00004
572111.63	4338586.05	0.00004	573111.63	4338586.05	0.00003
574111.63	4338586.05	0.00003	575111.63	4338586.05	0.00003
576111.63	4338586.05	0.00003	577111.63		

4338586.05 0.00003
578111.63 4338586.05 0.00003 579111.63
4338586.05 0.00003
580111.63 4338586.05 0.00003 581111.63
4338586.05 0.00003
582111.63 4338586.05 0.00002 583111.63
4338586.05 0.00002
584111.63 4338586.05 0.00002 542111.63
4339586.05 0.00000
543111.63 4339586.05 0.00000 544111.63
4339586.05 0.00000
545111.63 4339586.05 0.00000 546111.63
4339586.05 0.00001
547111.63 4339586.05 0.00001 548111.63
4339586.05 0.00001
549111.63 4339586.05 0.00001 550111.63
4339586.05 0.00001
551111.63 4339586.05 0.00001 552111.63
4339586.05 0.00002
553111.63 4339586.05 0.00002 554111.63
4339586.05 0.00003
555111.63 4339586.05 0.00003 556111.63
4339586.05 0.00003
557111.63 4339586.05 0.00003 558111.63
4339586.05 0.00005
559111.63 4339586.05 0.00009 560111.63
4339586.05 0.00008
561111.63 4339586.05 0.00007 562111.63
4339586.05 0.00007
563111.63 4339586.05 0.00007 564111.63
4339586.05 0.00007
565111.63 4339586.05 0.00006 566111.63
4339586.05 0.00006
567111.63 4339586.05 0.00006 568111.63
4339586.05 0.00007
569111.63 4339586.05 0.00006 570111.63
4339586.05 0.00004
571111.63 4339586.05 0.00004 572111.63
4339586.05 0.00003
573111.63 4339586.05 0.00003 574111.63
4339586.05 0.00003
575111.63 4339586.05 0.00003 576111.63
4339586.05 0.00003
577111.63 4339586.05 0.00003 578111.63
4339586.05 0.00003
579111.63 4339586.05 0.00002 580111.63
4339586.05 0.00002
581111.63 4339586.05 0.00002 582111.63
4339586.05 0.00002
583111.63 4339586.05 0.00002 584111.63

```
4339586.05        0.00002
         542111.63    4340586.05        0.00000                      543111.63
4340586.05        0.00000
         544111.63    4340586.05        0.00000                      545111.63
4340586.05        0.00001
         546111.63    4340586.05        0.00001                      547111.63
4340586.05        0.00001
         548111.63    4340586.05        0.00001                      549111.63
4340586.05        0.00001
         550111.63    4340586.05        0.00001                      551111.63
4340586.05        0.00001
         552111.63    4340586.05        0.00002                      553111.63
4340586.05        0.00002
         554111.63    4340586.05        0.00003                      555111.63
4340586.05        0.00004
         556111.63    4340586.05        0.00003                      557111.63
4340586.05        0.00003
         558111.63    4340586.05        0.00008                      559111.63
4340586.05        0.00008
         560111.63    4340586.05        0.00007                      561111.63
4340586.05        0.00006
         562111.63    4340586.05        0.00006                      563111.63
4340586.05        0.00007
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                              ***        06:53:13

                                     PAGE 131
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                    *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL      ***
                                    INCLUDING SOURCE(S):     PAREA1      ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF DPM      IN MICROGRAMS/M**3
                     **

       X-COORD (M)   Y-COORD (M)        CONC                         X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         564111.63    4340586.05        0.00006                      565111.63
4340586.05        0.00006
         566111.63    4340586.05        0.00005                      567111.63
4340586.05        0.00005
         568111.63    4340586.05        0.00006                      569111.63
```

4340586.05 0.00006
570111.63 4340586.05 0.00004 571111.63
4340586.05 0.00003
572111.63 4340586.05 0.00003 573111.63
4340586.05 0.00003
574111.63 4340586.05 0.00003 575111.63
4340586.05 0.00003
576111.63 4340586.05 0.00003 577111.63
4340586.05 0.00002
578111.63 4340586.05 0.00002 579111.63
4340586.05 0.00002
580111.63 4340586.05 0.00002 581111.63
4340586.05 0.00002
582111.63 4340586.05 0.00002 583111.63
4340586.05 0.00002
584111.63 4340586.05 0.00002 542111.63
4341586.05 0.00000
543111.63 4341586.05 0.00000 544111.63
4341586.05 0.00000
545111.63 4341586.05 0.00001 546111.63
4341586.05 0.00001
547111.63 4341586.05 0.00001 548111.63
4341586.05 0.00001
549111.63 4341586.05 0.00001 550111.63
4341586.05 0.00001
551111.63 4341586.05 0.00001 552111.63
4341586.05 0.00002
553111.63 4341586.05 0.00002 554111.63
4341586.05 0.00003
555111.63 4341586.05 0.00003 556111.63
4341586.05 0.00003
557111.63 4341586.05 0.00003 558111.63
4341586.05 0.00005
559111.63 4341586.05 0.00005 560111.63
4341586.05 0.00007
561111.63 4341586.05 0.00006 562111.63
4341586.05 0.00006
563111.63 4341586.05 0.00006 564111.63
4341586.05 0.00006
565111.63 4341586.05 0.00005 566111.63
4341586.05 0.00005
567111.63 4341586.05 0.00005 568111.63
4341586.05 0.00005
569111.63 4341586.05 0.00005 570111.63
4341586.05 0.00004
571111.63 4341586.05 0.00003 572111.63
4341586.05 0.00003
573111.63 4341586.05 0.00003 574111.63
4341586.05 0.00003
575111.63 4341586.05 0.00003 576111.63

4341586.05 0.00002
577111.63 4341586.05 0.00002 578111.63
4341586.05 0.00002
579111.63 4341586.05 0.00002 580111.63
4341586.05 0.00002
581111.63 4341586.05 0.00002 582111.63
4341586.05 0.00002
583111.63 4341586.05 0.00002 584111.63
4341586.05 0.00002
542111.63 4342586.05 0.00000 543111.63
4342586.05 0.00000
544111.63 4342586.05 0.00001 545111.63
4342586.05 0.00001
546111.63 4342586.05 0.00001 547111.63
4342586.05 0.00001
548111.63 4342586.05 0.00001 549111.63
4342586.05 0.00001
550111.63 4342586.05 0.00001 551111.63
4342586.05 0.00001
552111.63 4342586.05 0.00002 553111.63
4342586.05 0.00002
554111.63 4342586.05 0.00002 555111.63
4342586.05 0.00003
556111.63 4342586.05 0.00003 557111.63
4342586.05 0.00003
*** AERMOD - VERSION 23132 *** *** Janus Solar and Battery Strorage Project-
DPM *** 08/02/24
*** AERMET - VERSION 19191 *** *** Met data: Oroville 2015-2019
*** 06:53:13

PAGE 132
*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5
YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS
***

** CONC OF DPM IN MICROGRAMS/M**3
**

X-COORD (M) Y-COORD (M) CONC X-COORD (M)
Y-COORD (M) CONC
- -
- -
558111.63 4342586.05 0.00004 559111.63
4342586.05 0.00005
560111.63 4342586.05 0.00006 561111.63

4342586.05 0.00005
562111.63 4342586.05 0.00005 563111.63
4342586.05 0.00006
564111.63 4342586.05 0.00005 565111.63
4342586.05 0.00005
566111.63 4342586.05 0.00005 567111.63
4342586.05 0.00004
568111.63 4342586.05 0.00005 569111.63
4342586.05 0.00005
570111.63 4342586.05 0.00005 571111.63
4342586.05 0.00003
572111.63 4342586.05 0.00003 573111.63
4342586.05 0.00003
574111.63 4342586.05 0.00003 575111.63
4342586.05 0.00002
576111.63 4342586.05 0.00002 577111.63
4342586.05 0.00002
578111.63 4342586.05 0.00002 579111.63
4342586.05 0.00002
580111.63 4342586.05 0.00002 581111.63
4342586.05 0.00002
582111.63 4342586.05 0.00002 583111.63
4342586.05 0.00002
584111.63 4342586.05 0.00002 542111.63
4343586.05 0.00000
543111.63 4343586.05 0.00000 544111.63
4343586.05 0.00001
545111.63 4343586.05 0.00001 546111.63
4343586.05 0.00001
547111.63 4343586.05 0.00001 548111.63
4343586.05 0.00001
549111.63 4343586.05 0.00001 550111.63
4343586.05 0.00001
551111.63 4343586.05 0.00001 552111.63
4343586.05 0.00002
553111.63 4343586.05 0.00002 554111.63
4343586.05 0.00003
555111.63 4343586.05 0.00004 556111.63
4343586.05 0.00003
557111.63 4343586.05 0.00003 558111.63
4343586.05 0.00005
559111.63 4343586.05 0.00006 560111.63
4343586.05 0.00005
561111.63 4343586.05 0.00005 562111.63
4343586.05 0.00005
563111.63 4343586.05 0.00005 564111.63
4343586.05 0.00005
565111.63 4343586.05 0.00005 566111.63
4343586.05 0.00004
567111.63 4343586.05 0.00004 568111.63

4343586.05   0.00004
         569111.63   4343586.05   0.00005   570111.63
4343586.05   0.00005
         571111.63   4343586.05   0.00004   572111.63
4343586.05   0.00003
         573111.63   4343586.05   0.00003   574111.63
4343586.05   0.00002
         575111.63   4343586.05   0.00002   576111.63
4343586.05   0.00002
         577111.63   4343586.05   0.00002   578111.63
4343586.05   0.00002
         579111.63   4343586.05   0.00002   580111.63
4343586.05   0.00002
         581111.63   4343586.05   0.00002   582111.63
4343586.05   0.00002
         583111.63   4343586.05   0.00002   584111.63
4343586.05   0.00002
         542111.63   4344586.05   0.00000   543111.63
4344586.05   0.00001
         544111.63   4344586.05   0.00001   545111.63
4344586.05   0.00001
         546111.63   4344586.05   0.00001   547111.63
4344586.05   0.00001
         548111.63   4344586.05   0.00001   549111.63
4344586.05   0.00001
         550111.63   4344586.05   0.00001   551111.63
4344586.05   0.00001

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                    *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                   INCLUDING SOURCE(S):   PAREA1   ,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF DPM   IN MICROGRAMS/M**3
                     **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         552111.63   4344586.05   0.00002   553111.63

4344586.05 0.00002
554111.63 4344586.05 0.00003 555111.63
4344586.05 0.00005
556111.63 4344586.05 0.00003 557111.63
4344586.05 0.00003
558111.63 4344586.05 0.00006 559111.63
4344586.05 0.00005
560111.63 4344586.05 0.00005 561111.63
4344586.05 0.00004
562111.63 4344586.05 0.00005 563111.63
4344586.05 0.00005
564111.63 4344586.05 0.00005 565111.63
4344586.05 0.00004
566111.63 4344586.05 0.00004 567111.63
4344586.05 0.00004
568111.63 4344586.05 0.00004 569111.63
4344586.05 0.00004
570111.63 4344586.05 0.00005 571111.63
4344586.05 0.00004
572111.63 4344586.05 0.00003 573111.63
4344586.05 0.00002
574111.63 4344586.05 0.00002 575111.63
4344586.05 0.00002
576111.63 4344586.05 0.00002 577111.63
4344586.05 0.00002
578111.63 4344586.05 0.00002 579111.63
4344586.05 0.00002
580111.63 4344586.05 0.00002 581111.63
4344586.05 0.00002
582111.63 4344586.05 0.00002 583111.63
4344586.05 0.00002
584111.63 4344586.05 0.00002 542111.63
4345586.05 0.00000
543111.63 4345586.05 0.00001 544111.63
4345586.05 0.00001
545111.63 4345586.05 0.00001 546111.63
4345586.05 0.00001
547111.63 4345586.05 0.00001 548111.63
4345586.05 0.00001
549111.63 4345586.05 0.00001 550111.63
4345586.05 0.00001
551111.63 4345586.05 0.00001 552111.63
4345586.05 0.00002
553111.63 4345586.05 0.00002 554111.63
4345586.05 0.00003
555111.63 4345586.05 0.00005 556111.63
4345586.05 0.00003
557111.63 4345586.05 0.00002 558111.63
4345586.05 0.00003
559111.63 4345586.05 0.00005 560111.63

```
4345586.05        0.00004
         561111.63    4345586.05        0.00004                       562111.63
4345586.05        0.00004
         563111.63    4345586.05        0.00004                       564111.63
4345586.05        0.00004
         565111.63    4345586.05        0.00004                       566111.63
4345586.05        0.00004
         567111.63    4345586.05        0.00004                       568111.63
4345586.05        0.00003
         569111.63    4345586.05        0.00004                       570111.63
4345586.05        0.00004
         571111.63    4345586.05        0.00004                       572111.63
4345586.05        0.00003
         573111.63    4345586.05        0.00002                       574111.63
4345586.05        0.00002
         575111.63    4345586.05        0.00002                       576111.63
4345586.05        0.00002
         577111.63    4345586.05        0.00002                       578111.63
4345586.05        0.00002
         579111.63    4345586.05        0.00002                       580111.63
4345586.05        0.00002
         581111.63    4345586.05        0.00002                       582111.63
4345586.05        0.00002
         583111.63    4345586.05        0.00002                       584111.63
4345586.05        0.00002
         542111.63    4346586.05        0.00001                       543111.63
4346586.05        0.00001
         544111.63    4346586.05        0.00001                       545111.63
4346586.05        0.00001
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                              ***        06:53:13

                                     PAGE 134
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                    *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL      ***
                                    INCLUDING SOURCE(S):     PAREA1      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                               ** CONC OF DPM      IN MICROGRAMS/M**3
                     **

       X-COORD (M)   Y-COORD (M)        CONC                          X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
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- -
546111.63 4346586.05 0.00001 547111.63
4346586.05 0.00001
548111.63 4346586.05 0.00001 549111.63
4346586.05 0.00001
550111.63 4346586.05 0.00001 551111.63
4346586.05 0.00001
552111.63 4346586.05 0.00002 553111.63
4346586.05 0.00002
554111.63 4346586.05 0.00002 555111.63
4346586.05 0.00005
556111.63 4346586.05 0.00004 557111.63
4346586.05 0.00002
558111.63 4346586.05 0.00004 559111.63
4346586.05 0.00005
560111.63 4346586.05 0.00004 561111.63
4346586.05 0.00004
562111.63 4346586.05 0.00004 563111.63
4346586.05 0.00004
564111.63 4346586.05 0.00004 565111.63
4346586.05 0.00004
566111.63 4346586.05 0.00004 567111.63
4346586.05 0.00003
568111.63 4346586.05 0.00003 569111.63
4346586.05 0.00003
570111.63 4346586.05 0.00004 571111.63
4346586.05 0.00004
572111.63 4346586.05 0.00003 573111.63
4346586.05 0.00002
574111.63 4346586.05 0.00002 575111.63
4346586.05 0.00002
576111.63 4346586.05 0.00002 577111.63
4346586.05 0.00002
578111.63 4346586.05 0.00002 579111.63
4346586.05 0.00002
580111.63 4346586.05 0.00002 581111.63
4346586.05 0.00002
582111.63 4346586.05 0.00002 583111.63
4346586.05 0.00002
584111.63 4346586.05 0.00002 542111.63
4347586.05 0.00001
543111.63 4347586.05 0.00001 544111.63
4347586.05 0.00001
545111.63 4347586.05 0.00001 546111.63
4347586.05 0.00001
547111.63 4347586.05 0.00001 548111.63
4347586.05 0.00001
549111.63 4347586.05 0.00001 550111.63
4347586.05 0.00001
551111.63 4347586.05 0.00002 552111.63

4347586.05   0.00002
         553111.63   4347586.05   0.00002   554111.63
4347586.05   0.00003
         555111.63   4347586.05   0.00004   556111.63
4347586.05   0.00004
         557111.63   4347586.05   0.00002   558111.63
4347586.05   0.00003
         559111.63   4347586.05   0.00004   560111.63
4347586.05   0.00004
         561111.63   4347586.05   0.00004   562111.63
4347586.05   0.00004
         563111.63   4347586.05   0.00004   564111.63
4347586.05   0.00004
         565111.63   4347586.05   0.00004   566111.63
4347586.05   0.00003
         567111.63   4347586.05   0.00003   568111.63
4347586.05   0.00003
         569111.63   4347586.05   0.00003   570111.63
4347586.05   0.00003
         571111.63   4347586.05   0.00004   572111.63
4347586.05   0.00003
         573111.63   4347586.05   0.00003   574111.63
4347586.05   0.00002
         575111.63   4347586.05   0.00002   576111.63
4347586.05   0.00002
         577111.63   4347586.05   0.00002   578111.63
4347586.05   0.00002
         579111.63   4347586.05   0.00002   580111.63
4347586.05   0.00002
         581111.63   4347586.05   0.00002   582111.63
4347586.05   0.00002

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                    *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                           ** CONC OF DPM   IN MICROGRAMS/M**3
                     **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)

Y-COORD (M)   CONC

\- -
\- -

583111.63   4347586.05   0.00002   584111.63
4347586.05   0.00001
542111.63   4348586.05   0.00001   543111.63
4348586.05   0.00001
544111.63   4348586.05   0.00001   545111.63
4348586.05   0.00001
546111.63   4348586.05   0.00001   547111.63
4348586.05   0.00001
548111.63   4348586.05   0.00001   549111.63
4348586.05   0.00001
550111.63   4348586.05   0.00001   551111.63
4348586.05   0.00002
552111.63   4348586.05   0.00002   553111.63
4348586.05   0.00002
554111.63   4348586.05   0.00003   555111.63
4348586.05   0.00004
556111.63   4348586.05   0.00004   557111.63
4348586.05   0.00002
558111.63   4348586.05   0.00002   559111.63
4348586.05   0.00004
560111.63   4348586.05   0.00003   561111.63
4348586.05   0.00003
562111.63   4348586.05   0.00004   563111.63
4348586.05   0.00004
564111.63   4348586.05   0.00004   565111.63
4348586.05   0.00003
566111.63   4348586.05   0.00003   567111.63
4348586.05   0.00003
568111.63   4348586.05   0.00003   569111.63
4348586.05   0.00003
570111.63   4348586.05   0.00003   571111.63
4348586.05   0.00003
572111.63   4348586.05   0.00003   573111.63
4348586.05   0.00003
574111.63   4348586.05   0.00002   575111.63
4348586.05   0.00002
576111.63   4348586.05   0.00002   577111.63
4348586.05   0.00002
578111.63   4348586.05   0.00002   579111.63
4348586.05   0.00002
580111.63   4348586.05   0.00002   581111.63
4348586.05   0.00002
582111.63   4348586.05   0.00002   583111.63
4348586.05   0.00002
584111.63   4348586.05   0.00001   562146.93
4328276.92   0.00643
564540.14   4328281.94   0.00417   564535.11

4327110.48   0.00490
         564313.89   4327115.51   0.00670   564218.36
4327040.09   0.00576
         564042.39   4327040.09   0.00751   563861.39
4326828.92   0.00598
         562911.15   4326678.09   0.00867   562921.20
4326597.65   0.00483
         562131.84   4326617.76   0.00224   562166.87
4328276.96   0.00749
         562186.82   4328277.00   0.00802   562206.76
4328277.05   0.00833
         562226.70   4328277.09   0.00860   562246.65
4328277.13   0.00879
         562266.59   4328277.17   0.00893   562286.53
4328277.21   0.00903
         562306.48   4328277.25   0.00912   562326.42
4328277.30   0.00922
         562346.36   4328277.34   0.00930   562366.31
4328277.38   0.00937
         562386.25   4328277.42   0.00948   562406.19
4328277.46   0.00957
         562426.14   4328277.51   0.00963   562446.08
4328277.55   0.00964
         562466.02   4328277.59   0.00963   562485.97
4328277.63   0.00956
         562505.91   4328277.67   0.00936   562525.85
4328277.71   0.00919
         562545.80   4328277.76   0.00914   562565.74
4328277.80   0.00933
         562585.69   4328277.84   0.00966   562605.63
4328277.88   0.00995
         562625.57   4328277.92   0.01000   562645.52
4328277.97   0.01001

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   PAREA1   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                               ** CONC OF DPM   IN MICROGRAMS/M**3
                    **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
562665.46	4328278.01	0.01001	562685.40	4328278.05	0.01004
562705.35	4328278.09	0.01006	562725.29	4328278.13	0.01007
562745.23	4328278.17	0.01005	562765.18	4328278.22	0.01005
562785.12	4328278.26	0.01005	562805.06	4328278.30	0.01007
562825.01	4328278.34	0.01008	562844.95	4328278.38	0.01010
562864.89	4328278.43	0.01013	562884.84	4328278.47	0.01015
562904.78	4328278.51	0.01016	562924.72	4328278.55	0.01017
562944.67	4328278.59	0.01018	562964.61	4328278.64	0.01018
562984.55	4328278.68	0.01017	563004.50	4328278.72	0.01016
563024.44	4328278.76	0.01016	563044.38	4328278.80	0.01018
563064.33	4328278.84	0.01017	563084.27	4328278.89	0.01017
563104.21	4328278.93	0.01017	563124.16	4328278.97	0.01017
563144.10	4328279.01	0.01016	563164.04	4328279.05	0.01016
563183.99	4328279.10	0.01017	563203.93	4328279.14	0.01017
563223.87	4328279.18	0.01015	563243.82	4328279.22	0.01011
563263.76	4328279.26	0.01005	563283.70	4328279.30	0.01000
563303.65	4328279.35	0.00998	563323.59	4328279.39	0.01001
563343.54	4328279.43	0.01004	563363.48	4328279.47	0.01002
563383.42	4328279.51	0.00997	563403.37	4328279.56	0.00994
563423.31	4328279.60	0.00991	563443.25	4328279.64	0.00978
563463.20	4328279.68	0.00956	563483.14	4328279.72	0.00931
563503.08	4328279.76	0.00922	563523.03	4328279.81	0.00937
563542.97	4328279.85	0.00958	563562.91		

```
4328279.89        0.00969
         563582.86    4328279.93        0.00974                      563602.80
4328279.97        0.00975
         563622.74    4328280.02        0.00974                      563642.69
4328280.06        0.00971
         563662.63    4328280.10        0.00963                      563682.57
4328280.14        0.00948
         563702.52    4328280.18        0.00922                      563722.46
4328280.22        0.00894
         563742.40    4328280.27        0.00882                      563762.35
4328280.31        0.00883
         563782.29    4328280.35        0.00910                      563802.23
4328280.39        0.00948
         563822.18    4328280.43        0.00964                      563842.12
4328280.48        0.00956
         563862.06    4328280.52        0.00945                      563882.01
4328280.56        0.00954
         563901.95    4328280.60        0.00931                      563921.89
4328280.64        0.00918
         563941.84    4328280.69        0.00931                      563961.78
4328280.73        0.00933
         563981.72    4328280.77        0.00863                      564001.67
4328280.81        0.00826
         564021.61    4328280.85        0.00807                      564041.55
4328280.89        0.00796
         564061.50    4328280.94        0.00787                      564081.44
4328280.98        0.00777
         564101.38    4328281.02        0.00769                      564121.33
4328281.06        0.00762
         564141.27    4328281.10        0.00756                      564161.22
4328281.15        0.00754
         564181.16    4328281.19        0.00756                      564201.10
4328281.23        0.00750
         564221.05    4328281.27        0.00736                      564240.99
4328281.31        0.00726
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                          ***        06:53:13

                                    PAGE 137
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL      ***
                                    INCLUDING SOURCE(S):     PAREA1      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***
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** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564260.93	4328281.35	0.00723	564280.88	4328281.40	0.00730
564300.82	4328281.44	0.00749	564320.76	4328281.48	0.00775
564340.71	4328281.52	0.00781	564360.65	4328281.56	0.00760
564380.59	4328281.61	0.00732	564400.54	4328281.65	0.00688
564420.48	4328281.69	0.00634	564440.42	4328281.73	0.00592
564460.37	4328281.77	0.00562	564480.31	4328281.81	0.00537
564500.25	4328281.86	0.00511	564520.20	4328281.90	0.00474
564540.05	4328262.08	0.00529	564539.97	4328242.23	0.00570
564539.88	4328222.37	0.00575	564539.80	4328202.52	0.00579
564539.71	4328182.66	0.00591	564539.63	4328162.81	0.00608
564539.54	4328142.95	0.00618	564539.46	4328123.10	0.00623
564539.37	4328103.24	0.00632	564539.29	4328083.39	0.00648
564539.20	4328063.53	0.00672	564539.12	4328043.68	0.00706
564539.03	4328023.82	0.00757	564538.95	4328003.97	0.00788
564538.86	4327984.11	0.00804	564538.78	4327964.26	0.00809
564538.69	4327944.40	0.00804	564538.61	4327924.55	0.00829
564538.52	4327904.69	0.00782	564538.43	4327884.83	0.00786
564538.35	4327864.98	0.00839	564538.26	4327845.12	0.00831
564538.18	4327825.27	0.00840	564538.09	4327805.41	0.00833
564538.01	4327785.56	0.00839	564537.92	4327765.70	0.00846
564537.84	4327745.85	0.00790	564537.75	4327725.99	0.00791
564537.67	4327706.14	0.00854	564537.58		

4327686.28 0.00835
564537.50 4327666.43 0.00828 564537.41
4327646.57 0.00847
564537.33 4327626.72 0.00864 564537.24
4327606.86 0.00865
564537.16 4327587.01 0.00866 564537.07
4327567.15 0.00863
564536.99 4327547.30 0.00844 564536.90
4327527.44 0.00823
564536.82 4327507.59 0.00818 564536.73
4327487.73 0.00827
564536.64 4327467.87 0.00845 564536.56
4327448.02 0.00847
564536.47 4327428.16 0.00785 564536.39
4327408.31 0.00749
564536.30 4327388.45 0.00738 564536.22
4327368.60 0.00715
564536.13 4327348.74 0.00709 564536.05
4327328.89 0.00709
564535.96 4327309.03 0.00724 564535.88
4327289.18 0.00762
564535.79 4327269.32 0.00779 564535.71
4327249.47 0.00742
564535.62 4327229.61 0.00725 564535.54
4327209.76 0.00776
564535.45 4327189.90 0.00723 564535.37
4327170.05 0.00639
564535.28 4327150.19 0.00702 564535.20
4327130.34 0.00602
564516.68 4327110.90 0.00508 564498.24
4327111.32 0.00519
564479.80 4327111.74 0.00529 564461.37
4327112.16 0.00539
564442.94 4327112.58 0.00548 564424.50
4327113.00 0.00558
564406.06 4327113.41 0.00568 564387.63
4327113.83 0.00579

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
564369.20	4327114.25	0.00590	564350.76	4327114.67	0.00602
564332.32	4327115.09	0.00622	564300.24	4327104.74	0.00660
564286.60	4327093.96	0.00652	564272.95	4327083.19	0.00646
564259.30	4327072.41	0.00642	564245.65	4327061.64	0.00633
564232.01	4327050.86	0.00613	564198.81	4327040.09	0.00595
564179.26	4327040.09	0.00611	564159.70	4327040.09	0.00625
564140.15	4327040.09	0.00639	564120.60	4327040.09	0.00653
564101.05	4327040.09	0.00665	564081.49	4327040.09	0.00679
564061.94	4327040.09	0.00704	564029.46	4327025.01	0.00732
564016.53	4327009.92	0.00722	564003.60	4326994.84	0.00715
563990.68	4326979.76	0.00709	563977.75	4326964.67	0.00705
563964.82	4326949.59	0.00700	563951.89	4326934.50	0.00696
563938.96	4326919.42	0.00691	563926.03	4326904.34	0.00686
563913.10	4326889.25	0.00680	563900.18	4326874.17	0.00672
563887.25	4326859.09	0.00662	563874.32	4326844.00	0.00644
563842.00	4326825.84	0.00611	563822.60	4326822.76	0.00619
563803.21	4326819.69	0.00625	563783.82	4326816.61	0.00630
563764.43	4326813.53	0.00637	563745.03	4326810.45	0.00640
563725.64	4326807.37	0.00643	563706.25	4326804.29	0.00648
563686.86	4326801.22	0.00654	563667.46	4326798.14	0.00658
563648.07	4326795.06	0.00662	563628.68		

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4326791.98        0.00665
         563609.29    4326788.90        0.00669                     563589.89
4326785.83        0.00672
         563570.50    4326782.75        0.00674                     563551.11
4326779.67        0.00676
         563531.71    4326776.59        0.00679                     563512.32
4326773.51        0.00681
         563492.93    4326770.43        0.00680                     563473.54
4326767.36        0.00680
         563454.14    4326764.28        0.00681                     563434.75
4326761.20        0.00679
         563415.36    4326758.12        0.00690                     563395.97
4326755.04        0.00689
         563376.57    4326751.97        0.00690                     563357.18
4326748.89        0.00693
         563337.79    4326745.81        0.00710                     563318.40
4326742.73        0.00744
         563299.00    4326739.65        0.00748                     563279.61
4326736.58        0.00722
         563260.22    4326733.50        0.00699                     563240.83
4326730.42        0.00702
         563221.43    4326727.34        0.00707                     563202.04
4326724.26        0.00751
         563182.65    4326721.18        0.00694                     563163.25
4326718.11        0.00607
         563143.86    4326715.03        0.00638                     563124.47
4326711.95        0.00728
         563105.08    4326708.87        0.00752                     563085.68
4326705.79        0.00743
         563066.29    4326702.72        0.00707                     563046.90
4326699.64        0.00689
         563027.51    4326696.56        0.00695                     563008.11
4326693.48        0.00698
         562988.72    4326690.40        0.00703                     562969.33
4326687.32        0.00721
         562949.94    4326684.25        0.00769                     562930.54
4326681.17        0.00795
         562913.16    4326662.00        0.00840                     562915.17
4326645.91        0.00768
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                         ***       08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                          ***       06:53:13

                                    PAGE 139
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL      ***
                                    INCLUDING SOURCE(S):     PAREA1      ,
```

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
562917.18	4326629.83	0.00686	562919.19	4326613.74	0.00575
562901.47	4326598.15	0.00493	562881.73	4326598.66	0.00449
562862.00	4326599.16	0.00430	562842.26	4326599.66	0.00459
562822.53	4326600.16	0.00489	562802.80	4326600.67	0.00508
562783.06	4326601.17	0.00539	562763.33	4326601.67	0.00590
562743.59	4326602.17	0.00586	562723.86	4326602.68	0.00539
562704.13	4326603.18	0.00530	562684.39	4326603.68	0.00519
562664.66	4326604.19	0.00514	562644.92	4326604.69	0.00505
562625.19	4326605.19	0.00502	562605.46	4326605.69	0.00495
562585.72	4326606.20	0.00474	562565.99	4326606.70	0.00440
562546.25	4326607.20	0.00441	562526.52	4326607.71	0.00465
562506.79	4326608.21	0.00441	562487.05	4326608.71	0.00436
562467.32	4326609.21	0.00428	562447.58	4326609.72	0.00422
562427.85	4326610.22	0.00414	562408.12	4326610.72	0.00407
562388.38	4326611.22	0.00399	562368.65	4326611.73	0.00392
562348.91	4326612.23	0.00382	562329.18	4326612.73	0.00372
562309.45	4326613.24	0.00362	562289.71	4326613.74	0.00351
562269.98	4326614.24	0.00338	562250.24	4326614.74	0.00325
562230.51	4326615.25	0.00312	562210.78	4326615.75	0.00296
562191.04	4326616.25	0.00280	562171.31		

4326616.75 0.00261
562151.57 4326617.26 0.00240 562132.02
4326637.75 0.00249
562132.20 4326657.74 0.00279 562132.39
4326677.73 0.00313
562132.57 4326697.72 0.00339 562132.75
4326717.71 0.00357
562132.93 4326737.70 0.00377 562133.11
4326757.69 0.00395
562133.29 4326777.68 0.00413 562133.48
4326797.67 0.00430
562133.66 4326817.66 0.00445 562133.84
4326837.65 0.00460
562134.02 4326857.64 0.00475 562134.20
4326877.63 0.00489
562134.39 4326897.62 0.00502 562134.57
4326917.61 0.00514
562134.75 4326937.60 0.00527 562134.93
4326957.59 0.00539
562135.11 4326977.58 0.00550 562135.29
4326997.57 0.00562
562135.48 4327017.56 0.00573 562135.66
4327037.55 0.00584
562135.84 4327057.54 0.00596 562136.02
4327077.53 0.00607
562136.20 4327097.52 0.00615 562136.39
4327117.51 0.00626
562136.57 4327137.50 0.00634 562136.75
4327157.49 0.00644
562136.93 4327177.48 0.00655 562137.11
4327197.47 0.00702
562137.29 4327217.46 0.00711 562137.48
4327237.45 0.00720
562137.66 4327257.44 0.00729 562137.84
4327277.43 0.00738
562138.02 4327297.42 0.00745 562138.20
4327317.41 0.00752
562138.39 4327337.40 0.00758 562138.57
4327357.39 0.00763
562138.75 4327377.38 0.00767 562138.93
4327397.37 0.00771

*** MODELOPTs: RegDFAULT CONC ELEV RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5

YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
562139.11	4327417.36	0.00775	562139.29	4327437.35	0.00782
562139.48	4327457.33	0.00789	562139.66	4327477.32	0.00794
562139.84	4327497.31	0.00798	562140.02	4327517.30	0.00802
562140.20	4327537.29	0.00802	562140.38	4327557.28	0.00803
562140.57	4327577.27	0.00806	562140.75	4327597.26	0.00810
562140.93	4327617.25	0.00818	562141.11	4327637.24	0.00824
562141.29	4327657.23	0.00826	562141.48	4327677.22	0.00827
562141.66	4327697.21	0.00828	562141.84	4327717.20	0.00826
562142.02	4327737.19	0.00821	562142.20	4327757.18	0.00818
562142.38	4327777.17	0.00814	562142.57	4327797.16	0.00810
562142.75	4327817.15	0.00806	562142.93	4327837.14	0.00802
562143.11	4327857.13	0.00798	562143.29	4327877.12	0.00791
562143.48	4327897.11	0.00786	562143.66	4327917.10	0.00783
562143.84	4327937.09	0.00776	562144.02	4327957.08	0.00771
562144.20	4327977.07	0.00762	562144.38	4327997.06	0.00784
562144.57	4328017.05	0.00807	562144.75	4328037.04	0.00802
562144.93	4328057.03	0.00798	562145.11	4328077.02	0.00793
562145.29	4328097.01	0.00783	562145.48	4328117.00	0.00763
562145.66	4328136.99	0.00742	562145.84		

4328156.98   0.00727
         562146.02   4328176.97   0.00714   562146.20
4328196.96   0.00705
         562146.38   4328216.95   0.00698   562146.57
4328236.94   0.00691
         562146.75   4328256.93   0.00677

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL

                                     *** THE SUMMARY OF MAXIMUM ANNUAL RESULTS
AVERAGED OVER   5 YEARS ***

                                      ** CONC OF DPM   IN MICROGRAMS/M**3
                **

                          NETWORK
GROUP ID   AVERAGE CONC   RECEPTOR (XR, YR,
ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID
- -
- - - - - - - - - - - - - - - - - - -

ALL   1ST HIGHEST VALUE IS   0.01018 AT (562944.67, 4328278.59,
94.26,   780.04,   0.00) DC
          2ND HIGHEST VALUE IS   0.01018 AT (563044.38, 4328278.80,
94.43,   674.75,   0.00) DC
          3RD HIGHEST VALUE IS   0.01018 AT (562964.61, 4328278.64,
94.34,   780.04,   0.00) DC
          4TH HIGHEST VALUE IS   0.01017 AT (563064.33, 4328278.84,
94.46,   674.75,   0.00) DC
          5TH HIGHEST VALUE IS   0.01017 AT (562924.72, 4328278.55,
94.30,   780.04,   0.00) DC
          6TH HIGHEST VALUE IS   0.01017 AT (563084.27, 4328278.89,
94.46,   674.64,   0.00) DC
          7TH HIGHEST VALUE IS   0.01017 AT (563203.93, 4328279.14,
94.25,   662.28,   0.00) DC
          8TH HIGHEST VALUE IS   0.01017 AT (563124.16, 4328278.97,
94.45,   662.28,   0.00) DC
          9TH HIGHEST VALUE IS   0.01017 AT (563183.99, 4328279.10,
94.33,   662.28,   0.00) DC
         10TH HIGHEST VALUE IS   0.01017 AT (563104.21, 4328278.93,
94.49,   667.72,   0.00) DC

```
 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
 *** AERMOD - VERSION 23132  ***   *** Janus Solar and Battery Strorage Project-
DPM                          ***        08/02/24
 *** AERMET - VERSION  19191 ***   *** Met data: Oroville 2015-2019
                       ***        06:53:13

                                   PAGE 142
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            1 Warning Message(s)
 A Total of         4109 Informational Message(s)

 A Total of        43824 Hours Were Processed

 A Total of         2683 Calm Hours Identified

 A Total of         1426 Missing Hours Identified (  3.25 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      85       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50

    ***********************************
    *** AERMOD Finishes Successfully ***
    ***********************************
```

Appendix C. HARP2 Output

HARP2 - HRACalc (dated 22118) 8/7/2024 6:05:22 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 0.9

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 0.9
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

```
Tier2 adjustments were used in this assessment.  Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk saved to: C:\Users\s.sridharan\Documents\CEQA\Janus Solar\HRA\JanusSolarMEIRCancerRisk.csv
Calculating chronic risk
Chronic risk saved to: C:\Users\s.sridharan\Documents\CEQA\Janus Solar\HRA\JanusSolarMEIRNCChronicRisk.csv
Calculating acute risk
Acute risk saved to: C:\Users\s.sridharan\Documents\CEQA\Janus Solar\HRA\JanusSolarMEIRNCAcuteRisk.csv
HRA ran successfully

```

HARP2 - HRACalc (dated 22118) 8/2/2024 7:43:17 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 0.9

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0.9
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
NOTE: The worker adjustment factors below are only used for cancer assessments. However, the GLC adjustment factor is also applied to 8-hr noncancer chronic assessments.
Worker adjustments factors enabled: YES
GLC adjustment factor: 2
Exposure frequency: 250

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

```
65
66  **********
67  TIER 2 SETTINGS
68
69  Tier2 adjustments were used in this assessment.  Please see the input file for details.
70  Tier2 - What was changed: ED or start age changed|
71  Calculating cancer risk
72  Cancer risk saved to: C:\Users\s.sridharan\Documents\CEQA\Janus
    Solar\HRA\JanusSolarMEIWCancerRisk.csv
73  Calculating chronic risk
74  Chronic risk saved to: C:\Users\s.sridharan\Documents\CEQA\Janus
    Solar\HRA\JanusSolarMEIWNCChronicRisk.csv
75  Calculating acute risk
76  Acute risk saved to: C:\Users\s.sridharan\Documents\CEQA\Janus
    Solar\HRA\JanusSolarMEIWNCAcuteRisk.csv
77  HRA ran successfully
78
```

HARP2 - HRACalc (dated 22118) 8/1/2024 1:53:06 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 0
Total Exposure Duration: 0.9

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0.9
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
NOTE: The worker adjustment factors below are only used for cancer assessments. However, the GLC adjustment factor is also applied to 8-hr noncancer chronic assessments.
Worker adjustments factors enabled: YES
GLC adjustment factor: 2
Exposure frequency: 250

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

```
65
66  **********
67  TIER 2 SETTINGS
68
69  Tier2 adjustments were used in this assessment.  Please see the input file for details.
70  Tier2 - What was changed: ED or start age changed|
71  Calculating cancer risk
72  Cancer risk saved to: C:\Users\s.sridharan\Documents\CEQA\Janus
    Solar\HRA\JanusSolarSR1CancerRisk.csv
73  Calculating chronic risk
74  Chronic risk saved to: C:\Users\s.sridharan\Documents\CEQA\Janus
    Solar\HRA\JanusSolarSR1NCChronicRisk.csv
75  Calculating acute risk
76  Acute risk saved to: C:\Users\s.sridharan\Documents\CEQA\Janus
    Solar\HRA\JanusSolarSR1NCAcuteRisk.csv
77  HRA ran successfully
78
```

HARP2 - HRACalc (dated 22118) 8/1/2024 1:45:41 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 5
Total Exposure Duration: 0.9

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0.9
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
NOTE: The worker adjustment factors below are only used for cancer assessments. However, the GLC adjustment factor is also applied to 8-hr noncancer chronic assessments.
Worker adjustments factors enabled: YES
GLC adjustment factor: 2
Exposure frequency: 250

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

```
65
66  **********
67  TIER 2 SETTINGS
68
69  Tier2 adjustments were used in this assessment.  Please see the input file for details.
70  Tier2 - What was changed: ED or start age changed|
71  Calculating cancer risk
72  Cancer risk saved to: C:\Users\s.sridharan\Documents\CEQA\Janus
    Solar\HRA\JanusSolarSRCancerRisk.csv
73  Calculating chronic risk
74  Chronic risk saved to: C:\Users\s.sridharan\Documents\CEQA\Janus
    Solar\HRA\JanusSolarSRNCChronicRisk.csv
75  Calculating acute risk
76  Acute risk saved to: C:\Users\s.sridharan\Documents\CEQA\Janus
    Solar\HRA\JanusSolarSRNCAcuteRisk.csv
77  HRA ran successfully
78
```

APPENDIX E
BIOLOGICAL RESOURCES REPORTS

Biological Survey Report

BIOLOGICAL SURVEY REPORT

Janus Solar and Battery Storage Project
Colusa County, California



August 14, 2024

RWE

RWE Solar Development, LLC

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APPENDICES

Appendix A Photographs

ACRONYMS/ABBREVIATIONS

BESS	battery energy storage system
BSA	biological study area
BUOW	burrowing owl
Cal-IPC	California Invasive Plant Council
CEQA	California Environmental Quality Act
CDFW	California Department of Fish and Wildlife
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
Gen-tie	generator tie line
GPS	Global Positioning System
MBTA	Federal Migratory Bird Treaty Act
MCVII	Manual of California Vegetation, Second Edition
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
Pop.	population
Project	Janus Solar and Battery Storage Project
Report	Biological Survey Report
RWE	RWE Solar Development, LLC
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 INTRODUCTION

Tetra Tech prepared this Biological Survey Report (Report) for the proposed Janus Solar and Battery Storage Project (Project). RWE Solar Development, LLC (RWE) proposes to develop an estimated 666 acres on approximately 886 acres of land (Project site) on two parcels located in Colusa County, California for the development of a solar energy facility. Biological field surveys of the Project site and a 150-meter buffer zone were performed. Together, the Project site and the 150-meter buffer zone are the biological study area (BSA). Biologists visited the BSA in 2020, 2021, and 2024 and conducted the following surveys:

- Rare plant surveys.
- Raptor nest surveys.
- Protocol burrowing owl (BUOW) burrow survey.
- Protocol breeding season and winter season BUOW surveys.
- Jurisdictional wetlands/waters of the United States (U.S.).

The purpose of this Report is to discuss the methods and results of the rare plant surveys from 2020 and 2024 and raptor nest surveys from 2020 and provide maps of any special-status species observed. Results of the BUOW protocol surveys, Swainson's hawk foraging habitat surveys by Estep (2021) and Tetra Tech (2024b), 2024 Crotch's bumble bee (*Bombus crotchii*) surveys, and jurisdictional delineation are provided in separate reports. In 2024, the proposed Project site was reduced relative to 2020. The figures in this Report show the current Project site being proposed for development.

1.1 PROJECT SITE AND ENVIRONMENTAL SETTING

1.1.1 Project Site Location

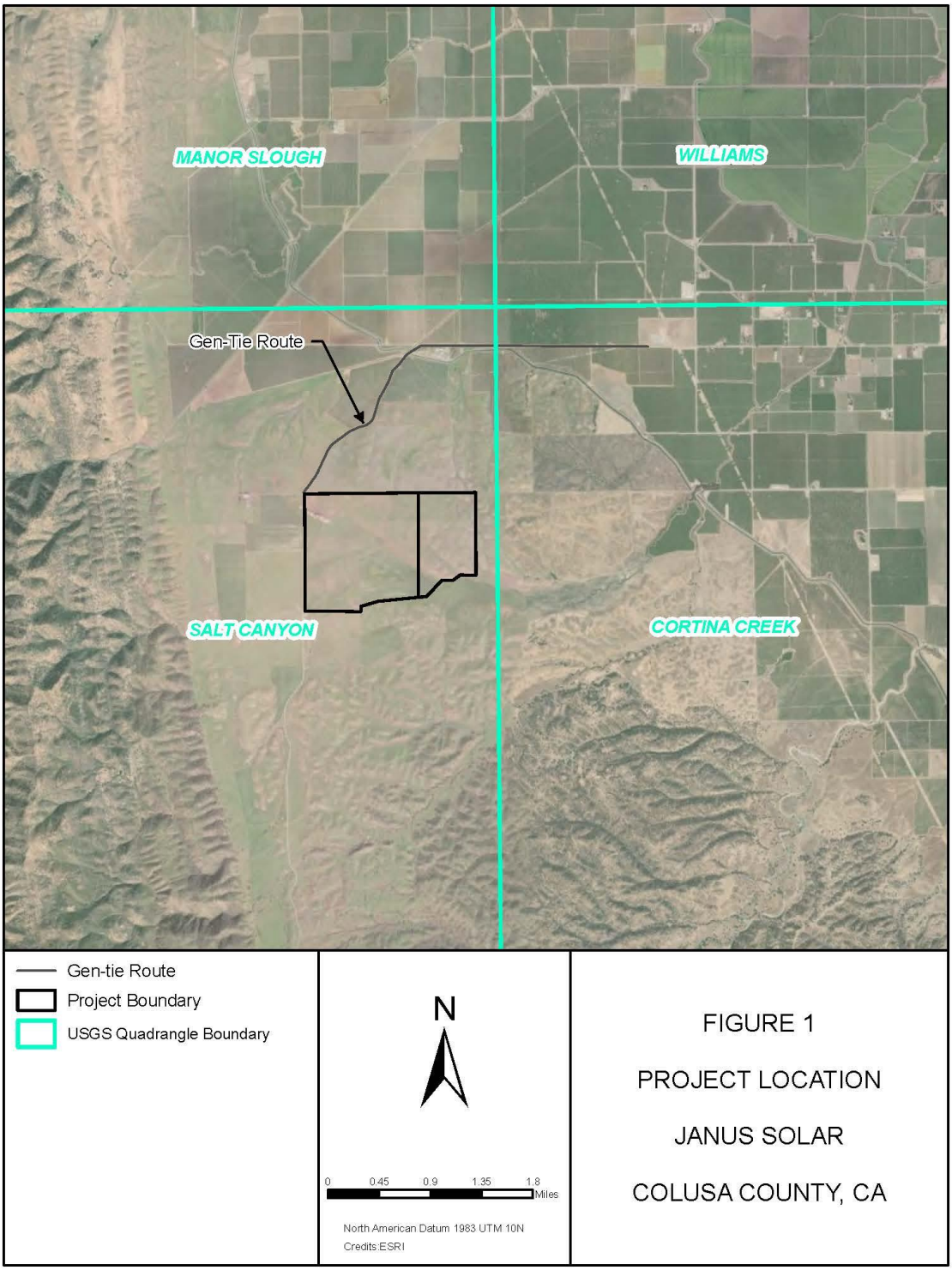
The Project site is located on private property in an area of Colusa County primarily used for cattle grazing (Figure 1). From the Project site, the nearest community is Williams, approximately 6.5 miles to the northeast. The Project site includes two parcels and a generator tie line (gen-tie) that would connect to the Cortina Substation (Figure 1). The Cortina Substation is located on Walnut Drive, approximately 2 miles northeast of the site. The elevation range including the proposed gen-tie line is approximately 43 to 105 meters (141 to 344 feet) above sea level.

The Project site is in the United States Geological Survey (USGS) Salt Canyon 7.5-Minute Topographic Quadrangle and the gen-tie extends into the western edge of the USGS Cortina Creek Quadrangle, within Townships 14N and 15N, Ranges 3W and 4W, Sections 1, 2, 3, 25, 26, 29, 30, and 35. Spring Valley Road borders the westernmost portion of the site. There are no access limitations to the Project site and one can reach the site from State Route 20, Walnut Drive, Spring Valley Road, and interior unpaved access routes. Most roadways in the Project vicinity are unimproved or paved without curb or sidewalk improvements. Interstate 5 is a major California freeway located approximately 9 miles east of the Project site.

1.1.2 Environmental Setting

The Project site is located in northern California within the Sacramento Valley Subregion of the Great Central Valley Region (Jepson Flora Project [eds.] 2024). This region experiences hot, dry summers, mild winters, and annual rainfall averaging between roughly 5 and 25 inches. Elevation at the Project site ranges from approximately 44 to 101 meters. The Project site currently supports cattle grazing and grain cultivation. Vegetation on the Project site includes non-native grassland, cultivated grain fields, low growing herbaceous plants, and disturbed riparian areas and drainages with sparse native and non-native trees, as well as non-native cultivated trees rows along the proposed gen-tie. Standing water, drainages, potential

wetlands, and riparian areas that occur within the Project site are described and mapped in the *Jurisdictional Delineation Report* (Tetra Tech 2024a).


MANOR SLOUGH
WILLIAMS
Gen-Tie Route
SALT CANYON
CORTINA CREEK
Gen-tie Route
Project Boundary
USGS Quadrangle Boundary
N
0 0.45 0.9 1.35 1.8
Miles
North American Datum 1983 UTM 10N
Credits:ESRI
FIGURE 1
PROJECT LOCATION
JANUS SOLAR
COLUSA COUNTY, CA

2.0 PROJECT DESCRIPTION

The Project consists of constructing and operating a photovoltaic solar electricity generating facility, battery energy storage system (BESS), and associated infrastructure on approximately 886 acres of privately-owned grazing and agricultural land. The Project would include the construction of:

- Gen-tie to Cortina substation;
- Project electrical substation;
- Project BESS;
- Solar panel arrays

Project design details and components may be modified during finalization of the site plan. Project construction would primarily occur during daylight hours, Mondays through Friday 7:00 am to 7:00 pm and potentially 8:00 am to 5:00 pm on Saturdays and Sundays. If nighttime work hours or work on weekends is necessary, such work would be scheduled consistent with Colusa County requirements. A variety of equipment may be used during the construction phase, such as skid steers, water trucks, welder, pickup trucks, bulldozers, front end loaders, graders, roller compactors, trenchers, forklifts, pile drivers, backhoes, crane, and/or aerial lifts. Construction would include site preparation, grading, preparing staging areas, and construction of the Project facilities.

3.0 METHODS

3.1 LITERATURE REVIEW

A literature and data review of pertinent background information for the Project site was completed in the *Janus Solar Project Habitat Characterization Report* (Tetra Tech 2020) and has been updated in this Report. These included California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) data (CDFW 2024), USGS topographic maps, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants data (CNPS 2024), satellite and aerial imagery from Google Earth, National Wetlands Inventory (NWI) data (United States Fish and Wildlife Service [USFWS] 2024a), United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soils data (USDA NRCS 2024), and the *Janus Solar Project – Foothill Agriculture Site Critical Issues Analysis Memo* prepared by Stantec (2018). The literature review determined the special-status species known to occur or that could potentially occur in the region, as well as the location of designated Critical Habitat and potential wetlands. Special-status species are defined herein as plants and wildlife holding a status of sensitive, threatened, endangered, rare, or candidate as defined by CDFW, USFWS, CNPS, or the Bureau of Land Management. The Project site falls within the USGS Salt Canyon Quadrangle; therefore, a search containing this quadrangle and the eight surrounding quadrangles was conducted to capture any species with potential to occur (CDFW 2024; CNPS 2024).

3.2 RARE PLANT SURVEYS

Rare plant surveys were conducted within the Project site during the spring and summer of 2020 and 2024. Surveys were conducted on-foot during daylight hours and not during abnormal or excessive cold, heat, wind, rain, or other inclement weather. The spring rare plant survey was conducted in April 2020 to search for special-status plants that bloom in spring. For example, adobe-lily (*Fritillaria pluriflora*) was identified as having a moderate potential to occur on the Project site and blooms from February to April (Tetra Tech 2020). Rare plant surveys were conducted within the Project site and a 150-meter buffer around the site. (i.e., the BSA).

During the spring survey in April 2020, a team of 3 biologists conducted pedestrian survey transects. Transects were spaced no more than 30 meters apart. The westernmost portion of the 150-meter buffer was surveyed on foot because it has the same property owner as the Project site. Due to access limitations, the remainder of the 150-meter buffer around the Project site was surveyed using binoculars. Observations were also made with aerial imagery for inaccessible areas.The summer rare plant surveys were conducted in June and July 2020 to search for special-status plants that bloom in late spring/summer. For example, pappose tarplant (*Centromadia parryi* ssp. *parryi*) was identified as having a high potential to occur on the Project site and blooms from May to November, and Parry's rough tarplant (*Centromadia parryi* ssp. *rudis*) was identified as having a moderate potential to occur on the site and blooms from May to October (Tetra Tech 2020). areas that were determined to have potential to support special-status plants were searched on-foot. These included wet or previously wet areas in the disturbed *Salix gooddingii - Salix laevigata* Forest and Woodland Alliance and other drainages within the Project site, areas where dead individuals of special-status plant genera were located during previous surveys, and areas with low non-native plant cover.

Additional rare plant surveys were performed in May and July 2024 to evaluate current conditions at the proposed Project site. The spring survey in May 2024 was conducted by 3 biologists and the summer survey in July 2024 was performed by 2 biologists. For both rare plant surveys in 2024, meandering survey transects were walked within potential rare plant habitat previously identified. During the summer 2024 survey, all populations of Parry's tarplant that were mapped in 2020 were checked and remapped if still present.

During rare plant surveys, special-status and common plants found within the BSA were recorded. Likewise, all special-status and common wildlife species and any signs of wildlife, including animal tracks, burrows,

dens, nests, nest sites, scat, or remains, were recorded. Biologists mapped occurrences of any special-status plants and wildlife that were found using a sub-meter Global Positioning System (GPS) unit and a tablet loaded with the ArcGIS Collector application. For each occurrence, the number of individuals observed was recorded. For special-status plants, the numbers of individuals were visually estimated for large populations, and populations were considered separate if they were greater than 20 feet apart. Photographs are provided in Appendix A.

3.3 RAPTOR NEST SURVEYS

Raptor nest surveys were conducted within the Project site and a 5-mile buffer around the site in April 2020 to understand the distribution of raptor nests on and around the Project site. Biologists used binoculars to survey trees and other features (e.g., power poles) from multiple angles to detect nests or perched raptors. Biologists looked for territorial and courtship displays and raptors circling the nest territory. Biologists also listened for vocalizations as vocal communication is frequent throughout the nesting season. The survey was performed during the period when Swainson's hawks (*Buteo swainsoni*) return to the Central Valley and begin occupying their nest territories (March 20 to April 20). The survey occurred between sunrise to 12:00 p.m. or 4:30 p.m. to sunset in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000). Biologists recorded notes on all raptor observations, including species, number of individuals observed, and behavior. All active nests observed within the 5-mile buffer were mapped using a sub-meter GPS unit and a tablet loaded with the ArcGIS Collector application. Due to access limitations, portions of the 5-mile buffer were surveyed at a distance using binoculars and primarily relied on vocalizations and/or observations of in-flight raptors. The locations of any active nests within these areas were estimated using aerial imagery. For any Swainson's hawk nest that was found during the April 2020 survey, additional nest checks were conducted concurrently with other project surveys to record nesting data (e.g., nest status, number Swainson's hawks observed, behavior, and evidence of chicks or fledglings).

In 2021, Estep Environmental Consulting (Estep) performed raptor nest surveys within the Project site and a 10-mile buffer in accordance with the 1994 CDFW Region 2 guidelines to evaluate Project impacts to loss of Swainson's hawk foraging habitat (Estep 2021; CDFW 1994). A raptor nest and Swainson's hawk survey was conducted within the Project site and a 10-mile buffer in April 2024 to update the Estep report. During this survey, nests that were previously mapped by Estep were visited and all new nests were mapped. Results of this 2024 survey from within the Project site are included in this report. All results of the 2024 raptor survey can be found in the *Swainson's Hawk Survey Report* (Tetra Tech 2024b).

3.4 BURROWING OWL SURVEYS

BUOW surveys, including a habitat assessment, burrow survey, and protocol breeding season surveys were performed within the BSA in 2024. Protocol winter season surveys are also planned for winter 2024-2025. Methods and results of the BUOW surveys within the BSA are located in the *Burrowing Owl Survey Report* (Tetra Tech 2024c).

3.5 VEGETATION COMMUNITIES

During the surveys in spring and summer 2020, biologists also updated the existing vegetation communities map from November 2019 (Tetra Tech 2020). Vegetation communities were then updated from the 2020 surveys in spring 2024. Vegetation communities within the BSA were mapped in accordance with the *Manual of California Vegetation, Second Edition* (MCVII; Sawyer et al. 2009). Vegetation was mapped to the alliance level, which is defined by plant species composition and identified by the most dominant tree, shrub, or herb in the vegetation community. A best attempt was made to categorize vegetation communities according to Sawyer et al. However, in the case that membership rules/community definitions were not met, a new alliance was named according to a best fit for the dominant species observed, aligned to the MCVII

structure. Vegetation was mapped using a sub-meter GPS unit, a tablet loaded with the ArcGIS Collector application, and aerial imagery.

3.6 FIELD SURVEYS CONDUCTED

Table 1 lists the field surveys that were conducted in 2020, 2021, and 2024.

Table 1. Field Surveys Conducted

Field Surveys Conducted	Dates	Notes
Spring rare plant survey, also updated vegetation community mapping	April 6-9, 2020 May 20-24, 2024	Surveys were performed in all areas with potential rare plant habitat
Summer rare plant surveys, also updated vegetation community mapping	June 9-10, 2020; July 8-9, 2020 July 9-10, 2024	Surveys were performed all areas with potential habitat for summer blooming rare plants.
Raptor nest survey	April 10-11, 2020 April 17-19, 2024 May 22-23, 2024	All raptor nests, including Swainson's hawk nests, previously identified in 2021 by Estep were visited during the 2024 survey. Inactive nests identified in April 2024 were revisited in May 2024.
Swainson's hawk additional nest checks	June 10, 2020; July 9, 2020 May 22-23, 2024	Additional checks of active Swainson's hawk nests were conducted. Previously identified Swainson's hawk nests that were inactive in April 2024 were rechecked in May 2024.
Protocol BUOW burrow survey*	June 24-28, 2024	Burrow survey was conducted sitewide.
Protocol breeding season BUOW surveys*	June 26-27, 2024; July 2-3, 2024; July 9-10, 2024	Surveys on July 9 and 10, 2024 were conducted concurrently with the summer rare plant survey.
Protocol winter season BUOW surveys*	Planned for winter 2024/2025	Winter BUOW surveys will be conducted between December 1, 2024, and January 31, 2025.
Jurisdictional delineation*	January 18-21, 2021 May 20-24, 2024	Jurisdictional delineation was conducted sitewide.

Note: *Results of the Swainson's hawk foraging habitat surveys in 2021 and 2024, BUOW surveys, Crotch's bumble bee surveys, and Jurisdictional Delineation are provided in separate reports.

4.0 RESULTS

Results of the rare plant surveys and raptor nest survey are presented in the sections below.

4.1 RARE PLANT SURVEYS

A rare annual plant species, Parry's rough tarplant (CNPS Rank 4.2), was identified within the Project site during the rare plant surveys in 2020 and 2024. Samples of this species were collected and provided to Dr. Bruce Baldwin with the Jepson Herbarium and Department of Integrative Biology, University of California, Berkeley in 2020. Dr. Baldwin is an expert in the *Centromadia* genus and confirmed identification of the samples as Parry's rough tarplant (B. Baldwin, personal communication, 2020). This species is known to occur in valley and foothill grassland and vernal pool habitats as well as disturbed areas. CNPS Rank 4 is the watch list, indicating that the species is of limited distribution or infrequent throughout a broad area in California; CNPS Threat Rank 0.2 indicates that the species is moderately threatened in the state (20 to 80 percent of occurrences are threatened). This species was found in small populations throughout the Project site. Rare plant surveys identified the following Parry's rough tarplant populations:

- 8 populations in 2020, and
- 3 populations in 2024.

One population (Pop. 6) originally observed in 2020 was remapped and split into two populations in 2024 (Pop. 6A and Pop. 6B). These two populations were located greater than 20 feet apart, so were considered separate populations. Pop. 5, originally observed in 2020, was observed again in 2024. The number of Parry's rough tarplant individuals declined at Pop. 5 and 6. In 2020, Pop. 6 had approximately 700 individuals present. In 2024, Pop. 6A and Pop. 6B had approximately 400 individuals combined. In 2020, Pop. 5 had 3 individuals present. In 2024, Pop. 5 had only 1 individual present.

All other populations mapped in 2020 were revisited in 2024, but no individuals of Parry's rough tarplant were observed in their vicinity. No new populations of Parry's rough tarplant were observed in the BSA in 2024. The populations were generally located on previously disturbed soils with relatively higher cover of bare ground and lower cover of non-native grasses. Details on each population of Parry's rough tarplant from 2020 are provided in Table 2. Table 3 provides details from 2024. The locations of all Parry's rough tarplant populations observed in the BSA are shown in Figure 2. No other special-status plants were found during the surveys.

Table 2: Parry's Rough Tarplant Occurrences Within the BSA in 2020

Parry's Rough Tarplant Population (2020)	Number of Individuals	Vegetation Community
Pop. 1	50-100	*Aegilops triuncialis* Provisional Herbaceous Semi-Natural Alliance
Pop. 2	5	*Aegilops triuncialis* Provisional Herbaceous Semi-Natural Alliance
Pop. 3	30-50	*Aegilops triuncialis* Provisional Herbaceous Semi-Natural Alliance
Pop. 4	300	*Aegilops triuncialis* Provisional Herbaceous Semi-Natural Alliance
Pop. 5	3	*Amsinckia menziesii - Achyrachaena mollis* Herbaceous Alliance
Pop. 6	700	*Aegilops triuncialis* Provisional Herbaceous Semi-Natural Alliance

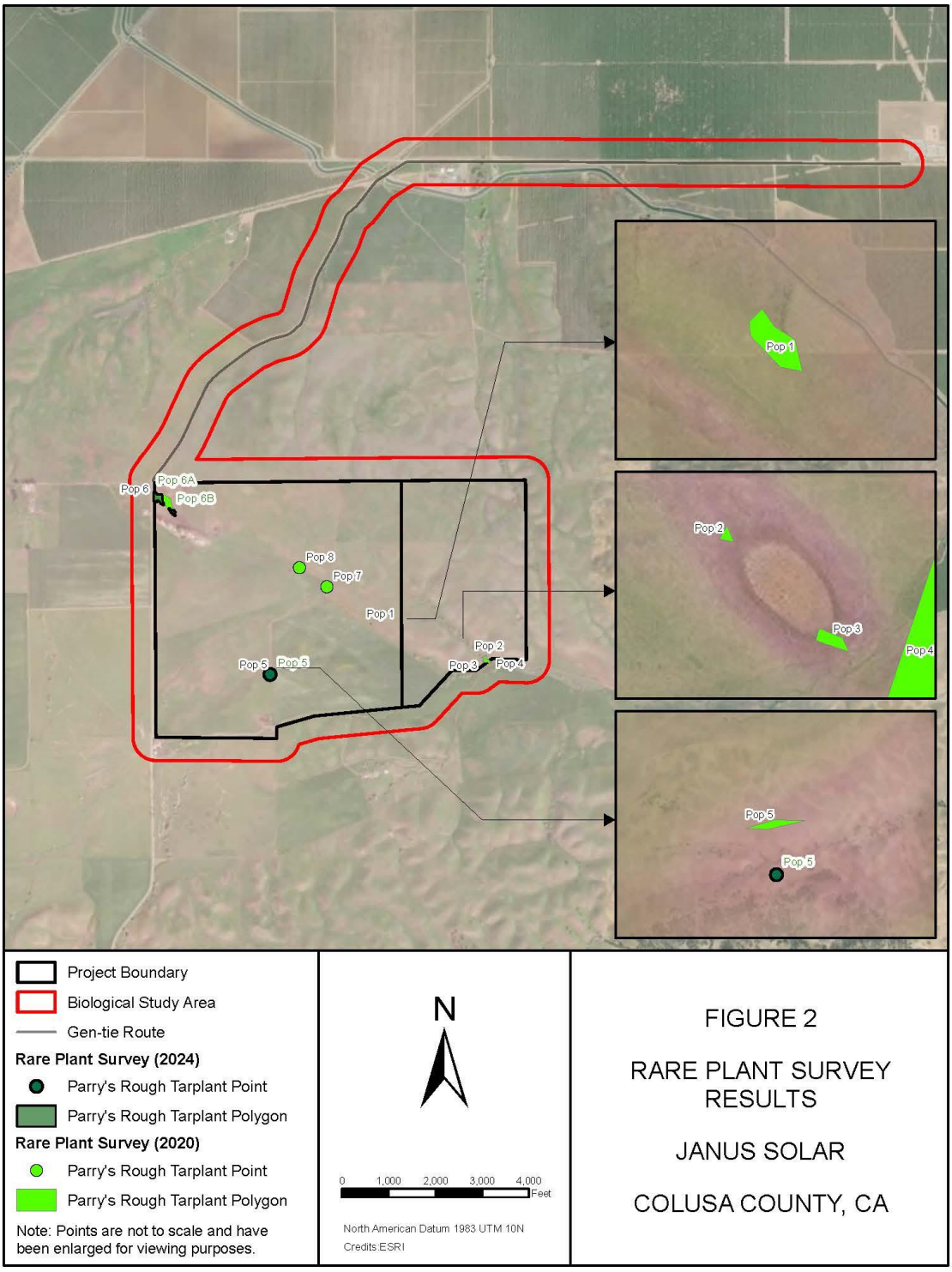
Parry's Rough Tarplant Population (2020)	Number of Individuals	Vegetation Community
Pop. 7	4	*Aegilops triuncialis* Provisional Herbaceous Semi-Natural Alliance / *Amsinckia menziesii - Achyrachaena mollis* Herbaceous Alliance
Pop. 8	1	*Amsinckia menziesii - Achyrachaena mollis* Herbaceous Alliance
Total	1,163*	

Note: *For Population 1 and Population 3, the upper bound of estimated individuals was used to calculate the total number of individuals.

Table 3: Parry's Rough Tarplant Occurrences Within the BSA in 2024

Parry's Rough Tarplant Population (2024)	Number of Individuals	Vegetation Community
Pop. 5	1	*Amsinckia menziesii - Achyrachaena mollis* Herbaceous Alliance
Pop. 6A*	300	*Aegilops triuncialis* Provisional Herbaceous Semi-Natural Alliance
Pop. 6B*	100	*Aegilops triuncialis* Provisional Herbaceous Semi-Natural Alliance
Total	401	

*Pop 6, originally observed in 2020, was split into two separate populations in 2024. The two observed populations were greater than 20 feet apart.


Pop 1
Pop 6
Pop 6A
Pop 6B
Pop 8
Pop 7
Pop 1
Pop 5
Pop 5
Pop 2
Pop 3
Pop 4
Pop 2
Pop 3
Pop 4
Pop 5
Pop 5
Project Boundary
Biological Study Area
Gen-tie Route
Rare Plant Survey (2024)
Parry's Rough Tarplant Point
Parry's Rough Tarplant Polygon
Rare Plant Survey (2020)
Parry's Rough Tarplant Point
Parry's Rough Tarplant Polygon
Note: Points are not to scale and have been enlarged for viewing purposes.
N
0 1,000 2,000 3,000 4,000
Feet
North American Datum 1983 UTM 10N
Credits:ESRI
FIGURE 2
RARE PLANT SURVEY RESULTS
JANUS SOLAR
COLUSA COUNTY, CA

4.2 RAPTOR NEST SURVEY

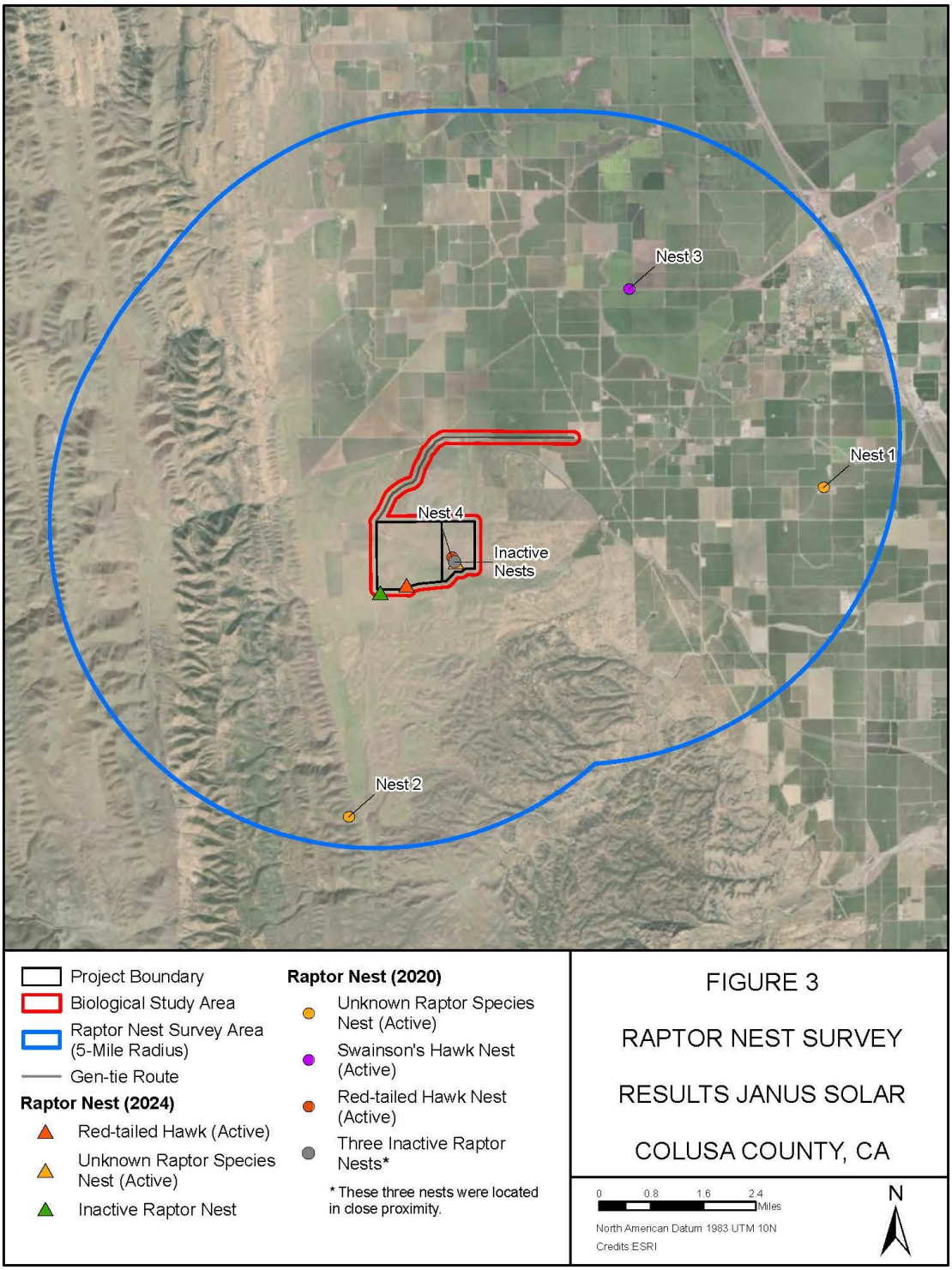
A raptor nest survey was conducted on and within 5 miles of the Project site in 2020. Native and non-native mature trees suitable for raptor nesting were found within the Project site, including willows (*Salix* spp.) in the disturbed *Salix gooddingii - Salix laevigata* Forest and Woodland Alliance, a small stand (approximately nine trees total) consisting of northern California black walnut (*Juglans hindsii*), pepper tree (*Schinus molle*), elm (*Ulmus* sp.), and fan palm (*Washingtonia* sp.) in the southwestern portion of the Project site, and additional trees including eucalyptus (*Eucalyptus* sp.) within the developed area in the northwestern portion of the site. Dense trees on mountainsides and numerous additional isolated trees were also found outside the Project site within the 5-mile buffer. Potential raptor foraging habitat was found within the Project site and throughout the 5-mile buffer, which included grazing lands and agricultural areas. A total of four active nests were found during the 2020 survey, one of which was occupied by Swainson's hawk.

Native birds and their nests, including all raptors that occur in California, are protected under the Federal Migratory Bird Treaty Act (MBTA). Three inactive raptor nests in close proximity were found in trees within the Project site in 2020. Details on all active nests found during the 2020 survey are provided in Table 4 and the locations are shown in Figure 3.

Table 4: Raptor Active Nest Survey Results (2020)

Nest ID	Scientific Name	Common Name	Project Site Location	Notes (2020)
1	Unknown species	Unknown species	Over 5 miles from the main site boundary, approximately 4 miles from the northeast end of the generator tie line (gen-tie).	One adult and one chick in nest within a tree. Unable to identify raptor species due to far distance of the nest from the closest available vantage point.
2	Unknown species	Unknown species	Approximately 3.5 miles from the main site boundary, over 4 miles from the southwest end of the gen-tie.	One individual in nest within a tree. Unable to identify raptor species due to far distance of the nest from the closest available vantage point.
3	*Buteo swainsoni*	Swainson's hawk	Over 4 miles from the main site boundary, approximately 2.5 miles from the northeast end of the gen-tie.	One adult in nest within a willow tree and soaring nearby (April). One adult perched near nest and one chick in nest (June). One individual perched on power pole near nest but no activity in nest (July).
4	*Buteo jamaicensis*	Red-tailed hawk	Within the eastern portion of the main site (Figure 3).	One individual in nest within a tree. The individual was seen soaring and returning to the nest. The nest occurred in a flat area with slopes of 10 percent on either side.

In 2024, one active red-tailed hawk nest and one unknown raptor species nest were found in the Project site, as well as one inactive raptor nest in the 150-meter buffer (Figure 3). More details on the 2024 raptor nest survey are provided in the separate Swainson's hawk survey report (Tetra Tech 2024b).


Nest 3
Nest 1
Nest 4
Inactive Nests
Nest 2
Project Boundary
Biological Study Area
Raptor Nest Survey Area (5-Mile Radius)
Gen-tie Route
Raptor Nest (2024)
Red-tailed Hawk (Active)
Unknown Raptor Species Nest (Active)
Inactive Raptor Nest
Raptor Nest (2020)
Unknown Raptor Species Nest (Active)
Swainson's Hawk Nest (Active)
Red-tailed Hawk Nest (Active)
Three Inactive Raptor Nests*
* These three nests were located in close proximity.
FIGURE 3
RAPTOR NEST SURVEY
RESULTS JANUS SOLAR
COLUSA COUNTY, CA
0 0.8 1.6 2.4 Miles
North American Datum 1983 UTM 10N
Credits:ESRI
N

4.3 VEGETATION COMMUNITIES

Figure 4 depicts the results of the vegetation community mapping. Changes from the vegetation map in the *Janus Solar Project Habitat Characterization Report* (Tetra Tech 2020) include the following:

- Vegetation was mapped within the 150-meter buffer.
- Vegetation communities were mapped to alliance level in accordance with the MCVII (Sawyer et al. 2009) and consistent with the BUOW protocol survey reporting requirements.
- Acres of the *Amsinckia menziesii* - *Achyrachaena mollis* Herbaceous Alliance (i.e., native forbs community) were increased. Higher cover of native forbs was found in these areas in the spring and summer of 2020, as compared to the previous survey in November 2019.
- The previous unvegetated agricultural fields community was found to be planted with common wheat (*Triticum aestivum*) and was renamed to planted common wheat fields.
- Vegetation community descriptions were updated.

Changes to the vegetation map between 2020 and 2024 include the following:

- Acres of the *Aegilops triuncialis* Provisional Herbaceous Semi-Natural Alliance were decreased. Several fields on the western side of the Project site in the 150-meter buffer are now cultivated wheat fields. One area in the northwestern section of the gen-tie is now a developed area associated with the Tehama Colusa Canal aqueduct. Two areas in the northern part of the gen-tie were changed to cultivated tree rows.
- Open water was added to the list of vegetation communities within the BSA. The Tehama Colusa Canal aqueduct that runs through the northern section of the gen-tie was mapped.
- Acres of previous cultivated tree row were changed. One area on the northeastern section of the gen-tie is now part of the Cortina Substation.
- Small areas in the southern part of the Project site were changed from cultivated wheat fields to *Salix gooddingii* - *Salix laevigata* Forest and Woodland Alliance.

No CDFW sensitive natural communities were found. All vegetated areas of the Project site have previously been or are currently being used for grazing and/or cultivation of common wheat. Table 5 summarizes the vegetation communities observed and their corresponding acreage; acreage includes the Project site and 150-meter buffer (i.e., the BSA). Descriptions of the communities are provided below. Standing water, drainages, potential wetlands, and riparian areas that occur within the Project site are described and mapped in the *Jurisdictional Delineation Report* (Tetra Tech 2024a).

Table 5: Vegetation Communities

Vegetation Communities	Acres within BSA
Aegilops triuncialis Provisional Herbaceous Semi-Natural Alliance	810.9
Amsinckia menziesii - *Achyrachaena mollis* Herbaceous Alliance	286.0
Cultivated Tree Rows	244.5
Common Wheat Fields	166.2
Developed	33.5
Open Water	4.7
Salix gooddingii - *Salix laevigata* Forest and Woodland Alliance	14.1
Disturbed *Salix gooddingii* - *Salix laevigata* Forest and Woodland Alliance	9.0
Total	**1,568.9***

Note: Total acres include the Project site and 150-meter buffer.

About 50 percent of the BSA consisted of non-native grasslands in the *Aegilops triuncialis* Provisional Herbaceous Semi-Natural Alliance. This alliance is considered a semi-natural alliance, which is defined as a vegetation community dominated by non-native plants that are naturalized (i.e., growing in the wild and

reproducing) in California. In addition, over 30 percent of the BSA consisted of cultivated tree rows, planted common wheat fields, open water at the Tehama Colusa Canal aqueduct, or developed areas, which provide poor quality habitat for native plants and wildlife. Trees in the cultivated trees rows or developed areas can provide nesting habitat for birds. The remainder of the BSA consisted of areas dominated by native forbs in the *Amsinckia menziesii* - *Achyrachaena mollis* Herbaceous Alliance, and small areas dominated by native willows in the *Salix gooddingii* - *Salix laevigata* Forest and Woodland Alliance.

Mature trees were found within the Project site, including native willows in the disturbed *Salix gooddingii* - *Salix laevigata* Forest and Woodland Alliance, a small stand (approximately nine trees total) consisting of native northern California black walnut, non-native pepper tree, non-native elm, and fan palm in the southwestern portion of the site, and additional trees including non-native eucalyptus within the developed area in the northwestern portion of the site.

***Aegilops triuncialis* Provisional Herbaceous Semi-Natural Alliance.** This non-native grassland community was the most common community throughout the Project site and was dominated by non-native barbed goat grass (*Aegilops triuncialis*) and non-native oat (*Avena* sp.). Other species that were common in this community were non-native yellow star thistle (*Centaurea solstitialis*) and native hayfield tarweed (*Hemizonia congesta*). Barbed goat grass and yellow star thistle are both rated high (i.e., highly invasive) by the California Invasive Plant Council (Cal-IPC; Cal-IPC 2024). Cal-IPC defines invasive plants as: plants that are not native to an environment, and once introduced, they establish, quickly reproduce and spread, and cause harm to the environment, economy, or human health (Cal-IPC 2024). All areas of this community on Project site were actively grazed by cattle.

***Amsinckia menziesii* - *Achyrachaena mollis* Herbaceous Alliance.** This native forb community was dominated by native common fiddleneck (*Amsinckia menziesii*) and native soft blow wives (*Achyrachaena mollis*). Other species found in this community were native miniature lupine (*Lupinus bicolor*), native purple owl's-clover (*Castilleja exserta*), native Tejon cryptantha (*Cryptantha microstachys*), native vinegarweed (*Trichostema lanceolatum)*, non-native yellow star thistle, and non-native oat. Cover of native forbs in this community in April 2020 ranged from 50 percent in the northwestern portion of the Project site to 10-20 percent in the northeastern, southeastern, and southwestern portions of the site.

Cultivated Tree Rows. These areas consisted of cultivated almond (*Prunus dulcis*) tree rows.

Common Wheat Fields. These areas consisted of densely planted common wheat for the purposes of feeding cattle. Soils within this community are actively disked/tilled.

Developed. These areas included houses, barns/storage sheds, paved and dirt roads, the Cortina Substation, aqueduct infrastructure, and non-native ornamental species such as eucalyptus and rosemary (*Rosmarinus officinalis)*.

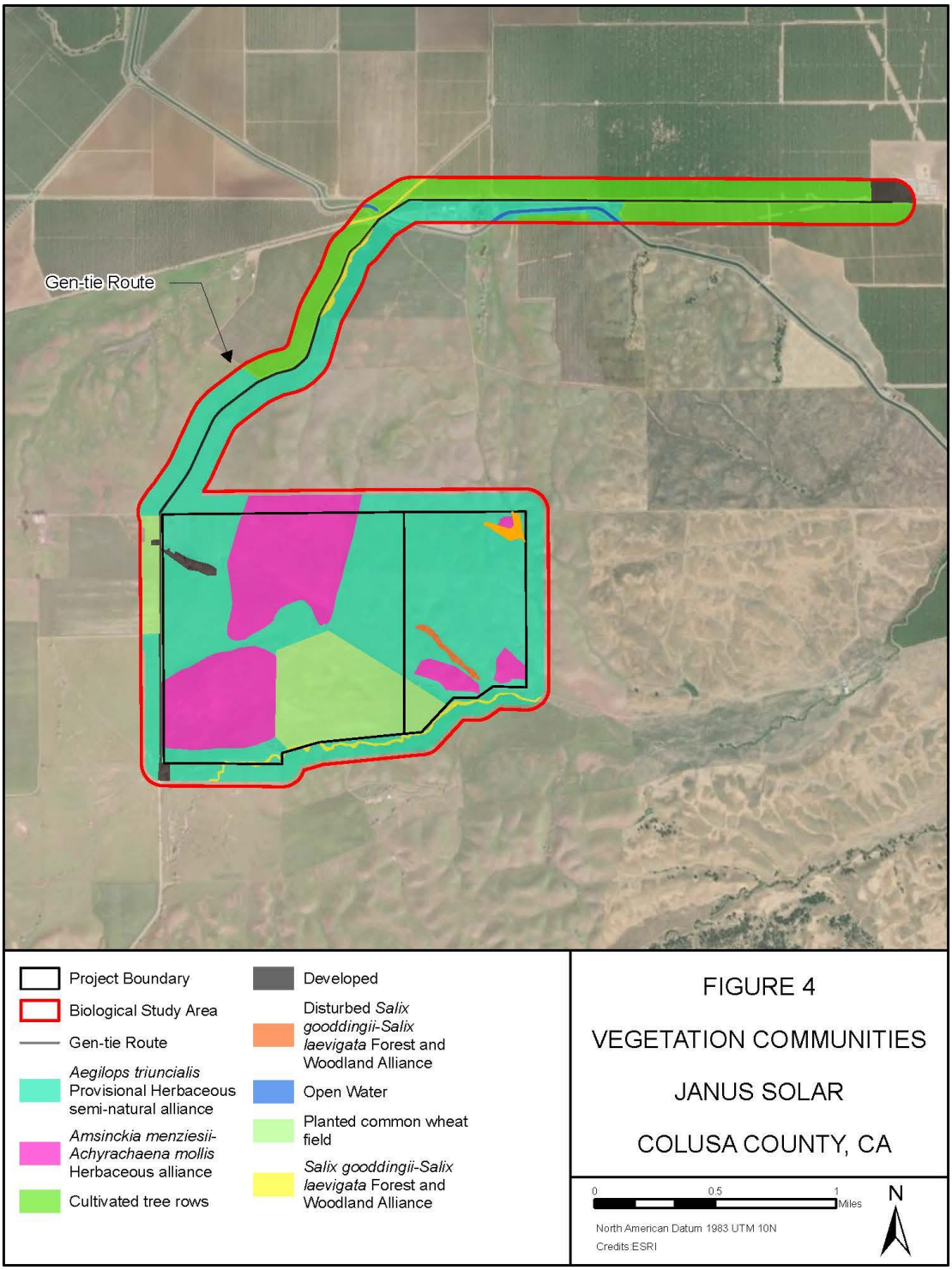
Open Water. This area consisted of a fenced aqueduct, the Tehama Colusa Canal aqueduct, within the 150-meter buffer surrounding the gen-tie.

***Salix gooddingii* - *Salix laevigata* Forest and Woodland Alliance.** This native riparian community was dominated by native Goodding's black willow (*Salix gooddingii*) and native red willow (*Salix laevigata*). Other species found in this community were native Fremont cottonwood (*Populus fremontii*), native northern California black walnut, and non-native edible fig (*Ficus carica*). This community primarily occurred outside of the Project site within the 150-meter buffer. Within the Project site, this community occurred in a drainage in the southernmost portion of the site, running along the site boundary. The drainage ranged from approximately 5 to 15 feet wide, a defined bed and bank was present throughout, and standing water and wet soils were observed. Wetland hydrology and hydrophytic vegetation were also present (Tetra Tech 2024a).

Disturbed *Salix gooddingii* - *Salix laevigata* Forest and Woodland Alliance. This native riparian community was similar to the version above but was heavily disturbed by intensive cattle grazing. This community occurred in the northeast and southeast portions of the Project site and was dominated by sparse native Goodding's black willow and native red willow. Native Fremont cottonwood was also found in this community.

In the northeast portion of the Project site, this community contained muddy soils and the low point had standing water in 2020 and 2024. Disturbed native willows, one mature native Fremont cottonwood, canary grass (*Phalaris* sp.), non-native bindweed (*Convolvulus arvensis*), and non-native goosefoot (*Chenopodium* sp.) were present in this area. Based on aerial imagery and NWI data, this area appeared to be fed by a drainage extending to the north. Wetland hydrology was present in this area, and it has the potential to be a vernal pool (Tetra Tech 2024a).

In the southeast portion of the Project site, plant species in this community included native willows and native Fremont cottonwood. No standing water or mud was observed in 2020, but one inch of standing water was observed in a small area in 2024. Based on the depth of cattle footprints in the area, it appeared that the ground is wet for part of the year. A defined bed and bank was not observed in this area. Based on aerial imagery and NWI data, this area appears to have historically connected to other drainages to the north and south; however, due to intensive grazing of the Project site, this connection was not visible. Hydrophytic vegetation is likely present in this area (Tetra Tech 2024a).


Gen-tie Route
Project Boundary
Biological Study Area
Gen-tie Route
Aegilops triuncialis Provisional Herbaceous semi-natural alliance
Amsinckia menziesii-Achyrachaena mollis Herbaceous alliance
Cultivated tree rows
Developed
Disturbed Salix gooddingii-Salix laevigata Forest and Woodland Alliance
Open Water
Planted common wheat field
Salix gooddingii-Salix laevigata Forest and Woodland Alliance
FIGURE 4
VEGETATION COMMUNITIES
JANUS SOLAR
COLUSA COUNTY, CA
0
0.5
1
Miles
N
North American Datum 1983 UTM 10N
Credits:ESRI

4.4 PLANTS AND WILDLIFE

All plant and wildlife species observed in the BSA during the surveys were recorded. The plant and wildlife species recorded from all Tetra Tech biological surveys are listed in Tables 6 and 7.

Table 6: Plant Species Observed Within the BSA

Scientific Name	Common Name
Achyrachaena mollis[(2)(4)]	soft blow wives
Aegilops triuncialis[(2)(4)]*	barbed goat grass
Amaranthus retroflexus[(2)(4)]*	redroot pigweed
Ambrosia psilostachya[(1)(2)(4)]	western ragweed
Amsinckia menziesii[(2)(4)]	common fiddleneck
Anthemis cotula[(4)]*	mayweed
Asclepias eriocarpa[(1)(2)(4)]	kotolo
Asclepias fascicularis[(1)(2)(4)]	narrow-leaf milkweed
Avena sp.[(1)(2)(4)]*	oat
Brodiaea elegans[(4)]	harvest brodiaea
Bromus diandrus[(1)(2)(4)]*	ripgut grass
Bromus hordeaceus[(1)(2)(4)]*	soft brome
Calandrinia menziesii[(2)]	red maids
Capsella bursa-pastoris[(2)(4)]*	shepherd's purse
Carduus pycnocephalus[(4)]*	Italian thistle
Castilleja attenuata[(2)(4)]	valley tassels
Castilleja exserta[(2)(4)]	purple owl's-clover
Centaurea calcitrapa[(1)(2)(4)]*	purple star-thistle
Centaurea solstitialis[(1)(2)(4)]*	yellow star-thistle
Centromadia fitchii[(2)(4)]	spikeweed
Centromadia parryi ssp. *rudis*[(1)(2)(4)]**	Parry's rough tarplant
Chenopodium album[(1)(2)(4)]*	lamb's quarters
Chenopodium murale[(1)(2)(4)]*	nettle leaf goosefoot
Convolvulus arvensis[(1)(2)(4)]*	bindweed
Croton setiger[(1)(2)(4)]	doveweed
Cryptantha microstachys[(2)(4)]	Tejon cryptantha
Cynara cardunculus[(2)]*	artichoke thistle
Cynodon dactylon[(1)(2)(4)]*	Bermuda grass
Cyperus esculentus var. *leptostachyus*[(2)]	yellow nutsedge
Dipsacus fullonum[(2)(4)]*	wild teasel
Dipterostemon capitatus[(2)]	blue dicks
Distichlis spicata[(4)]	salt grass
Downingia insignis[(4)]	harlequin calicoflower
Echinochloa crus-galli[(2)]*	barnyard grass
Eleocharis macrostachya[(2)]	common spikerush
Erigeron sp.[(1)(2)(4)]	fleabane daisy
Erodium sp.[(1)(2)(4)]*	filaree
Eryngium sp.[(2)]	button-celery
Eucalyptus sp.[(1)(2)]*	eucalyptus
Festuca perennis[(2)(4)]*	rye grass
Ficus carica[(2)(4)]*	edible fig
Galium sp.[(2)]	bedstraw
Heliotropium europaeum[(4)]*	European heliotrope

Scientific Name	Common Name
Hemizonia congesta[1][2]	hayfield tarweed
Hirschfeldia incana[2][4]*	Mediterranean hoary mustard
Hordeum murinum[2][4]*	wall barley
Hordeum vulgare[2][4]*	barley
Juglans hindsii[1][2][4]	northern California black walnut
Juncus effusus[1][2][4]	soft rush
Juncus torreyi[1][2][4]	Torrey's rush
Lactuca sp.[1][2][4]*	lettuce
Lepidium latifolium[2][4]*	perennial pepperweed
Lepidium nitidum[2]	peppergrass
Lupinus bicolor[2][4]	miniature lupine
Lupinus microcarpus[2]	chick lupine
Lupinus succulentus[2]	arroyo lupine
Lythrum hyssopifolia[2][4]*	hyssop loosestrife
Malva parviflora[1][2][4]*	cheeseweed
Malvella leprosa[2][4]	alkali-mallow
Marrubium vulgare[1][2][4]*	white horehound
Matricaria discoidea[2][4]	pineapple weed
Medicago polymorpha[2][4]*	California burclover
Melilotus indicus[2][4]*	sourclover
Micropus californicus[2]	q-tips
Myoporum sp.[2]*	myoporum
Persicaria sp.[2]	smartweed
Phalaris sp.[1][2][4]	canary grass
Phyla nodiflora[4]	common lippia
Plantago erecta[2][4]	California plantain
Platanus sp.[2]	sycamore
Poa bulbosa[2]*	bulbous blue grass
Polygonum aviculare[2]*	knotweed
Polypogon monspeliensis[2][4]*	annual beard grass
Populus fremontii[1][2][4]	Fremont cottonwood
Proboscidea louisianica ssp. *louisianica*[2][4]*	common devil's claw
Prunus dulcis[1][2]*	almond
Pseudognaphalium sp.[1][2]	cudweed
Psilocarphus brevissimus[4]	short woollyheads
Quercus agrifolia[1][2]	coast live oak
Ranunculus sp.[4]	buttercup
Rosmarinus officinalis[1][2]	rosemary
Rumex sp.[1][2][4]	dock
Salix gooddingii[1][2][4]	Goodding's black willow
Salix laevigata[1][2][4]	red willow
Schinus molle[1][2]*	pepper tree
Schismus barbatus[2]*	Common Mediterranean grass
Schoenoplectus sp.[2]	bulrush
Senecio sp.[2]	ragwort
Silybum marianum[2][4]*	blessed milk thistle
Sonchus oleraceus[2][4]*	common sow thistle
Spergularia sp.[2][4]	sand-spurrey

Scientific Name	Common Name
Stellaria sp.(2)	chickweed
Taraxacum officinale(2)*	common dandelion
Trichostema lanceolatum(1)(2)	vinegar weed
Trifolium hirtum(2)(4)*	rose clover
Triticum aestivum(2)(4)*	common wheat
Typha sp.(1)(2)(4)	cattail
Ulmus sp.(2)(4)*	elm
Vicia villosa(2)(4)*	hairy vetch
Washingtonia sp.(1)(2)(4)	fan palm
Xanthium spinosum(2)(4)*	spiny cocklebur
Xanthium strumarium(1)(2)(4)	cocklebur

Notes:
(1) Observed in 2019.
(2) Observed in 2020.
(3) Observed in 2021.
(4) Observed in 2024.
*Non-native species
**CNPS Rank 4.2: Limited distribution or infrequent throughout a broad area in California, and moderately threatened in the state (20 to 80 percent of occurrences are threatened).
[1]Puffball mushroom (*Calvatia* sp.) was also observed in 2024.

Table 7: Wildlife Species Observed Within the BSA

Scientific Name	Common Name
Mammals	
Bos taurus(1)(2)(4)	domestic cow
Canis latrans(1)(2)(4)	coyote
Equus ferus caballus(2)(4)	domestic horse
Felis catus(2)(4)	domestic cat
Lepus sp.(2)	jackrabbit
Spermophilus sp.(1)(2)(4)	ground squirrel
Birds	
Agelaius phoeniceus(1)(2)	red-winged blackbird
Athene cunicularia(3)	Burrowing owl
Branta canadensis(2)(4)	Canada Goose
Bubo virginianus(2)	great horned owl
Bubulcus ibis(4)	western cattle egret
Buteo jamaicensis(1)(2)(4)	red-tailed hawk
Buteo swainsoni(2)(4)**	Swainson's hawk
Callipepla californica(3)	California quail
Cathartes aura(1)(2)(4)	turkey vulture
Charadrius vociferus(2)(4)	killdeer
Circus hudsonius(1)(2)(4)*	northern harrier
Columba livia(2)(4)	rock pigeon
Corvus corax(2)(4)	common raven
Eremophila alpestris(1)(2)(4)	horned lark
Euphagus cyanocephalus(1)(2)(4)	Brewer's blackbird
Falco columbarius(1)*	merlin
Falco mexicanus(2)*	prairie falcon

Scientific Name	Common Name
Falco sparverius[(1)(2)(4)]	American kestrel
Haemorhous mexicanus[(2)(4)]	house finch
Hirundo rustica[(4)]	barn swallow
Lanius ludovicianus[(1)(2)(4)]*	loggerhead shrike
Mimus polyglottos[(2)(4)]	northern mockingbird
Molothrus ater[(1)(2)(4)]	brown-headed cowbird
Passerculus sandwichensis[(1)(2)(4)]	savannah sparrow
Pica sp.[(2)]	magpie
Pica nuttalli[(4)]	yellow-billed magpie
Plegadis chihi[(3)(4)*]	white-faced ibis
Sayornis nigricans[(1)(2)(4)]	black phoebe
Sayornis saya[(1)(2)(4)]	Say's phoebe
Spinus psaltria[(2)]	lesser goldfinch
Streptopelia decaocto[(1)(2)(4)]	Eurasian collared-dove
Sturnella neglecta[(1)(2)(4)]	western meadowlark
Sturnus vulgaris[(2)(4)]	European starling
Troglodytes aedon[(2)(4)]	house wren
Tyrannus sp.[(2)]	kingbird
Tyrannus verticalis[(4)]	western kingbird
Tyto alba[(2)]	barn owl
Zenaida macroura[(1)(2)(4)]	mourning dove
Zonotrichia leucophrys[(1)(2)(4)]	white-crowned sparrow
Invertebrates	
Bombus sp.[(2)(4)***]	bumble bee
Danaus plexippus[(1)(2)]	monarch
Erythemis sp.[(2)]	pondhawk
Gryllus sp.[(4)]	cricket
Hemipepsis or *Pepsis* sp.[(2)(4)]	tarantula hawk
Mantodea[(2)]	mantis
Vanessa cardui[(2)]	painted lady
Reptiles and Amphibians	
Anaxyrus boreas halophilus[(2)(4)]	California toad
Crotalus oreganus oreganus[(4)]	Northern Pacific rattlesnake
Elgaria sp.[(2)]	alligator lizard
Pituophis catenifer catenifer[(2)(4)]	Pacific gophersnake
Pseudacris sp.[(2)(4)]	treefrog
Rana catebeiana[(4)]	American bullfrog
Sceloporus occidentalis occidentalis[(2)(4)]	northwestern fence lizard

Notes:

(1) Observed in 2019.

(2) Observed in 2020.

(3) Observed in 2021.

(4) Observed in 2024.

*CDFW Species of Special Concern or Watch List
**State Threatened species
***Bumble bees observed could not be identified but have potential to be the State Candidate Endangered Crotch's bumble bee (*Bombus crotchii*). Surveys for Crotch's bumble bee will occur in summer 2024.

4.5 SPECIAL-STATUS SPECIES

Special-status plant and wildlife species and habitats that could support these species were recorded within the BSA. No Critical Habitat occurs within the BSA (USFWS 2024b). Conclusions and recommendations for these species are discussed in Section 6 of this Report. One rare annual forb, Parry's rough tarplant (CNPS Rank 4.2), was found during the surveys. This species is described in Section 4.1. Approximately 1,163 individuals were found within the Project site in 2020 and approximately 401 individuals were observed in the Project site in 2024 (Figure 2).

It was determined that the Project site is in the known distributional range of the BUOW, and the site contains potentially suitable BUOW habitat due to low-growing grazed vegetation and agricultural use. The closest BUOW occurrence from CNDDB is 1.8 miles from the Project site (CDFW 2024). BUOW is a CDFW Species of Special Concern. BUOWs breed and live in burrows and use coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean Desert scrub, Sonoran Desert scrub, and valley and foothill grassland habitats as well as agricultural areas or any open dry area with low vegetation. BUOW was not observed during breeding season surveys in 2024. Protocol winter season surveys are planned for winter 2024-2025 to determine if BUOW winters within the Project site. Whitewash and old pellets were observed at several burrows in 2024, but these could not be definitively attributed to BUOW. Additional details on the methods and results of the BUOW surveys are provided in a separate report (Tetra Tech 2024c).

The Swainson's hawk is listed as Threatened in California and is known to occur in Great Basin grassland, riparian forest, riparian woodland, and valley and foothill grassland habitats. This species nests in California in trees and on man-made structures such as power poles between March 1 and September 15. Two adult Swainson's hawks were observed within the central portion of the Project site on the ground, perched on a cattle fence, and flying overhead during the rare plant survey on April 9, 2020. Foraging Swainson's hawks were observed in the BSA in 2024 on two separate occasions. Both observations in 2024 involved individuals that were flying above the Project site.

In 2020, one active Swainson's hawk nest was found within the 5-mile buffer. In 2024, six active Swainson's hawk nests were observed within a 10-mile buffer. The nest observed in 2020 was the closest Swainson's hawk nest to the Project site, approximately 2.5 miles from the northeast end of the gen-tie at the Cortina substation and over 4 miles from the main Project site boundary (Figure 3). The closest Swainson's hawk nest to the Project site in 2024 was located approximately 5.4 miles from the Project site boundary and 5 miles from the northeast end of the gen-tie. Details on this nest are provided in Section 5.4 of this Report. Results of the April 2024 Swainson's hawk foraging habitat survey are provided in a separate report.

The northern harrier (*Circus hudsonius*) and loggerhead shrike (*Lanius ludovicianus*) are CDFW Species of Special Concern, and the prairie falcon (*Falco mexicanus*), merlin (*Falco columbarius*), and white-faced ibis (*Plegadis chihi*) are CDFW Watch List. Northern harriers nest on the ground mostly within patches of dense, often tall, vegetation and use coastal scrub, Great Basin grassland, marsh and swamp, riparian scrub, valley and foothill grassland, and wetland habitats as well as weed fields and croplands. Loggerhead shrikes nest within trees and shrubs and use broadleaved upland forest, desert wash, Joshua tree woodland, Mojavean Desert scrub, piñon and juniper woodlands, riparian woodland, and Sonoran Desert scrub habitats. Prairie falcons most often nest in cliffs or bluffs, and inhabit dry, open level or hilly terrain. Merlins inhabit open forests and grasslands but do not nest in California. The white-faced ibis nests in dense, freshwater emergent wetland, extensive marshes, and rarely in trees, but no longer breeds regularly

anywhere in California (California Department of Fish and Game 2005). The white-faced ibis prefers to forage in freshwater emergent wetland, shallow lakes, muddy ground of wet meadows, and irrigated or flooded pastures and croplands. Transient individuals of these five species were observed foraging and perching in the vicinity of the Project site but no nests were found.

No large underground holes or dens were found that would be considered suitable for habitation by the American badger (*Taxidea taxus*), a CDFW Species of Special Concern. Culverts are sometimes used by this species for refuge or to pass safely beneath roads. Within the BSA there are19 culverts that are of sufficient size for American badger.

Crotch's bumble bee is a State Candidate Endangered species, and the Project site has potential Crotch's bumble bee habitat. Surveys for this species are being performed during the summer of 2024. Details on the methods and results of the Crotch's bumble bee surveys are provided in a separate report.

Potential and observed special-status plant and wildlife species that may occur within the Project site have been analyzed. These species are presented in Table 8.

Table 8: Special-status Species with Potential to Occur on the Project Site

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Habitat	Potential to Occur
Plants					
Acmispon rubriflorus	red-flowered bird's-foot trefoil	None	None/1B.1	Cismontane woodland, Valley and foothill grassland.	**Low**. The Project site contained primarily non-native grasslands and planted common wheat fields and is actively grazed. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Amsinckia lunaris	bent-flowered fiddleneck	None	None/1B.2	Cismontane woodland, Coastal bluff scrub, Valley and foothill grassland.	**Low**. While there are three known occurrences within the Salt Canyon quadrangle, the Project site contained primarily non-native grasslands and planted common wheat fields and is actively grazed. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Astragalus breweri	Brewer's milk-vetch	None	None/4.2	Chaparral, Cismontane woodland, Meadows and seeps, Valley and foothill grassland (open, often gravelly).	**Low**. The Project site contained primarily non-native grasslands and planted common wheat fields and is actively grazed. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Astragalus rattanii var. *jepsonianus*	Jepson's milkvetch	None	None/1B.2	Chaparral, cismontane woodland, valley and foothill grassland, serpentine soils.	**Low**. While there is one known occurrence in the Salt Canyon quadrangle, the Project site contained primarily non-native grasslands and planted common wheat fields and is actively grazed. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Astragalus tener var. *ferrisiae*	Ferris' milk-vetch	None	None/1B.1	Meadow and seep, Valley and foothill grassland, Wetland.	**Low.** While this species is known to occur within 5 miles of the Project site, non-native grassland and wetland habitat and drainages on the site were highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Habitat	Potential to Occur
Atriplex depressa	brittlescale	None	None/1B.2	Alkali playa, Chenopod scrub, Meadow and seep, Valley and foothill grassland, Vernal pool, Wetland.	**Low.** Non-native grassland and wetland habitat and drainages on the Project site were highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Balsamorhiza macrolepis	big-scale balsamroot	None	None/1B.2	Chaparral, Cismontane woodland, Ultramafic*, Valley and foothill grassland.	**Low**. The Project site contained primarily non-native grasslands and planted common wheat fields and is actively grazed. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Castilleja rubicundula var. *rubicundula*	pink creamsacs	None	None/1B.2	Chaparral, Cismontane woodland, Meadow and seep, Ultramafic*, Valley and foothill grassland.	**Low**. While there is one known occurrence within the Salt Canyon quadrangle, non-native grassland and wetland habitat and drainages on the Project site were highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Centromadia parryi ssp. *parryi*	pappose tarplant	None	None/1B.2	Chaparral, Coastal prairie, Marsh and swamp, Meadow and seep, Valley and foothill grassland.	**Low.** There is one known occurrence within the Salt Canyon quadrangle. While the Project site is highly disturbed due to consistent active grazing, this species can persist in disturbed areas. This species was not found during the rare plant surveys that were conducted during the blooming period. The dried-up population of *Centromadia* sp. that was identified during the field spot check in November 2019 was determined to be Parry's rough tarplant (*Centromadia parryi* ssp. *rudis*) during the surveys in 2020. Therefore, potential to occur is low.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Habitat	Potential to Occur
Centromadia parryi ssp. *rudis*	Parry's rough tarplant	None	None/4.2	Valley and foothill grassland, Vernal pools.	**Observed.** Eight populations of this species were found within the Project site (approximately 1,163 individuals) in 2020 and three populations were observed in the Project site in 2024 (approximately 401 individuals). The populations were generally located on previously disturbed soils with relatively higher cover of bare ground and lower cover of non-native grasses.
Cryptantha rostellata	red-stemmed cryptantha	None	None/4.2	Cismontane woodland, Valley and foothill grassland.	**Low.** Grassland habitat on the Project site consisted of primarily non-native species and was highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Delphinium recurvatum	recurved larkspur	None	None/1B.2	Chenopod scrub, Cismontane woodland, Valley and foothill grassland.	**Low.** Grassland habitat on the Project site consisted of primarily non-native species and was highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Extriplex joaquinana	San Joaquin spearscale	None	None/1B.2	Alkali playa, Chenopod scrub, Meadow and seep, Valley and foothill grassland.	**Low**. Non-native grassland and wetland habitat and drainages on the Project site were highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Fritillaria pluriflora	adobe-lily	None	None/1B.2	Chaparral, Cismontane woodland, Ultramafic*, Valley and foothill grassland.	**Low**. There are four known occurrences within the Salt Canyon quadrangle, and although the Project site is disturbed due to consistent active grazing, preferred clay soils are present throughout (USDA NRCS 2024). This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Habitat	Potential to Occur
Hesperolinon drymarioides	drymaria-like western flax	None	None/1B.2	Chaparral, Cismontane woodland, Closed-cone coniferous forest, Ultramafic*, Valley and foothill grassland.	**Low.** Grassland habitat on Project site consisted of primarily non-native species and was highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Heteranthera dubia	water star-grass	None	None/2B.2	Marsh and swamp.	**Low.** While standing water and disturbed drainages were observed within the Project site, marsh and swamp habitat was not found. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Horkelia bolanderi	Bolander's horkelia	None	None/1B.2	Cismontane woodland, Lower montane coniferous forest, Meadow and seep, Valley and foothill grassland.	**Low**. Non-native grassland and wetland habitat and drainages on the Project site were highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Layia septentrionalis	Colusa layia	None	None/1B.2	Chaparral, Cismontane woodland, Ultramafic*, Valley and foothill grassland.	**Low.** Grassland habitat on Project site consisted of primarily non-native species and was highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Leptosiphon aureus	bristly leptosiphon	None	None/4.2	Chaparral, Cismontane woodland, Coastal prairie, Valley and foothill grassland.	**Low.** Grassland habitat on the Project site consisted of primarily non-native species and was highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Micropus amphibolus	Mt. Diablo cottonweed	None	None/3.2	Broad-leafed upland forest, Chaparral, Cismontane woodland, Valley and foothill grassland.	**Low.** Grassland habitat on Project site consisted of primarily non-native species and was highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Habitat	Potential to Occur
Myosurus minimus ssp. *apus*	little mousetail	None	None/3.1	Valley and foothill grassland, Vernal pools (alkaline).	**Low.** Grassland habitat on Project site consisted of primarily non-native species and was highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Navarretia leucocephala ssp. *bakeri*	Baker's navarretia	None	None/1B.1	Cismontane woodland, Lower montane coniferous forest, Meadow and seep, Valley and foothill grassland, Vernal pool, Wetland.	**Low.** Grassland habitat on Project site consisted of primarily non-native species and was highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Navarretia nigelliformis ssp. nigelliformis	adobe navarretia	None	None/4.2	Valley and foothill grassland vernally mesic, Vernal pools sometimes.	**Low.** Non-native grassland and wetland habitat on the Project site was highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Navarretia nigelliformis ssp. *radians*	shining navarretia	None	None/1B.2	Cismontane woodland, Valley and foothill grassland, Vernal pool, Wetland.	**Low**. While there are three known occurrences within the Salt Canyon quadrangle, non-native grassland and wetland habitat and drainages on the Project site were highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Plagiobryoides vinosula	wine-colored tufa moss	None	None/4.2	Cismontane woodland, Mojavean desert scrub, Meadows and seeps, Pinyon and juniper woodland, Riparian woodland.	**Low.** Riparian woodland tree species were low in numbers and located in disturbed areas. Riparian habitat on the Project site was highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Habitat	Potential to Occur
Puccinellia simplex	California alkali grass	None	None/1B.2	Chenopod scrub, Meadow and seep, Valley and foothill grassland, Vernal pool.	**Low.** Non-native grassland and wetland habitat and drainages on the Project site were highly disturbed due to consistent active grazing. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Sidalcea keckii	Keck's checkerbloom	Endangered	None/1B.1	Cismontane woodland, Ultramafic*, Valley and foothill grassland.	**Low**. While there is one known occurrence within the Salt Canyon quadrangle, the Project site contained primarily non-native grasslands and planted common wheat fields and is actively grazed. This species was not found during the rare plant surveys that were conducted during the blooming period. Therefore, potential to occur is low.
Birds					
Accipiter cooperii	Cooper's hawk	None	None/WL	Woodland, chiefly of open, interrupted, or marginal type.	**Low.** Some perching and foraging habitat is available on the Project site. However, only limited potential nesting sites within disturbed woodland habitat is present. This species was not found during surveys within the Project site. Therefore, potential to occur is low.
Agelaius tricolor	tricolored blackbird	None	Threatened/ S, SSC, BCC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California.	**Low.** Preferred vast marshland habitat suitable to colonies of this species are not present on the Project site. Therefore, potential to occur is low.
Aquila chrysaetos	golden eagle	None	None/S, FP, WL	Rolling foothills, mountain areas, sage-juniper flats, and desert.	**Low.** The Project site is highly disturbed due to consistent active grazing, and preferred habitat is not present on the site. Therefore, potential to occur is low.
Athene cunicularia	burrowing owl	None	None/S, SSC, BCC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	**Moderate.** BUOW were not observed during 2024 surveys, including a burrow survey and protocol breeding season surveys. During the burrow survey, whitewash was observed at several burrows and old pellets were observed at one burrow. Protocol winter season surveys are planned for winter 2024-2025.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Habitat	Potential to Occur
Buteo swainsoni	Swainson's hawk	None	Threatened/ S	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees.	**Observed.** Foraging habitat and preferred nesting habitat of solitary or small groves of trees near agricultural fields are present on the Project site (The Cornell Lab 2019). Two adult Swainson's hawks were briefly observed within the central portion of the Project site on the ground, perched on a cattle fence, and flying overhead during the rare plant survey in 2020. Two separate adult Swainson's hawk sightings occurred within the Project site in May 2024. Both individuals were observed flying overhead. In addition, one active Swainson's hawk nest was found within the 5-mile raptor survey buffer in 2020. In 2024, six active Swainson's hawk nests were observed within a 10-mile buffer. The closest Swainson's hawk nest to the Project site occurred in 2020, approximately 2.5 miles from the northeast end of the gen-tie at the Cortina substation and over 4 miles from the main Project site boundary. The closest Swainson's hawk nest to the Project site in 2024 was located approximately 5.4 miles from the Project site boundary and 5 miles from the northeast end of the gen-tie. Details on the Swainson's hawk nests observed in the 10-mile buffer are located in a separate report (Tetra Tech 2024b).
Circus hudsonius	northern harrier	None	None/SSC, BCC	Wetlands, grasslands, fields, estuaries, open floodplain, and marshes (The Cornell Lab 2019).	**Observed.** While this species did not appear in the CNDDB 9-quadrangle search, two individuals were observed flying overhead during the field spot check in November 2019, approximately three individuals were observed during the surveys in 2020, and one individual was observed in 2024. Nesting is not likely on the Project site, as this species is not tolerant of disturbance when nesting (The Cornell Lab 2019).

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Habitat	Potential to Occur
Elanus leucurus	white-tailed kite	None	None/S, FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland.	**Low.** Some perching and foraging habitat is available on the Project site. However, only limited potential nesting sites and disturbed woodland habitat is present. This species was not found during any surveys within the BSA. Therefore, potential to occur is low.
Falco columbarius	merlin	None	None/WL	Open forests and grasslands (The Cornell Lab 2019).	**Observed.** While this species did not appear in the CNDDB 9-quadrangle search, one individual was observed perching on the Project site during the field spot check in November 2019. Merlin nesting does not occur in California.
Falco mexicanus	prairie falcon	None	None/WL	Inhabits dry, open level or hilly terrain.	**Observed.** Preferred foraging habitat is available on the Project site. However, preferred cliff or bluff nesting habitat is not present. One individual of this species was observed foraging and perching in the vicinity of the Project site in 2020 but no nests were found.
Lanius ludovicianus	loggerhead shrike	None	None/SSC	Broadleaved upland forest, desert wash, Joshua tree woodland, Mojavean Desert scrub, pinon and juniper woodlands, riparian woodland, Sonoran Desert scrub.	**Observed.** Some perching and foraging habitat is available on the Project site. However, only limited potential nesting sites (i.e., trees and shrubs) are present on the Project site and the site is heavily disturbed by consistent active grazing. This species did not appear in the CNDDB 9-quadrangle search. Individuals of this species were observed foraging and perching in the vicinity of the Project site in 2019, 2020, and 2024 but no nests were found.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Habitat	Potential to Occur
Plegadis chihi	white-faced ibis	None	None/WL	Nests in dense, freshwater emergent wetland, extensive marshes, and rarely in trees, but no longer breeds regularly anywhere in California (California Department of Fish and Game 2005). Forages in freshwater emergent wetland, shallow lakes, muddy ground of wet meadows, and irrigated or flooded pastures and croplands.	**Observed.** Foraging habitat is available on the Project site. However, preferred nesting sites (i.e., dense, freshwater emergent wetland and extensive marshes) do not occur on the Project site and the site is heavily disturbed by consistent active grazing. Numerous individuals of this species were observed foraging in grasslands within the Project site in 2021 and 2024 but no nests were found.
Mammals					
Antrozous pallidus	pallid bat	None	None/S, SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	**Low.** Suitable open, non-urbanized, foraging habitat is available on the Project site. However, preferred rocky roosting sites are not available. Therefore, potential to occur is low.
Corynorhinus townsendii	Townsend's big-eared bat	None	None/S, SSC	Throughout California in a wide variety of habitats. Most common in mesic sites.	**Low.** The nearest CNDDB occurrence of this species is approximately 8 miles from the Project site. While suitable open, non-urbanized, foraging habitat is available on the Project site, this species is unlikely to roost on the site because caves, cliffs, and rock ledges do not occur. While this species may roost in man-made structures, few structures occur on the Project site and this species is extremely sensitive to human disturbance. Therefore, potential to occur is low.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Habitat	Potential to Occur
Lasiurus frantzii	western red bat	None	None/SSC	Roosts primarily in trees, 2-40 ft above ground	**Low.** The nearest CNDDB occurrences of this species are from 1999 and are approximately 15 miles or more from the Project site. While suitable open, non-urbanized, foraging habitat is available on the Project site, this species is unlikely to roost on the site because trees within the desired height range are limited in numbers on the site and do not form dense stands that are used for roosting. Therefore, potential to occur is low.
Perognathus inornatus	San Joaquin Pocket Mouse	None	None/S	Grassland, oak savanna and arid scrubland in the southern Sacramento Valley, Salinas Valley, San Joaquin Valley, and adjacent foothills, south to the Mojave Desert.	**Low.** Non-native grassland is present on the Project site; however, it is highly disturbed by active grazing and formed dense swards, which are not preferable for pocket mouse burrows. Additionally, burrows that were observed on the Project site during the surveys were likely created by ground squirrels and appeared too big to be suitable to mice. The nearest CNDDB occurrence is over 13 miles from the Project site. Therefore, potential to occur is low.
Taxidea taxus	American badger	None	None/SSC	Open stages of most shrub, forest, and herbaceous habitats, with friable soils.	**Moderate.** There is one CNDDB occurrence approximately 1 mile from the Project site in 2016; however, the site is highly disturbed by consistent active grazing. This species was not observed during the surveys and no large underground holes or potential burrows/dens were found in the vicinity of the Project site that would be considered suitable for habitation by this species. There are 19 culverts of sufficient size within the BSA. Culverts are sometimes used by this species for refuge or to pass safely beneath roads. Therefore, potential to occur is moderate.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Habitat	Potential to Occur
Amphibians					
Rana boylii pop. 1	foothill yellow-legged frog	None	None/SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats.	**Low.** Although highly disturbed by consistent active grazing, one drainage with flowing water was observed on the Project site. However, this drainage was not observed to have a rocky substrate. The nearest CNDDB occurrence is over 4 miles south of the Project site in Cortina Creek from 1993. Therefore, potential to occur is low.
Spea hammondii	western spadefoot	Proposed threatened	None/S, SSC	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Also occurs in and near drainages and streams.	**Moderate.** While non-native grassland habitat is present on the Project site, it is highly disturbed due to consistent active grazing, and the nearest CNDDB occurrence is over 5 miles from the site. However, multiple drainages and intermittent streams occur on the Project site that may serve as habitat for western spadefoot. Therefore, potential to occur is moderate.
Reptiles					
Actinemys marmorata	northwestern pond turtle	Proposed threatened	None/S, SSC	Ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation.	**Low.** While one drainage with flowing water was observed on the Project site, aquatic vegetation was sparse and highly disturbed by consistent active grazing. The nearest CNDDB known occurrence is approximately 8.5 miles from the site in 2004. Therefore, potential to occur is low.
Thamnophis gigas	giant gartersnake	Threatened	Threatened	Freshwater marsh and low gradient streams. Adapted to drainage canals and irrigation ditches.	**Moderate.** All potential wetland and drainages in the Project site were highly disturbed due to consistent active grazing but may still serve as potential habitat for giant gartersnake. Common wheat is cultivated on the Project site and irrigation ditches may be present. The nearest CNDDB occurrence is approximately 4 miles away and within an agricultural area. Therefore, the potential to occur is moderate.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Habitat	Potential to Occur
Invertebrates					
Bombus crotchii	Crotch's bumble bee	None	Candidate Endangered	Open grasslands and shrublands.	**High.** The Project site mainly consists of disturbed open grassland habitat with some riparian area. Some shrubland habitat is available in riparian areas within the 150-meter buffer surrounding the gen-tie. The closest occurrence of this species in the CNDDB is from 2003 and is located 14 miles from the Project site. Foraging resources for Crotch's bumble bee include flowering plants, which are located on the Project site in small patches. Nesting habitat includes bare ground, abandoned rodent burrows or bird nests, thatched grasses, brush piles, rock piles, and fallen logs, all of which occur within the Project site. Overwintering habitat may include leaf litter and woody forest edge. Surveys for this species are being performed during the summer of 2024. Details on the methods and results of the Crotch's bumble bee surveys are provided in a separate report.
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Threatened	None	Occurs only in the Central Valley of California, in association with blue elderberry (*Sambucus mexicana*).	**Low.** Blue elderberry was not observed on the Project site during surveys. Therefore, potential to occur is low.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Habitat	Potential to Occur
Lepidurus packardi	vernal pool tadpole shrimp	Endangered	None	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water.	**Low.** While all potential wetland areas on the Project site were highly disturbed due to consistent active grazing, two standing water features were observed in November 2019 and nine standing water features were observed in May 2024 (Tetra Tech 2020). The nearest CNDDB occurrence of this species is from 1993 and is approximately 6 miles from the Project site. The second closest known occurrence of this species is from 2012 and is located 15 miles from the Project site. Only these two vernal pool tadpole shrimp occurrences are recorded in Colusa County. Vernal pools in the Solano-Colusa Region are typically alkaline, may have whitish salt deposits, and support salt-tolerant plant species (California Department of Fish and Game 1998). Soils underlying the vernal pools in this Region most commonly include Pescadero Clay Loam, Sycamore, Willows, and Riz series (California Department of Fish and Game 1998). Neither salt deposits nor the plant species listed above were observed during surveys of the Project site. In addition, the soil series listed above do not occur on the Project site (USDA NRCS 2024). Moreover, plowed fields, such as those that occur on the Project site, and which could have historically held vernal pool habitat, do not typically support vernal pool species (Federal Register 1994). Therefore, potential to occur is low.

Notes:

*Ultramafic is a geologic term used to define a type of rock with very low silica content and rich in minerals such as hypersthene, augite, and olivine (Geoscience News and Information 2019).

Results are based on CNDDB and CNPS query for 9 regional quadrangles (Cortina Creek, Salt Canyon, Manor Slough, Williams, Rumsey, Glascock Mountain, Wilson Valley, Wilbur Springs, and Leesville). BCC = USFWS Birds of Conservation Concern; FP = CDFW Fully Protected; S = BLM Sensitive Species; SSC = CDFW Species of Special Concern; WL = CDFW Watch List.

5.0 DISCUSSION

Special-status species observed in the Project site include Parry's rough tarplant, Swainson's hawk, northern harrier, merlin, prairie falcon, loggerhead shrike, and white-faced ibis. While soils on the Project site did not change since surveys in 2020, the vegetation communities within the BSA had changed somewhat in 2024. Several fields changed from non-native grasslands to wheat fields and areas along the gen-tie changed to a developed area and cultivated tree rows. One area adjacent to the Cortina Substation had been converted from cultivated tree rows to a developed area. Riparian areas with nesting bird habitat in the form of trees that used to be cultivated wheat fields were remapped and acres were increased. Additionally, several new plant and wildlife species were observed on the Project site, but no new special-status species were found in 2024.

Fewer populations and individuals of Parry's rough tarplant were observed on the Project site in 2024 than in 2020. Precipitation data from the Colusa 2 SSW weather station showed that annual rainfall was higher in 2024 (15.19 inches) than in 2020 (4.19 inches). Precipitation outside of Parry's rough tarplant bloom period, from November to April, was 8.41 inches for 2019-2020 and 18.45 inches for 2023-2024 (CalClim 2024). While precipitation does not appear to explain the difference in the amount of Parry's rough tarplant found in the Project site, it is likely that grazing disturbance played a role. According to the CNPS Rare Plant Inventory, Parry's rough tarplant is threatened by habitat disturbance and possibly threatened by grazing (CNPS 2024). The populations that were found in both 2020 and 2024 were located in areas that had less or no evidence of cattle grazing in comparison to populations observed in 2020 that were no longer present in 2024. It is likely that high cattle presence decreased the overall Parry's rough tarplant within the Project site.

BUOW burrows and burrow surrogates and potential BUOW sign were observed in the BSA during the 2024 surveys. Live BUOW individuals were not seen during protocol breeding season surveys. Winter BUOW protocol surveys are planned for winter 2024-2025. There is currently a petition to list the Northern Central Valley population of BUOW within Colusa County as threatened under the California Endangered Species Act (Center for Biological Diversity et al. 2024). While the outcome of this petition is not determined, it is possible that BUOW may become a listed or candidate species prior to the start of construction.

Swainson's hawk was observed foraging in the Project site in 2020 and 2024. While Swainson's hawk is not currently known to nest within the BSA, the Project site provides grassland and cropland foraging habitat for Swainson's hawk.

Northern harrier was observed foraging in the Project site in 2019, 2020, and 2024. While Northern harrier is not currently known to nest within the BSA as this species is not tolerant of disturbance when nesting, the Project site provides grassland and cropland foraging habitat for Northern harrier.

Merlin was observed foraging in the Project site in 2019. Merlin was not seen within the BSA in 2024. Merlin do not nest in California. The Project site provides grassland and cropland foraging habitat for merlin.

Prairie falcon was observed foraging in the Project site in 2020. Prairie falcon was not seen within the BSA in 2024. While the Project site does not provide nesting habitat for prairie falcon, it does provide grassland and cropland foraging habitat for prairie falcon.

Loggerhead shrike was observed foraging in the Project site in 2019, 2020, and 2024. While loggerhead shrike is not currently known to nest within the BSA, the Project site provides some nesting habitat in trees and shrubs and foraging habitat within grasslands.

White-faced ibis was observed foraging in the Project site in 2021 and 2024. While the Project site does not provide nesting habitat for white-faced ibis, it does provide wetland foraging habitat for white-faced ibis.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The use of heavy machinery and ground disturbance during construction could impact special-status plants, BUOW, Swainson's hawk, raptors, and other nesting birds such as loggerhead shrike, American badger, or other special-status species, if present. These species are listed or considered species of special concern by the CDFW. Coordination with this agency will be required if impacts to these species are anticipated. Active bird nests are also protected by the MBTA.

The jurisdictional delineation identified features that are under USACE, RWQCB, and/or CDFW jurisdiction. Future coordination with each of these agencies will be required if impacts to these areas are anticipated.

Special-status species and habitats observed at the site or with moderate to high potential to occur at the site are summarized in Table 9.

Table 9: Special-status Species and Habitat Summary

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Summary
Centromadia parryi ssp. *rudis*	Parry's rough tarplant	None	None/4.2	Eight populations of Parry's rough tarplant were found within the Project site in 2020 (approximately 1,163 individuals) and three remaining populations were observed in 2024 (approximately 401 individuals) as shown in Figure 2. The populations were generally located on previously disturbed soils with relatively higher cover of bare ground and lower cover of non-native grasses in areas with limited to no cattle disturbance.
Athene cunicularia	burrowing owl	None	SSC	No BUOW were observed in the BSA during 2024 surveys. However, potential BUOW sign in the form of whitewash and old pellets were observed at several burrows. A protocol winter season survey is planned for winter 2024-2025.
Buteo swainsoni	Swainson's hawk	None	Threatened	Two adult Swainson's hawks were briefly observed foraging in 2020 within the central portion of the Project site on the ground, perched on a cattle fence, and flying overhead during the rare plant survey. Two separate Swainson's hawk observations in the Project site occurred in 2024. Both individuals were observed flying overhead. In addition, one active Swainson's hawk nest was found in 2020 within the 5-mile raptor survey buffer, approximately 2.5 miles from the northeast end of the generator tie line at the Cortina substation and over 4 miles from the main Project site boundary (Figure 3). In 2024, six active Swainson's hawk nests were observed within a 10-mile raptor survey buffer, with the closest nest approximately 5.4 miles from the Project site boundary and 5 miles from the northeast end of the gen-tie.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Summary
Circus hudsonius	northern harrier	None	SSC	Two northern harriers were observed flying overhead during the field spot check in November 2019 and approximately three harriers were observed during the surveys in 2020. One northern harrier individual was observed foraging in 2024. Nesting is not likely on the Project site, as this species is not tolerant of disturbance when nesting (The Cornell Lab 2019).
Falco columbarius	merlin	None	None/WL	One merlin was observed perching on the Project site during the field spot check in November 2019. No merlin individuals were observed in 2024. Merlin nesting does not occur in California.
Falco mexicanus	prairie falcon	None	None/WL, BCC	One prairie falcon was observed in 2020 foraging and perching in the vicinity of the Project site, but no nests were found. No prairie falcon individuals were observed in 2024. This species is unlikely to nest within the Project site because cliff/bluff nesting habitat is not present on the site.
Lanius ludovicianus	loggerhead shrike	None	SSC	Individuals of this species were observed foraging and perching in the vicinity of the Project site in 2019, 2020, and 2024 but no nests were found. The Project site provides only limited potential nesting sites (i.e., trees and shrubs) and is heavily disturbed by consistent active grazing.
Plegadis chihi	white-faced ibis	None	None/WL	Numerous individuals of this species were observed foraging in grasslands within the Project site in 2021 and 2024 but no nests were found. This species is unlikely to nest within the Project site because preferred nesting sites (i.e., dense, freshwater emergent wetland and extensive marshes) do not occur. In addition, this species no longer breeds regularly anywhere in California (California Department of Fish and Game 2005).
Native raptor and bird nests		MBTA	MBTA	One active red-tailed hawk nest was found within the Project site in 2020 (Figure 3). One individual was observed in the nest. In 2024, one active red-tailed hawk nest was observed with one individual in the nest. A second unknown raptor species nest was observed in the Project site in 2024, but the species could not be identified.
Taxidea taxus	American badger	None	SSC	American badger was not observed during the surveys and no large underground holes or potential burrows/dens were found in the vicinity of the Project site that would be considered suitable for habitation by this species. There are 19 culverts of sufficient size within the BSA. Culverts are sometimes used by this species for refuge or to pass safely beneath roads.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Summary
Spea hammondii	western spadefoot	None	None/S, SSC	Western spadefoot was not observed during surveys. Western spadefoot occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands, and near drainages and streams. While non-native grassland habitat is present on the Project site, it is highly disturbed due to consistent active grazing, and the nearest CNDDB occurrence is over 5 miles from the site. However, multiple drainages and intermittent streams occur on the Project site that may serve as habitat for western spadefoot.
Thamnophis gigas	giant gartersnake	Threatened	Threatened	Giant gartersnake occurs in freshwater marsh and low gradient streams and is adapted to drainage canals and irrigation ditches. Common wheat is cultivated on the Project site and irrigation ditches may be present. All potential wetland and drainages in the Project site were highly disturbed due to consistent active grazing but may still serve as potential habitat for giant gartersnake.

Notes: 4.2 = CNPS watch list; BCC = USFWS Birds of Conservation Concern; SSC = CDFW Species of Special Concern; WL = CDFW Watch List; MBTA = Migratory Bird Treaty Act.

The results of the surveys have been used to develop recommendations for pre-construction surveys and avoidance and minimization measures that will be included during the California Environmental Quality Act (CEQA) process as more details about the Project design and schedule are determined.

Based on CNPS guidance, Parry's rough tarplant (CNPS Rank 4.2), does not warrant inclusion or evaluation in the CEQA document (CNPS 2020). This species is not considered to be regionally rare in the area based on occurrence information and range maps for the species, and the occurrence is not at the periphery of the species range as the species has been observed as far north as Modoc County near the Oregon border (Calflora 2024). The species is not considered to be especially uncommon in the area and there are several records in the CNDDB in the vicinity of the BSA. This species occurs in valley and foothill grasslands which are not sustaining heavy losses or declining in California or in the vicinity of the BSA. The individuals of the species also did not exhibit any unusual morphology and did not occur on unusual substrates. As such, this species does not meet CEQA standards and thresholds for impact considerations based on CNPS guidance for California Rare Plant Rank 4 species.

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Photograph 4	
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Photograph 6	
Notes: Representative photo of flowering Parry's rough tarplant within the Project site in 2020 (2020 Pop. 6; 2024 Pop. 1).	

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Swainson's Hawk Survey Report

SWAINSON'S HAWK SURVEY REPORT

Janus Solar Project
Colusa County, California



June 28, 2024

RWE

RWE Solar Development, LLC

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APPENDICES

Appendix A The Distribution, Abundance, and Habitat Associations of Nesting Swainson's Hawk (*Buteo swainsoni*) in the Vincity of the Proposed Janus Solar Project
Appendix B 2024 Raptor Nest Locations

ACRONYMS/ABBREVIATIONS

ESTEP	ESTEP Environmental Consulting
Project	Janus Solar Project
Survey Area	103,827 acres

1.0 INTRODUCTION

RWE Solar Development, LLC proposes to construct, operate, maintain, and decommission the Janus Solar Project (Project) which consist of a photovoltaic electricity generating facility, with a battery energy storage system and associated facilities and infrastructure. The Project is located in western Colusa County approximately 6.5 miles southwest of the city of Williams, and 7.5 miles west of the Interstate 5 corridor (Figure 1). The Project would generate and store up to 80 megawatts on approximately 886 acres of land; however, only approximately 666 acres of the 886-acre Project site would be used for Project development (Figure 2). The Project would connect to the electrical grid at the existing Cortina Substation, which is owned and operated by Pacific Gas and Electric Company, approximately 3 miles northeast of the Project site. The Project site consists primarily of grazed annual grasslands and agricultural lands. Rangelands, agricultural lands, and rural scattered residences occur in the immediate vicinity of the Project site.

The Project site and vicinity are located on the extreme western edge of the breeding range of the state-threatened Swainson's hawk (*Buteo swainsoni*). The Project area has suitable foraging and nesting grounds for Swainson's hawk, which the development of the Project may impact. This impact was first assessed in 2021 by ESTEP Environmental Consulting (ESTEP; Appendix A). A refresher 2024 breeding season nesting survey was conducted by Tetra Tech, Inc., to determine the distribution and abundance of Swainson's hawk in the vicinity of the Project and the effects the Project may have on the local nesting populations. This report describes the methods and results of 2024 breeding season surveys for the Swainson's hawk in the vicinity of the Project.



Figure 1
Project Vicinity

Janus Solar Project
RWE

Project Site

TETRA TECH

1:1,000,00

0 10 20 Miles

N

Revised: 6/17/2024 | NOT FOR CONSTRUCTION

Colusa County, CA

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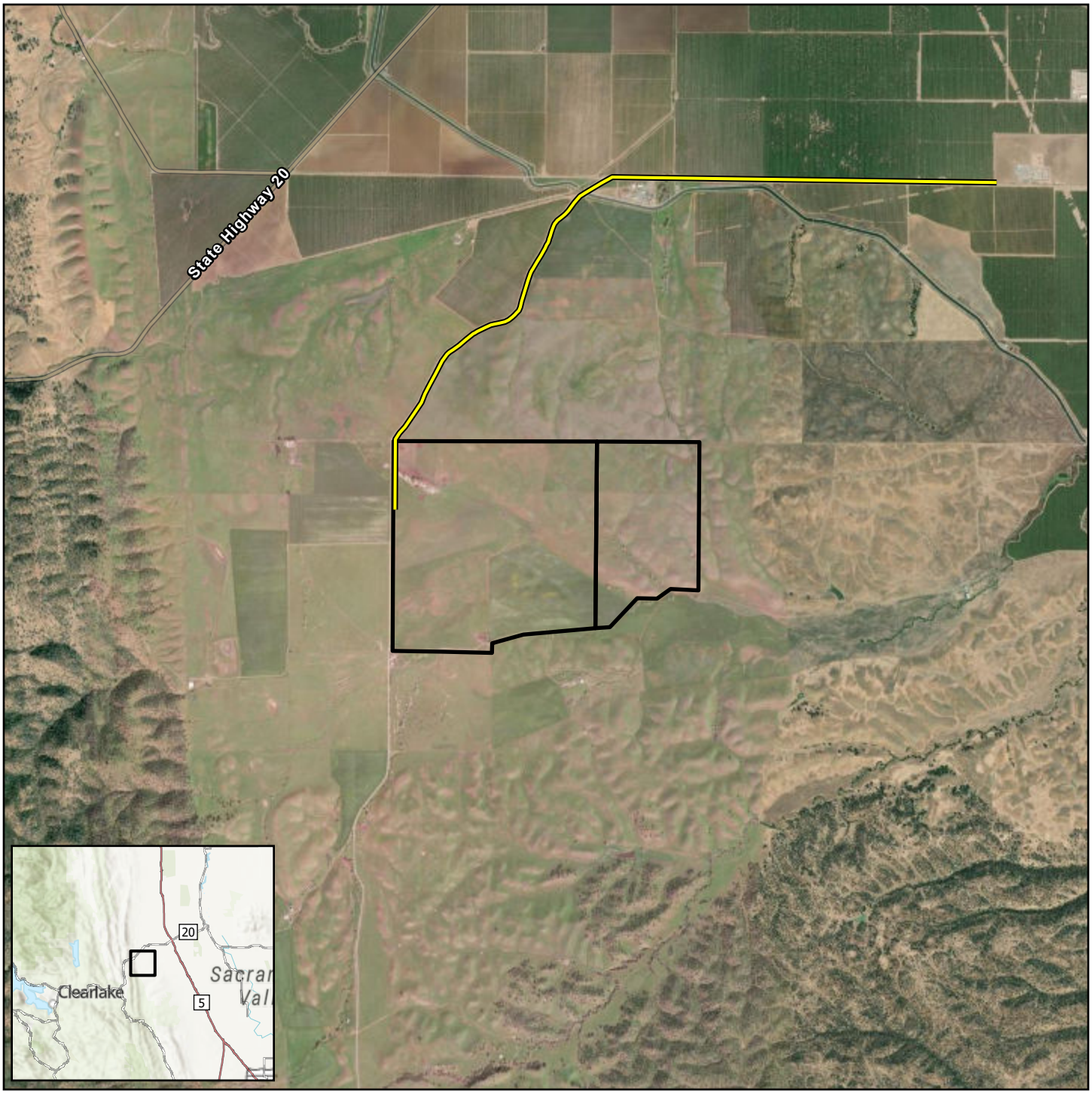


Figure 2
Project Footprint

Janus Solar Project
RWE

Proposed Gen-tie Line

Project Site

TETRA TECH

1:45,000

0 0.5 1 Miles

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2.0 METHODS

Following the methods employed in the 2021 Swainson's hawk survey (Appendix A), a 10-mile buffer around the Project site was used to identify and record all active Swainson's hawk nests. A portion of this 10-mile buffer extends into the inner Coast Range, which is beyond the known breeding range of Swainson's hawk. This area occurs west of the Project site where the landscape transitions from open foothill grasslands, which include suitable habitat for Swainson's hawk, to higher elevations and wooded mountains which do not support habitat for Swainson's hawk (ESTEP 2021). For this reason, the survey area only include lands within the 10-mile buffer of the Project site that are also within the range of Swainson's hawk. As a result, the survey area includes a total of 103,827 acres (Survey Area, Figure 3).

All active Swainson's hawk nests within the Survey Area were recorded and mapped during the field surveys conducted from April 17-19, 2024 (Table 1). In addition, other raptor species that may compete for nesting and/or foraging resources such as the red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), great horned owl (*Bubo virginianus*), and common raven (*Corvus corax*) were also mapped during the surveys (Swainson's Hawk Technical Advisory Committee 2000).

Table 1: Survey Dates

Date	Start Time	End Time	Temperature (°F)	Weather
Wednesday, April 17, 2024	1300	1600	72-77	Clear, sunny; winds 0-8 mph
Thursday, April 18, 2024	1000	1930	68-72	Clear, sunny; winds 0-10 mph
Friday, April 19, 2024	0630	1330	50-77	Clear, sunny; winds 0-5 mph

Notes: mph – miles per hour

In general, raptors either have high nest fidelity (returning to the same nest each year) or will use or rebuild existing nests from previous years (CDFW 2016). Due to this common trait among most raptors, all nests that were identified in the 2021 surveys (Appendix A) were revisited during the 2024 surveys to confirm nesting status. In addition, the surveyor systematically drove on available roads throughout the Survey Area to document new nesting locations. Where access was limited due to private property or no roads existing, the survey was conducted on foot, where access was allowed, and with the use of binoculars. All suitable nesting habitat was checked for presence of nesting raptors or nesting activity. Identified nest sites were recorded on a standardized field form and mapped in the field.

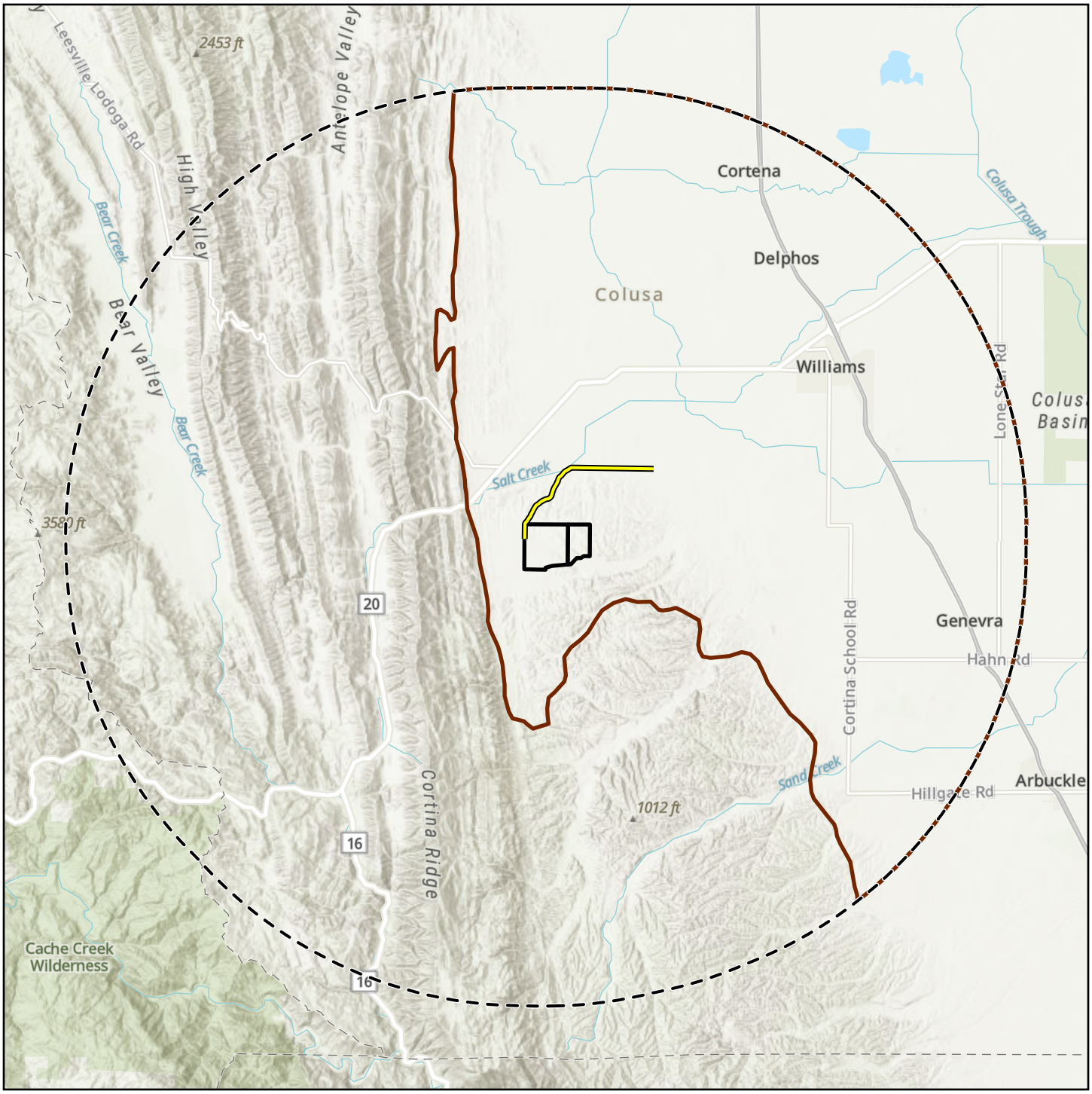


Figure 3
Survey Area

Janus Solar Project
RWE

Buffer (10-mile)
Study Area
Proposed Gen-tie Line
Project Site

TETRA TECH

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0 2 4
Miles

N

Colusa County, CA

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3.0 RESULTS

In total, 39 nests were identified during the 2024 surveys, of which only 28 were identified as being active during the survey period. Of these, 6 active Swainson's hawk nests were identified. In addition, 17 active red-tailed hawk nests, 1 active great horned owl nest, 1 active common raven, and 3 active unidentified raptor nests were identified. During the surveys, 11 nests were observed that appeared to be inactive (no sign of raptor activity in the vicinity) (Figure 4). A full list of the nests that were identified and their locations is included in Appendix B.

3.1 DESCRIPTION OF THE SURVEY AREA

ESTEP broadly characterized the land uses and habitat types throughout the Survey Area in 2021 into seven defined land cover types (Appendix A). These land uses include orchards, rice fields, grasslands, rotated croplands, developed lands, irrigated pastures, and vineyards. Table 2 defines the land use types within the Survey Area and presents the acreages, relative abundance, and includes a description if the land use type is suitable for Swainson's hawk foraging.

A total of 32,552 acres (31.4 percent) of the Survey Area includes lands that are suitable for Swainson's hawk foraging. Grasslands, rotated croplands, and irrigated pastures represent land uses that are suitable for Swainson's hawk foraging. Orchards, rice fields, developed lands, and vineyards represent approximately 71,275 acres (68.6 percent) of the Survey Area and are generally unsuitable foraging land uses for Swainson's hawk (Table 2).

Table 2: Land Use Acreage Totals within the Study Area

Land Use Type	Acres	Percent of Total	Suitable for Foraging
Orchards	37,813	36.4	No
Rice Fields	29,637	28.5	No
Grassland	18,581	17.9	Yes
Rotated Cropland	12,566	12.1	Yes
Developed Lands	3,493	3.4	No
Irrigated Pasture	1,405	1.3	Yes
Vineyard	332	0.4	No
Total	**103,827**	**100**	**N/A**
Total Suitable Foraging Lands	**32,552**	**31.4**	**N/A**
Total Unsuitable Foraging Lands	**71,275**	**68.6**	**N/A**

3.2 SWAINSON'S HAWK DISTRIBUTION AND ABUNDANCE

A total of 6 Swainson's hawk nests were documented during the 2024 survey. Figure 5 illustrates the geographic relationship of the Project site to the six Swainson's hawk nests identified within the Survey Area. All six Swainson's hawk nests are located 5 miles or more from the Project site (Table 3). The relatively few active Swainson's hawk nests were distributed mainly in the eastern half of the Survey Area and were generally associated with the I-5 corridor where suitable nest trees occur along frontage roads. The eastern portion of the study area has suitable agricultural lands to support foraging of these species. There were no active Swainson's hawk nests identified in the western portion of the Survey Area, including in or near the Project site. In addition, there were no Swainson's hawks observed foraging in or near the Project site during the 2024 surveys; however, there were

two reported non-nesting observations in the Project site during previous biological surveys conducted in 2020 (Tetra Tech 2020).

Table 3: 2024 Swainson's Hawk Nest Locations

2024 Nest ID	GPS Coordinates		Identified in 2021 Survey	2021 Survey Site #	Location from the Project Site
	Latitude	Longitude			
N12	39.165805	-122.15064	Yes	SH1	7.1 mi NE
N14	39.146856	-122.141521	No	-	6.8 mi NE
N28	39.195608	-122.1742	Yes	SH2	7.8 mi NE
N31	39.211825	-122.184605	Yes	SH3	8.5 mi NE
N33	39.136245	-122.136927	Yes	SH7	6.7 mi E
N35	39.153619	-122.177631	Yes	SH4	5.4 mi NE

Notes: NE – northeast; E – east

Active Swainson's hawk nest density, based on the number of active nest sites per square mile, across the Study Area was 0.04 active nest sites per square mile (0.01/square kilometer [km^2]). This density decreased from the 0.07 active nest sites/square mile (0.03/km^2) found during the 2021 surveys (Appendix A).

3.3 OTHER RAPTOR DISTRIBUTION AND ABUNDANCE

The most common raptor nesting in the Survey Area is the red-tailed hawk. A total of 17 active red-tailed hawks' nests were recorded in the Survey Area. In addition, 1 great horned owl, 1 common raven, and 3 unidentified raptor nests were recorded in the Survey Area. The locations of each of these nests are provided in Figure 4 and Table 4.

Table 4: 2024 Other Raptor Nest Locations

2024 Nest ID	Species	GPS Coordinates		Location from the Project Site
		Latitude	Longitude	
N2	Red-tailed hawk	39.087561	-122.273056	In southern portion of the Project site
N5	Red-tailed hawk	39.091274	-122.289244	0.2 mi S
N6	Red-tailed hawk	39.086352	-122.29079	0.5 mi S, 0.5 mi W
N10	Unknown	39.088821	-122.069765	9.9 mi E
N11	Red-tailed hawk	39.138329	-122.102689	8.5 mi NE
N13	Red-tailed hawk	39.148003	-122.141027	6.8 mi NE
N16	Red-tailed hawk	39.118052	-122.122973	7.1 mi E
N17	Red-tailed hawk	39.096839	-122.111307	7.6 mi E
N18	Red-tailed hawk	39.028118	-122.129901	7.9 mi SE
N19	Red-tailed hawk	39.016448	-122.153287	7.5 mi SE
N22	Common raven	39.116031	-122.255045	1.0 mi N
N23	Red-tailed hawk	39.1251	-122.311	2 mi NW
N24	Red-tailed hawk	39.168604	-122.311547	4.8 mi N
N25	Red-tailed hawk	39.180333	-122.197099	6.3 mi NE
N26	Red-tailed hawk	39.186456	-122.200132	6.6 mi NE

2024 Nest ID	Species	GPS Coordinates		Location from the Project Site
		Latitude	Longitude	
N27	Red-tailed hawk	39.177226	-122.167842	7.0 mi NE
N29	Red-tailed hawk	39.1993	-122.176445	7.9 mi NE
N30	Unknown	39.203149	-122.178402	8.2 mi NE
N32	Great horned owl	39.152756	-122.179527	5.4 mi NE
N34	Red-tailed hawk	39.155724	-122.172963	5.7 mi NE
N36	Unknown	39.111442	-122.212403	2.4 mi NE
N39	Red-tailed hawk	39.116491	-122.25181	1.0 mi N

Notes: S – south, SE – southeast; N – north; NE – northeast; NW – northwest; E – east; W – west

3.4 ASSESSMENT OF PROJECT IMPACTS ON THE SWAINSON'S HAWK

While only a portion of the Project site is expected to be developed, for the purposes of this assessment, the Project site (886 acres) is considered the area of direct impact. The area surrounding the Project site and up to 0.5 mile is considered the area of indirect impact that may be subject to construction-related disturbances such as noise or visual disturbances. The active Swainson's hawk territories that occur within the Survey Area may be potentially directly or indirectly affected by the reduction of available land as a result of the Project.

There are no anticipated direct or indirect impacts to the active Swainson's hawk nests within the Survey Area. The nearest active Swainson's hawk nest is located 5.4 miles northeast of the Project site. Therefore, the Project will not remove Swainson's hawk nests or affect the reproductive outcome of the active Swainson's hawk nests and no direct impacts are anticipated to occur as a result of the Project. Similarly, because the nearest nest is over 5 miles from the Project site, indirect construction-related impacts such as noise or visual disturbances are not anticipated to affect the reproductive outcome of the active Swainson's hawk nests identified in the Survey Area.

While there are no anticipated direct or indirect impacts to Swainson's hawk nests, the Project site may still be utilized as foraging habitat. However, as noted by ESTEP, solar energy facilities are largely aboveground, do not result in the permanent removal of all habitats, and can allow for ongoing floral and fauna uses (Appendix A). As a result, the Project site may still allow for continued use by prey species and foraging lands for raptor species.

The Project is anticipated to only develop approximately 666 acres of the 868-acre Project site. This 666-acre development would affect grazed grasslands, some of which may be periodically cultivated, on the extreme western edge of the Swainson's hawk breeding range. This area represents less than 0.6 percent of the total Survey Area and only 2.0 percent of the total suitable foraging habitat present in the Survey Area.

Although the Project site and surrounding grasslands is considered suitable foraging habitat, the low breeding density in the Survey Area and lack of Swainson's hawk sightings foraging in the Project site indicate that use of the Project site by Swainson's hawk is low. The development of the Project site is not anticipated to affect Swainson's hawk nesting territories and would only result in minimal loss of foraging habitat.

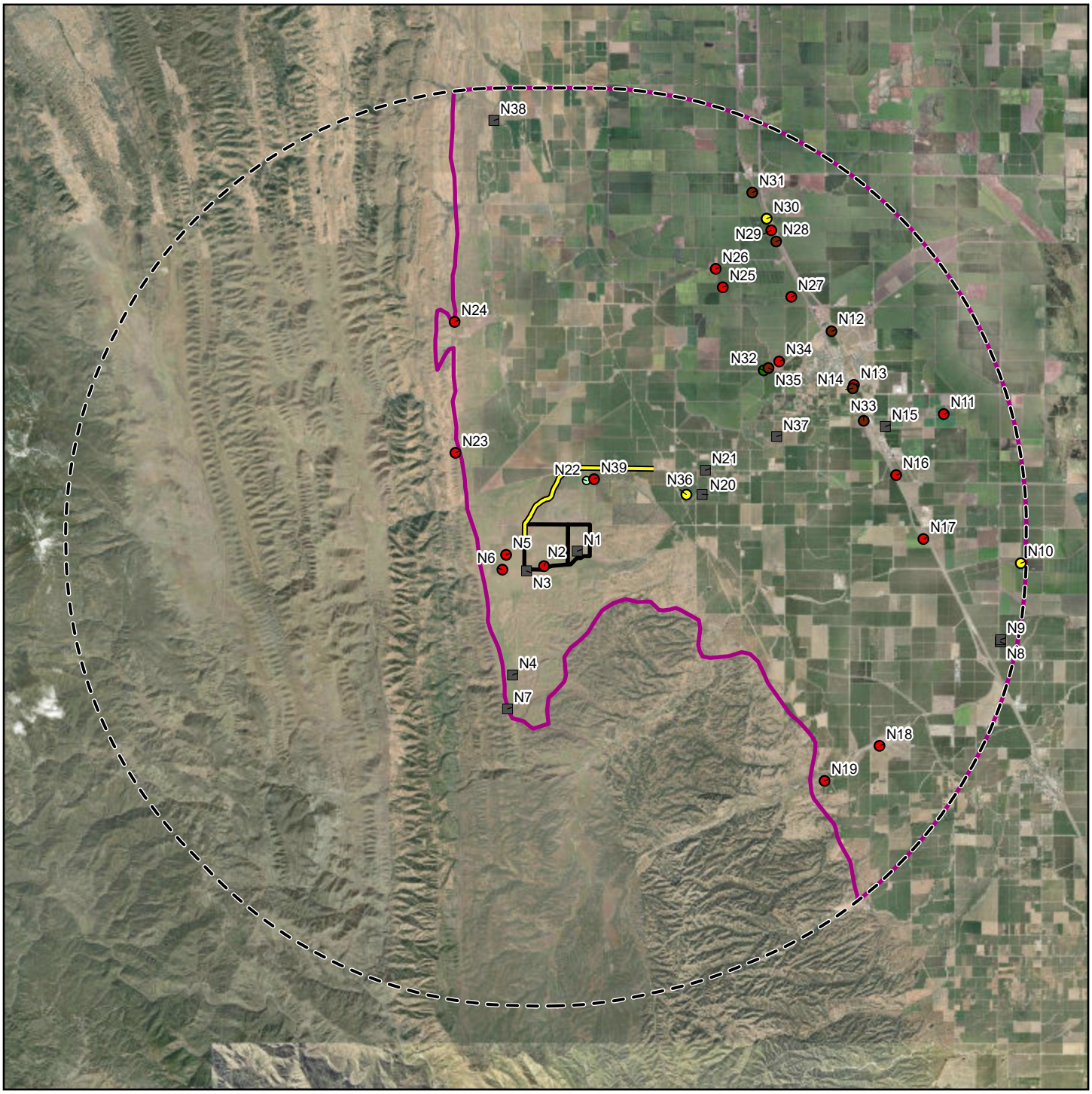


Figure 4
2024 Raptor Nest Locations

Janus Solar Project
RWE

- Great horned owl
- Raven
- Red-tailed hawk
- Swainson's hawk
- Unknown
- Inactive
- Study Area
- Buffer (10-mile)
- Proposed Gen-tie Line
- Project Site

TETRA TECH

1:210,000

0 2 4 Miles

N

Colusa County, CA

Revised: 6/17/2024 | NOT FOR CONSTRUCTION

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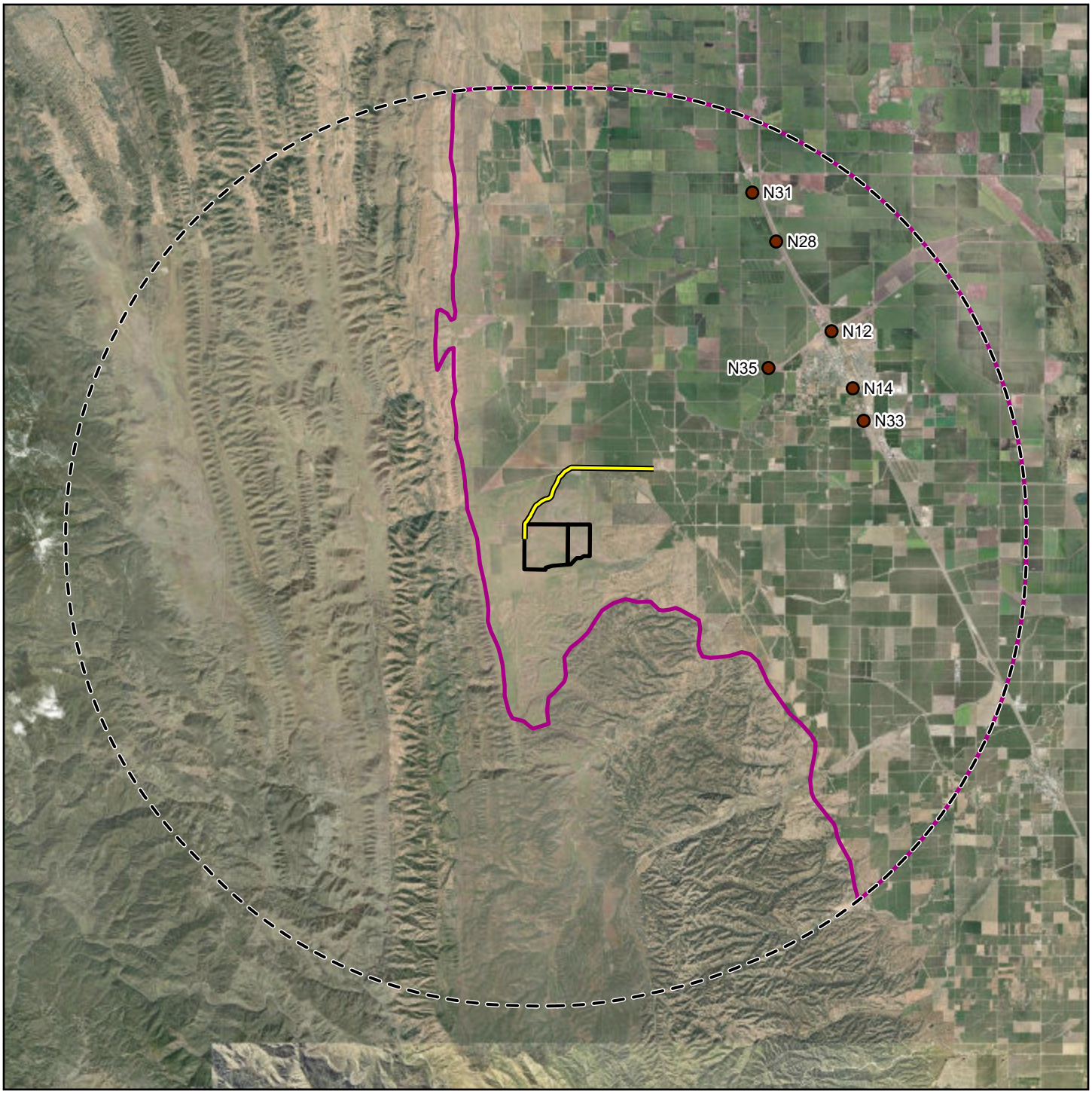


Figure 5
2024 Swainson's Hawk Nests

Janus Solar Project
RWE

Swainson's hawk
Buffer (10-mile)
Proposed Gen-tie Line
Study Area
Project Site

TETRA TECH

1:210,000

0 2 4 Miles

N

Colusa County, CA

Revised: 6/17/2024 | NOT FOR CONSTRUCTION

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APPENDIX A THE DISTRIBUTION, ABUNDANCE, AND HABITAT ASSOCIATIONS OF NESTING SWAINSON'S HAWK (*BUTEO SWAINSONI*) IN THE VINCITY OF THE PROPOSED JANUS SOLAR PROJECT

The Distribution, Abundance, and Habitat Associations of Nesting Swainson's Hawks (Buteo swainsoni) in the Vicinity of the Proposed Janus Solar Project

May 2021



Prepared for:

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RWE Solar Development, LLC

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Prepared by:

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May 2021

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Introduction

This report describes the results of 2021 breeding season surveys and habitat assessment of the state-threatened Swainson's hawk (*Buteo swainsoni*) in the vicinity of the proposed Janus Solar Project (project) in Colusa County. Using the survey data, this report also assesses the impact of the proposed Project, pursuant to the California Environmental Quality Act (CEQA), on the local and regional Swainson's hawk nesting population.

This study of a regional Swainson's hawk nesting population was undertaken in an effort to provide an assessment approach based on a clear biological foundation and that leads to impact determinations that are rationale-based and consistent with CEQA significance criteria. CEQA does not dictate any particular assessment approach but does require that the best scientific information be used to assess biological impacts and reach significance determinations consistent with CEQA guidelines. There may be multiple ways of assessing land use-related impacts on wide-ranging species, such as the Swainson's hawk. This approach was developed using current data on species distribution and abundance and the availability of suitable habitat conditions over a broad landscape.

Purpose of the Study

The purpose of this study is several-fold and includes:

- Determining the distribution and abundance of the Swainson's hawk and other nesting raptors in the study area.
- Determining nesting and foraging habitat associations of Swainson's hawk in the study area.
- Using data on distribution and abundance and available nesting and foraging habitat to assess the effects of the proposed project on the nesting population.

Project Background

RWE Solar Development, LLC (RWE) proposes to construct a new photovoltaic solar facility in western Colusa County northwest of Sacramento and west of Interstate 5 (Figure 1). The project is currently undergoing CEQA review and development of an environmental impact report (EIR) is in progress. The project would have a potential generating capacity of 80 megawatts (MW) and would be installed on approximately 580 acres within an area encompassing three

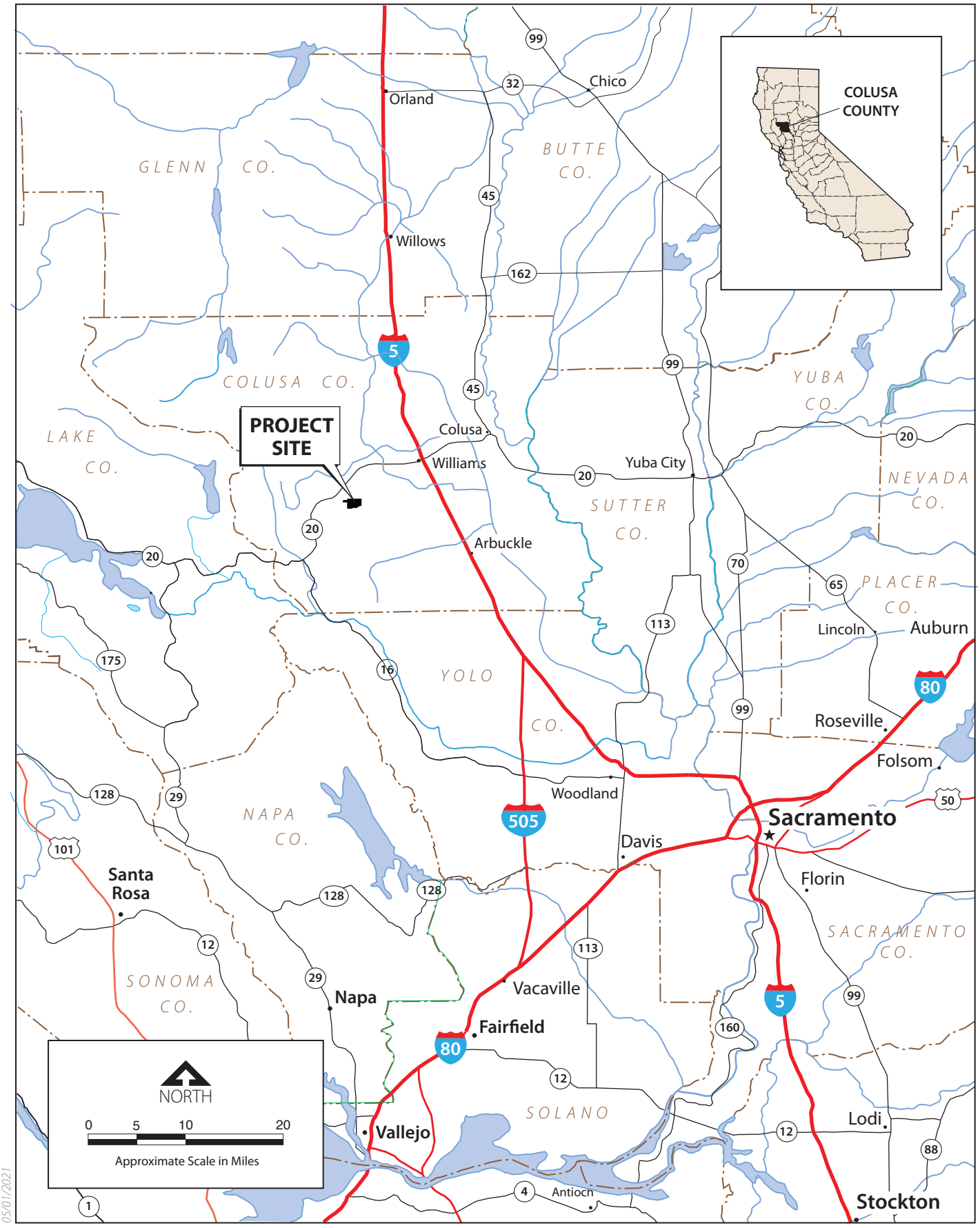


Figure 1
Regional Location of the Janus Solar Project

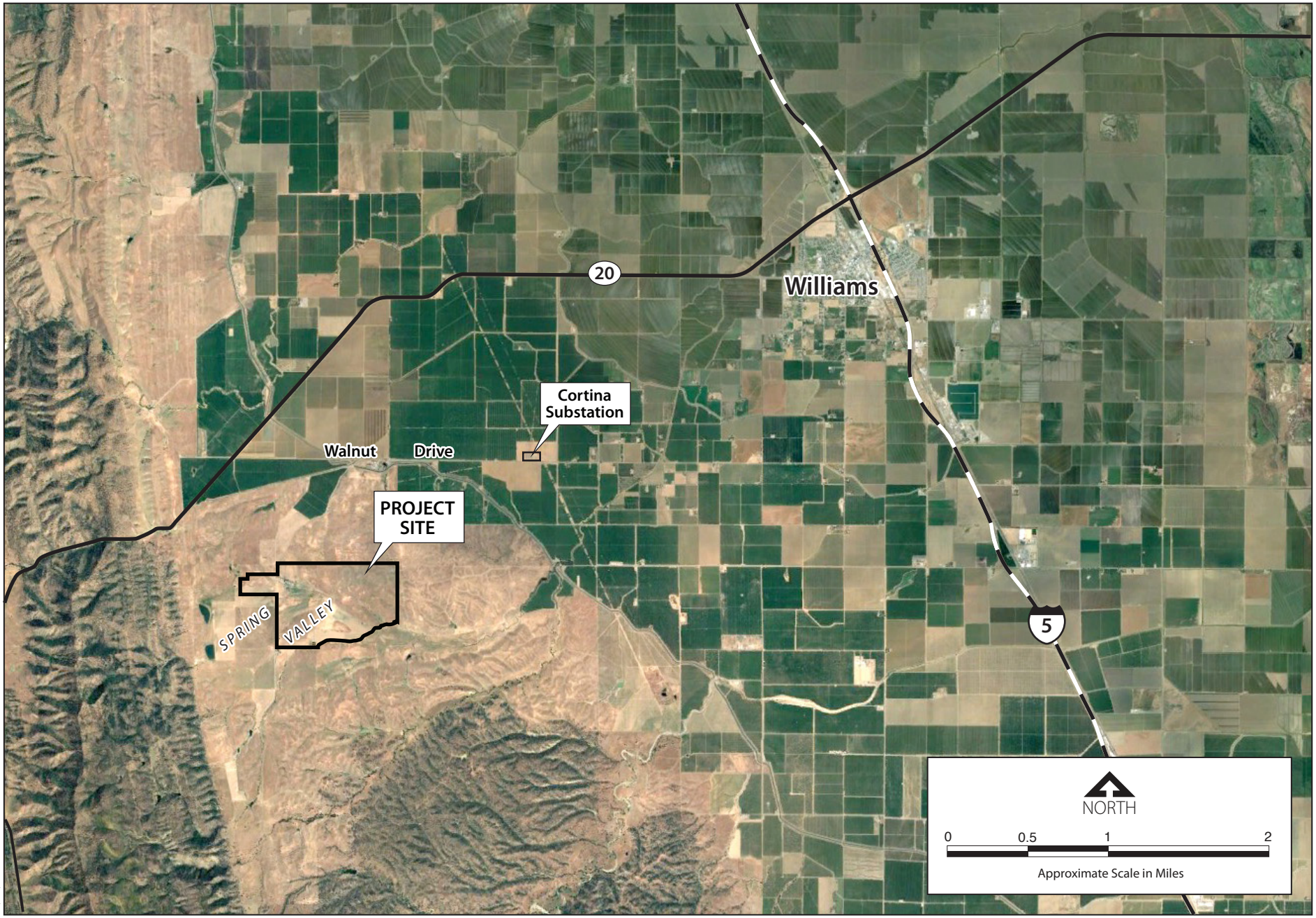


Figure 2
Location of the Janus Solar Project

contiguous parcels totaling 1,024 acres along the western edge of the Central Valley in the low-elevation foothills of the interior Coast Ranges. The final design of the solar array has not been determined, so for purposes of this report, the project site refers to the 1,024-acre area (Figure 2). Consisting primarily of grazed annual grassland and foothill grainfields, this area is also along the extreme western edge of the breeding range of the state-listed Swainson's hawk. As a result, the EIR will address project impacts to the Swainson's hawk in terms of disturbances to nest sites and nesting habitat, and loss of foraging habitat that supports the nesting population. Results of this study are intended to provide background data and analysis in support of the ongoing environmental review process and are subject to review by Colusa County as the CEQA Lead Agency.

Project Location

The project area is located approximately 7.5 miles southwest of the City of Williams in Spring Valley, a small valley within the lower elevation foothills of the interior Coast Ranges at the base of Cortina Ridge. The project area is approximately one mile southeast of State Route 20, and 1.2 miles south of Walnut Drive. Spring Valley Road, an unpaved ranch road, extends along most of the western boundary of the project area, and Spring Creek extends along most of the southern boundary (Figure 2).

Project Description

The proposed project consists of the construction, operation and maintenance, and eventual decommissioning of the solar PV facilities. The project includes typical solar PV infrastructure, including solar arrays, an electrical substation, a battery energy storage system, and a 60kV interconnection generation tie line (gen-tie) that would connect the project substation to the existing PG&E Cortina Substation located approximately 2 miles northeast of the project area (Figure 2). The solar array would be installed in parallel rows separated by approximately 10 feet from edge of panel to edge of panel (Figure 3).

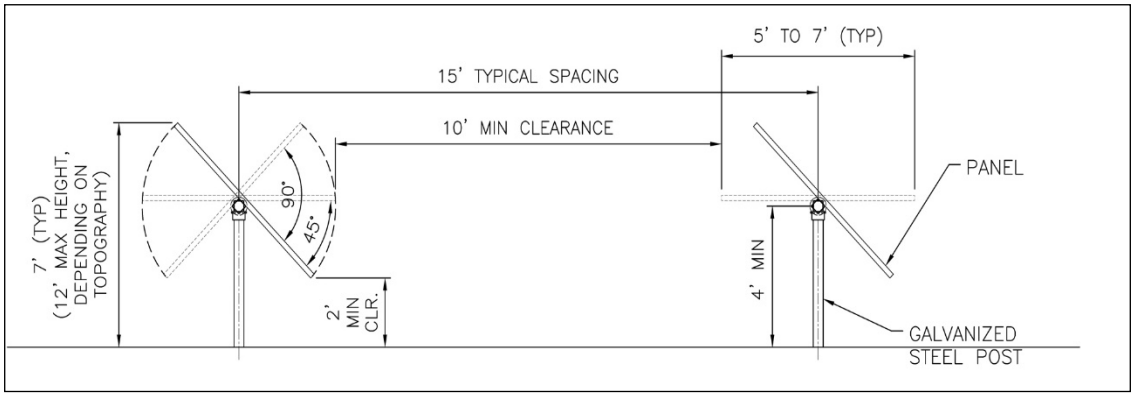


Figure 3. Configuration and layout of solar panel rows.

The internal driveway system would consist of driveways separating array cells approximately 20 feet wide with a permeable surface, and a 20-foot perimeter access driveway around the facility. The project site would be secured by a chain-link perimeter fence approximately 6 to 7-feet-high.

Once the initial construction is completed, the project site would be managed to reduce soil erosion, prevent or control weed growth to reduce fire hazards, and to provide herbaceous habitat for local wildlife. A grass substrate will be maintained throughout the project site, which would be actively managed to minimize fire risk, through mowing or sheep grazing.

Although ultimately the project footprint will be smaller, for purposes of this assessment, the project site includes the 1,024-acre area indicated on Figure 2. All changes and potential impacts to land cover from project components are anticipated to occur within this area. The 60 kV gen-tie line route, which will connect with the Cortina Substation, is outside of the project site boundary. As a result, this project component is not included in this assessment because it will not affect land cover and therefore not result in loss of Swainson's hawk habitat.

Swainson's Hawk Natural History

Description

The Swainson's hawk is a medium-sized buteo most often characterized by its long, narrow, and tapered wings held in flight in a slight dihedral shape (Plate 1). The body size is somewhat smaller, thinner, and less robust than other buteos, although the wings are at least as long as other buteos. This body and wing shape allow for efficient soaring flight and aerial maneuverability, important for foraging, which Swainson's hawks do primarily from the wing, and during courtship and inter-specific territorial interactions.



Plate 1. Adult Swainson's hawk showing the long, tapered wings that allow for efficient soaring and flight maneuverability.

There are three definitive plumage morphs: light, rufous, and dark, with numerous intermediate variations between these plumage morphs. The two most distinguishing plumage characteristics are a dark breast band and the contrasting darker flight feathers and lighter wing linings on the underwings giving most individuals a distinctive bicolored underwing pattern (Plate 2). These characteristics are most pronounced in lighter morph birds and become less so as the plumage darkens, and can be indistinguishable in the definitive dark morph, which is completely melanistic. All three definitive plumage morphs are present in California, with a relatively large proportion of the population categorized as intermediate between the definitive morphs, with varying amounts of streaking or coloration in the belly and wing linings.



Plate 2. Light Morph Adult Swainson's Hawk

Breeding Range and Statewide Distribution

Swainson's hawks inhabit grassland plains, shrublands, and agricultural regions of western North America during the breeding season and inhabit similar habitats from Central Mexico to southern South America during the migration and winter non-breeding seasons (Bechard et al. 2010; Airola et al. 2019). Early accounts described Swainson's hawk as one of the most common raptors in the state, occurring throughout much of lowland California (Sharp 1902). Since the mid-1800s, the native habitats that supported the species have undergone a gradual conversion to agricultural uses, or as in the case of southern California coastal valleys, to urbanization. Today, with the exception of desert scrub communities in the high desert regions of the state, native landscapes that supported nesting and foraging Swainson's hawks are virtually nonexistent. This habitat loss is thought to have caused a substantial reduction in the breeding range and in the size of the breeding population in California, estimated in 1980 at 375 breeding pairs (Bloom 1980). A more recent statewide survey indicates a larger and possibly expanding breeding population in the Central Valley with a current estimate of 3,218 breeding pairs (Battistone et al. 2019).

The current range of the species in California includes the Central Valley, the high desert regions and valleys of northeastern California, the east side of the Sierra Nevada from Owens Valley and extending southwestward into the western Mojave Desert in the vicinity of Antelope Valley (Figure 4).

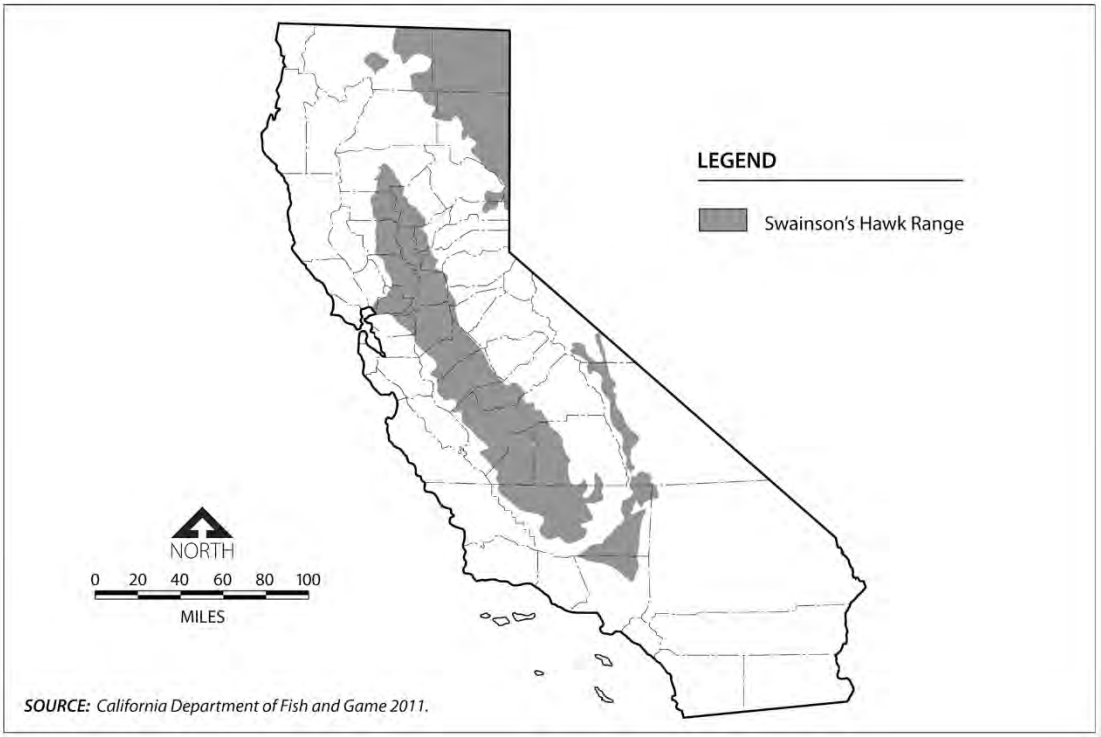


Figure 4. The breeding range of the Swainson's hawk in California.

Despite the loss of native habitats throughout the species' range in California, Swainson's hawks appear to have adapted relatively well to certain types of agricultural patterns in areas where suitable nesting habitat remains. Today, the species is most abundant in landscapes that are entirely under cultivation. The largest segment of the statewide population is in the Central Valley, with the highest nesting densities occurring in Yolo, Sacramento, Solano, and San Joaquin Counties (Bloom 1980, Estep 2020, 2007, LSA 2012, Battistone et al. 2019), and where the species is nearly entirely dependent on cultivated foraging habitats. The nesting distribution in the Central Valley follows the distribution of suitable hay, grain, and row crop agriculture compatible with the foraging requirements of the Swainson's hawk and where it occurs in association with suitable nesting habitat (Battistone et al. 2019, Estep and Dinsdale 2012). The association with cultivated lands has also been described throughout the species range outside of California (Schmutz 1987, Bechard et al. 2010, Alsup 2012), and during migration and on wintering ranges in Central and South America (Airola et al. 2019).

The Swainson's hawk has also shifted its distribution throughout the high desert region of northeast California to take advantage of cultivated habitats, where it occurs in greater breeding densities than it does in most native deserts or shrublands (Woodbridge 1991). The same association with cultivated habitats has occurred along the east side of the Sierra Nevada and the Mojave Desert (Estep 2013).

Habitats and Habitat Use

Nesting

In the Central Valley, Swainson's hawk nests in large native trees such as valley oak (*Quercus lobata*), cottonwood (*Populus fremontia*), walnut (*Juglans californica*), and willow (*Salix* sp.), and increasingly in nonnative trees, such as eucalyptus (*Eucalyptus* sp.) and ornamental pine trees. Prior to agricultural conversion, Central Valley populations nested primarily in riparian woodlands and on the edges of oak woodlands. Today, in addition to these habitats, the species nests in roadside trees, trees along field borders, isolated trees, trees around farm houses and farmyards, and in urban areas that are adjacent to cultivated lands (Bechard et al. 2010, Estep 2007, 2020, Alsup 2012) (Plate 3).

Nesting pairs are highly traditional in their use of nesting territories. Many monitored nesting territories in the state have been occupied annually since at least the early 1980s and banding studies conducted since 1986 confirm a high degree of territory and mate fidelity (Woodbridge 1991, Briggs 2007, Estep *in progress*).



Plate 3. Typical Swainson's hawk nest in a willow tree. This is nest SH8, east of Lone Star Road.

Foraging

Swainson's hawks are plains or open-country hunters, requiring large open landscapes for foraging. Historically, the species hunted the grasslands of the Central Valley and coastal valleys and the open desert scrub and shrublands in high desert regions. With the cultivation of virtually all of the Central Valley, and a portion of the high desert region, Swainson's hawk foraging has largely shifted onto agricultural lands that provide a dynamic, regularly manipulated landscape that maximizes prey populations and accessibility of rodent prey (Estep 1989, Babcock 1995, Woodbridge 1991). In the Central Valley, the principal prey species in the California vole (*Microtus californicus*), although other small mammals are also taken including pocket gopher (*Thomomys bottae*).

Foraging habitat use, particularly agricultural foraging habitat, is largely a function of two primary variables: abundance of prey and amount of vegetative cover that affects access to prey (Bechard 1982, Estep 1989, 2009). Suitability is in part a function of changing vegetation structure throughout the growing season, which influences prey accessibility. Agricultural cover types that provide suitable foraging habitat conditions include hay, grain and row crops, fallow fields, and irrigated and dryland pasture. The matrix of these cover types can create a dynamic foraging landscape as temporal changes in vegetation results in changing foraging patterns and foraging ranges (Estep 1989, Babcock 1995, Fleishman et al. 2016). Uncultivated habitats, such as grasslands, shrub-steppe communities in northeastern California, and desert scrub in the Mojave Desert provide more stable, consistent habitat value, but probably do not provide the extent of available prey resources that would support the high breeding densities found in some cultivated habitats.

Within the cultivated landscape, hay crops, particularly alfalfa, provide the highest value because of the low vegetation structure, relatively large prey populations, and because farming operations such as periodic mowing enhance prey accessibility. Foraging studies have demonstrated that use of alfalfa fields is significantly greater than other crop types (Estep 1989, Swolgaard et al., Nur et al. 2019). Most row and grain crops are planted in winter or spring and have foraging value while the vegetation remains low, but become less suitable as vegetative cover and density increases. During harvest, vegetation cover is eliminated while prey populations are highest, enhancing their suitability during this period. Some crop types, such as orchards, provide little to no value because of reduced accessibility and relatively low prey populations.

Home Ranges

Home ranges are highly variable depending on cover type, and fluctuate seasonally and annually with changes in vegetation structure (e.g., growth, harvest) (Estep 1989, Woodbridge 1991, Babcock 1995). Fleishman et al. 2016 also found that home range size was associated with life stage (e.g., arrival, pre-hatching, nestling, pre-migratory) and nesting status. Studies conducted in the 1980s and 1990s in the Central Valley found that home range size ranged from 830 to 21,543 acres (336 to 8,718 ha) (Estep 1989, Babcock 1995). Fleishman et al 2016 reports larger

home ranges from 21,489 acres (8,696 ha) to 45,502 acres (18,414 ha), due in part to including arrival and pre-migratory life stages, periods when home range size was found to be larger and that were not entirely included in earlier studies. Smaller home ranges during the pre-hatching and nestling phases of the breeding cycle may be related to nest provisioning activity. At sites where nests failed, home range expanded (Fleishman et al 2016). Smaller home ranges generally consist of high percentages of alfalfa, fallow fields, and dry pastures (Estep 1989, Woodbridge 1991, Babcock 1995). Larger home ranges were associated with higher proportions of cover types with reduced prey accessibility, such as orchards and vineyards, or reduced prey abundance, such as flooded rice fields. Swainson's hawks regularly forage across a very large landscape compared with most raptor species. Because of their ability to rapidly move long distances, it remains energetically feasible for Swainson's hawks to successfully reproduce when food resources are limited around the nest and large home ranges are required (Bechard et al. 2010) (Plate 4).



Plate 4. Swainson's hawk morphology is ideal for long-distance movements that allow it to expand its home range area in response to changing food resources in agricultural landscapes.

Breeding Season Phenology

Swainson's hawks arrive at the breeding grounds from early March to early April (Figure 5). Breeding pairs immediately begin constructing new nests or repairing old ones. Eggs are usually laid in mid- to late April, and incubation continues until mid-May when young begin to hatch. The brooding period typically continues through early to mid-July when young begin to fledge (Bechard et al. 2010). Studies conducted in the Sacramento Valley indicate that one or two—and

occasionally three—young typically fledge from successful nests (Estep 2020, Estep and Dinsdale 2012, ICF 2019) (Plate 5). After fledging, young remain near the nest and are dependent on the adults for about 4 weeks, after which they permanently leave the breeding territory (Anderson and Estep, unpublished telemetry data). By mid-August, breeding territories are no longer defended, and Swainson's hawks begin to form communal groups. These groups begin their fall migration from late August to mid-September. Unlike most other Swainson's hawk populations, which migrate to southern Argentina for the winter, the Central Valley population winters from Central Mexico to central South America (Airola et al. 2019).

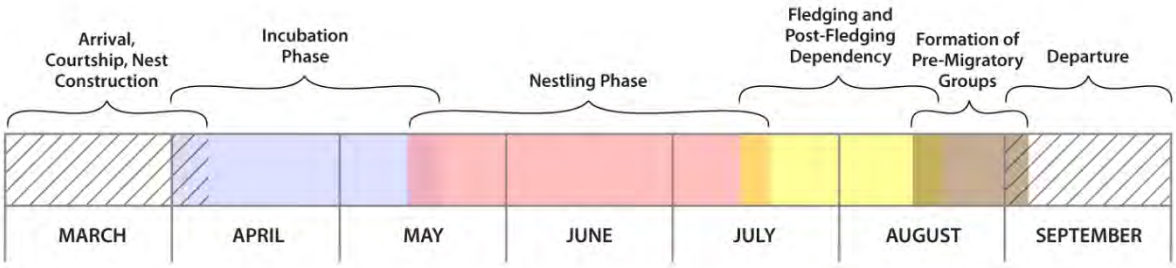


Figure 5
General Representation of Swainson's Hawk Breeding Cycle in the Central Valley



Plate 5. Nearly Fledged Swainson's Hawks.

Statewide Population Status

Data have been collected on the distribution and abundance of Swainson's hawk in California since the late 1970s. Bloom (1980) conducted the initial statewide survey that estimated a 90% reduction in the historic population and that led to the state-listing of the species in 1983. At that time, the statewide estimate of breeding pairs was 375 (Bloom 1980). Beginning in the early 1980s, long-term monitoring of selected survey sites in the Central Valley was conducted to assess population trends. In 1988, CDFW conducted a second and more intensive statewide survey and using density data from the long-term monitoring sites, recalibrated the statewide estimate to 550 breeding pairs (CDFW 1988). Neither the initial Bloom (1980) nor the CDFW 1988 statewide surveys were conducted using a standardized survey protocol that would lend itself to statistical analysis sufficient to reliably estimate the statewide population. Thus, it was later acknowledged that these early statewide estimates did not necessarily represent an accurate estimate of the statewide population and were cautiously used to describe the status of the species. The survey efforts were, however, important in establishing the current distribution of the species in California.

Since the mid-1980s, several regional and statewide surveys, long-term monitoring efforts, and research studies have been conducted in the Central Valley and in northeastern California, providing additional information on distribution and abundance and life history of the species. As a result of these efforts and the increasing understanding of Swainson's hawk distribution and abundance, but still in the absence of any statistically-based analysis, the Swainson's Hawk Technical Advisory Committee (TAC) – an ad hoc group of researchers that conducts and facilitates research on the Swainson's hawk and advises CDFW and local jurisdictions regarding Swainson's hawk ecology – provided a new estimated population range. In 2001 the TAC conservatively estimated that there were between 700 and 1,000 breeding pairs in the state with approximately 90% of these in the Central Valley.

Finally, in an effort to more conclusively estimate the population size, CDFW, with the assistance of UC Davis and the TAC began a comprehensive, standardized, statistically-based survey effort of the Central Valley in 2005. Using a standardized sampling approach, the Central Valley population is currently estimated at 3,218 breeding pairs (95% CI: 2271 – 4165) (Battistone et al. 2019). This is considered the most reliable estimate to date and is thought to more accurately reflect the total number of breeding pairs in the Central Valley.

The extent to which this revised estimate reflects simply a more accurate estimation or whether it may represent an increasing population since the early 1980s is unclear. More recent regional census-level surveys conducted in the Central Valley have identified large and more robust breeding populations than had been previously identified including as many as 400 breeding pairs in Yolo County (Estep 2020) and as many as 300 breeding pairs within the Bay-Delta Conservation Plan Area (ICF 2012) centered in the Sacramento-San Joaquin River Delta. Recent anecdotal information also suggests some re-colonization into some areas thought to have been previously extirpated, such as the Napa Valley. However, a long-term population study in Yolo

County from 1986 to present indicates that following an initial increase in population in the late-1980s – which could be attributed to refined survey technique and increased survey experience – this population remained relatively stable from the late 1980s to present (Estep *in progress*), suggesting that the current higher statewide estimate may also be due in part to more complete survey and more reliable estimation techniques.

Despite some level of uncertainty regarding the change in population size since the late 1980s, the current statewide estimate still constitutes an estimated 50 to 90 percent reduction in the estimated historic population (Bloom 1980).

Population Declines and Factors Affecting Distribution

Initial population declines of Swainson's hawk in California were attributed to loss of habitat from urbanization and conversion of native habitats to agriculture. Urbanization, agricultural conversion, channelization of watercourses and other factors have reduced the extent of nesting habitat (e.g., riparian forests, oak woodland, desert woodland) and foraging habitat, primarily native grasslands, shrub-steppe communities, and to a lesser extent desert scrub. However, the species appears well adapted to certain agricultural landscapes and where patterns are compatible with the foraging requirements and behavior of the species, Swainson's hawks can occur in very high breeding densities.

As a result of habitat loss, the species is no longer found in the coastal valleys of southern California and is reported infrequently in central coast valleys. The species has persisted, however, in much of the Central Valley, particularly in the southern Sacramento and northern San Joaquin Valleys. While intensively farmed for over 100 years, much of this area between Stanislaus County and Butte County, retains a relative abundance of nesting habitat – narrow riparian corridors along rivers and streams, remnant oak groves and trees, roadside trees – and an agricultural pattern that is compatible with Swainson's hawk foraging requirements. Thus, the species is relatively common in the central portion of the Central Valley and perhaps on a local basis - even more common than it was historically. Today, the distribution and abundance of the Swainson's hawk in the Central Valley is primarily a function of agricultural patterns and nest tree availability. Swainson's hawks are dependent on an agricultural landscape that provides available and accessible food resources and suitable nesting habitat. Where these suitable landscapes are lacking, Swainson's hawks occur in less abundance.

Conservation and Management

Today, the Swainson's hawk is reliant on certain types of agricultural land uses, remaining grasslands, and desert scrub communities. With the bulk of the statewide population occurring in association with cultivated lands, changes in agricultural patterns in particular, can have a significant influence on the distribution and abundance of the species. Because of the inherent conflicts between urbanization, the preservation of agricultural and valley grassland habitats, and

compliance with state laws and regulations, land use-related impacts that affect the Swainson's hawk continues to be a key issue for land use decision-making.

In 1994, Region 2 of CDFW, which included the Sacramento Valley and the largest proportion of nesting Swainson's hawks in the state, took an initial step in addressing the issue of habitat conservation for Swainson's hawks by issuing guidelines for mitigating development-related impacts (California Department of Fish and Game 1994). The guidelines were developed primarily to address the increasing extent of agricultural habitat loss from urbanization in the Sacramento region. Since then, CDFW's mitigation guidelines have been used by local agencies as a method to mitigate habitat impacts on individual development projects pursuant to the provisions of CEQA. In an effort to standardize mitigation costs for impacts to Swainson's hawk habitat and consolidate conservation efforts, some local agencies established ordinances or similar programs that required payment of mitigation fees. The fees are applied to all development projects that would remove Swainson's hawk habitat and used to compensate for this loss through acquisition and management of offsite lands.

Concurrent with these activities, larger regional habitat conservation plans were also being considered or developed for lands within the range of the Swainson's hawk. Driven by the presence of federally listed species, habitat conservation plans (HCPs) are prepared pursuant to Section 10 of the federal Endangered Species Act under consultation with the U.S. Fish and Wildlife Service. State-listed species can be included as 'covered' species in HCPs under agreement and permit authorization of CDFW (Section 2081 or 2080.1 of Fish and Game Code). At the state level, Natural Community Conservation Plans (NCCPs) can also be prepared pursuant to Fish and Game Code (Sections 2800-2835) to provide a means of complying with the California endangered species act (CESA). An NCCP is similar to an HCP in that it is designed to protect and conserve intact natural landscapes and biological communities, biological diversity, and species listed under CESA while allowing appropriate development and economic growth. The HCP and NCCP processes can provide a more regional approach to addressing impacts and mitigation and potentially allowing for consolidation of conservation lands and a greater potential for conservation at a regional population level. Several multispecies HCPs or HCP/NCCPs have either been completed (e.g., Yolo County, Natomas Basin, South Sacramento County, San Joaquin County) or are in preparation (Solano County, Butte County, Placer County) within the range of the Central Valley population of Swainson's hawk.

State Regulations and Agency Guidance

The Swainson's hawk was listed as a state-threatened species by the California Fish and Game Commission in 1983 largely as a result of Bloom's (1980) statewide survey and status assessment conducted in the late 1970s that estimated a population decline of greater than 90 percent. Species that are listed as threatened or endangered receive protection under the provisions of the California Endangered Species Act (CESA) (Section 2050 of the Fish and Game Code), and related Fish and Game Code Sections, including Section 2080 that prohibits

the "take" of any threatened or endangered species. Take is defined in Section 86 as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

While not specifically defined in the definition of take, loss of essential habitat can result in the direct or indirect loss of breeding territories and reproductive potential leading to further population declines, and thus can potentially be included in the definition of take. However, most habitat-related impacts on the Swainson's hawk are addressed through CEQA. CEQA defines the significance of an impact on a state-listed species based on the following:

- Appendix G of the State CEQA guidelines states that a biological resource impact is considered significant (before considering offsetting mitigation measures) if the lead agency determines that project implementation would result in "substantial adverse effects, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS"; and

- CEQA Section 15065 (Mandatory Findings of Significance), a biological resource impact is considered significant if the project has the potential to "substantially reduce the number or restrict the range of an endangered, rare or threatened species".

It has been pursuant to both the CESA and CEQA processes that mitigation and management, including the development of regional strategies, have been developed to address land use issues related to Swainson's hawk conservation.

The 1994 CDFW Region 2 guidelines (California Department of Fish and Game 1994) are often considered at the local jurisdiction level during CEQA review of individual proposed projects, including solar development projects. The guidelines outline methods for conducting nest surveys and avoidance or minimization of impacts to active nest sites from project elements that may result in nest abandonment or otherwise affect the integrity of the breeding territory. The guidelines also recommend acquisition of replacement lands (i.e., compensatory mitigation) for projects that meet criteria that would presumably result in the loss of foraging habitat sufficient to be considered 'significant' pursuant to CEQA definition.

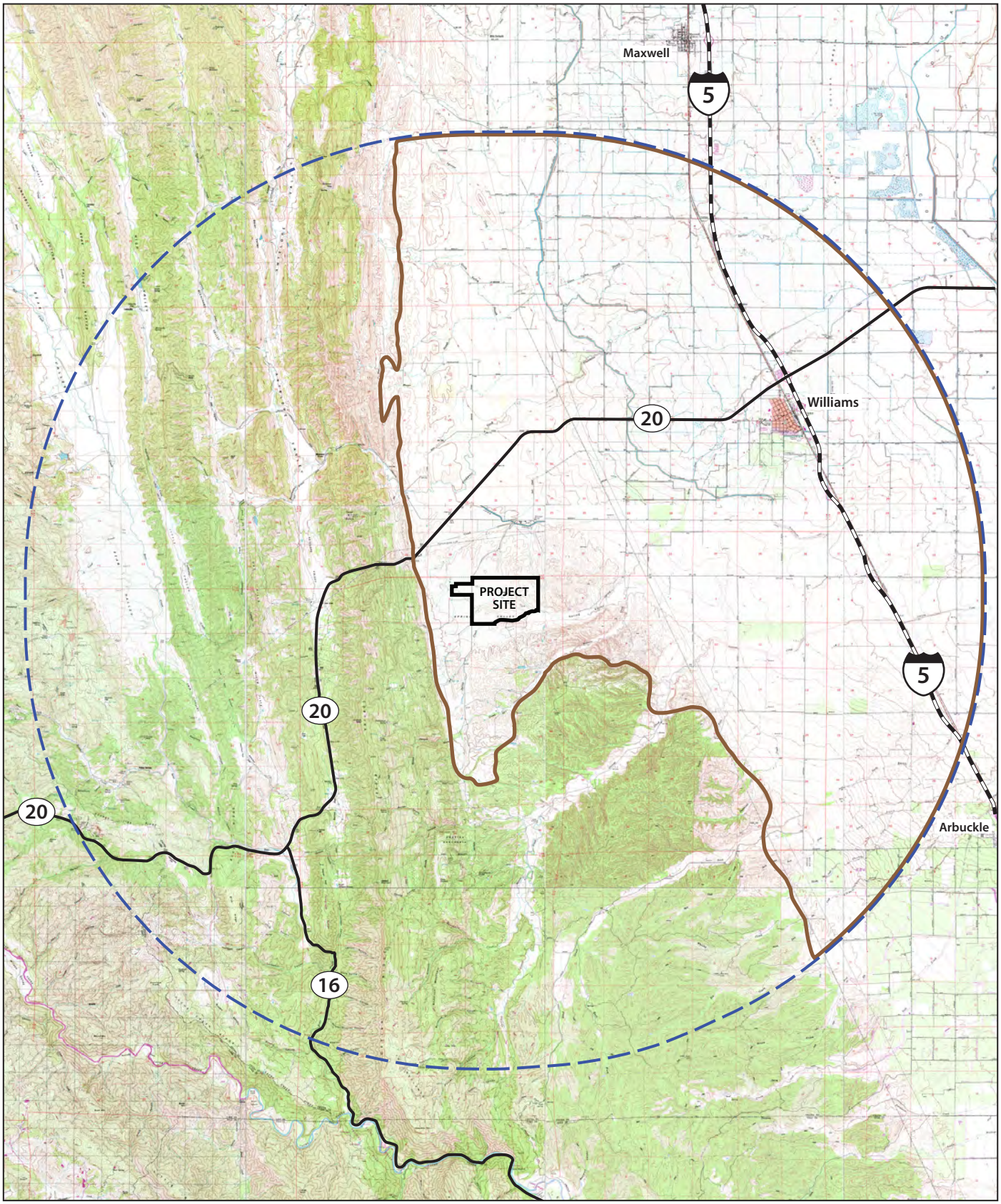
The guidelines then establish that the determining criteria for CEQA significance is removal of any suitable foraging habitat within 10 miles of an active nest, which is defined as a nest active at any time during the previous 5 years. The guidelines provide no further rationale or guidance for determination of a significant impact including the size of the potentially affected population, availability of habitat, the quality or suitability of existing habitat, the long-term sustainability of existing habitat, or the size of the project relative to available habitat. The guidelines do, however, allow for independent assessment of impacts and development of a conservation strategy as an alternative to the guidelines. As a result, this study was undertaken to assess the effects of the proposed project using abundance, distribution, and habitat data to allow for a significance determination based on a more robust biological rationale.

Description of the Study Area

A 10-mile radius study area was initially established around the proposed project site (See Methods Section) (Figure 6). However, because this area extends into the inner Coast Ranges beyond the breeding range of the Swainson's hawk, the study area was further delineated by establishing a range boundary. This boundary generally equates to the transition from open foothill grasslands to the wooded higher elevation mountains to the west, which occurs generally along the 400- to 600-foot elevational contours (Plate 6). These higher elevation lands to the west are not within the breeding range of the Swainson's hawk and do not support habitat for the species. As a result, the study area includes only those lands within 10 miles of the project site and that are within the range of the species (Figure 6).



Plate 6. Looking west toward Cortina Ridge and the transition from the high elevation mountains to the low-elevation grassland foothills, and then onto the floor of the Central Valley. The project site is within the low-elevation foothills.



LEGEND

- Project Site
- 10-Mile Radius around Project Site
- Study area

NORTH

0 1 2 3 4

Miles

Figure 6
Location of the Janus Solar Project Study Area

Climate and Physiography

The proposed project site occurs in the low elevation foothills of the inner Coast Ranges of western Colusa County. The elevation drops sharply from the steep and heavily wooded Cortina Ridge into the open grassland savannah of Spring Valley. The low grassland foothills extend as much as 5 miles before transitioning onto the floor of the Central Valley. The climate is characterized as Mediterranean with hot dry summers and temperate wet winters. The average annual air temperature is from 60-62 degrees Fahrenheit. The average daily high temperature during the summer (June through August) is in the mid-90s, average daily low is in the high-50s. During the winter months (December-February) average daily high is in the mid-50s and average daily low is from 38-40 degrees Fahrenheit. Average annual precipitation in Colusa County is 25 inches, with the lowest in the lower elevation on the east, and the highest in the inner Coast Ranges to the west.

The proposed project site is centrally located within Spring Valley. This area can be generally characterized as flat to moderately hilly and surrounded to the west by steeper elevations extending to Cortina Ridge (Plate 7, Figure 2) and to the east by similar hilly range before transitioning to the floor of the Central Valley (Plate 8, Figure 2). Several ephemeral drainages, including Spring Creek, extend through Spring Valley (Plate 7). The elevation within the project area ranges from approximately 270 to 343 feet above sea level.



Plate 7. Looking west from the project site toward Cortina Ridge. The riparian trees are along Spring Creek, the southern border of the project site.



Plate 8. Looking east from the project site toward foothill grasslands before dropping onto the floor of the Central Valley.

East of the inner Coast Range foothills, the overall study area can be characterized as flat, open farmland. Several small drainages also occur in this area, most originating in the inner Coast Ranges and extending eastward into the Central Valley. There are no major watercourses in the study area with the exception of two large north-south irrigation canals, Tehama-Colusa Canal and the Glenn-Colusa Canal. The elevation within the survey area ranges from approximately 48 feet above sea level in the interior of the Central Valley to approximately 645 feet above sea level along the western edge of the survey area. After transitioning onto the floor of the Central Valley, elevation slopes imperceptibly from west to east.

Land Use

The dominant land use in the study area is agricultural, and the dominant agricultural land cover types are rice and orchards. Rice has long been a staple of Colusa County agriculture and the largest number of acres continue to be devoted to rice production. Orchards, particularly with the relatively recent and ongoing expansion of almonds and pistachios, occupy the second largest number of agricultural acres in Colusa County. The conversion to orchards has had the effect of reducing the acreage devoted to annually or periodically rotated irrigated cropland, which includes a variety of crops historically common in Colusa County such as tomatoes, wheat, corn, and alfalfa (https://www.countyofcolusa.org/485/Colusa-County-Crop-Reports). As a result, the majority of the agricultural land use in the study area is currently not conducive to maintaining a high density of breeding Swainson's hawks.

Grazed annual grasslands occur along the western edge of the study area, including the project area, within the low-elevation foothills of the inner Coast Ranges (Plate 9). This area is characterized by hilly, treeless grassland areas, occasional ephemeral drainages supporting narrow bands of riparian woodland dominated by willow and cottonwood trees, and savannahs supporting scattered valley oak, blue oak (*Quercus douglasii*), live oak (*Quercus wislizeni*), and foothill pine (*Pinus sabiniana*) trees. In some areas, including portions of the project site, grazing areas are also occasionally cultivated with foothill grains or hays.



Plate 9. Looking north along the transition from foothill grasslands on the lower eastern slopes of the inner Coast Ranges to orchard-dominated agricultural land.

Relatively small irrigated pastures occur in the study area, particularly on the west side of the Central Valley, likely supporting the cattle operations occurring throughout the adjacent grassland foothills. Urbanization is largely restricted to the city of Williams and several large agricultural processing facilities. Rural residences are also scattered throughout the agricultural landscape; however, these 1- to 2-acre sites were incorporated into the surrounding agricultural land use.

Due primarily to the extent of rice and orchard land uses, trees – particularly those suitable for raptor nesting – occur infrequently in the study area. Narrow riparian areas support occasional willow and cottonwood trees, and the grassland foothills support scattered oak trees. Trees also occur along roadsides and at rural residences.

Methods

Assessment of Populations

The goal of the nesting survey was to record all active Swainson's hawk nests within the study area. While the survey focused primarily on nesting Swainson's hawks, activity and nesting data were also collected on several other species that compete for nesting and/or foraging habitat resources and may influence the distribution and abundance of Swainson's hawk, including red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), great-horned owl (*Bubo virginianus*), and common raven (*Corvus corax*).

The study area was selected by establishing a minimum 10-mile radius area extending from the edges of the project site boundary. Because the Project is irregularly shaped, the study area was expanded outward until a circular-shaped study area was achieved. Because the proposed project is on the extreme western edge of the Swainson's hawk breeding range, the portion of the 10-mile radius circle that was outside of the breeding range was excluded. As a result, the study area includes a total of 103,827 acres (162 square miles) (Figure 6).

Surveys were conducted over 4 survey days between April 20 and April 23, 2021. Swainson's hawks were in the latter stages of the early portion of the reproductive cycle and engaged in nest construction, incubation, food provisioning by males, and territory defense. In all cases, both adults were present and visible at active nest sites. Follow-up surveys to determine status during later stages of the reproductive cycle or reproductive outcome of active nests were not conducted. The survey was designed as a complete census. All potential nesting areas within the study area were surveyed equally according to the protocol described below.

Surveys were conducted by systematically driving all available roads within the study area. Where roads were not available to drive or where there were no roads to access potential nest trees, the survey was conducted on foot unless access to private property was not granted. In general, access and visibility of potential nesting habitat in the study area was very good.

All suitable nesting habitats were checked for the presence of adult Swainson's hawks and other raptor species and to note all nesting activity and behavior (e.g., nest construction, incubation, nest provisioning, defensive behavior). All trees were searched for the presence of active nests. Nest site and habitat data were recorded on a standardized field form. Activity was noted and mapped on field maps; locations of active nests were documented on 7.5-minute USGS quadrangle maps and a hand-held GPS unit was used to record coordinates of each nest. Photographs were taken of each active nest site and surrounding land use.

Activity data were recorded based on the following definitions (Postupalsky 1983):

- *Occupied Nesting Territory:* a nesting area in which a pair of raptors display activity indicating territory establishment. Territories were considered occupied when the following activities and behaviors were observed: regular presence and activity of adults, courtship displays, circling low above the nest tree or nesting stand, defensive behavior, prey exchanges and prey delivery to the nest. The nesting territory location was plotted based on the location of the nest, or if the nest was not located based on the primary area of observed activity within potential nesting habitat.

- A*ctive Nest:* the nest within the occupied nesting territory for which egg laying was confirmed through direct observation of incubating adults or if the nest is concealed from direct observation, a combination of behaviors that indicate the presence of an active nest (e.g., food provisioning, visual or auditory confirmation of young, defensive behaviors).

Each occupied nesting territory was characterized with respect to overall habitat conditions and availability and land use patterns. Each active nest site was characterized with regard to nesting habitat type and condition, tree species, and estimated tree and nest height.

Distribution of Nesting and Foraging Habitats

The distribution and characterization of land uses and habitat types throughout the study area was documented and mapped initially as a desktop exercise using Google Earth Pro followed by field verification during the survey effort using eight 7.5-minute USGS quadrangle maps (Figures A-1 through A-8 in Appendix A). To determine the distribution of suitable foraging habitat in the study area, land cover types were documented according to the categories listed below. Using the USGS base maps, field boundaries were recorded, confirmed, or adjusted as needed.

- Rotated cropland
- Rice
- Orchards
- Vineyards
- Irrigated pastureland
- Natural land (includes all uncultivated grassland and scrub natural communities)
- Developed land (excluding rural residential less than 1 acre)

With the exception of rotated cropland, the agricultural types listed above, including rice and orchard – the dominant agricultural land uses in the study area – are considered perennial agricultural land uses. These are differentiated from annually or periodically rotated crop types, such as corn, tomatoes, and alfalfa, which were grouped into a single broad category (rotated cropland).

In addition, the following nesting habitat types were also identified, mapped, and characterized; however, acreages or other measures of abundance were not calculated for these types:

- Riparian
- Tree row
- Tree grove/savanna
- Isolated trees

Maps developed from aerial interpretation and field verification were then converted to graphic maps using Adobe Illustrator (See Figures A-1 through A-8 in Appendix A).

Habitat/land cover acreages were calculated from the graphic maps using a plug-in filter from Telegraphics Inc. While this process provided an accurate representation, and particularly relative abundance of the mapped types across the landscape, it did not exclude roads, rural residences less than 1-acre, uncultivated field borders, and other edge features. As a result, the acreage totals may exceed the actual acreage for most types. However, at the scale of the study area and for purposes of this study where characterizing broader landscapes is most important, this was considered to have a negligible effect on the total calculations or the relative abundance of the various types. The distribution and abundance of Swainson's hawk was analyzed with respect to these broad habitat associations.

The data collected during this survey and assessment were not subjected to statistical analysis for purposes of analyzing habitat use preferences or differences between data sets. The data were used solely to report and describe the current nesting distribution and habitat associations of Swainson's hawk and other raptors within the study area. The data were then used to assess the significance of the removal of habitat as a result of project implementation pursuant to CEQA guidance.

Results

Distribution and Abundance

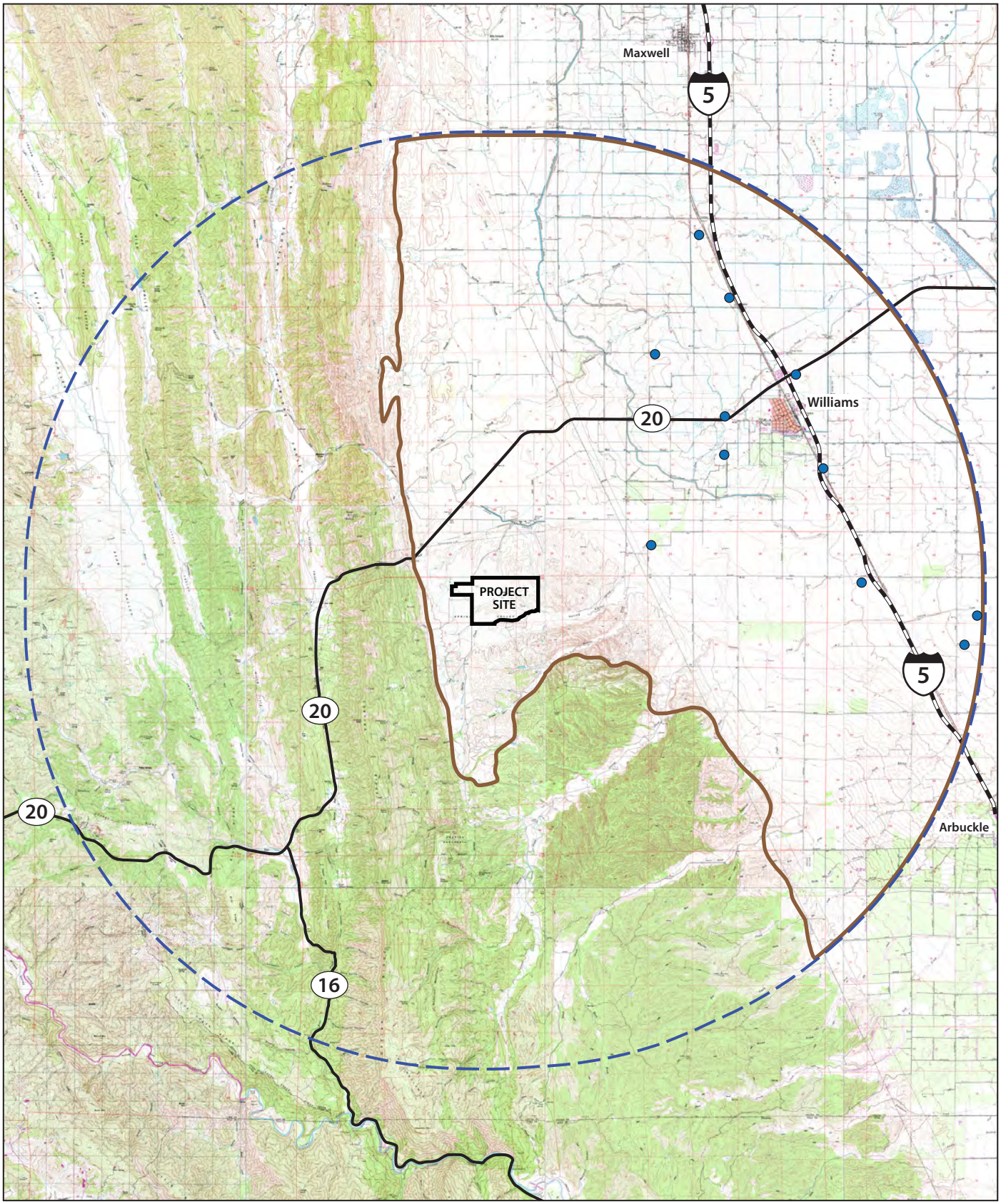
A total of 11 Swainson's hawk nests were documented during the survey (Figure 7, Appendix A, Maps A-1 through A-8). Table 1 provides the location of each nest site along with the nesting habitat and nest tree.

Table 1. Swainson's hawk nest site locations and nesting habitat type within the study area.

Site #	USGS Quad	Location	GPS coordinates		Nesting Habitat	Nest Tree
SH1	Williams	SW corner of I-5 and SR20	39.166920	-122.147776	Tree row	Eucalyptus
SH2	Williams	99W, 0.36mi N of Haas Rd	39.194291	-122.173419	Tree row	Elm
SH3	Williams	Lurline Creek, 0.44mi S of Lurline Ave.	39.211894	-122.184636	Riparian	Willow
SH4	Williams	Salt Creek, just N of SR20	39.153573	-122.177502	Riparian	Willow
SH5	Williams	W side Hankins Rd, 0.7mi S of SR20	39.142271	-122.175618	Channelized Riparian	Willow
SH6	Williams	Freshwater Rd, 0.9mi W of Gibson Rd	39.174437	-122.205261	Isolated roadside tree	Willow
SH7	Williams	99W at I-5 crossing	39.137221	-122.135306	Isolated roadside tree	Elm
SH8	Arbuckle	0.3mi E of Lone Star Rd, 1.5mi N of Hahn Rd	39.079004	-122.073395	Isolated tree	Willow
SH9	Arbuckle	0.5mi E of Long Star Rd, 0.8mi S of Myers Rd	39.088826	-122.069778	Isolated tree	Willow
SH10	Arbuckle	300ft S of Myers Rd, 700ft W of I-5	39.100166	-122.117593	Farmyard tree	Valley oak
SH11	Cortina Creek	N side of Hill Rd, 0.7mi N of Myers Rd	39.111527	-122.205741	Rural Residence	Sycamore

S = Successful, F = Failed, NN = active territory but not nesting, U = undetermined

The relatively few active Swainson's hawk nests were distributed mainly in the eastern half of the study area and were generally associated with remaining patches of suitable agricultural land cover (e.g., irrigated cropland, irrigated pasture) (Figure 7, Appendix A, Maps A-1 through A-8). Five of the 11 nest sites were closely associated with the I-5 corridor where suitable nest trees occur along frontage roads. There were no active nests in the western portion of the study area. All nests were associated with cultivated land cover and none with the foothill grasslands on the western edge of the Central Valley.



05/01/2021

LEGEND

- Project Site
- 10-Mile Radius around Project Site
- Study area
- Swainson's Hawk Nest

NORTH

0 1 2 3 4

Miles

Figure 7
Swainson's Hawk Nest Site Locations within the Study Area

Breeding Density

Breeding density, based on the number of active nest sites per square mile, across the study area was 0.07 active nest sites/mile^2 (0.03/km^2). This is a low nesting density compared with other Sacramento Valley breeding populations (e.g., 0.49/mile^2 [0.19 km^2] in Yolo County [Estep 2020]), but similar to the low densities found in the Central San Joaquin Valley (0.06/mile^2, 0.02/ km^2) (Estep and Dinsdale 2012) and in other portions of the breeding range outside of the Central Valley (Schmutz 1987, Bednarz et al. 1990, Woodbridge et al 1995).

Proximity of Nest Sites to the Project Site

Figure 7 and Figures A-1 through A-8 in Appendix A illustrate the geographic relationship of the project site to the 11 Swainson's hawk nest sites in the study area. Of the 11 nest sites, none are within 1 mile of the Project site, one is within 5 miles, and ten are within 5 to 10 miles of the project site.

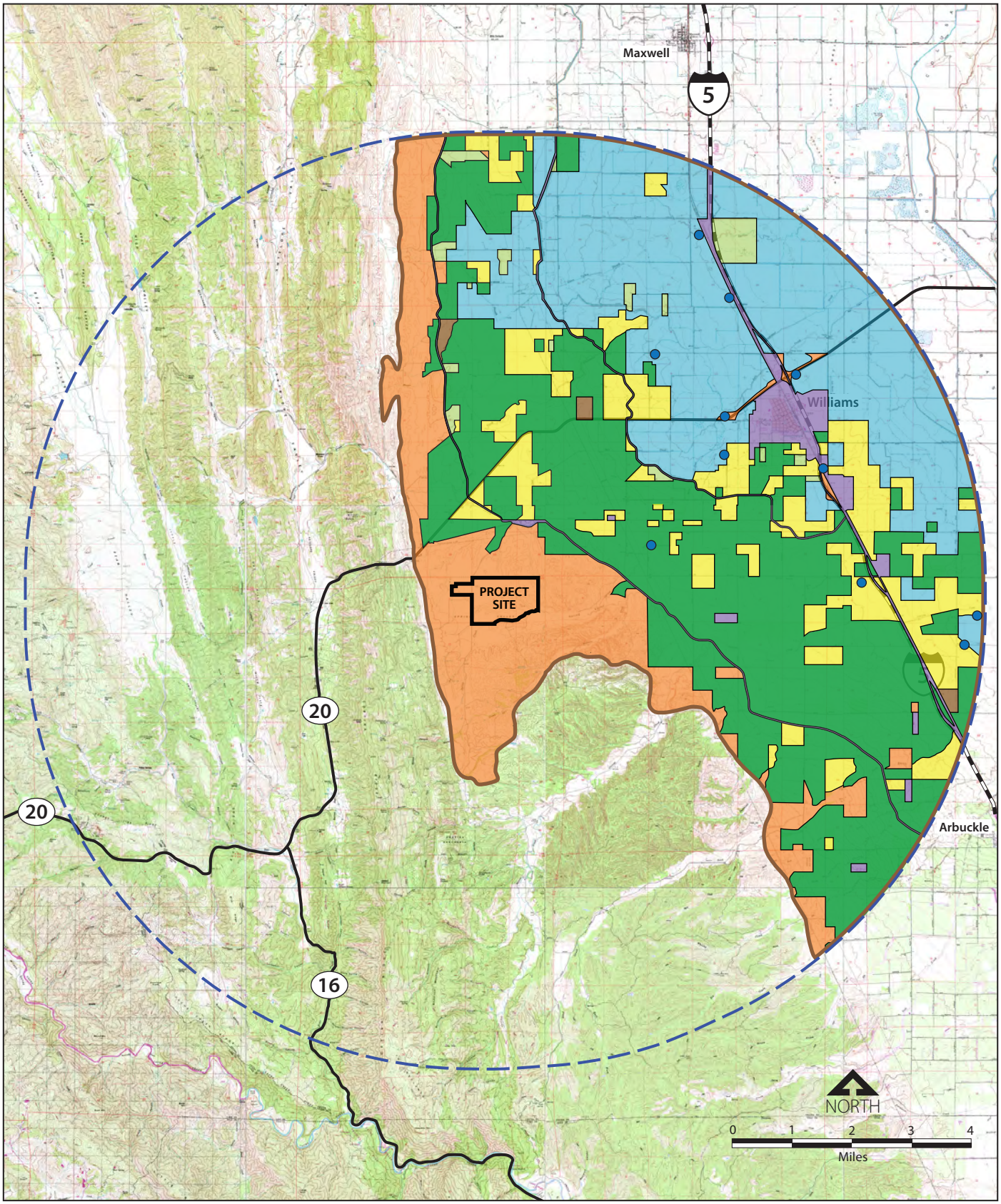
Habitat Associations

Land Cover

Figure 8 and Maps A-1 through A-8 in Appendix A illustrate the distribution of land cover types across the entire study area. Table 2 summarizes the acreages and relative abundance of each of the seven defined land cover types in the study area. (Note that nesting habitat types, including riparian, tree groves, and tree rows, are not included in the acreage calculations; although they are generally mapped on Figure 10 [see below]). Brief descriptions of each follows.

Table 2. Land use acreage totals within the study area (*suitable foraging land use types are highlighted in green, unsuitable foraging land use types are highlighted in yellow*).

Land Use Type	Acres	Percent of Total
Orchard	37,813	36.4
Rice	29,637	28.5
Grassland	18,581	17.9
Rotated Cropland	12,566	12.1
Developed Land	3,493	3.4
Irrigated Pasture	1,405	1.3
Vineyard	332	0.4
Total Acreage	103,827	100
Total Suitable Foraging	32,552	31.4
Total Unsuitable Foraging	71,275	68.6



LEGEND

Project Site
Study Area
Approximate 10-Mile Radius around Project Site

Grassland
Rice
Vineyard
Developed
Orchard
Irrigated Pasture
Irrigated Cropland
Swainson's Hawk Nest

Figure 8
Land Use within the Study Area

Orchard and Vineyard. These perennial crops develop a vegetative overstory that usually precludes access by foraging Swainson's hawks and most other raptors (Plate 10). Although Swolgaard et al. (2008) found some limited use of vineyard habitats, both types are generally considered incompatible with Swainson's hawk foraging. Both types, but particularly orchards, have undergone a substantial increase in areal extent in the study area and currently represent a combined 36.8% of the land area (Figure 8, Table 2).



Plate 10. Orchards dominate the agricultural landscape throughout much of the study area and create a dense canopy that substantially reduces raptor foraging use.

Rice. Rice cultivation is also a dominant land cover in the study area and tends to be relatively stable within the cultivated matrix because of its association with specific soil conditions. Most of the northeastern portion of the study area is rice monoculture. Active rice fields are flooded much of the spring/summer breeding season, and are therefore considered unsuitable as Swainson's hawk foraging habitat (Plate 11). Swainson's hawk generally avoid large rice monocultures. However, when rice fields are intermixed with other upland crop types, the edges and borders may provide some foraging value to Swainson's hawks. Fallowed rice fields often develop herbaceous weedy vegetation capable of supporting rodent or insect prey populations and thus can also provide some foraging value to Swainson's hawks and other raptors. Depending on the timing of spring flood-up, rice fields may also provide foraging value during field preparation and initial flood-up, which can expose rodent prey. Rice cultivation comprises 28.5% of the land area (Figure 8, Table 2).



Plate 11. Rice cultivation is the dominant land use in the north and northeastern portion of the study area. Once flooded, usually in April or May, they eliminate potential foraging habitat for raptors except along the narrow rice checks. Also, trees that are usually tolerated in areas of rotated cropland are often removed in rice and orchard-dominated agricultural landscapes, reducing potential raptor nesting habitat.

Rotated Cropland. This type is defined as areas that are dominated by crop patterns that involve annual, seasonal, or periodic rotation. This includes field and vegetable crops (e.g., tomatoes, wheat, corn, sunflower, safflower) and hay crops (e.g., alfalfa, barley, oats, ryegrass, Sudan grass). As a whole, this type is considered suitable foraging habitat for Swainson's hawk; however, suitability varies among specific crop types based on vegetation structure and planting/harvesting regime, which influence prey accessibility (Estep 2009, Bechard 1982). This is typically the dominant agricultural land cover in areas of high Swainson's hawk and other raptor breeding density. With the extent of historic rice cultivation and increasing orchard crops in the study area, this is a relatively small and declining portion of the agricultural landscape in the study area comprising only 12.1% of the land area, with remaining patches intermixed within the dominant orchard land cover (Figure 8, Table 2).

Irrigated Pasture. Irrigated pastures grow irrigated grasses or forbs grazed by livestock or periodically cut for hay. Depending on rodent availability, grazing intensity, and haying frequency, irrigated pastures can provide moderate to high value foraging habitat for Swainson's hawks and other raptors because they usually maintain low vegetative cover and are available for

foraging throughout the breeding season. Irrigated pastures comprise only a small proportion (1.3%) of the study area (Figure 8, Table 2).

Grasslands/Oak Savannah. Other than several small patches of ruderal grassland found along roadsides or fallow fields, grassland land cover occurs mainly along the western edge of the study area and are associated with the low-elevation foothills of the inner Coast Ranges. Although for purposes of this report this area is considered grassland in total, it also includes areas of oak savannah where patches of blue oak and live oak occur along the edge of the Swainson's hawk range, and valley oak-dominated riparian, which extends through the grasslands along narrow ephemeral stream corridors originating in the higher elevations to the west. These foothill prairies are dominated by annual grasses and are used primarily for livestock grazing. As a whole, grasslands are considered moderately suitable foraging habitat for Swainson's hawk, more closely resembling the pre-agriculture foraging landscape. Grasslands comprise 17.9% of the land use within the survey area and is the land use associated with the project site (Figure 8, Table 2).

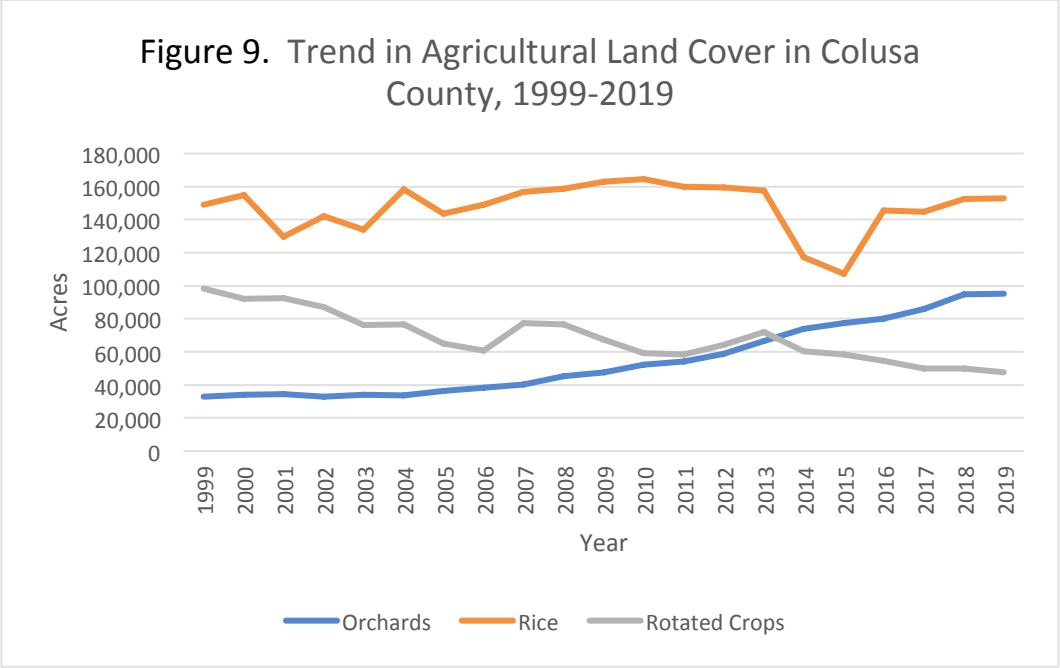
Developed. Developed areas are defined as high density development (e.g., the City of Williams), low density development (e.g., ranchette-type around the perimeter of Williams), and industrial areas including large agricultural processing facilities. Interstate 5 and large irrigation canals were also considered developed land use. Although Swainson's hawks will nest in suitable trees within urban areas (Figure 6), these types do not provide suitable foraging habitat for Swainson's hawk. Developed land uses comprise 3.4% of the land use within the survey area (Figure 8, Table 2).

Foraging Habitat

Like much of the Central Valley, the agricultural landscape in the study area has undergone substantial recent conversion to nut orchards, primarily almonds and pistachios (See Colusa County Crop Reports [https://www.countyofcolusa.org/485/Colusa-County-Crop-Reports]). The extent of land cover converted to orchard has approximately tripled in Colusa County since 1999 resulting in a substantial reduction of rotated crop acreage in the county and within the study area (Figures 8 and 9). Orchards have also encroached into the westside grassland foothills, reducing the extent of annual grasslands. Rice cultivation has been a mainstay of agriculture in Colusa County for many decades and occupies a large portion of the study area (28.5%). Land cover devoted to rice production has remained relatively stable in the county (Figure 9) and in the study area, but with expansion of orchards, the combined acreage for rice and orchard cultivation, both considered low or unsuitable land cover for Swainson's hawks, is currently 65% of the study area (Figure 8, Table 2). Along with a small amount of vineyard cultivation and developed land, nearly 70% of the study area is considered low value or unsuitable land cover for Swainson's hawks.

Suitable foraging habitat for Swainson's hawks in the study area include the remaining areas of rotated cropland, the small patches of irrigated pasture, and the grassland foothills, which

together comprise just over 30% of the study area. While irrigated pasture and grassland habitats provide relatively consistent value as foraging habitat, rotated cropland may be less consistently available throughout the breeding season. Swainson's hawk use of cultivated lands is primarily affected by vegetation structure (i.e., height and density) (Bechard 1982, Swolgaard et al. 2008, Estep 2009), which can change seasonally and annually based on planting, growth, and harvesting regimes of different crop types. As a result, within the study area, the extent of available habitat may be less than 30% during portions of the breeding season.

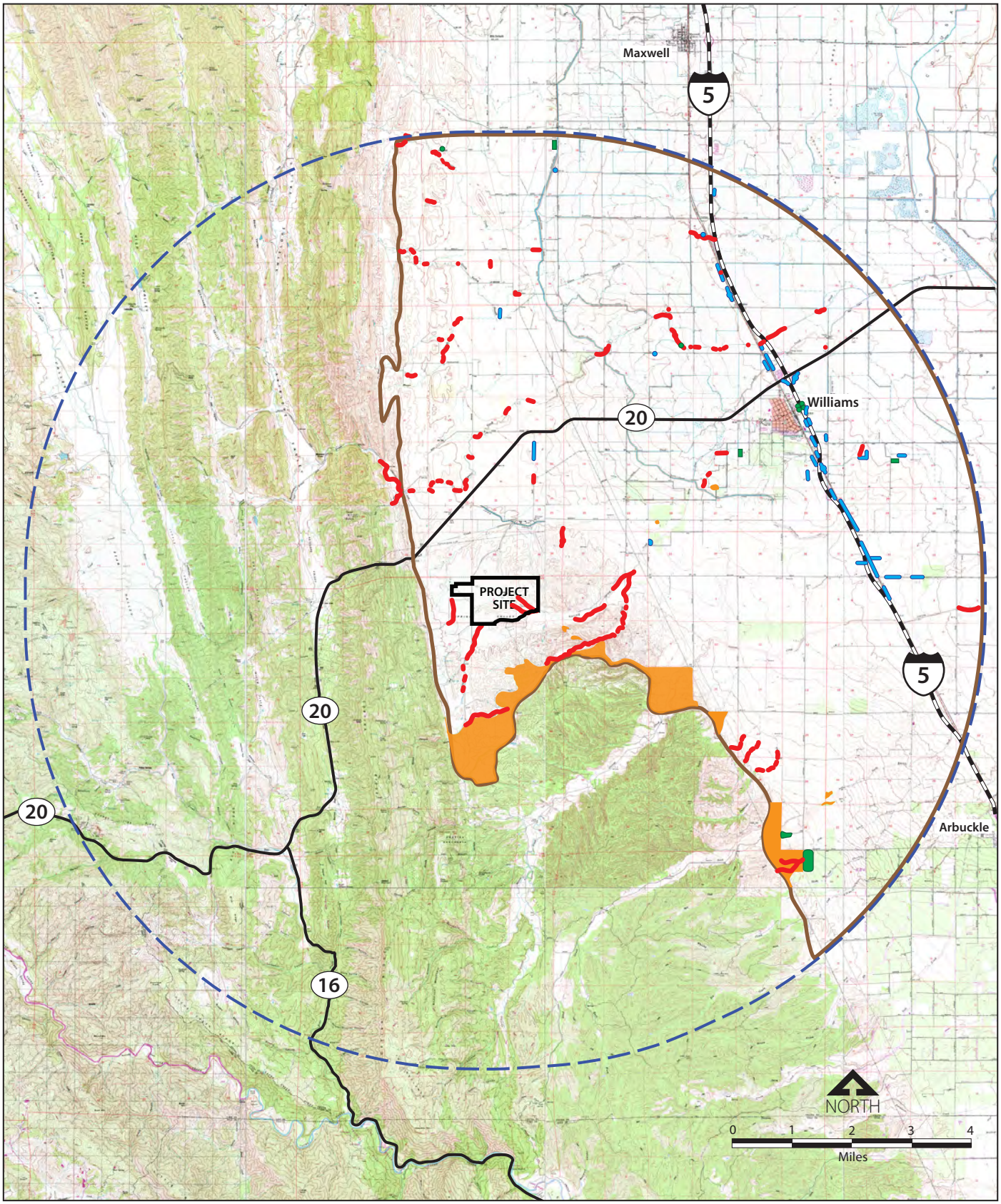


Nesting Habitat

Suitable Swainson's hawk nesting habitat is sparsely distributed in the study area. Already substantially reduced from the conversion of native to agricultural land cover, rice and orchard cultivation tends to further reduce available nesting habitat by removing roadside trees, remnant trees in fields, riparian trees, and other remnant habitats that supported native trees to a greater extent than is associated with rotated cropland. Figure 10 illustrates the general distribution of suitable nesting habitats in the study area (excluding isolated trees and trees associated with urban or rural residences).

Several nesting habitat types occur in the study area, although all are limited in extent. Brief descriptions follow.

Riparian. This includes patches of oak and cottonwood-willow-dominated riparian along narrow stream corridors flowing eastward from the grassland foothills, including Spring



LEGEND

- Project Site
- Study Area
- Approximate 10-Mile Radius around Project Site
- Outside of Study Area
- Riparian
- Tree Grove
- Tree Row
- Oak Savanna

Figure 10
Distribution of Suitable Swainson's Hawk Nest Habitat within the Study Area

Creek, Cortina Creek, Freshwater Creek, Salt Creek, and Lurline Creek. Most of these small drainages are natural as they flow through the foothill grasslands but become channelized as the continue onto the valley floor. Three Swainson's hawk nests occur along these narrow riparian corridors (Table 1, Figure 10, Plate 7).

Tree Row. Tree rows consist of planted rows of trees along field borders, roadsides, or rural driveways. Many were originally planted as visual barriers or windbreaks, but others developed along field borders naturally and were allowed to grow and mature. In the study area, most tree rows are small and consist of elm, willow, cottonwood, and eucalyptus trees. Two Swainson's hawk nests occur along tree rows (Table 1, Figure 10, Plate 12).



Plate 12. Swainson's hawk nest SH-2, in a roadside tree row along road 99W, north of Williams. The nest is in central-left side of this elm tree.

Isolated Trees. Isolated trees are single trees (and occasionally two or three trees) found along field borders, roadsides, or along stream corridors. In the study area, most of these are small willow trees. Four Swainson's hawk nests occur in isolated trees (Table 1, Figure 10, Plate 13).



Plate 13. Swainson's hawk nest SH-6, an isolated group of three willow trees along Freshwater Road.

Savannah. The western edge of the survey area supports oak savannah in the grassland foothills and patches of blue oak/foothill pine woodland at the higher elevations. No Swainson's hawk nests occur in savannah habitats or elsewhere in the foothill grasslands.

Rural Residence and Farmyard. Rural residential includes trees planted for windbreak cover, shade or ornamentals around rural farmsteads. These trees are of a variety of species, including sycamore, willow, ornamental pine, eucalyptus, and valley oak. Farmyards are sites along the edges of agricultural fields that are used for equipment staging for planting and harvesting operations or storage of farm equipment. They occasionally have trees within or around their perimeter, and are sometimes associated with rural residences. One Swainson's hawk nest occurs at a rural residence and one is in a farmyard (Table 1, Figure 10).

Urban/Developed. Urban trees are large remnant native or nonnative ornamental trees within dense urban areas. Swainson's hawks will occasionally occupy these sites if the tree is large and the nest can be visually protected from disturbance, and the site is within 1 to 2 miles from foraging habitat (England et al. 1995). Swainson's hawk nests have been documented within the urban areas of Davis and Woodland, most in ornamental pines or redwoods or remnant native valley oaks (England et al. 1995). The are numerous suitable nest trees within the Williams urban area; however, no active nests were detected.

Swainson's Hawk Use of the Study Area

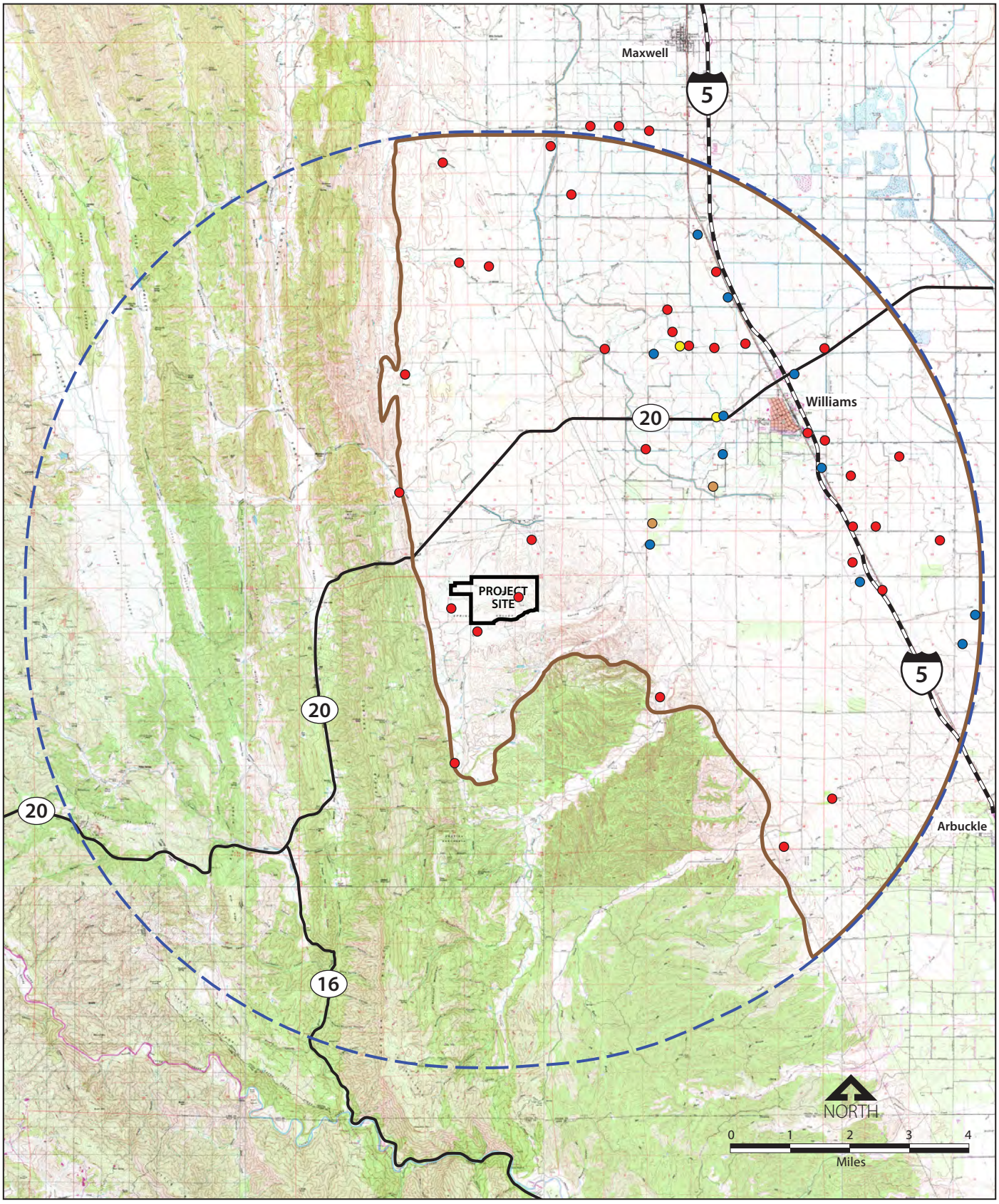
All observations of Swainson's hawks during the survey effort were in the vicinity of active nest sites and all were associated with irrigated agriculture. Foraging activity was observed in the remaining patches of suitable rotated agricultural fields and in pre-flooded rice fields. No Swainson's hawks were observed in the west side foothill grasslands, including on or near the project site. However, two adult Swainson's hawks were observed on the project site in 2020 during initial biological surveys for the proposed project (Tetra Tech 2021).

The change in agricultural land cover over the last 20 years suggests the Swainson's hawk breeding population within the study area has declined over time as suitable foraging and presumably nesting habitat has declined due to the continued proliferation of nut orchards. The low breeding density suggests the current population maximizes use of the remaining suitable habitat patches and to some extent relies on pre-flooded rice fields in late March and April during the early stages of the breeding cycle. Once flooded, the rice fields along the with orchard areas reduce available habitat within the study area to approximately 30%. Although the foothill grasslands are considered suitable foraging habitat for Swainson's hawks, use of this area is likely only occasional due to reduced microtine rodent prey populations and the presence of the more common red-tailed hawk, a species more common to the foothill grassland and savannah habitats.

The Swainson's hawk is a wide-ranging species that can travel substantial distances to hunt. Foraging ranges of individual birds can exceed 20,000 acres (Estep 1989, Babcock 1995, Fleishman et al 2016). The size and configuration of foraging ranges is highly dynamic seasonally and annually based on crop patterns and the planting, growth, and harvesting regime, which influences prey availability and accessibility (Estep 1989, 2009). It is likely that the eleven pairs of Swainson's hawk nesting within the study area expand their foraging ranges as rice fields are flooded in April and May. This expansion likely occurs to the east, north, and south where additional patches of suitable rotated cropland foraging habitat are available. Due to prey limitations in the foothill grasslands and the presence of the competing red-tailed hawk, foraging use westward toward the edge of the Central Valley and breeding range of the Swainson's hawk is likely limited.

Other Raptors

Red-tailed is the most common nesting raptor in the study area. A total of 36 active red-tailed hawk nests were recorded, more than three times the number of Swainson's hawks (Table 3, Figure 11, Appendix A, Maps A-1 through A-8). Although distributed throughout the study area, 12 of the 36 active nests were associated with the foothill grasslands. Unlike Swainson's hawks, red-tailed hawks are able to utilize California ground squirrel (*Otospermophilus beecheyi*), common to the foothill grasslands, as a prey species. As a result, the foothill grassland landscape is substantially more conducive to red-tailed hawk occurrence and use. The red-tailed hawk also uses irrigated agriculture where its distribution and habitat requirements



LEGEND

- Project Site
- Approximate 10-Mile Radius around Project
- Study area

Active Raptor Nests

- Swainson's Hawk Nest
- Red-Tailed Hawk Nest
- Red-Shouldered Hawk Nest
- Great-Horned Owl Nest

Figure 11
Distribution of Raptor Nests within the Study Area

overlap with Swainson's hawk. However, with its earlier arrival on the breeding grounds (nesting typically beings several weeks before Swainson's hawk arrive), and its typical perch-and-wait hunting technique, the red-tailed hawk foraging range is generally smaller with a greater tolerance of small patches of suitable habitat. As a result, the study area is considered substantially more conducive to red-tailed hawk occurrence than Swainson's hawk, which is supported by their relative abundance. Where suitable rotated cropland occurs as a greater proportion of the irrigated agricultural landscape, Swainson's hawk populations may be dominant, as in Yolo County where Swainson's hawk nesting territories are three times that of red-tailed hawks (Estep 2020).

Table 3. Other raptor nest site locations and nesting habitat type within the study area.

Site #	USGS Quad	Location	GPS coordinates		Nesting Habitat	Nest Tree
RT1	Manor Slough	Lurline Creek, 0.25mi S of Standard Road	39.235504	-122.294974	Riparian	Cottonwood
RT2	Manor Slough	0.4mi N of La Grande Rd, 1.5mi W of Danley Rd	39.203360	-122.274198	Channelized riparian	Willow
RT3	Manor Slough	0.37mi S of Bagley Rd, 2.2 mi W of Danley Rd	39.202551	-122.287425	Rural Residential	Willow
RT4	Manor Slough	Manor Slough, 0.43 mi E of Harlan Rd	39.168561	-122.311549	Riparian	Cottonwood
RT5	Manor Slough	Freshwater Creek, 0.2mi W of Leesville Rd	39.125108	-122.311058	Riparian	Willow
RT6	Williams	W side of Danley Rd, 0.4mi S of Fairview Rd	39.242399	-122.247261	Small grove	Willow
RT7	Williams	0.3mi E of Danley Rd, 0.5mi N of Lurline Ave	39.226121	-122.240958	Channelized riparian	Willow
RT8	Williams	Fairview Rd, 0.46mi W of Wells Rd	39.248701	-122.227297	Tree Row/Rural Residential	Eucalyptus
RT9	Williams	Fairview Rd at Wells Rd	39.247847	-122.218496	Roadside tree	Eucalyptus
RT10	Williams	Fairview Rd, 0.9mi W of Old Hwy99	39.247457	-122.208266	Roadside tree row	Eucalyptus
RT11	Williams	Old Hwy99, 0.75mi N of Haas Rd	39.199305	-122.176458	Roadside tree	Eucalyptus
RT12	Williams	Freshwater Creek, 0.6mi W of Gibson Rd	39.186461	-122.200145	Riparian	Cottonwood
RT13	Williams	Freshwater Creek, 190ft N of Freshwater Rd	39.175308	-122.225934	Riparian	Cottonwood
RT14	Williams	Freshwater Creek, 0.43mi W of Gibson Rd	39.180314	-122.197133	Riparian	Cottonwood
RT15	Williams	Freshwater Creek at Gibson Rd	39.176614	-122.189291	Riparian	Cottonwood
RT16	Williams	Freshwater Creek, 0.38mi E of Gibson Rd	39.176325	-122.182041	Riparian/ isolated tree	Cottonwood
RT17	Williams	Freshwater Creek, 0.3mi E of Old Hwy 99W	39.177296	-122.167999	Riparian/ isolated tree	Cottonwood

Site #	USGS Quad	Location	GPS coordinates	Nesting Habitat	Nest Tree	
RT18	Williams	W side of Husted Rd, 0.1mi N of SR 20	39.175782	-122.133094	Rural residential	Eucalyptus
RT19	Williams	Salt Creek, 0.5mi E of E Camp Rd	39.142595	-122.207275	Channelized riparian	Willow
RT20	Williams	250ft S of Theater Rd, 0.1mi E of 7th Street	39.148008	-122.141040	Semi-urban	Eucalyptus
RT21	Williams	370ft W of Abel Rd ad Husted Rd intersection	39.144606	-122.133975	Rural residential	Eucalyptus
RT22	Cortina Creek	0.73mi E of Cortina Vineyard Rd, 2mi S of Myers Rd	39.070829	-122.203075	Savannah	Blue oak
RT23	Cortina Creek	0.5mi W Corina School Rd, 0.1mi S of Sand Creek Rd	39.016453	-122.153300	Savannah	Foothill Pine
RT24	Cortina Creek	Sand Creek, 0.7mi E of Cortina School Rd	39.028123	-122.129914	Savannah	Valley oak
RT25	Arbuckle	0.2mi N of Ware Rd along Old Hwy 99W	39.118057	-122.122986	Roadside tree row	Elm
RT26	Arbuckle	0.12mi N of Ware Rd, 0.6mi E of I-5	39.117603	-122.111724	Rural residential	Elm
RT27	Arbuckle	0.3mi N of Myers Rd, 0.2mi W of I-5	39.105294	-122.120796	Tree row	Cottonwood
RT28	Arbuckle	0.37mi S of Ware Rd, 0.5mi W of Lone Star Rd	39.110158	-122.088333	Tree row	Willow
RT29	Arbuckle	E side of I-5, 0.33mi S of Myers Rd	39.097064	-122.112245	Roadside tree	Cottonwood
RT30	Colusa	0.45mi S of Able Rd, 1.3mi W of Lone Star Rd	39.138383	-122.102772	Wetland	Willow
RT31	Colusa	0.75mi S of Able Rd, 0.28mi E of Husted Rd	39.134133	-122.127541	Rural residential	Eucalyptus
RT32	Salt Canyon	0.22mi S of Walnut Dr, 0.5mi E of Spring Valley Rd	39.116929	-122.256626	Riparian	Cottonwood
RT33	Salt Canyon	0.4mi W of Spring Valley Rd, 2mi S of Walnut Dr	39.091287	-122.289048	Riparian	Cottonwood
RT34	Salt Canyon	1.2mi E of Spring Valley Rd, 1.9mi S of Walnut Dr	39.092621	-122.259002	Riparian	Willow
RT35	Salt Canyon	0.06 mi E of Spring Valley Rd, 2.7mi S of Walnut Dr	39.087703	-122.272926	Riparian	Valley oak
RT36	Salt Canyon	0.24mi W of Spring Valley Rd, 5.5mi S of Walnut Dr	39.040075	-122.288403	Savannah	Live oak
RS1	Cortina Creek	Walnut Dr, 0.2mi E of Stovall Rd	39.119484	-122.204439	Rural residence	Sycamore
RS2	Williams	Turner Rd, 0.14mi W of Hankins Rd	39.130920	-122.182502	Roadside tree row	Cottonwood
GH1	Williams	Salt Creek at SR20	39.152761	-122.179540	Riparian	Willow
GH2	Williams	Freshwater Creek, 0.21mi W of Gibson Rd	39.176593	-122.194175	Riparian	Willow

RT = Red-tailed hawk, RS = Red-shouldered hawk, GH = Great-horned owl

Assessment of Project Impacts on the Swainson's Hawk

For purposes of this assessment, the project site is considered the direct impact area; the area immediately surrounding the project site up to 0.5 miles is considered the indirect impact area subject to noise and other construction-related disturbances; and the active Swainson's hawk breeding territories that occur within the study area is the population potentially indirectly affected by the reduction of available land cover resulting from the project.

As noted above, CEQA defines the significance of an impact on a state-listed species based on the following:

- Appendix G of the State CEQA guidelines states that a biological resource impact is considered significant (before considering offsetting mitigation measures) if the lead agency determines that project implementation would result in "substantial adverse effects, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFG or USFWS"; and

- CEQA Section 15065 (Mandatory Findings of Significance), a biological resource impact is considered significant if the project has the potential to "substantially reduce the number or restrict the range of an endangered, rare or threatened species".

To address CEQA guidance pursuant to Appendix G, a threshold of significance is generally established to provide definition and a framework to address the term "substantial adverse effect". For purposes of this assessment, that threshold is conservatively defined to indicate whether or not the impact would affect the distribution and abundance of the existing breeding population or affect the future expansion of that population. So, if it can be demonstrated that a project or projects that reduce available nesting or foraging habitat for Swainson's hawks would in turn reduce the distribution or abundance of the nesting population or prevent expansion of that population, the impact would be considered significant. If, however, it can be demonstrated that removal or alteration of nesting or foraging habitat would not reduce the distribution or abundance of the existing population or prevent expansion of that population, then the impact would be considered less than significant.

Direct Impacts to Active Swainson's Hawk Nests

There are no Swainson's hawk nests on the project site and the nearest active nest is approximately 2.6 miles east of the project site. Therefore, the project will not remove

Swainson's hawk nests or affect activity or reproductive outcome of active Swainson's hawk nests.

Indirect Disturbances to Active Nests

Similarly, because the nearest nest is approximately 2.6 miles from the project site, the project will have no indirect noise or other construction-related disturbances that could potentially affect the activity or reproductive status of active Swainson's hawk nests.

Removal of Suitable Foraging Habitat and Impacts to the Population

Its important to initially note the distinction between photovoltaic solar energy facilities and other types of development. Although altering the foraging landscape, unlike urban or other types of industrial development, photovoltaic solar facilities generally do not result in the permanent removal of all habitat or all biological resource value. The structure is largely above-ground and can allow for ongoing wildlife uses and establishment and maintenance of grasslands and pollinator plants. Array design can also influence continued raptor use and other biological resource values (Taylor et al 2019).

Other than a variety of energy storage, transmission, and other ancillary features, the project primarily involves the placement of a solar array to generate electrical power. The tracking system on the array allows for movement of the solar panels during daylight hours (Figure 3) and thus provides variable open access to the ground during the day. Long-term ground disturbance may be largely limited to installation of the steel posts that support the panels, and thus allowing for continued maintenance of a grassland substrate below the array. As a result, the project area may continue to support a variety of prey species and, depending on the configuration of the array, access by foraging raptors (Estep 2013).

The project would affect up to 580 acres of grazed grassland, some of which may be periodically cultivated for hay or grain, on the extreme western edge of the Swainson's hawk breeding range. This area represents approximately 0.5% of the total study area and 1.8% of the total suitable foraging habitat in the study area, and is located within the larger foothill grassland natural community where the inner Coast Ranges transition toward the floor of the Central Valley. There are no Swainson's hawk nests within or near this foothill grassland transition area, and although suitable for foraging – and foraging by Swainson's hawks has been observed (Tetra Tech 2021), use by Swainson's hawks is likely minimal compared with the irrigated croplands in the interior of the valley. All eleven Swainson's hawk nests in the study area are found within the irrigated agricultural landscape 2.6 miles to nearly 10 miles from the project site (Figure 7). However, eleven of the 36 red-tailed hawk nests occurring in the study area occur in this natural community along the edge of the Central Valley.

The project site and surrounding foothill grassland area is unoccupied by nesting Swainson's hawks and no foraging observations were recorded from this area during surveys for this

assessment. Tetra Tech reported two non-nesting observations during their surveys conducted in 2020 (Tetra Tech 2021), but overall observations and records indicate limited use of the area by Swainson's hawks. This is likely due in part to the extent of red-tailed hawk use of this area, the more abundant prey found in irrigated agricultural habitats to the east, and the location on the extreme edge of the species range. As a result, although suitable, use of the project site and surrounding foothill grasslands by Swainson's hawks is considered low.

Due to the wide-ranging nature of Swainson's hawks, the low breeding density in the study area resulting from incompatible agricultural land uses, and the likelihood of these birds expanding their foraging range eastward, northward, and southward when foraging resources become more limited in the study area due to the flooding of rice fields, the placement of a solar array on the project site is not expected to impact the Swainson's hawk nesting population within the study area. The project would not affect individual nesting territories, affect existing use patterns or future expansion of the population, or affect the status and reproductive potential of the population. Thus, the project would not reduce the number or restrict the range of the species, or otherwise result in substantial adverse effects on the Swainson's hawk.

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The Distribution, Abundance, and Habitat Associations of Nesting Swainson's Hawks (*Buteo swainsoni*) in the Vicinity of the Proposed Janus Solar Project

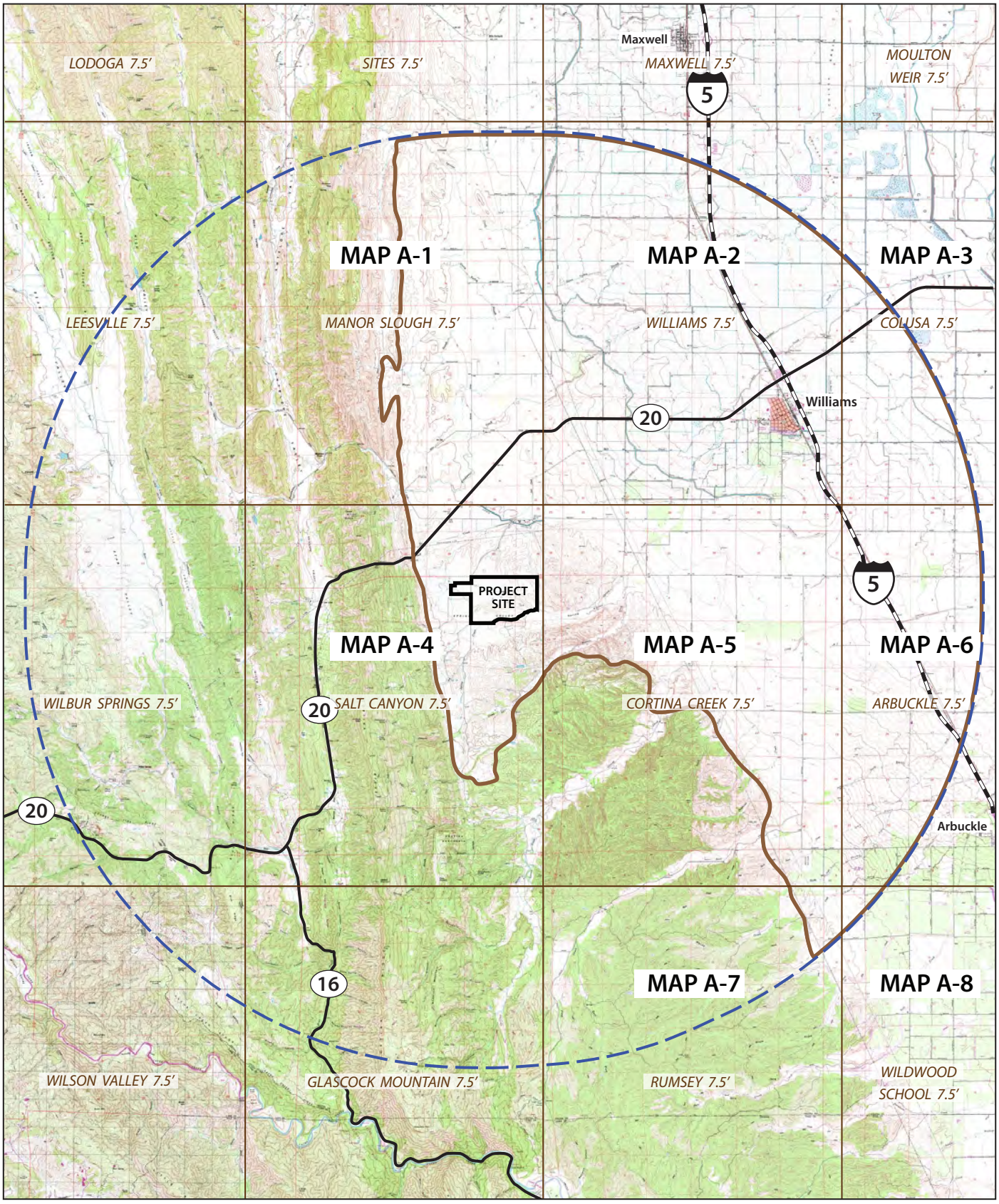
May 2021

APPENDIX A:

Individual Quadrangle Maps with Land Cover and Nesting Territory Locations

Prepared for:
RWR Solar Development, LLC and
Tetra Tech, Inc.

Prepared by:
Estep Environmental Consulting



05/01/2021

LEGEND

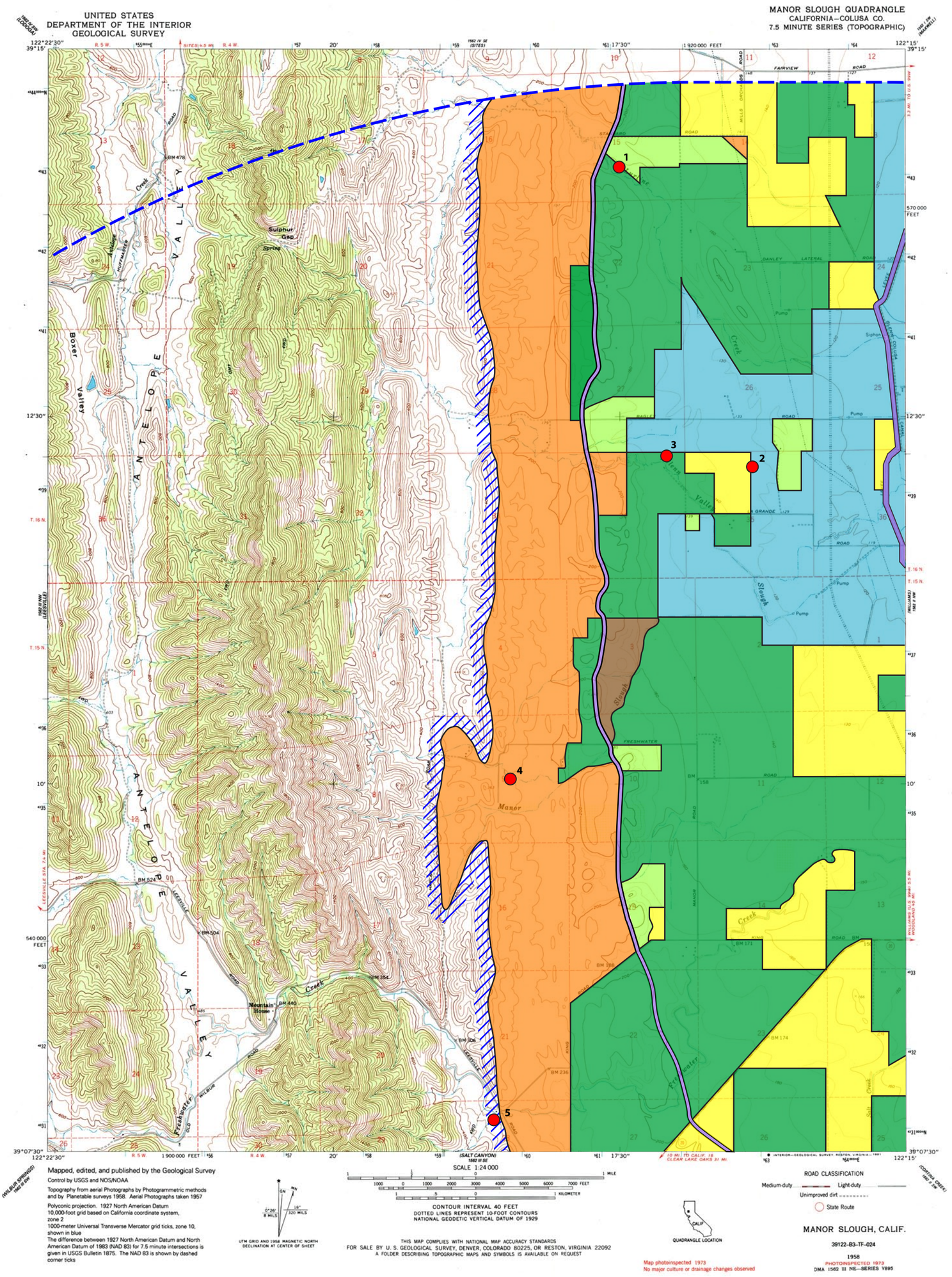
- Project Site
- 10-Mile Radius around Project Site
- Study area

NORTH

0 1 2 3 4

Miles

APPENDIX A
Index Map



10-Mile Radius Study Area

Swainson's Hawk Breeding Range Boundary

Land Use

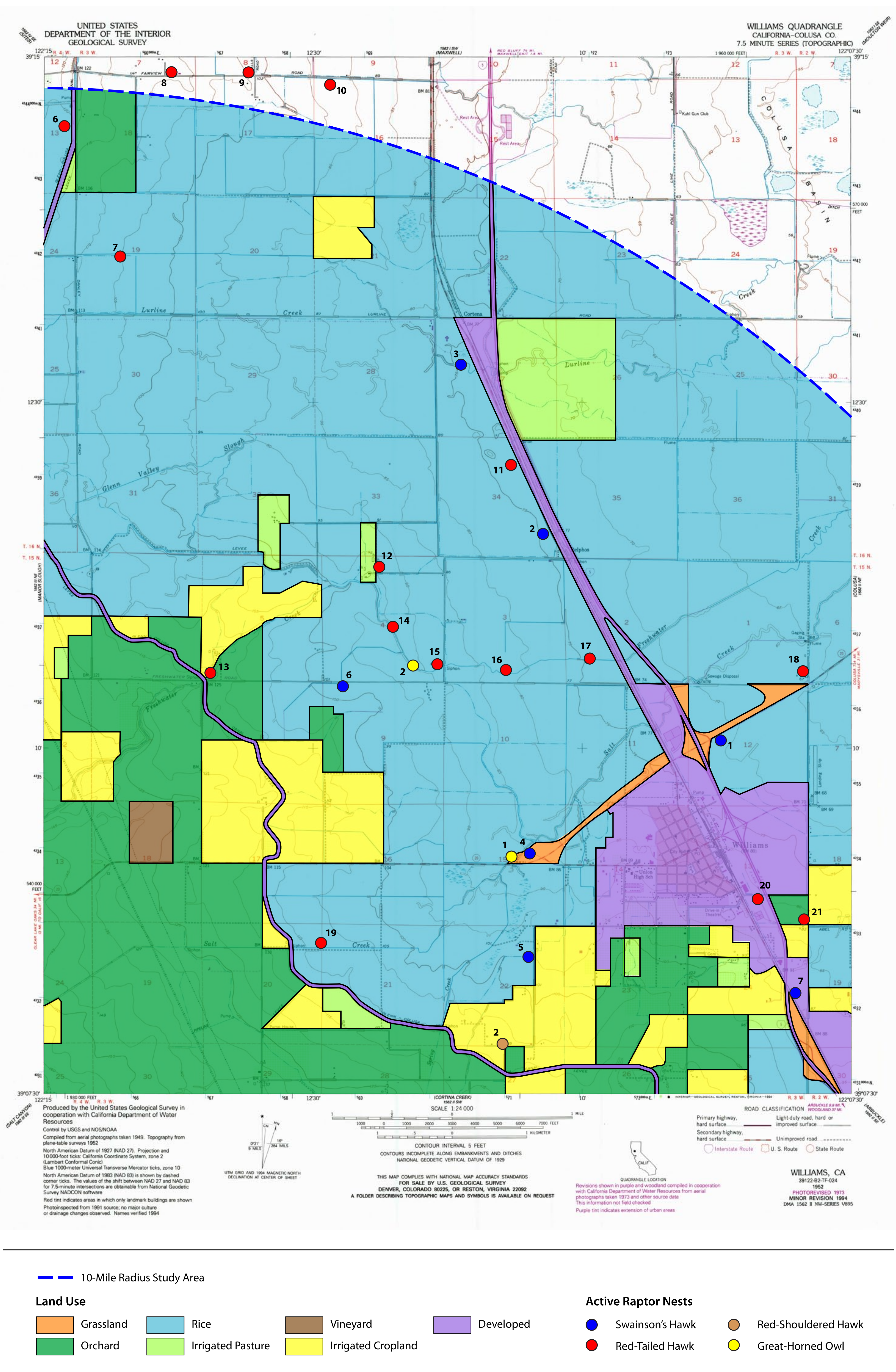
- Grassland
- Orchard
- Rice
- Irrigated Pasture
- Vineyard
- Irrigated Cropland
- Developed

Active Raptor Nests

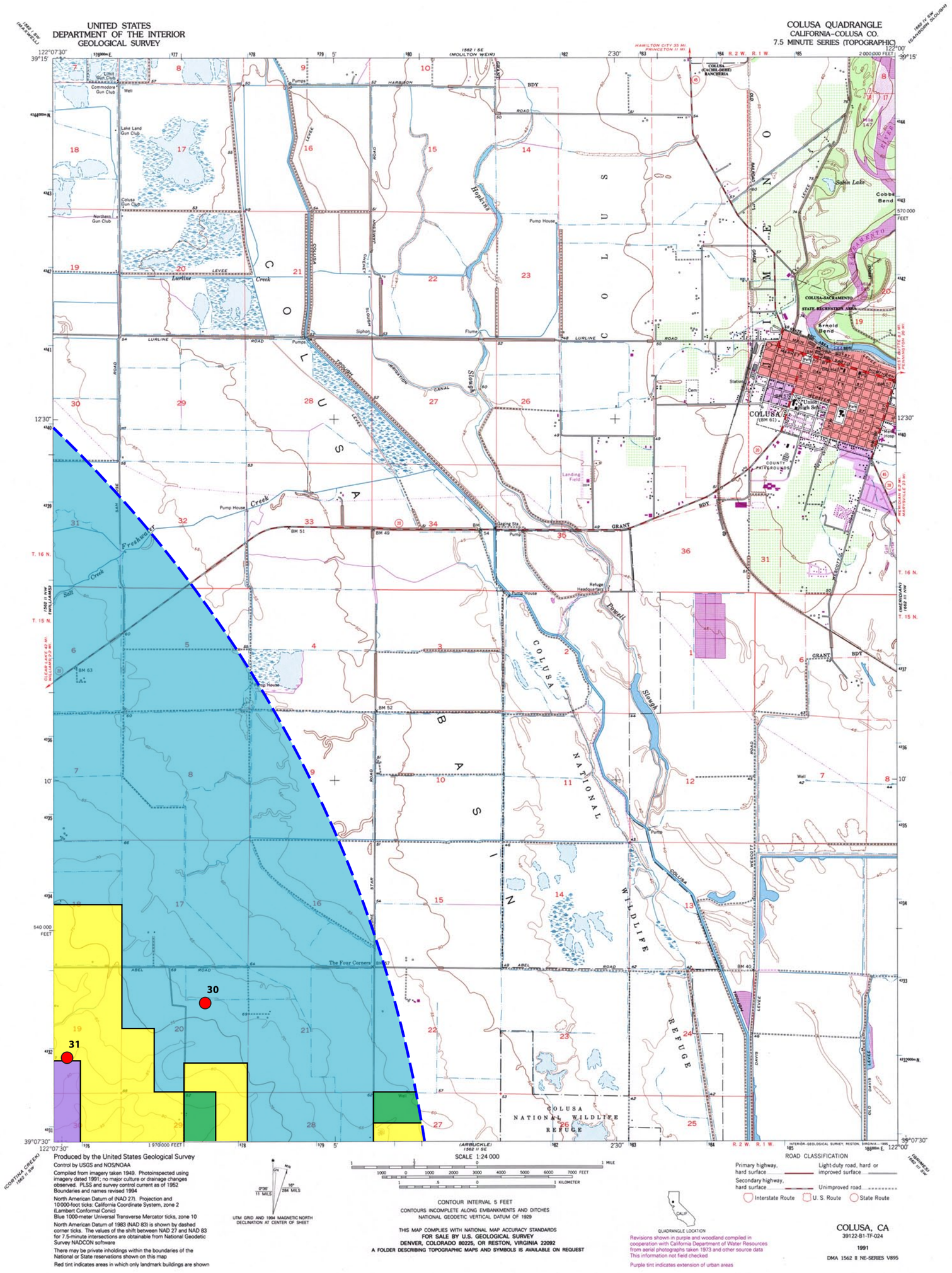
- Swainson's Hawk
- Red-Tailed Hawk
- Red-Shouldered Hawk
- Great-Horned Owl

05/01/21

Map A-1
Manor Slough 7.5' Quadrangle

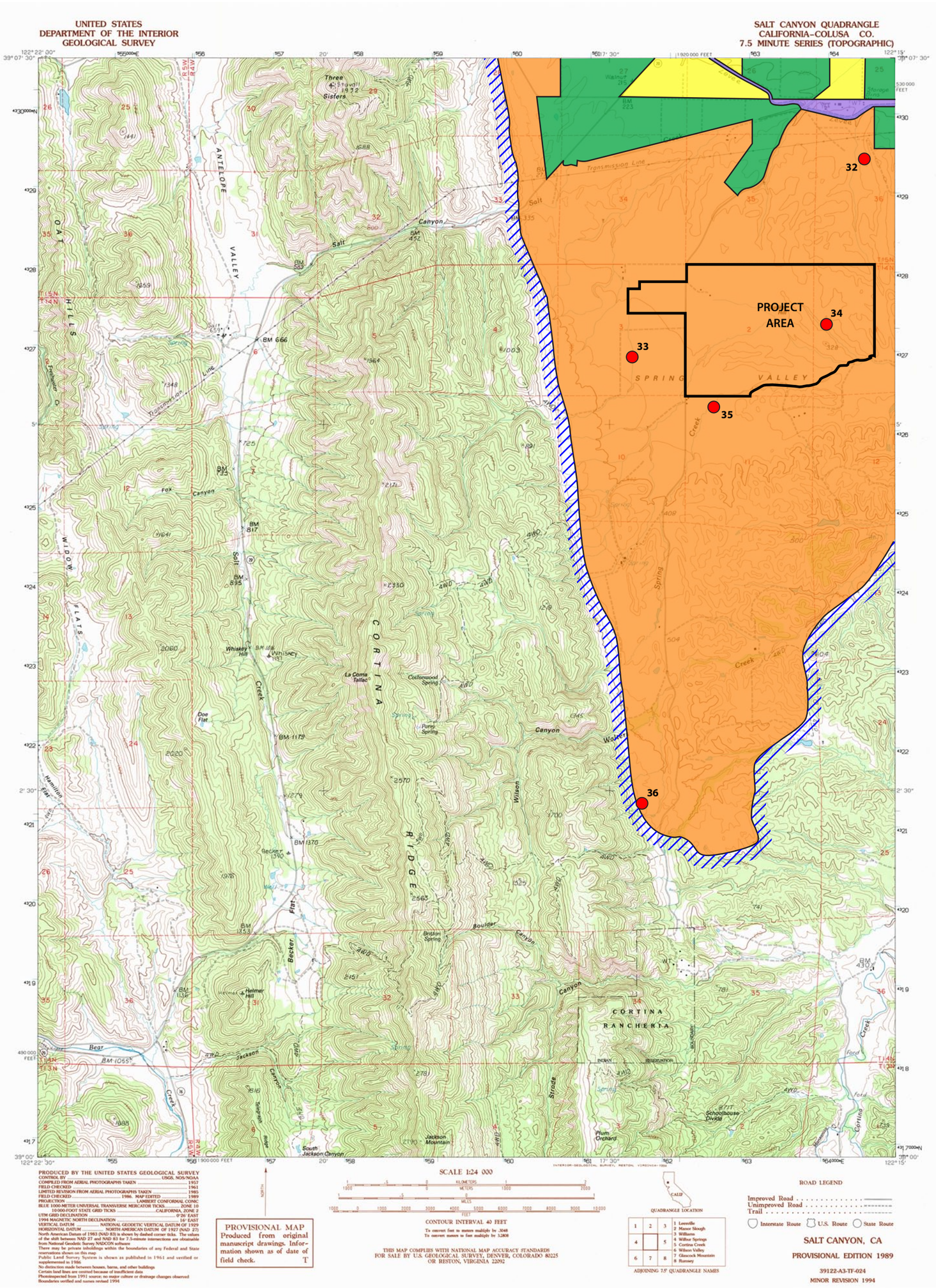


Map A-2
Williams 7.5′ Quadrangle



05/01/21

Map A-3
Colusa 7.5' Quadrangle



Project Area Swainson's Hawk Breeding Range Boundary

Land Use

Grassland Rice Vineyard Developed

Orchard Irrigated Pasture Irrigated Cropland

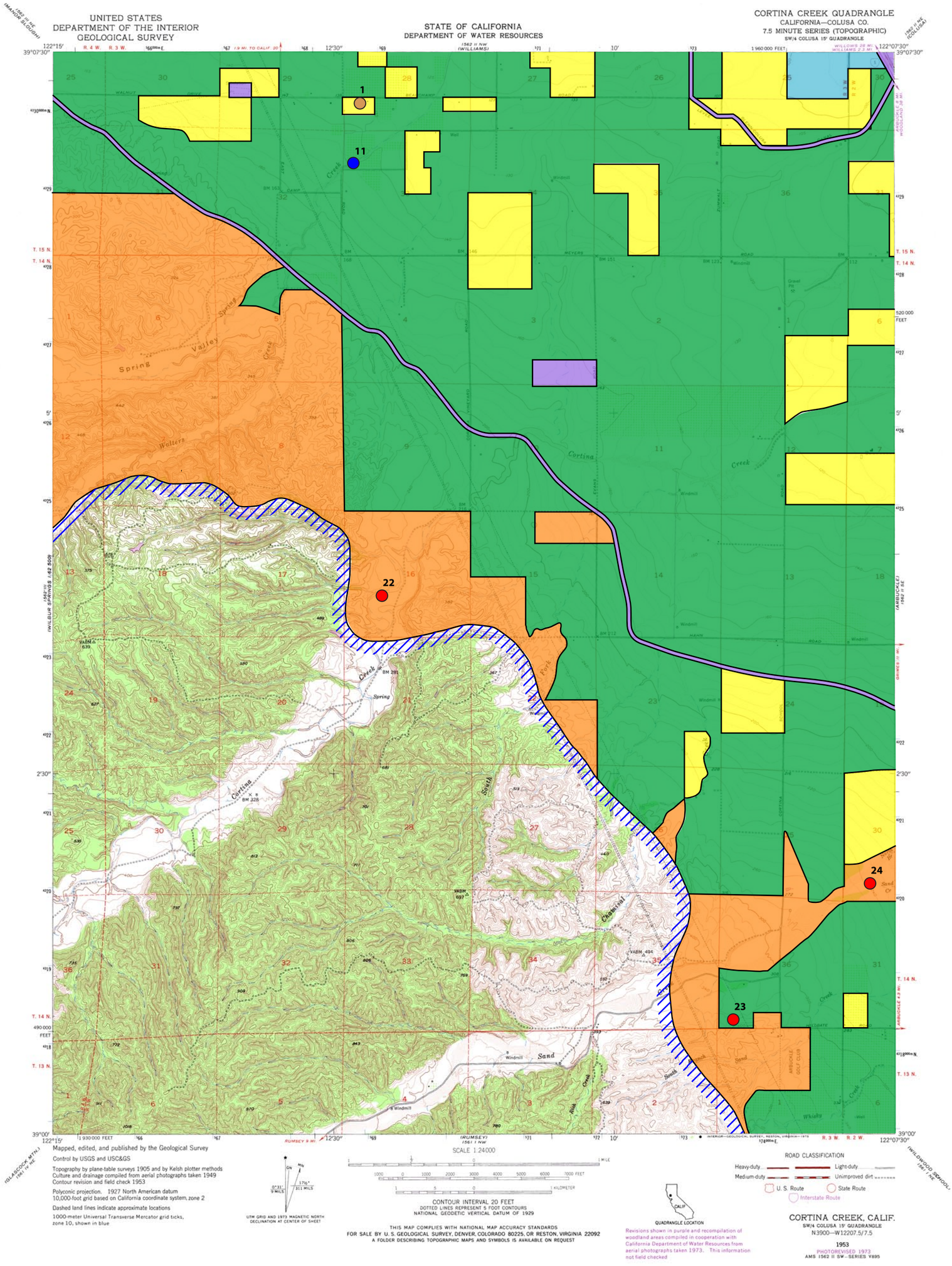
Active Raptor Nests

Swainson's Hawk Red-Shouldered Hawk

Red-Tailed Hawk Great-Horned Owl

05/01/21

Map A-4
Salt Canyon 7.5' Quadrangle



Swainson's Hawk Breeding Range Boundary

Land Use

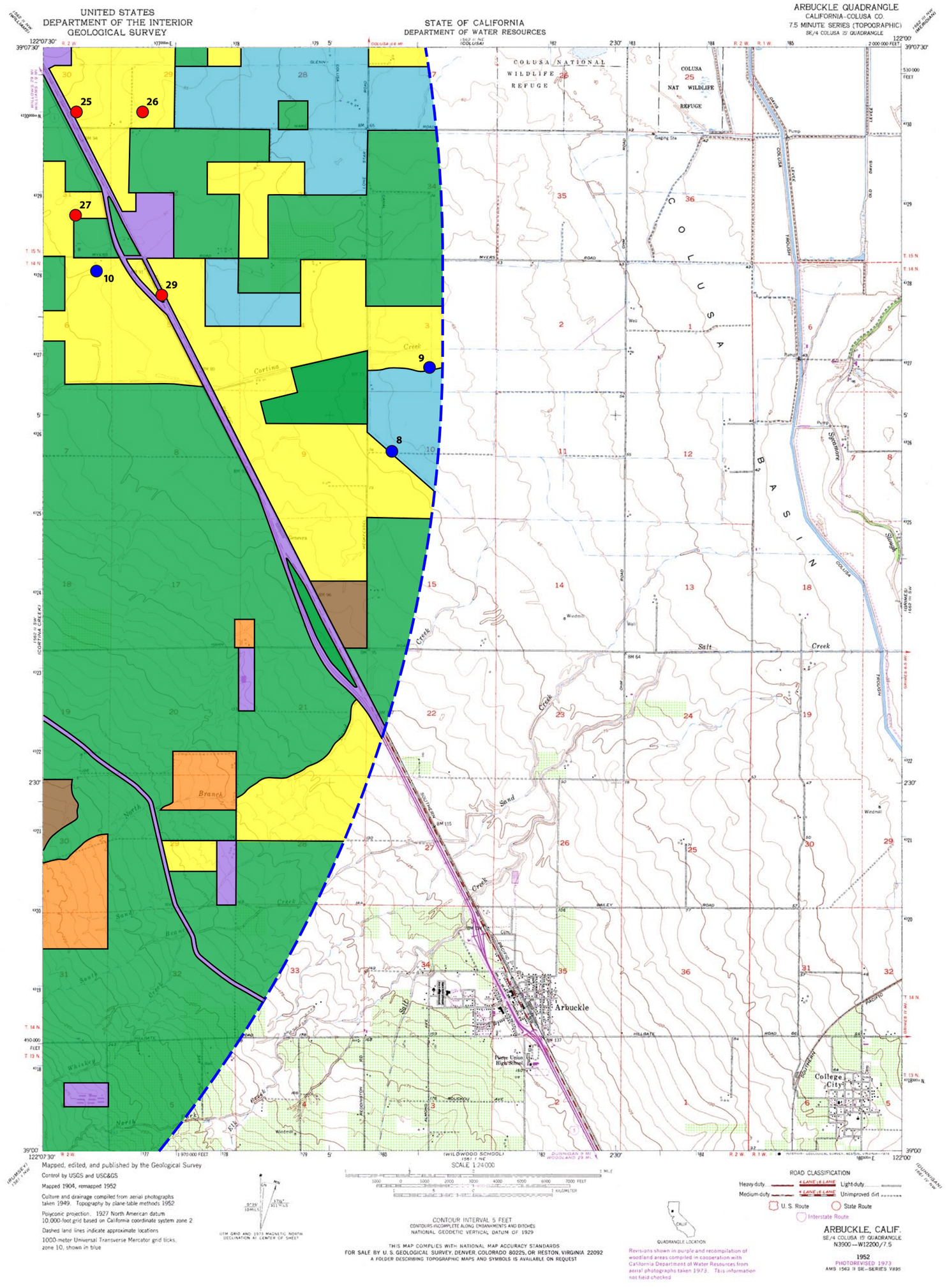
- Grassland
- Orchard
- Rice
- Irrigated Pasture
- Vineyard
- Irrigated Cropland
- Developed

Active Raptor Nests

- Swainson's Hawk
- Red-Tailed Hawk
- Red-Shouldered Hawk
- Great-Horned Owl

05/01/21

Map A-5
Cortina Creek 7.5' Quadrangle



10-Mile Radius Study Area

Land Use

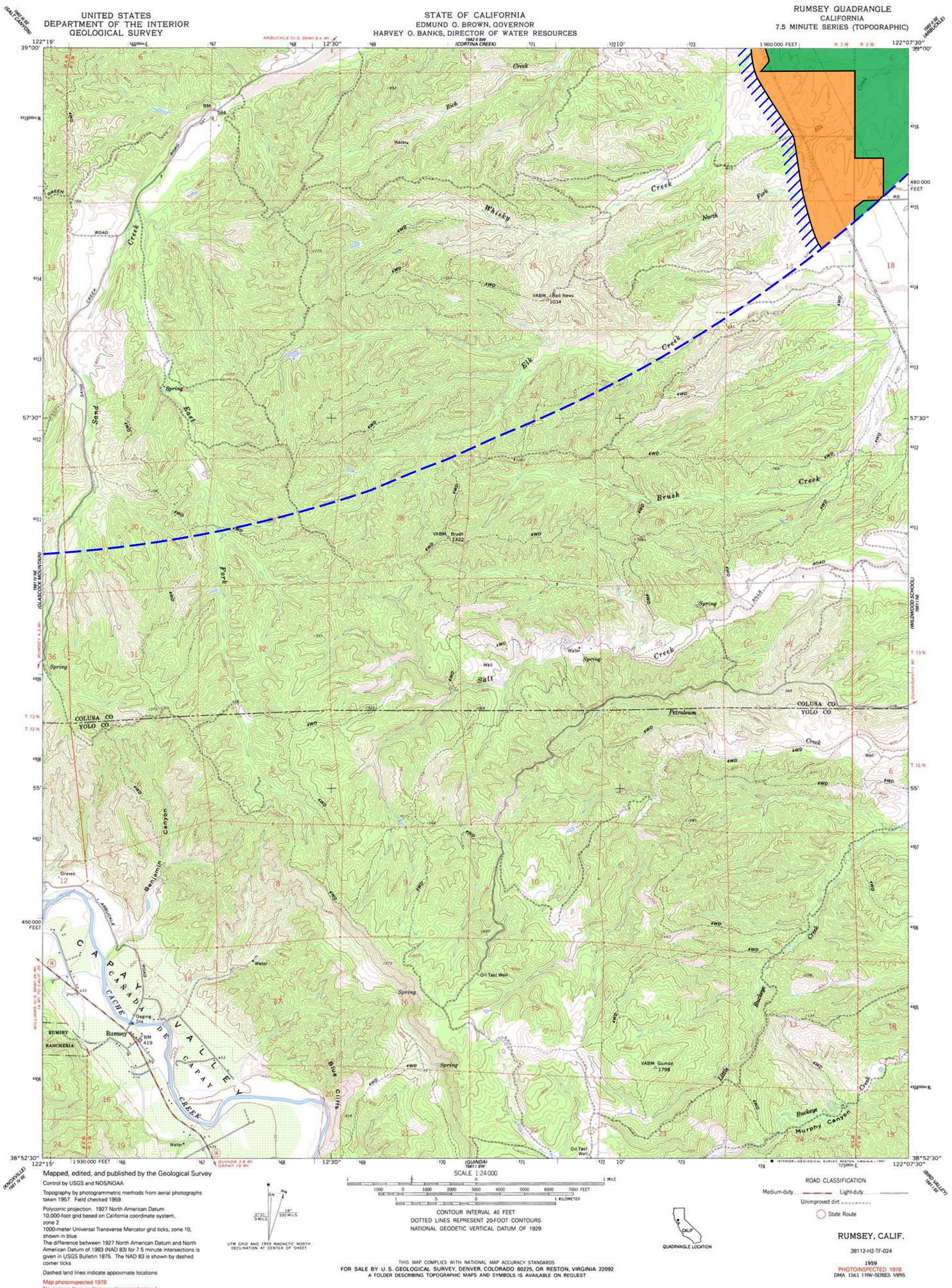
- Grassland
- Orchard
- Rice
- Irrigated Pasture
- Vineyard
- Irrigated Cropland
- Developed

Active Raptor Nests

- Swainson's Hawk
- Red-Tailed Hawk
- Red-Shouldered Hawk
- Great-Horned Owl

05/01/21

Map A-6
Arbuckle 7.5' Quadrangle



10-Mile Radius Study Area

Swainson's Hawk Breeding Range Boundary

Land Use

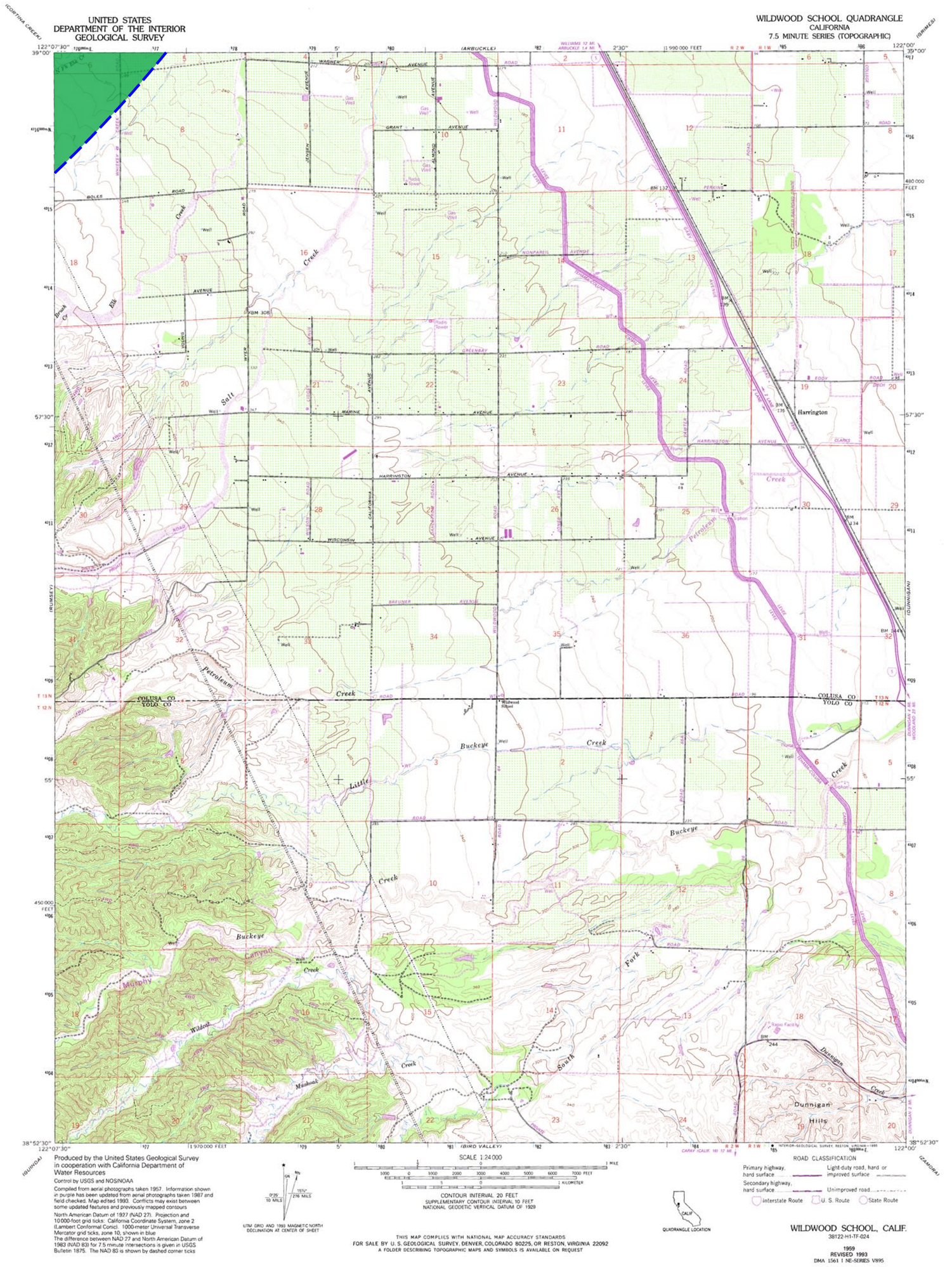
- Grassland
- Orchard
- Rice
- Irrigated Pasture
- Vineyard
- Irrigated Cropland
- Developed

Active Raptor Nests

- Swainson's Hawk
- Red-Tailed Hawk
- Red-Shouldered Hawk
- Great-Horned Owl

05/01/21

Map A-7
Rumsey 7.5' Quadrangle



10-Mile Radius Study Area

Land Use

- Grassland
- Orchard
- Rice
- Irrigated Pasture
- Vineyard
- Irrigated Cropland
- Developed

Active Raptor Nests

- Swainson's Hawk
- Red-Tailed Hawk
- Red-Shouldered Hawk
- Great-Horned Owl

05/01/21

Map A-8
Wildwood School 7.5' Quadrangle

APPENDIX B 2024 RAPTOR NEST LOCATIONS

Table B-1: 2024 Raptor Nest Locations

2024 Nest ID	Species	GPS Coordinates		Identified in 2021 Survey	2021 Site Survey #	Location from the Project Site
		Latitude	Longitude			
N1	Inactive	39.092579	-122.258894	Yes	RT34	In southern portion of the Project site
N2	RTHA	39.087561	-122.273056	Yes	RT35	In southern portion of the Project site
N3	Inactive	39.085987	-122.28052	No	-	0.03 mi S
N4	Inactive	39.05137	-122.286307	No	-	2.4 mi S
N5	RTHA	39.091274	-122.289244	Yes	RT33	0.2 mi S
N6	RTHA	39.086352	-122.29079	No	-	0.5 mi S, 0.5 mi W
N7	Inactive	39.040093	-122.288414	Yes	RT36	3.2 mi S
N8	Inactive	39.062689	-122.078454	No	-	9.6 mi SE
N9	Inactive	39.063415	-122.078307	No	-	9.6 mi SE
N10	Unknown	39.088821	-122.069765	Yes	SH9	9.9 mi E
N11	RTHA	39.138329	-122.102689	Yes	RT30	8.5 mi NE
N12	SWHA	39.1658	-122.150626	Yes	SH1	7.1 mi NE
N13	RTHA	39.148003	-122.141027	Yes	RT20	6.8 mi NE
N14	SWHA	39.146856	-122.141521	No	-	6.8 mi NE
N15	Inactive	39.134199	-122.127594	Yes	RT31	7.2 mi NE
N16	RTHA	39.118052	-122.122973	Yes	RT25	7.1 mi E
N17	RTHA	39.096839	-122.111307	Yes	RT29	7.6 mi E
N18	RTHA	39.028118	-122.129901	Yes	RT24	7.9 mi SE
N19	RTHA	39.016448	-122.153287	Yes	RT23	7.5 mi SE
N20	Inactive	39.111522	-122.205728	Yes	SH11	2.7 mi NE
N21	Inactive	39.11953	-122.204344	Yes	RS1	3.0 mi NE
N22	CORA	39.116031	-122.255045	No	-	1.0 mi N
N23	RTHA	39.1251	-122.311	Yes	RT5	2 mi NW
N24	RTHA	39.168604	-122.311547	Yes	RT4	4.8 mi N
N25	RTHA	39.180333	-122.197099	Yes	RT14	6.3 mi NE
N26	RTHA	39.186456	-122.200132	Yes	RT12	6.6 mi NE
N27	RTHA	39.177226	-122.167842	Yes	RT17	7.0 mi NE
N28	SWHA	39.195573	-122.174332	Yes	SH2	7.8 mi NE
N29	RTHA	39.1993	-122.176445	Yes	RT11	7.9 mi NE
N30	Unknown	39.203149	-122.178402	No	-	8.2 mi NE
N31	SWHA	39.21182	-122.184592	Yes	SH3	8.5 mi NE
N32	GHOW	39.152756	-122.179527	Yes	GH1	5.4 mi NE
N33	SWHA	39.136076	-122.136834	Yes	SH7	6.7 mi E
N34	RTHA	39.155724	-122.172963	No	-	5.7 mi NE
N35	SWHA	39.153551	-122.177516	Yes	SH4	5.4 mi NE
N36	Unknown	39.111442	-122.212403	No	-	2.4 mi NE

2024 Nest ID	Species	GPS Coordinates		Identified in 2021 Survey	2021 Site Survey #	Location from the Project Site
		Latitude	Longitude			
N37	Inactive	39.130779	-122.173955	No	-	4.7 mi NE
N38	Inactive	39.235563	-122.295038	Yes	RT1	9.3 mi N
N39	RTHA	39.116491	-122.25181	No	-	1.0 mi N

Additional Notes:

- Nests identified in the 2021 that were not observed (tree removed, dense foliage cover, nest potentially no longer existing, access issues): SH5, SH6, SH8, SH9, SH10, RT2, RT3, RT6, RT7, RT13, RT15, RT16, RT18, RT19, RT21, RT22, RT26, RT27, RT28, RT32, RS2, GH2.
- Nests identified in the 2021 survey outside of 10-mile buffer: RT8, RT9, RT10

Burrowing Owl Survey Report

BURROWING OWL SURVEY REPORT

Janus Solar and Battery Storage Project
Colusa County, California



August 14, 2024

RWE Solar Development, LLC

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Appendix C Photographs

ACRONYMS/ABBREVIATIONS

BESS	battery energy storage system
BSA	biological study area
BUOW	burrowing owl
Cal-IPC	California Invasive Plant Council
CDFW	California Department of Fish and Wildlife
CNDDB	California Natural Diversity Database
Gen-tie	generator tie line
MCVII	Manual of California Vegetation, Second Edition
NRCS	National Resources Conservation Service
Project	Janus Solar and Battery Storage Project
RWE	RWE Solar Development, LLC
USDA	United States Department of Agriculture
USGS	United States Geological Survey

1.0 INTRODUCTION

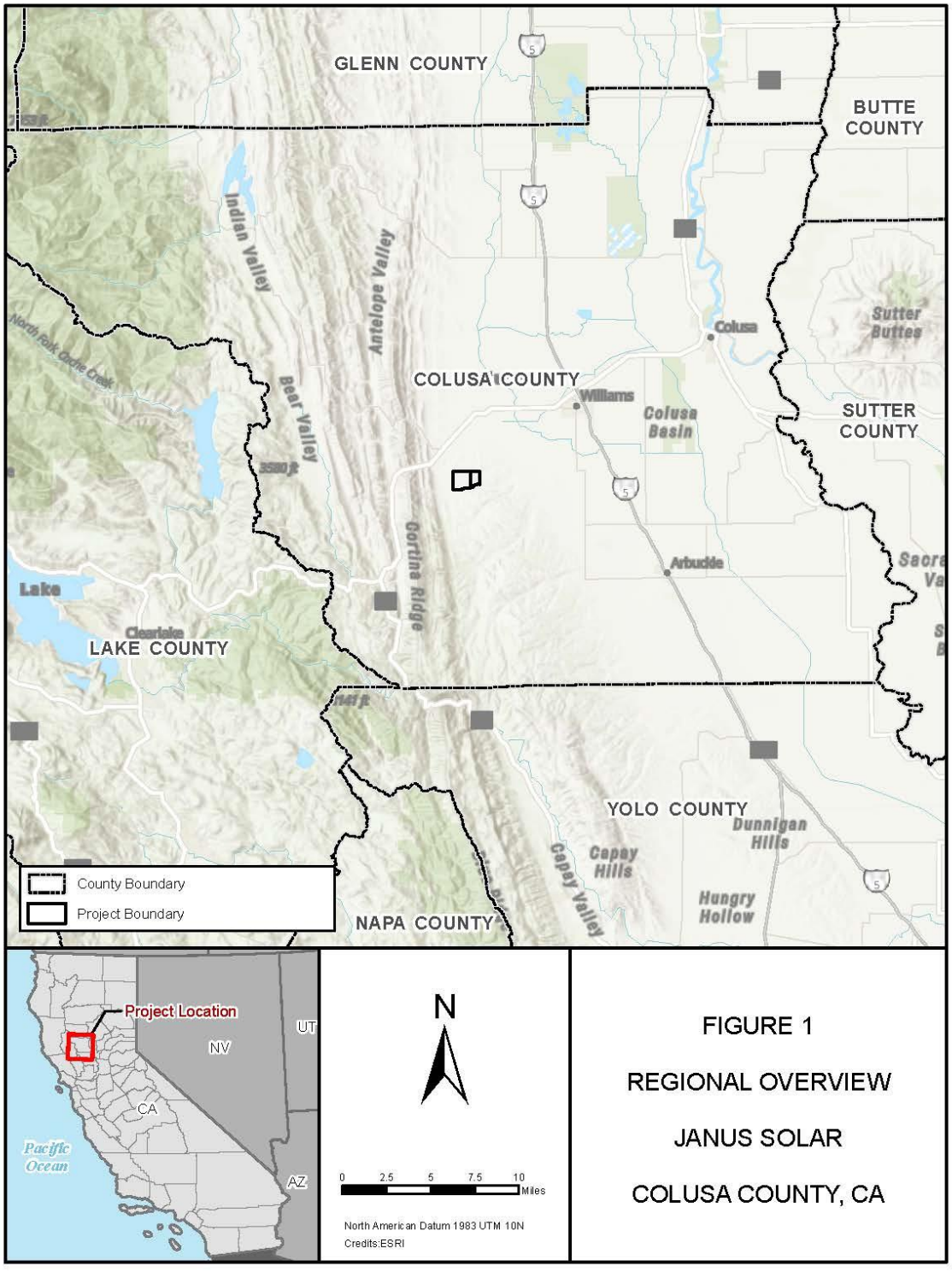
Tetra Tech prepared this Burrowing Owl Survey Report for the proposed Janus Solar and Battery Storage Project (Project). RWE Solar Development, LLC (Project proponent - RWE) proposes to develop an estimated 666 acres on approximately 886 acres of land (Project site) on two parcels located in Colusa County, California, for the development of a solar energy facility. This report has been prepared to document the burrowing owl (*Athene cunicularia*) survey methods, results, impact assessment, and recommendations, in accordance with the guidelines stated in the *Burrowing Owl Survey Protocol and Mitigation Guidelines,* and Appendices C and D in the *Staff Report on Burrowing Owl Mitigation* (The California Burrowing Owl Consortium 1993, California Department of Fish and Game 2012).

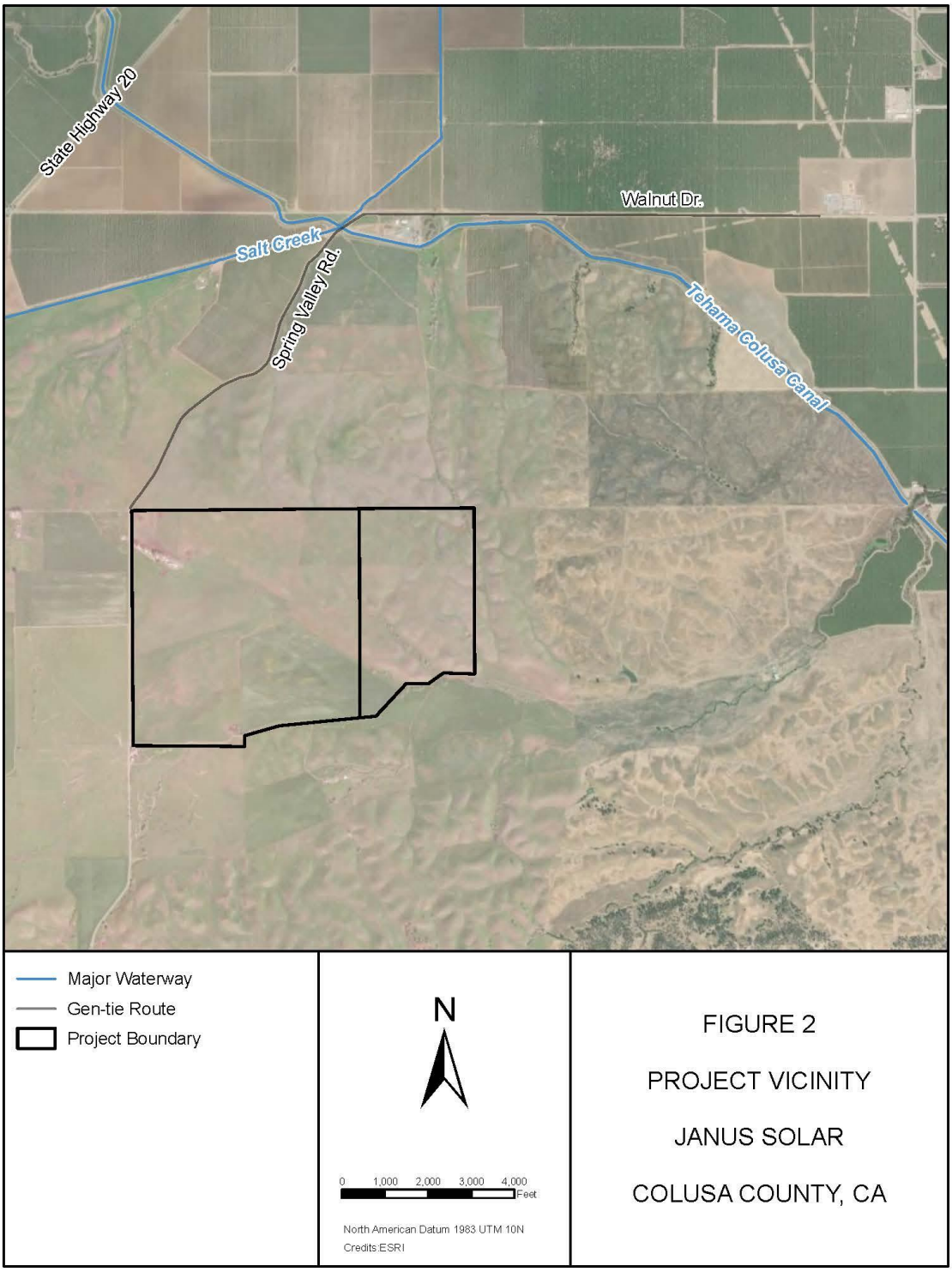
Burrowing owl (BUOW) use a variety of habitat types characterized by low-growing vegetation and the presence of burrows or burrow-like structures (surrogate burrows). BUOW may utilize a site for breeding, foraging, overwintering, or transient/migration stops; therefore, a site that is utilized by BUOW may only be occupied for a short duration of a year. Agricultural land can be considered suitable habitat for BUOW, dependent upon the presence of burrowing mammals or suitable surrogate burrows. Current threats to California's BUOW population include habitat loss/fragmentation, eradication/displacement of ground squirrels and other burrowing mammals, and various other human disturbances (The California Burrowing Owl Consortium 1993, California Department of Fish and Game 2012). BUOW are a California Department of Fish and Wildlife (CDFW) Species of Special Concern and a Bureau of Land Management Sensitive Species. There is currently a petition to list the Northern Central Valley population of BUOW within Colusa County as threatened under the California Endangered Species Act (Center for Biological Diversity et al. 2024). While the outcome of this petition is not determined, it is possible that BUOW may become a listed or candidate species prior to the start of construction.

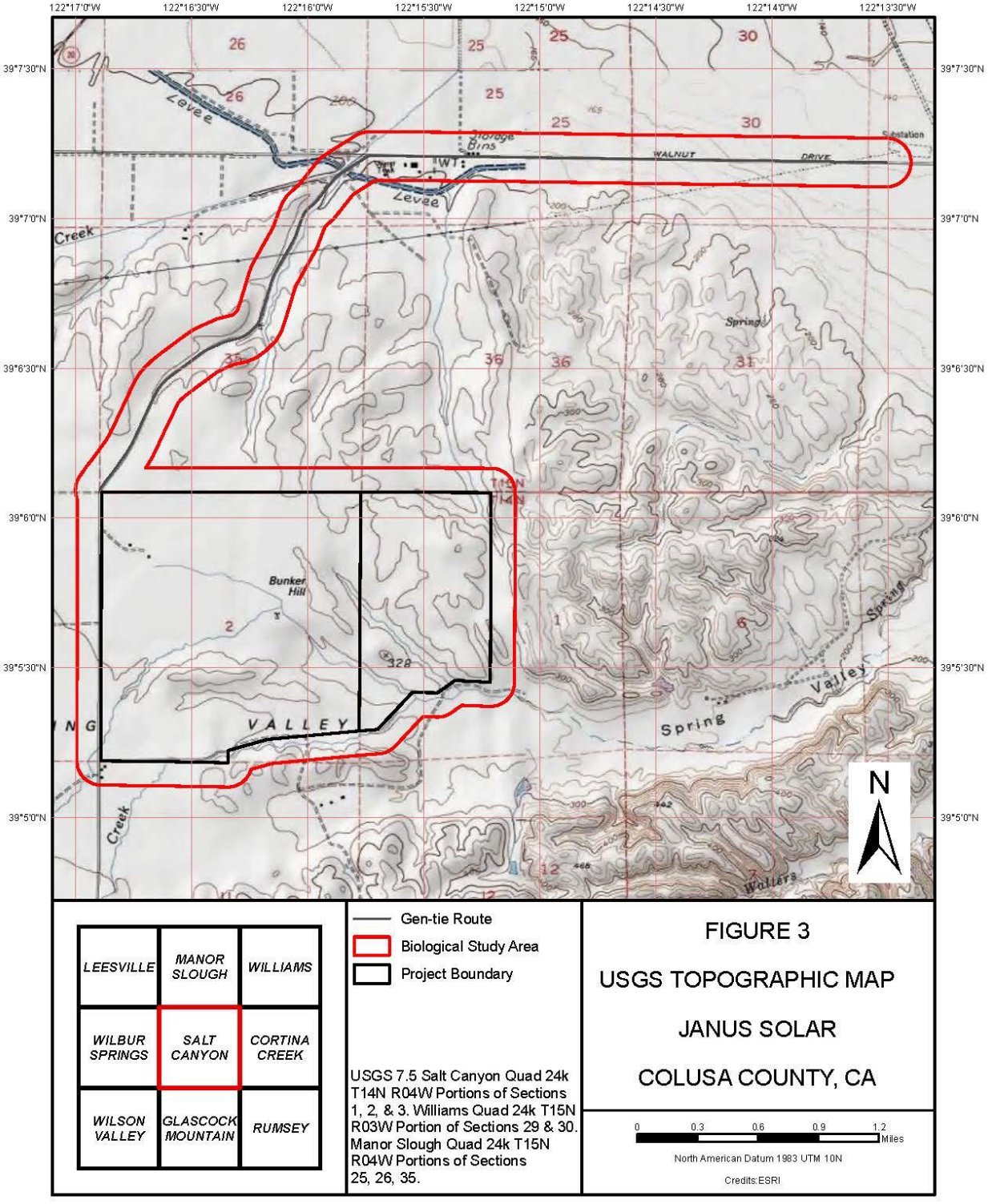
1.1 PROJECT SITE LOCATION

The Project site is located on private property within Colusa County and is primarily used for cattle grazing (Figure 1). The Project site has been under the same private ownership since 1984 and has been used as grazing lands for decades. From the Project site, the nearest community is Williams, approximately 6.5 miles to the northeast. The Project site includes two parcels and a generator tie line (gen-tie) that would connect to the Cortina Substation (Figure 2). The Cortina Substation is located on Walnut Drive, approximately 3 miles northeast of the site. The elevation range including the proposed gen-tie line is approximately 43 to 105 meters (141 to 344 feet) above sea level.

The Project site is in the United States Geological Survey (USGS) Salt Canyon 7.5-Minute Topographic Quadrangle and the gen-tie extends into the western edge of the USGS Cortina Creek Quadrangle, within Townships 14N and 15N, Ranges 3W and 4W, Sections 1, 2, 3, 25, 26, 29, 30, and 35 (Figure 3). Spring Valley Road borders the westernmost portion of the site. There are no access limitations to the Project site and one can reach the site from State Route 20, Walnut Drive, Spring Valley Road, and interior unpaved access routes. Most roadways in the Project vicinity are unimproved or paved without curb or sidewalk improvements. Interstate 5 is a major California freeway located approximately 9 miles east of the Project site.


GLENN COUNTY
BUTTE COUNTY
COLUSA COUNTY
SUTTER COUNTY
YOLO COUNTY
LAKE COUNTY
NAPA COUNTY
Indian Valley
Antelope Valley
Bear Valley
Cortina Ridge
Colusa
Williams
Arbuckle
Clearlake
Lake
Sutter Buttes
Colusa Basin
Capay Hills
Capay Valley
Dunnigan Hills
Hungry Hollow
County Boundary
Project Boundary
Project Location
NV
UT
CA
AZ
Pacific Ocean
N
0 2.5 5 7.5 10 Miles
North American Datum 1983 UTM 10N
Credits:ESRI
FIGURE 1
REGIONAL OVERVIEW
JANUS SOLAR
COLUSA COUNTY, CA


State Highway 20
Walnut Dr.
Salt Creek
Spring Valley Rd
Tehama Colusa Canal
Major Waterway
Gen-tie Route
Project Boundary
N
0 1,000 2,000 3,000 4,000
Feet
North American Datum 1983 UTM 10N
Credits:ESRI
FIGURE 2
PROJECT VICINITY
JANUS SOLAR
COLUSA COUNTY, CA


122°17'0"W
122°16'30"W
122°16'0"W
122°15'30"W
122°15'0"W
122°14'30"W
122°14'0"W
122°13'30"W
39°7'30"N
39°7'0"N
39°6'30"N
39°6'0"N
39°5'30"N
39°5'0"N
Levee
Storage Bins
WALNUT
DRIVE
Substation
Creek
Spring
Bunker Hill
VALLEY
Valley Spring
Walters
N
LEESVILLE
MANOR SLOUGH
WILLIAMS
WILBUR SPRINGS
SALT CANYON
CORTINA CREEK
WILSON VALLEY
GLASCOCK MOUNTAIN
RUMSEY
Gen-tie Route
Biological Study Area
Project Boundary
USGS 7.5 Salt Canyon Quad 24k T14N R04W Portions of Sections 1, 2, & 3. Williams Quad 24k T15N R03W Portion of Sections 29 & 30. Manor Slough Quad 24k T15N R04W Portions of Sections 25, 26, 35.
FIGURE 3
USGS TOPOGRAPHIC MAP
JANUS SOLAR
COLUSA COUNTY, CA
0 0.3 0.6 0.9 1.2 Miles
North American Datum 1983 UTM 10N
Credits:ESRI

1.2 PROJECT DESCRIPTION

The Project consists of constructing and operating a photovoltaic solar electricity generating facility, battery energy storage system (BESS), and associated infrastructure on privately-owned grazing and agricultural land. The Project would include the construction of:

- Gen-tie to Cortina substation;
- Project electrical substation;
- Project BESS;
- Solar panel arrays.

Project design details and components may be modified during finalization of the site plan. Project construction would primarily occur during daylight hours, Mondays through Friday 7:00 am to 7:00 pm and potentially 8:00 am to 5:00 pm on Saturdays and Sundays. If nighttime work hours or work on weekends is necessary, such work would be scheduled consistent with Colusa County requirements. A variety of equipment may be used during the construction phase, such as skid steers, water trucks, welder, pickup trucks, bulldozers, front end loaders, graders, roller compactors, trenchers, forklifts, pile drivers, backhoes, crane, and/or aerial lifts. Construction would include site preparation, grading, preparing staging areas, and construction of the Project facilities. A drafted site plan can be found in Appendix A, *Site Plan*; this site plan has not been finalized.

2.0 METHODS

This section describes the literature search and field methods used for the BUOW habitat assessment, burrow surveys and breeding season surveys in 2024, and planned winter season surveys in 2024-2025 in accordance with the *Burrowing Owl Survey Protocol and Mitigation Guidelines,* and Appendices C and D in the *Staff Report on Burrowing Owl Mitigation* (The California Burrowing Owl Consortium 1993, California Department of Fish and Game 2012).

2.1 HABITAT ASSESSMENT AND BURROW SURVEY

A literature and data review of pertinent background information for the Project site was completed prior to fieldwork, which included the CDFW California Natural Diversity Database (CNDDB) data (CDFW 2024), the USGS topographic maps, satellite and aerial imagery (Google Earth©), United States Department of Agriculture (USDA) National Resources Conservation Service (NRCS) soils data (USDA NRCS 2024), and the *Janus Solar Project – Foothill Agriculture Site Critical Issues Analysis Memo* (Stantec 2018). Topography describes the physical features of an area of land. The topographic features that were reviewed included natural landforms, aquatic features, developed lands, agricultural lands, undeveloped lands, and terrain.

According to the CNDDB, the closest BUOW occurrence record is from 1992 and is located approximately 1.8 miles east of the Project site boundary and 0.7 miles south of the eastern edge of the gen-tie (CDFW 2024). There are no previous records of BUOW occupying the Project site. The Project site is in the known distributional range of the BUOW, and most of the Project site contains vegetation communities with suitable habitat to potentially support BUOW.

The 2024 habitat assessment and burrow survey were conducted in June 2024 by Tetra Tech biologists. For the habitat assessment and burrow survey, biologists ascertained existing site conditions and mapped vegetation communities in accordance with the *Manual of California Vegetation, Second Edition* (MCVII; Sawyer et al. 2009). During the burrow surveys, BUOW suitable habitats within the Project site were surveyed for potential burrows and burrow surrogates by walking 30-meter interval transects. Burrow transects were walked during optimal weather conditions (no heavy rain or fog) to allow for the greatest visibility possible. With this method, 100 percent visual coverage of BUOW suitable habitat within the Project site ground surface was achieved. In addition, a 150-meter (approximately 500-feet) buffer zone around the Project site, herein referred to as the biological study area (BSA), was surveyed for potential burrows and burrow surrogates using binoculars due to access limitations. The westernmost portion of the 150-meter buffer was surveyed on foot because it has the same property owner as the Project site. The gen-tie route and associated BSA buffer area was surveyed using binoculars from the existing Spring Valley Road and Walnut Drive due to access limitations. A burrow/burrow surrogate was considered suitable for BUOW if it was equal or greater than 11 cm [4.3 inches] in diameter [height and width] and 150 cm [59 inches] in depth (Johnson et al. 2010). Potential surrogate burrows consisted of man-made structures such as pipes, culverts, debris piles, or other various openings that met the size criteria stated above. Potentially suitable burrows and burrow surrogates were mapped using a Collector mobile application paired with a sub-meter accuracy Global Positioning System device and documented on a datasheet. All BUOW survey datasheets are included in Appendix B. Any signs of use, including the presence of pellets, feathers, tracks, whitewash, burrow decoration materials, eggshell fragments, etc. were also documented.

2.2 BREEDING SEASON SURVEYS

Breeding season surveys were performed on June 26-27, July 2-3, and July 9-10. During these surveys, potential burrows/burrow surrogates were visited during the timeframe of two hours before sunset to evening civil twilight or from morning civil twilight to 10:00 a.m. Burrows/burrow surrogates were observed using binoculars to maintain a minimum distance of 50 meters to minimize disturbance, should occupied burrows or BUOW individuals be present. Surveys were not conducted during heavy rain, high winds greater than 20 miles per hour, or dense fog. Any BUOW or sign, possible predators present, and any evidence of predation of owls were noted.

2.3 WINTER SEASON SURVEY

Winter season surveys are planned for the winter of 2024-2025 to determine if BUOW overwinter at the Project site.

3.0 RESULTS

This section describes the results of the 2024 BUOW habitat assessment, burrow surveys, and breeding season surveys.

3.1 HABITAT ASSESSMENT AND BURROW SURVEY

3.1.1 Habitat Assessment

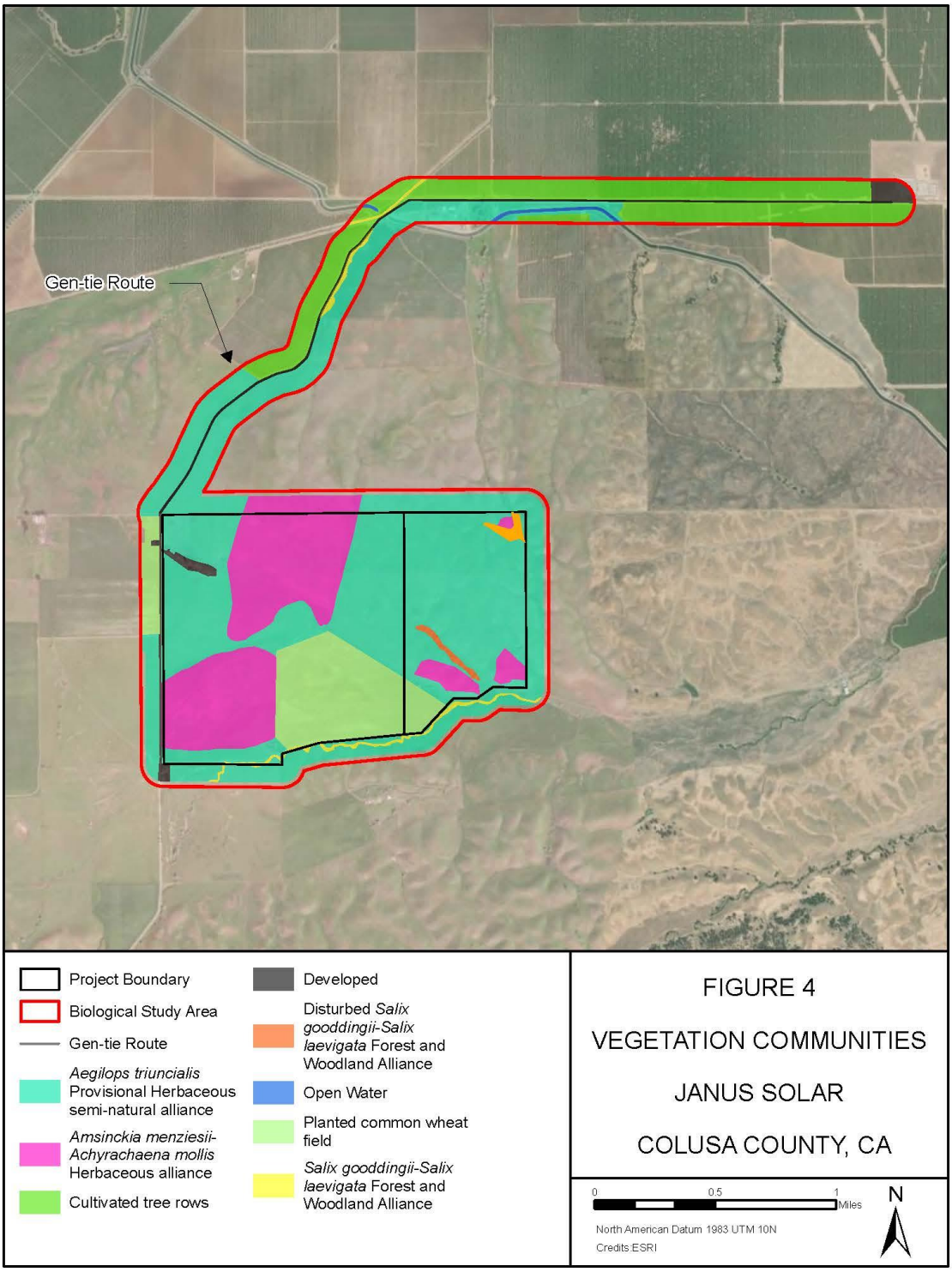
The Project site is in the known distributional range of the BUOW and most of the Project site contains vegetation communities with suitable habitat to potentially support BUOW. According to the USDA NRCS Web Soil Survey (2024), the Project site includes five types of soils. The soils are: Capay clay loam (approximately 30 percent of the site), Ayar clay (approximately 40 percent of the site), Corning clay (approximately 20 percent of the site), Corval loam (approximately 5 percent of the site) and Clear Lake clay (approximately 5 percent of the site). All vegetated areas of the Project site have previously been or are currently being used disked/tilled for grazing and/or cultivation of common wheat (*Triticum aestivum*). Vegetation communities within the Project site, gen-tie route, and associated BSA were mapped in accordance with the MCVII and updated during the general biological survey in May 2024 (Sawyer et al. 2009). Vegetation was mapped to the alliance level, which is defined by plant species composition and identified by the most dominant tree, shrub, or herb in the vegetation community. A best attempt was made to categorize vegetation communities according to Sawyer et al. 2009. However, in the case that membership rules/community definitions were not met, a new alliance was named according to a best fit for the dominant species observed, aligned to the MCVII structure. Table 1 summarizes the eight vegetation communities observed and their corresponding acreage. The reported acreage includes the 150-meter BSA. Results of the vegetation mapping are shown in Figure 4.

Table 1: Vegetation Communities

Vegetation Communities	Acres within BSA
Aegilops triuncialis Provisional Herbaceous Semi-Natural Alliance	810.9
Amsinckia menziesii - Achyrachaena mollis Herbaceous Alliance	286.0
Cultivated Tree Rows	244.5
Common Wheat Fields	166.2
Developed	33.5
Open Water	4.7
Salix gooddingii - Salix laevigata Forest and Woodland Alliance	14.1
Disturbed *Salix gooddingii - Salix laevigata* Forest and Woodland Alliance	9.0
Total	**1,568.9***

Note: Total acres include the Project site and 150-meter buffer.

Approximately 50 percent of the BSA consisted of non-native grasslands in the *Aegilops triuncialis* Provisional Herbaceous Semi-Natural Alliance. This alliance is considered a semi-natural alliance, which is defined as a vegetation community dominated by non-native plants that are naturalized (i.e., growing in the wild and reproducing) in California. In addition, over 30 percent of the BSA consisted of cultivated tree rows, planted common wheat fields, open water at the Tehama Colusa Canal aqueduct, or developed areas, which do not provide suitable habitat for BUOW. The remainder of the BSA consisted of areas dominated by native forbs in the *Amsinckia menziesii - Achyrachaena mollis* Herbaceous Alliance, and small areas dominated by native willows (*Salix* spp.) in the *Salix gooddingii - Salix laevigata* Forest and Woodland Alliance.


Gen-tie Route
Project Boundary
Biological Study Area
Gen-tie Route
Aegilops triuncialis Provisional Herbaceous semi-natural alliance
Amsinckia menziesii-Achyrachaena mollis Herbaceous alliance
Cultivated tree rows
Developed
Disturbed Salix gooddingii-Salix laevigata Forest and Woodland Alliance
Open Water
Planted common wheat field
Salix gooddingii-Salix laevigata Forest and Woodland Alliance
FIGURE 4
VEGETATION COMMUNITIES
JANUS SOLAR
COLUSA COUNTY, CA
0
0.5
1
Miles
N
North American Datum 1983 UTM 10N
Credits:ESRI

***Aegilops triuncialis* Provisional Herbaceous Semi-Natural Alliance.** This non-native grassland community was the most common community throughout the Project site and was dominated by non-native barbed goat grass (*Aegilops triuncialis*) and non-native oat (*Avena* sp.). Other species that were common in this community were non-native yellow star thistle (*Centaurea solstitialis*) and native hayfield tarweed (*Hemizonia congesta*). Barbed goat grass and yellow star thistle are both rated high (i.e., highly invasive) by the California Invasive Plant Council (Cal-IPC; Cal-IPC 2024). Cal-IPC defines invasive plants as: plants that are not native to an environment, and once introduced, they establish, quickly reproduce, and spread, and cause harm to the environment, economy, or human health (Cal-IPC 2024). All areas of this community on Project site were actively grazed by cattle.

***Amsinckia menziesii* - *Achyrachaena mollis* Herbaceous Alliance.** This native forb community was dominated by native common fiddleneck (*Amsinckia menziesii*) and native soft blow wives (*Achyrachaena mollis*). Other species found in this community were native miniature lupine (*Lupinus bicolor*), native purple owl's-clover (*Castilleja exserta*), Tejon cryptantha (*Cryptantha microstachys*), native vinegarweed (*Trichostema lanceolatum)*, non-native yellow star thistle, and non-native oat. Cover of native forbs in this community in April 2020 ranged from 50 percent in the northwestern portion of the Project site to 10-20 percent in the northeastern, southeastern, and southwestern portions of the site.

Cultivated Tree Rows. These areas consisted of cultivated almond (*Prunus dulcis*) tree rows.

Common Wheat Fields. These areas consisted of densely planted common wheat for the purposes of feeding cattle. Soils within this community are actively disked/tilled.

Developed. These areas included houses, barns/storage sheds, paved and dirt roads, the Cortina Substation, aqueduct infrastructure, and non-native ornamental species such as eucalyptus (*Eucalyptus* sp.) and rosemary (*Rosmarinus officinalis)*.

Open Water. This area consisted of a fenced aqueduct, the Tehama Colusa Canal aqueduct, within the 150-meter buffer surrounding the gen-tie.

***Salix gooddingii* - *Salix laevigata* Forest and Woodland Alliance.** This native riparian community was dominated by native Goodding's black willow (*Salix gooddingii*) and native red willow (*Salix laevigata*). Other species found in this community were native Fremont cottonwood (*Populus fremontii*), native northern California black walnut, and non-native edible fig (*Ficus carica*). This community primarily occurred outside of the Project site within the 150-meter buffer. Within the Project site, this community occurred in a drainage in the southernmost portion of the site, running along the site boundary. The drainage ranged from approximately 5 to 15 feet wide, a defined bed and bank was present throughout, and standing water and wet soils were observed. Wetland hydrology and hydrophytic vegetation were also present (Tetra Tech 2024).

Disturbed *Salix gooddingii* - *Salix laevigata* Forest and Woodland Alliance. This native riparian community was similar to the version above but was heavily disturbed by intensive cattle grazing. This community occurred in the northeast and southeast portions of the Project site and was dominated by sparse native Goodding's black willow and native red willow. Native Fremont cottonwood was also found in this community.

In the northeast portion of the Project site, this community contained muddy soils and the low point had standing water in 2020 and 2024. Disturbed native willows, one mature native Fremont cottonwood, canary grass (*Phalaris* sp.), non-native bindweed (*Convolvulus arvensis*), and non-native goosefoot (*Chenopodium* sp.) were present in this area. Based on aerial imagery and NWI data, this area appeared to be fed by a drainage extending to the north. Wetland hydrology was present in this area and it has the potential to be a vernal pool (Tetra Tech 2024).

In the southeast portion of the Project site, plant species in this community included native willows and native Fremont cottonwood. No standing water or mud was observed in 2020, but one inch of standing water was observed in a small area in the middle of this community in 2024. Based on the depth of cattle footprints in the area, it appeared that the ground is wet for part of the year. A defined bed and bank was not observed in this area. Based on aerial imagery and NWI data, this area appears to have historically connected to other drainages to the north and south; however, due to intensive grazing of the Project site, this connection was not visible. Hydrophytic vegetation is likely present in this area (Tetra Tech 2024).

3.1.2 Burrow Survey

A total of 48 suitable burrows, 24 suitable potential burrow surrogates in the form of culverts, 1 burrow surrogate in the form of riprap, and one burrow surrogate in the form of a debris pile (D) were mapped in the BSA during the burrow survey. Burrows/burrow surrogates were numbered consecutively as found during the burrow survey and are referred to in this section using burrow/burrow surrogate numbers. Details on the potential burrows/burrow surrogates are included in Table 2. Burrow/burrow surrogate locations are shown on Figure 6 and representative burrow/burrow surrogate photographs are included in Appendix C.

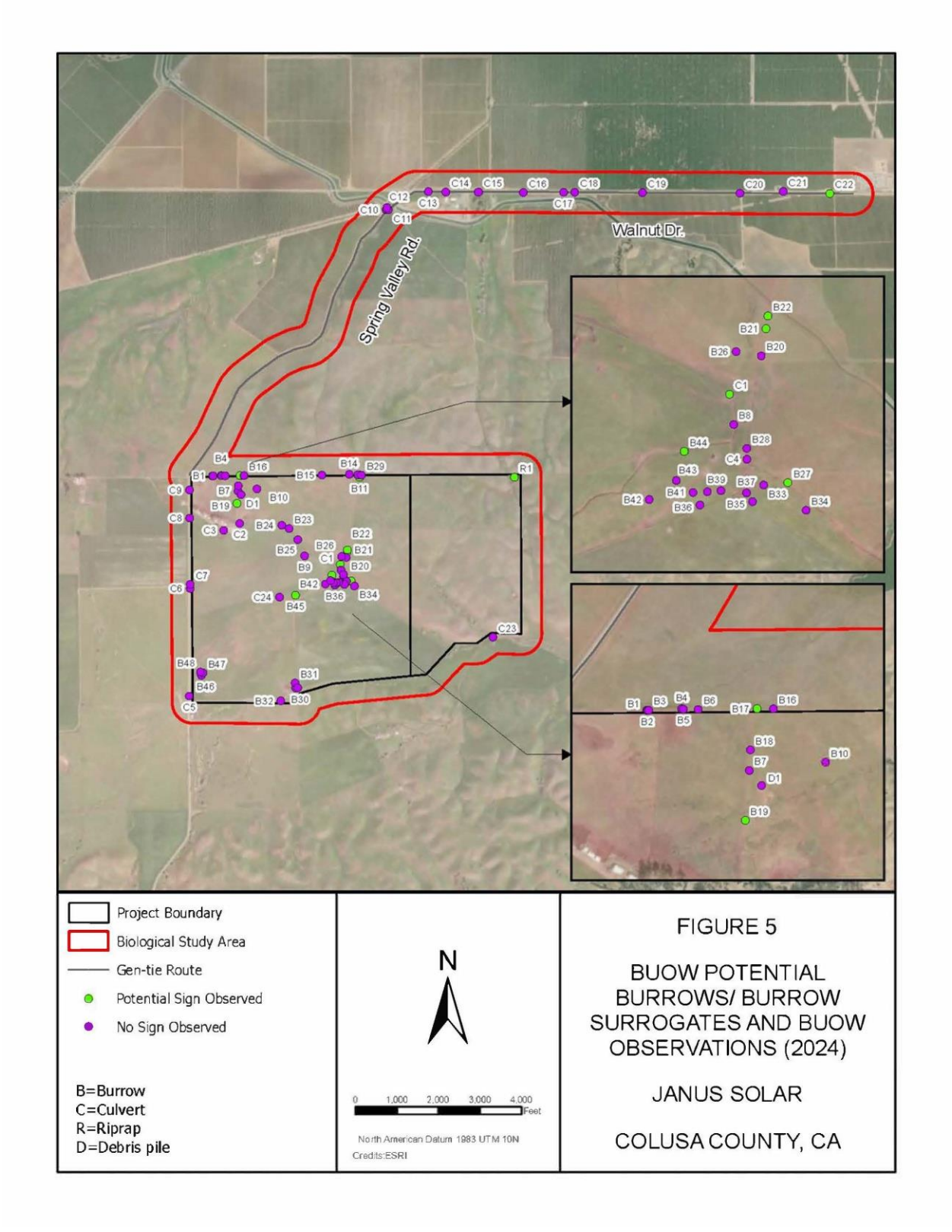
Table 2: Potential Burrows and Burrow Surrogates Identified during the Burrow Survey

Burrow/Burrow Surrogate Number	Dimensions (inches)	Sign Observed	Location (Project site or buffer area)	Notes
B1	4 x 4	No	Buffer area	None.
B2	4 x 4	No	Buffer area	None.
B3	4 x 4	No	Buffer area	Colony of 4 adjacent burrows of similar size.
B4	5 x 4	No	Buffer area	None.
B5	5 x 5	No	Buffer area	None.
B6	4 x 4; 8 x 8	No	Buffer area	Colony of 2 adjacent burrows.
B7	5 x 4	No	Project site	None.
B8	4 x 5	No	Project site	None
B9	4 x 4	No	Project site	None.
B10	4.5 x 4	No	Project site	None.
B11	5 x 6	Yes – minor whitewash observed	Project site	Colony of 2 adjacent burrows of similar size.
B12	5 x 6	No	Buffer area	None.
B13	4.5 x 5	Yes – minor whitewash observed	Buffer area	Whitewash observed, fence above burrow.
B14	4.5 x 6	No	Buffer area	None.
B15	5 x 4.5	No	Buffer area	None.
B16	5.5 x 6	Yes – minor whitewash observed	Buffer area	Whitewash observed, fence above burrow.
B17	5 x 5.5	No	Buffer area	Colony of 4 adjacent burrows of similar size.
B18	5 x 5.5	No	Project site	None.
B19	4.5 x 4.5	Yes – minor whitewash observed	Project site	Colony of 2 adjacent burrows of similar size. Whitewash observed, fence above burrows.
B20	5 x 5.5	No	Project site	None.

Burrow/Burrow Surrogate Number	Dimensions (inches)	Sign Observed	Location (Project site or buffer area)	Notes
B21	5 x 5.5	Yes – minor whitewash observed	Project site	Whitewash observed, fence above burrow.
B22	4 x 4.5	Yes – minor whitewash observed	Project site	Whitewash observed, fence above burrow.
B23	5 x 5.5	No	Project site	Colony of 7 adjacent burrows of similar size.
B24	5 x 5.5	No	Project site	Colony of 4 adjacent burrows of similar size.
B25	5 x 5.5	No	Project site	Colony of 12 adjacent burrows of similar size.
B26	5 x 6	No	Project site	Colony of 4 burrows of similar size.
B27	5 x 5	Yes – whitewash observed	Project site	Colony of 3 adjacent burrows of similar size.
B28	4.5 x 4	No	Project site	None.
B29	4 x 4	No	Project site	None.
B30	4.5 x 5	No	Project site	None.
B31	4.5 x 5	No	Project site	None.
B32	5 x 5	No	Project site	None.
B33	6.5 x 6.5	No	Project site	None.
B34	4 x 4.5	No	Project site	Colony of 2 adjacent burrows of similar size.
B35	4 x 4	No	Project site	None.
B36	4 x 4; 5 x 7	No	Project site	Colony of 5 adjacent burrows.
B37	4 x 4.5	No	Project site	None.
B38	5 x 5.5	No	Project site	None.
B39	5 x 5.5	No	Project site	Colony of 11 adjacent burrows of similar size.
B40	4.5 x 5; 6 x 5	No	Project site	Colony of 2 adjacent burrows.
B41	4.5 x 4.5; 5.5 x 6	No	Project site	Colony of 2 adjacent burrows.
B42	5 x 5.5	No	Project site	Colony of 4 adjacent burrows of similar size.
B43	4.5 x 4.5	No	Project site	Colony of 2 adjacent burrows of similar size.
B44	4 x 4	Yes – minor whitewash observed	Project site	None.
B45	8 x 5	Yes – old whitewash and old pellets observed	Project site	None.
B46	5 x 8; 8 x 6	No	Project site	Colony of 2 adjacent burrows.
B47	5 x 5	No	Project site	None.
B48	5 x 5	No	Project site	Colony of 4 adjacent burrows of similar size.
C1	7 x 13	Yes – minor whitewash observed	Project site	3 culverts, all the same size.
C2	24 x 24	No	Project site	2 culverts, both the same size.

Burrow/Burrow Surrogate Number	Dimensions (inches)	Sign Observed	Location (Project site or buffer area)	Notes
C3	24 x 24	No	Project site	None.
C4	60 x 60	No	Project site	None.
C5	60 x 60	No	Buffer area	None.
C6	16 x 16	No	Buffer area	None.
C7	24 x 24	No	Buffer area	None.
C8	24 x 24	No	Buffer area	None.
C9	24 x 24	No	Buffer area	None.
C10	9.5 x 12	No	Buffer area	None.
C11	36 x 36	No	Buffer area	None.
C12	20 x 20	No	Buffer area	None.
C13	28 x 28	No	Buffer area	2 culverts, both the same size.
C14	6 x 10	No	Buffer area	None.
C15	24 x 24	No	Buffer area	None.
C16	6 x 14	No	Buffer area	None.
C17	8 x 12	No	Buffer area	None.
C18	12 x 12	No	Buffer area	None.
C19	7 x 12	No	Buffer area	None.
C20	24 x 24	No	Buffer area	None.
C21	16 x 16	No	Buffer area	None.
C22	10 x 30	Yes – minor whitewash observed	Buffer area	Whitewash is on headwall of culvert.
C23	12 x 12	No	Buffer area	None.
C24	60 x 60	No	Project site	None.
R1	unknown	Yes – whitewash observed	Project site	Riprap with multi sized crevices of sizes that could be used by BUOW.
D1	unknown	No	Project site	Debris pile with many sizeable burrows of sizes that could be used by BUOW.

Potential BUOW sign was observed at 12 of the 74 burrows/burrow surrogates documented in the. Whitewash was found at nine burrows (B11, B13, B16, B19, B21, B22, B27, B44, and B45), two burrow surrogates in the form of culverts (C1 and C22), and one burrow surrogate in the form of riprap (R1). In addition, old owl pellets were observed at one burrow (B45). Most whitewash observed was minor and some burrows with whitewash were located next to a fence (B13, B16, B19, B21, B22). Whitewash can not be positively attributed to BUOW. The Project site had relatively flat topography with few trees/shrubs that could be utilized as perching locations; various bird species were observed perching on fence lines throughout the site. Minor whitewash is likely from smaller bird species and whitewash at burrows along fence lines could have been from any bird species perching on the fence line above.


Walnut Dr.
Spring Valley Rd.
Project Boundary
Biological Study Area
Gen-tie Route
Potential Sign Observed
No Sign Observed
B=Burrow
C=Culvert
R=Riprap
D=Debris pile
N
0 1,000 2,000 3,000 4,000 Feet
North American Datum 1983 UTM 10N
Credits:ESRI
FIGURE 5
BUOW POTENTIAL BURROWS/ BURROW SURROGATES AND BUOW OBSERVATIONS (2024)
JANUS SOLAR
COLUSA COUNTY, CA

3.1.3 Wildlife Species Observed in the Project Site

Table 3 lists other wildlife species observed on the Project site. Species including coyote (*Canis latrans*), domestic cat (*Felis catus*), great horned owl (*Bubo virginianus*), red-tailed hawk (*Buteo jamaicensis*), Swainson's hawk *(Buteo swainsoni*), northern harrier (*Circus hudsonius*), prairie falcon (*Falco mexicanus*), barn owl (*Tyto alba*), common raven (*Corvus corax*), and Pacific gophersnake *(Pituophis catenifer catenifer*) could potentially predate on BUOW if present. No evidence of predation of BUOW was observed.

Table 3: Wildlife Species Observed

Scientific Name	Common Name
Mammals	
Bos taurus(1)(2)(4)	domestic cow
Canis latrans(1)(2)(4)	coyote
Equus ferus caballus(2)(4)	domestic horse
Felis catus(2)(4)	domestic cat
Lepus sp.(2)	jackrabbit
Spermophilus sp.(1)(2)(4)	ground squirrel
Birds	
Agelaius phoeniceus(1)(2)	red-winged blackbird
Branta canadensis(2)(4)	Canada Goose
Bubo virginianus(2)	great horned owl
Bubulcus ibis(4)	western cattle egret
Buteo jamaicensis(1)(2)(4)	red-tailed hawk
Buteo swainsoni(2)(4)**	Swainson's hawk
Callipepla californica(3)	California quail
Cathartes aura(1)(2)(4)	turkey vulture
Charadrius vociferus(2)(4)	killdeer
Circus hudsonius(1)(2)(4)*	northern harrier
Columba livia(2)(4)	rock pigeon
Corvus corax(2)(4)	common raven
Eremophila alpestris(1)(2)(4)	horned lark
Euphagus cyanocephalus(1)(2)(4)	Brewer's blackbird
Falco columbarius(1)*	merlin
Falco mexicanus(2)*	prairie falcon
Falco sparverius(1)(2)(4)	American kestrel
Haemorhous mexicanus(2)(4)	house finch
Hirundo rustica(4)	barn swallow
Lanius ludovicianus(1)(2)(4)*	loggerhead shrike
Mimus polyglottos(2)(4)	northern mockingbird
Molothrus ater(1)(2)(4)	brown-headed cowbird
Passerculus sandwichensis(1)(2)(4)	savannah sparrow
Pica sp.(2)	magpie
Pica nuttalli(4)	yellow-billed magpie
Plegadis chihi(3)(4)*	white-faced ibis
Sayornis nigricans(1)(2)(4)	black phoebe
Sayornis saya(1)(2)(4)	Say's phoebe
Spinus psaltria(2)	lesser goldfinch
Streptopelia decaocto(1)(2)(4)	Eurasian collared-dove
Sturnella neglecta(1)(2)(4)	western meadowlark

Scientific Name	Common Name
Sturnus vulgaris(2)(4)	European starling
Troglodytes aedon(2)(4)	house wren
Tyrannus sp.(2)	kingbird
Tyrannus verticalis(4)	western kingbird
Tyto alba(2)	barn owl
Zenaida macroura(1)(2)(4)	mourning dove
Zonotrichia leucophrys(1)(2)(4)	white-crowned sparrow
Invertebrates	
Bombus sp.(2)(4)***	bumblebee
Danaus plexippus(1)(2)	monarch
Erythemis sp.(2)	pondhawk
Gryllus sp.(4)	cricket
Hemipepsis or *Pepsis* sp.(2)(4)	tarantula hawk
Mantodea(2)	mantis
Vanessa cardui(2)	painted lady
Reptiles and Amphibians	
Anaxyrus boreas halophilus(2)(4)	California toad
Crotalus oreganus oreganus(4)	Northern Pacific rattlesnake
Elgaria sp.(2)	alligator lizard
Pituophis catenifer catenifer(2)(4)	Pacific gophersnake
Pseudacris sp.(2)(4)	treefrog
Rana catebeiana(4)	American bullfrog
Sceloporus occidentalis occidentalis(2)(4)	northwestern fence lizard
Mammals	
Bos taurus(1)(2)(4)	domestic cow
Canis latrans(1)(2)(4)	coyote
Equus ferus caballus(2)(4)	domestic horse
Felis catus(2)(4)	domestic cat
Lepus sp.(2)	jackrabbit
Spermophilus sp.(1)(2)(4)	ground squirrel
Birds	
Agelaius phoeniceus(1)(2)	red-winged blackbird
Athene cunicularia(3)	Burrowing owl
Branta canadensis(2)(4)	Canada Goose
Bubo virginianus(2)	great horned owl
Bubulcus ibis(4)	western cattle egret
Buteo jamaicensis(1)(2)(4)	red-tailed hawk
Buteo swainsoni(2)(4)**	Swainson's hawk
Callipepla californica(3)	California quail
Cathartes aura(1)(2)(4)	turkey vulture
Charadrius vociferus(2)(4)	killdeer
Circus hudsonius(1)(2)(4)*	northern harrier
Columba livia(2)(4)	rock pigeon
Corvus corax(2)(4)	common raven
Eremophila alpestris(1)(2)(4)	horned lark
Euphagus cyanocephalus(1)(2)(4)	Brewer's blackbird
Falco columbarius(1)*	merlin
Falco mexicanus(2)*	prairie falcon
Falco sparverius(1)(2)(4)	American kestrel

Scientific Name	Common Name
Haemorhous mexicanus(2)(4)	house finch
Hirundo rustica(4)	barn swallow
Lanius ludovicianus(1)(2)(4)*	loggerhead shrike
Mimus polyglottos(2)(4)	northern mockingbird
Molothrus ater(1)(2)(4)	brown-headed cowbird
Passerculus sandwichensis(1)(2)(4)	savannah sparrow
Pica sp.(2)	magpie
Pica nuttalli(4)	yellow-billed magpie
Plegadis chihi(3)(4)*	white-faced ibis
Sayornis nigricans(1)(2)(4)	black phoebe
Sayornis saya(1)(2)(4)	Say's phoebe
Spinus psaltria(2)	lesser goldfinch
Streptopelia decaocto(1)(2)(4)	Eurasian collared-dove
Sturnella neglecta(1)(2)(4)	western meadowlark
Sturnus vulgaris(2)(4)	European starling
Troglodytes aedon(2)(4)	house wren
Tyrannus sp.(2)	kingbird
Tyrannus verticalis(4)	western kingbird
Tyto alba(2)	barn owl
Zenaida macroura(1)(2)(4)	mourning dove
Zonotrichia leucophrys(1)(2)(4)	white-crowned sparrow
Invertebrates	
Bombus sp.(2)(4)***	bumble bee
Danaus plexippus(1)(2)	monarch
Erythemis sp.(2)	pondhawk
Gryllus sp.(4)	cricket
Hemipepsis or *Pepsis* sp.(2)(4)	tarantula hawk
Mantodea(2)	mantis
Vanessa cardui(2)	painted lady
Reptiles and Amphibians	
Anaxyrus boreas halophilus(2)(4)	California toad
Crotalus oreganus oreganus(4)	Northern Pacific rattlesnake
Elgaria sp.(2)	alligator lizard
Pituophis catenifer catenifer(2)(4)	Pacific gophersnake
Pseudacris sp.(2)(4)	treefrog
Rana catebeiana(4)	American bullfrog
Sceloporus occidentalis occidentalis(2)(4)	northwestern fence lizard

Notes:

(1) Observed in 2019.

(2) Observed in 2020.

(3) Observed in 2021.

(4) Observed in 2024.

*CDFW Species of Special Concern or Watch List

**State Threatened species

***Bumble bees observed could not be identified but have potential to be the State Candidate Endangered Crotch's bumble bee (*Bombus crotchii*). Surveys for Crotch's bumble bee will occur in summer 2024.

3.2 BREEDING SEASON SURVEYS

3.2.1 Breeding Season Survey

Live BUOW were not detected during any of the additional breeding season surveys performed. Potential BUOW sign observed during the 2024 burrow survey at B11, B13, B16, B19, B21, B22, B27, B44, B45, C1, C22, and R1 Ground squirrels were active throughout the site at most burrows. Table 4 presents the results of the breeding season surveys. While live BUOW were not observed during the 2024 breeding season surveys, the potential BUOW sign on the Project site indicates that they may overwinter within the BSA.

3.3 WINTER SEASON SURVEY

Winter season surveys are planned for the winter of 2024-2025.

Table 4: BUOW Breeding Season Survey Results

Survey	Date	Start Time (am/pm)	End Time (am/pm)	Temperature (°F)	Wind Speed (mph)	Cloud Cover (%)	Potential Sign Observed	BUOW Observed	Biologists
1	6/26/2024	6:35 p.m.	8:40 p.m.	83-97	5-20	3-5	No additional sign observed.	No	Daniel Berg, Jack Gordon, Bryanna Griffin
1	6/27/2024	5:30 a.m.	7:43 a.m.	59-65	0-5	0	No additional sign observed.	No	Daniel Berg, Jack Gordon, Bryanna Griffin
2	7/2/2024	6:38 p.m.	8:34 p.m.	87-102	5-10	0	No additional sign observed.	No	Jack Gordon, Genny Kintscher
2	7/3/2024	5:40 a.m.	7:47 a.m	76-82	0-20	0	No additional sign observed.	No	Jack Gordon, Genny Kintscher
3	7/9/2024	6:37 p.m.	8:38 p.m	89-95	5-8	0	No additional sign observed.	No	Lauren Jennings, Ari Naiman
3	7/20/2024	5:43 a.m.	7:45 a.m.	65-74	0-2	0	No additional sign observed.	No	Lauren Jennings, Ari Naiman

4.0 DISCUSSION AND RECOMMENDATIONS

No live BUOW were observed during the breeding season surveys, but potential BUOW sign was observed. Winter season surveys are planned for winter 2024-2025 to determine if BUOW occupy the Project site in the winter season. Table 5 summarizes the survey results.

Table 5: Summary of Survey Results

Year	Location	Number of Burrows/ Burrow Surrogates	Number of Burrows/ Burrow Surrogates with Potential Sign	Type of Sign	Number of Burrows/ Burrow Surrogates with Live BUOW	Total Number of Live BUOW Observed
	Project site	34	9	Whitewash, old pellets	0	0
	Buffer Area	28	3	Whitewash	0	0

BUOW were not observed during the breeding season survey, so they are not anticipated to breed at the site. But there is potential for the species to occur during the winter season based on the potential sign that was observed. If BUOW are present, the use of heavy machinery and/or significant ground disturbance during construction activities has the potential to disturb BUOW. Winter season surveys in 2024/2025 will be conducted to assess for the presence of BUOW. The results of these surveys will be used to develop recommendations for pre-construction surveys and avoidance and minimization measures. The recommendations within this report are preliminary and will be refined during the California Environmental Quality Act process as more details about the project design and schedule are determined.

5.0 LITERATURE CITED

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APPENDIX A SITE PLAN



Janus Solar and Battery Storage Site Plan

APPENDIX B BUOW SURVEY DATASHEETS

Burrowing Owl Survey Form

Date:	6/26/2024	Surveyor Names:	Jack Gordon, Bryanna Griffin, Daniel Berg
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start:_____	End:_____	Start: 1835	End: 2040
Temp (deg F)	Start:_____	End:_____	Start: 97	End: 83
Wind (mph)	Start:_____	End:_____	Start: 5-15	End: 15-20
% Cloud Cover	Start:_____	End:_____	Start: 3	End: 5
Precip (Yes/No)	Start:_____	End:_____	Start: No	End: No
Visibility (Good/Fair/Poor)	Start:_____	End:_____	Start: Good	End: Good

Phase III BUOW Survey

1. **Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.**
2. **Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.**
3. **DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.**

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
C23	0	NA	1835	None.
B34	0	NA	1842	None.
B27	0	NA	1843	None.
B33	0	NA	1844	None.
B35	0	NA	1844	None.
B37	0	NA	1844	None.
C4	0	NA	1846	None.
B28	0	NA	1846	None.
B39	0	NA	1847	None.
B40	0	NA	1847	None.
B36	0	NA	1848	None.
B41	0	NA	1849	None.
B43	0	NA	1849	None.
B42	0	NA	1849	None.
B44	0	NA	1850	None.
B8	0	NA	1850	None.
B45	0	NA	1858	None.
C24	0	NA	1859	None.
B26	0	NA	1906	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	6/26/2024	Surveyor Names:	Jack Gordon, Bryanna Griffin, Daniel Berg
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start:_____	End:_____	Start: 1835	End: 2040
Temp (deg F)	Start:_____	End:_____	Start: 97	End: 83
Wind (mph)	Start:_____	End:_____	Start: 5-15	End: 15-20
% Cloud Cover	Start:_____	End:_____	Start: 3	End: 5
Precip (Yes/No)	Start:_____	End:_____	Start: No	End: No
Visibility (Good/Fair/Poor)	Start:_____	End:_____	Start: Good	End: Good

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
C1	0	NA	1906	None.
B20	0	NA	1907	None.
B21	0	NA	1907	None.
B22	0	NA	1909	None.
R1	0	NA	1929	None.
B29	0	NA	1914	None.
B12	0	NA	1914	None.
B11	0	NA	1914	None.
B13	0	NA	1914	None.
B14	0	NA	1914	None.
B15	0	NA	1914	None.
B10	0	NA	2002	None.
B16	0	NA	2002	None.
B17	0	NA	2002	None.
B18	0	NA	2002	None.
B7	0	NA	2000	None.
D1	0	NA	2000	None.
B19	0	NA	2000	None.
B6	0	NA	2005	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	6/26/2024	Surveyor Names:	Jack Gordon, Bryanna Griffin, Daniel Berg
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start:_____	End:_____	Start: 1835	End: 2040
Temp (deg F)	Start:_____	End:_____	Start: 97	End: 83
Wind (mph)	Start:_____	End:_____	Start: 5-15	End: 15-20
% Cloud Cover	Start:_____	End:_____	Start: 3	End: 5
Precip (Yes/No)	Start:_____	End:_____	Start: No	End: No
Visibility (Good/Fair/Poor)	Start:_____	End:_____	Start: Good	End: Good

Phase III BUOW Survey

1. **Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.**
2. **Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.**
3. **DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.**

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
B4	0	NA	2005	None.
B5	0	NA	2005	None.
B1	0	NA	2009	None.
B2	0	NA	2009	None.
B3	0	NA	2009	None.
C2	0	NA	1957	None.
B24	0	NA	1953	None.
B23	0	NA	1952	None.
B25	0	NA	1948	None.
B9	0	NA	1948	None.
C3	0	NA	2014	None.
C8	0	NA	2017	None.
C6	0	NA	2018	None.
C7	0	NA	2018	None.
B46	0	NA	2019	None.
B47	0	NA	2019	None.
B48	0	NA	2019	None.
C5	0	NA	2020	None.
B32	0	NA	2023	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	6/26/2024	Surveyor Names:	Jack Gordon, Bryanna Griffin, Daniel Berg
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start:_____	End:_____	Start: 1835	End: 2040
Temp (deg F)	Start:_____	End:_____	Start: 97	End: 83
Wind (mph)	Start:_____	End:_____	Start: 5-15	End: 15-20
% Cloud Cover	Start:_____	End:_____	Start: 3	End: 5
Precip (Yes/No)	Start:_____	End:_____	Start: No	End: No
Visibility (Good/Fair/Poor)	Start:_____	End:_____	Start: Good	End: Good

Phase III BUOW Survey

1. **Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.**
2. **Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.**
3. **DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.**

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
B30	0	NA	2023	None.
B38	0	NA	2023	None.
B31	0	NA	2023	None.
C9	0	NA	2027	None.
C10	0	NA	2031	None.
C11	0	NA	2031	None.
C12	0	NA	2031	None.
C13	0	NA	2032	None.
C14	0	NA	2033	None.
C15	0	NA	2034	None.
C16	0	NA	2035	None.
C17	0	NA	2030	None.
C18	0	NA	2036	None.
C19	0	NA	2037	None.
C20	0	NA	2038	None.
C21	0	NA	2039	None.
C22	0	NA	2040	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	6/27/2024	Surveyor Names:	Jack Gordon, Bryanna Griffin, Daniel Berg
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start: 0530	End: 0743	Start:	End:
Temp (deg F)	Start: 59	End: 65	Start:	End:
Wind (mph)	Start: 0-5	End: 0-5	Start:	End:
% Cloud Cover	Start: 0	End: 0	Start:	End:
Precip (Yes/No)	Start: No	End: No	Start:	End:
Visibility (Good/Fair/Poor)	Start: Good	End: Good	Start:	End:

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
C22	0	NA	530	None.
C21	0	NA	532	None.
C20	0	NA	537	None.
C19	0	NA	538	None.
C18	0	NA	539	None.
C17	0	NA	541	None.
C16	0	NA	543	None.
C15	0	NA	544	None.
C14	0	NA	545	None.
C13	0	NA	546	None.
C12	0	NA	547	None.
C11	0	NA	547	None.
C10	0	NA	547	None.
C9	0	NA	548	None.
B31	0	NA	550	None.
B38	0	NA	550	None.
B30	0	NA	550	None.
B32	0	NA	552	None.
C5	0	NA	555	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	6/27/2024	Surveyor Names:	Jack Gordon, Bryanna Griffin, Daniel Berg
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start: 0530	End: 0743	Start:	End:
Temp (deg F)	Start: 59	End: 65	Start:	End:
Wind (mph)	Start: 0-5	End: 0-5	Start:	End:
% Cloud Cover	Start: 0	End: 0	Start:	End:
Precip (Yes/No)	Start: No	End: No	Start:	End:
Visibility (Good/Fair/Poor)	Start: Good	End: Good	Start:	End:

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
B48	0	NA	557	None.
B47	0	NA	557	None.
B46	0	NA	557	None.
C7	0	NA	558	None.
C6	0	NA	558	None.
C8	0	NA	559	None.
C3	0	NA	601	None.
B9	0	NA	633	None.
B25	0	NA	630	None.
B23	0	NA	630	None.
B24	0	NA	630	None.
C2	0	NA	604	None.
B3	0	NA	615	None.
B2	0	NA	615	None.
B1	0	NA	615	None.
B5	0	NA	615	None.
B4	0	NA	615	None.
B6	0	NA	615	None.
B19	0	NA	606	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	6/27/2024	Surveyor Names:	Jack Gordon, Bryanna Griffin, Daniel Berg
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start: 0530	End: 0743	Start:	End:
Temp (deg F)	Start: 59	End: 65	Start:	End:
Wind (mph)	Start: 0-5	End: 0-5	Start:	End:
% Cloud Cover	Start: 0	End: 0	Start:	End:
Precip (Yes/No)	Start: No	End: No	Start:	End:
Visibility (Good/Fair/Poor)	Start: Good	End: Good	Start:	End:

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
D1	0	NA	607	None.
B7	0	NA	607	None.
B18	0	NA	607	None.
B17	0	NA	607	None.
B16	0	NA	607	None.
B10	0	NA	607	None.
B15	0	NA	652	None.
B14	0	NA	652	None.
B13	0	NA	652	None.
B11	0	NA	652	None.
B12	0	NA	652	None.
B29	0	NA	652	None.
R1	0	NA	710	None.
B22	0	NA	643	None.
B21	0	NA	643	None.
B20	0	NA	643	None.
C1	0	NA	640	None.
B26	0	NA	643	None.
C24	0	NA	743	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	6/27/2024	Surveyor Names:	Jack Gordon, Bryanna Griffin, Daniel Berg
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start: 0530	End: 0743	Start:	End:
Temp (deg F)	Start: 59	End: 65	Start:	End:
Wind (mph)	Start: 0-5	End: 0-5	Start:	End:
% Cloud Cover	Start: 0	End: 0	Start:	End:
Precip (Yes/No)	Start: No	End: No	Start:	End:
Visibility (Good/Fair/Poor)	Start: Good	End: Good	Start:	End:

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
B45	0	NA	743	None.
B8	0	NA	740	None.
B44	0	NA	740	None.
B42	0	NA	740	None.
B43	0	NA	741	None.
B41	0	NA	742	None.
B36	0	NA	740	None.
B40	0	NA	740	None.
B39	0	NA	737	None.
B28	0	NA	736	None.
C4	0	NA	740	None.
B37	0	NA	735	None.
B35	0	NA	734	None.
B33	0	NA	733	None.
B27	0	NA	732	None.
B34	0	NA	730	None.
C23	0	NA	724	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/2/2024	Surveyor Names:	Jack Gordon, Genny Kintscher
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start:_____	End:_____	Start: 1838	End: 2034
Temp (deg F)	Start:_____	End:_____	Start: 102	End: 87
Wind (mph)	Start:_____	End:_____	Start: 5-10	End: 5-10
% Cloud Cover	Start:_____	End:_____	Start: 0	End: 0
Precip (Yes/No)	Start:_____	End:_____	Start: No	End: No
Visibility (Good/Fair/Poor)	Start:_____	End:_____	Start: Good	End: Good

Phase III BUOW Survey

1. **Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.**
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Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
C23	0	NA	1838	None.
B34	0	NA	1849	None.
B27	0	NA	1849	None.
B33	0	NA	1850	None.
B35	0	NA	1850	None.
B37	0	NA	1852	None.
C4	0	NA	1852	None.
B28	0	NA	1852	None.
B39	0	NA	1853	None.
B40	0	NA	1853	None.
B36	0	NA	1854	None.
B41	0	NA	1855	None.
B43	0	NA	1857	None.
B42	0	NA	1857	None.
B44	0	NA	1859	None.
B8	0	NA	1900	None.
B45	0	NA	1912	None.
C24	0	NA	1918	None.
C1	0	NA	1920	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/2/2024	Surveyor Names:	Jack Gordon, Genny Kintscher
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start:_____	End:_____	Start: 1838	End: 2034
Temp (deg F)	Start:_____	End:_____	Start: 102	End: 87
Wind (mph)	Start:_____	End:_____	Start: 5-10	End: 5-10
% Cloud Cover	Start:_____	End:_____	Start: 0	End: 0
Precip (Yes/No)	Start:_____	End:_____	Start: No	End: No
Visibility (Good/Fair/Poor)	Start:_____	End:_____	Start: Good	End: Good

Phase III BUOW Survey

1. **Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.**
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3. **DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.**

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
B26	0	NA	1923	None.
B20	0	NA	1924	None.
B21	0	NA	1928	None.
B22	0	NA	1926	None.
B29	0	NA	1930	None.
B12	0	NA	1930	None.
B11	0	NA	1930	None.
B13	0	NA	1930	None.
B14	0	NA	1933	None.
B15	0	NA	1933	None.
R1	0	NA	1944	None.
B9	0	NA	1952	None.
B25	0	NA	1952	None.
B23	0	NA	1954	None.
B24	0	NA	1954	None.
C2	0	NA	1956	None.
B19	0	NA	1957	None.
D1	0	NA	1957	None.
B7	0	NA	1957	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/2/2024	Surveyor Names:	Jack Gordon, Genny Kintscher
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start:_____	End:_____	Start: 1838	End: 2034
Temp (deg F)	Start:_____	End:_____	Start: 102	End: 87
Wind (mph)	Start:_____	End:_____	Start: 5-10	End: 5-10
% Cloud Cover	Start:_____	End:_____	Start: 0	End: 0
Precip (Yes/No)	Start:_____	End:_____	Start: No	End: No
Visibility (Good/Fair/Poor)	Start:_____	End:_____	Start: Good	End: Good

Phase III BUOW Survey

1. **Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.**
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3. **DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.**

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
B18	0	NA	1957	None.
B10	0	NA	1958	None.
B16	0	NA	1958	None.
B17	0	NA	1958	None.
B6	0	NA	2002	None.
B5	0	NA	2002	None.
B4	0	NA	2002	None.
B3	0	NA	2004	None.
B2	0	NA	2004	None.
B1	0	NA	2004	None.
C3	0	NA	2009	None.
B32	0	NA	2011	None.
B31	0	NA	2012	None.
B30	0	NA	2012	None.
B38	0	NA	2012	None.
C5	0	NA	2016	None.
B46	0	NA	2018	None.
B47	0	NA	2018	None.
B48	0	NA	2018	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/2/2024	Surveyor Names:	Jack Gordon, Genny Kintscher
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start:_____	End:_____	Start: 1838	End: 2034
Temp (deg F)	Start:_____	End:_____	Start: 102	End: 87
Wind (mph)	Start:_____	End:_____	Start: 5-10	End: 5-10
% Cloud Cover	Start:_____	End:_____	Start: 0	End: 0
Precip (Yes/No)	Start:_____	End:_____	Start: No	End: No
Visibility (Good/Fair/Poor)	Start:_____	End:_____	Start: Good	End: Good

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
C6	0	NA	2020	None.
C7	0	NA	2020	None.
C8	0	NA	2021	None.
C9	0	NA	2022	None.
C10	0	NA	2028	None.
C11	0	NA	2028	None.
C12	0	NA	2028	None.
C13	0	NA	2029	None.
C14	0	NA	2029	None.
C15	0	NA	2030	None.
C16	0	NA	2030	None.
C17	0	NA	2030	None.
C18	0	NA	2031	None.
C19	0	NA	2032	None.
C20	0	NA	2033	None.
C21	0	NA	2034	None.
C22	0	NA	2035	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/3/2024	Surveyor Names:	Jack Gordon, Genny Kintscher
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start: 0540	End: 0747	Start:	End:
Temp (deg F)	Start: 76	End: 82	Start:	End:
Wind (mph)	Start: 0-10	End: 10-20	Start:	End:
% Cloud Cover	Start: 0	End: 0	Start:	End:
Precip (Yes/No)	Start: No	End: No	Start:	End:
Visibility (Good/Fair/Poor)	Start: Good	End: Good	Start:	End:

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
C22	0	NA	540	None.
C21	0	NA	541	None.
C20	0	NA	542	None.
C19	0	NA	543	None.
C18	0	NA	543	None.
C17	0	NA	543	None.
C16	0	NA	544	None.
C15	0	NA	545	None.
C14	0	NA	546	None.
C13	0	NA	547	None.
C12	0	NA	548	None.
C11	0	NA	549	None.
C10	0	NA	549	None.
C9	0	NA	552	None.
C8	0	NA	553	None.
C7	0	NA	555	None.
C6	0	NA	555	None.
B48	0	NA	558	None.
B47	0	NA	558	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/3/2024	Surveyor Names:	Jack Gordon, Genny Kintscher
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start: 0540	End: 0747	Start:	End:
Temp (deg F)	Start: 76	End: 82	Start:	End:
Wind (mph)	Start: 0-10	End: 10-20	Start:	End:
% Cloud Cover	Start: 0	End: 0	Start:	End:
Precip (Yes/No)	Start: No	End: No	Start:	End:
Visibility (Good/Fair/Poor)	Start: Good	End: Good	Start:	End:

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
B46	0	NA	558	None.
C5	0	NA	559	None.
B38	0	NA	601	None.
B30	0	NA	601	None.
B31	0	NA	601	None.
B32	0	NA	600	None.
C3	0	NA	610	None.
B1	0	NA	627	None.
B2	0	NA	627	None.
B3	0	NA	627	None.
B4	0	NA	624	None.
B5	0	NA	624	None.
B6	0	NA	624	None.
B17	0	NA	617	None.
B16	0	NA	617	None.
B10	0	NA	617	None.
B18	0	NA	615	None.
B7	0	NA	615	None.
D1	0	NA	614	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/3/2024	Surveyor Names:	Jack Gordon, Genny Kintscher
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start: 0540	End: 0747	Start:	End:
Temp (deg F)	Start: 76	End: 82	Start:	End:
Wind (mph)	Start: 0-10	End: 10-20	Start:	End:
% Cloud Cover	Start: 0	End: 0	Start:	End:
Precip (Yes/No)	Start: No	End: No	Start:	End:
Visibility (Good/Fair/Poor)	Start: Good	End: Good	Start:	End:

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
B19	0	NA	614	None.
C2	0	NA	612	None.
B24	0	NA	633	None.
B23	0	NA	633	None.
B25	0	NA	637	None.
B9	0	NA	637	None.
R1	0	NA	702	None.
B15	0	NA	649	None.
B14	0	NA	646	None.
B13	0	NA	646	None.
B11	0	NA	646	None.
B12	0	NA	646	None.
B29	0	NA	646	None.
B22	0	NA	642	None.
B21	0	NA	642	None.
B20	0	NA	642	None.
B26	0	NA	641	None.
C1	0	NA	641	None.
C24	0	NA	733	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/3/2024	Surveyor Names:	Jack Gordon, Genny Kintscher
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start: 0540	End: 0747	Start:	End:
Temp (deg F)	Start: 76	End: 82	Start:	End:
Wind (mph)	Start: 0-10	End: 10-20	Start:	End:
% Cloud Cover	Start: 0	End: 0	Start:	End:
Precip (Yes/No)	Start: No	End: No	Start:	End:
Visibility (Good/Fair/Poor)	Start: Good	End: Good	Start:	End:

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
B45	0	NA	736	None.
B8	0	NA	714	None.
B44	0	NA	714	None.
B42	0	NA	714	None.
B43	0	NA	714	None.
B41	0	NA	714	None.
B36	0	NA	715	None.
B40	0	NA	715	None.
B39	0	NA	717	None.
B28	0	NA	718	None.
C4	0	NA	718	None.
B37	0	NA	720	None.
B35	0	NA	721	None.
B33	0	NA	721	None.
B27	0	NA	723	None.
B34	0	NA	724	None.
C23	0	NA	746	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/9/2024	Surveyor Names: Lauren Jennings, Ari Naiman	
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start:_____	End:_____	Start: 1837	End: 2038
Temp (deg F)	Start:_____	End:_____	Start: 95	End: 89
Wind (mph)	Start:_____	End:_____	Start: 5-8	End: 5
% Cloud Cover	Start:_____	End:_____	Start: 0	End: 0
Precip (Yes/No)	Start:_____	End:_____	Start: No	End: No
Visibility (Good/Fair/Poor)	Start:_____	End:_____	Start: Good	End: Good

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
C22	0	NA	1837	None.
C21	0	NA	1838	None.
C20	0	NA	1839	None.
C19	0	NA	1840	None.
C18	0	NA	1842	None.
C17	0	NA	1842	None.
C16	0	NA	1844	None.
C15	0	NA	1847	None.
C14	0	NA	1849	None.
C13	0	NA	1850	None.
C12	0	NA	1852	None.
C11	0	NA	1852	None.
C10	0	NA	1852	None.
C9	0	NA	1857	None.
C8	0	NA	1858	None.
C7	0	NA	1900	None.
C6	0	NA	1900	None.
B48	0	NA	1903	None.
B47	0	NA	1903	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/9/2024	Surveyor Names: Lauren Jennings, Ari Naiman	
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start:_____	End:_____	Start: 1837	End: 2038
Temp (deg F)	Start:_____	End:_____	Start: 95	End: 89
Wind (mph)	Start:_____	End:_____	Start: 5-8	End: 5
% Cloud Cover	Start:_____	End:_____	Start: 0	End: 0
Precip (Yes/No)	Start:_____	End:_____	Start: No	End: No
Visibility (Good/Fair/Poor)	Start:_____	End:_____	Start: Good	End: Good

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
B46	0	NA	1903	None.
C5	0	NA	1904	None.
B38	0	NA	1906	None.
B30	0	NA	1907	None.
B31	0	NA	1907	None.
B32	0	NA	1907	None.
C3	0	NA	1913	None.
B1	0	NA	2038	None.
B2	0	NA	2038	None.
B3	0	NA	2038	None.
B4	0	NA	2035	None.
B5	0	NA	2035	None.
B6	0	NA	2034	None.
B17	0	NA	2032	None.
B16	0	NA	2032	None.
B10	0	NA	2031	None.
B18	0	NA	2031	None.
B7	0	NA	2029	None.
D1	0	NA	2029	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/9/2024	Surveyor Names: Lauren Jennings, Ari Naiman	
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start:_____	End:_____	Start: 1837	End: 2038
Temp (deg F)	Start:_____	End:_____	Start: 95	End: 89
Wind (mph)	Start:_____	End:_____	Start: 5-8	End: 5
% Cloud Cover	Start:_____	End:_____	Start: 0	End: 0
Precip (Yes/No)	Start:_____	End:_____	Start: No	End: No
Visibility (Good/Fair/Poor)	Start:_____	End:_____	Start: Good	End: Good

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
B19	0	NA	2028	None.
C2	0	NA	1915	None.
B24	0	NA	1918	None.
B23	0	NA	1918	None.
B25	0	NA	1918	None.
B9	0	NA	1920	None.
R1	0	NA	1941	None.
B15	0	NA	1933	None.
B14	0	NA	1933	None.
B13	0	NA	1928	None.
B11	0	NA	1928	None.
B12	0	NA	1928	None.
B29	0	NA	1928	None.
B22	0	NA	1925	None.
B21	0	NA	1925	None.
B20	0	NA	1925	None.
B26	0	NA	1922	None.
C1	0	NA	1921	None.
C24	0	NA	2000	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/9/2024	Surveyor Names: Lauren Jennings, Ari Naiman	
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start:_____	End:_____	Start: 1837	End: 2038
Temp (deg F)	Start:_____	End:_____	Start: 95	End: 89
Wind (mph)	Start:_____	End:_____	Start: 5-8	End: 5
% Cloud Cover	Start:_____	End:_____	Start: 0	End: 0
Precip (Yes/No)	Start:_____	End:_____	Start: No	End: No
Visibility (Good/Fair/Poor)	Start:_____	End:_____	Start: Good	End: Good

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
B45	0	NA	2001	None.
B8	0	NA	1949	None.
B44	0	NA	1956	None.
B42	0	NA	1958	None.
B43	0	NA	1957	None.
B41	0	NA	1956	None.
B36	0	NA	1956	None.
B40	0	NA	1955	None.
B39	0	NA	1955	None.
B28	0	NA	1950	None.
C4	0	NA	1950	None.
B37	0	NA	1952	None.
B35	0	NA	1952	None.
B33	0	NA	1952	None.
B27	0	NA	1954	None.
B34	0	NA	1954	None.
C23	0	NA	2013	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/10/2024	Surveyor Names: Lauren Jennings, Ari Naiman	
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start: 0543	End: 0745	Start:	End:
Temp (deg F)	Start: 65	End: 74	Start:	End:
Wind (mph)	Start: 0-2	End: 0-2	Start:	End:
% Cloud Cover	Start: 0	End: 0	Start:	End:
Precip (Yes/No)	Start: No	End: No	Start:	End:
Visibility (Good/Fair/Poor)	Start: Good	End: Good	Start:	End:

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
C22	0	NA	545	None.
C21	0	NA	546	None.
C20	0	NA	547	None.
C19	0	NA	549	None.
C18	0	NA	551	None.
C17	0	NA	552	None.
C16	0	NA	553	None.
C15	0	NA	554	None.
C14	0	NA	555	None.
C13	0	NA	556	None.
C12	0	NA	557	None.
C11	0	NA	557	None.
C10	0	NA	557	None.
C9	0	NA	602	None.
C8	0	NA	603	None.
C7	0	NA	605	None.
C6	0	NA	605	None.
B48	0	NA	607	None.
B47	0	NA	607	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/10/2024	Surveyor Names: Lauren Jennings, Ari Naiman	
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start: 0543	End: 0745	Start:	End:
Temp (deg F)	Start: 65	End: 74	Start:	End:
Wind (mph)	Start: 0-2	End: 0-2	Start:	End:
% Cloud Cover	Start: 0	End: 0	Start:	End:
Precip (Yes/No)	Start: No	End: No	Start:	End:
Visibility (Good/Fair/Poor)	Start: Good	End: Good	Start:	End:

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
B46	0	NA	607	None.
C5	0	NA	608	None.
B38	0	NA	614	None.
B30	0	NA	614	None.
B31	0	NA	614	None.
B32	0	NA	611	None.
C3	0	NA	620	None.
C2	0	NA	623	None.
B24	0	NA	625	None.
B23	0	NA	625	None.
B25	0	NA	626	None.
B9	0	NA	627	None.
C1	0	NA	628	None.
B26	0	NA	631	None.
B22	0	NA	632	None.
B21	0	NA	632	None.
B20	0	NA	632	None.
B13	0	NA	635	None.
B11	0	NA	635	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/10/2024	Surveyor Names: Lauren Jennings, Ari Naiman	
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start: 0543	End: 0745	Start:	End:
Temp (deg F)	Start: 65	End: 74	Start:	End:
Wind (mph)	Start: 0-2	End: 0-2	Start:	End:
% Cloud Cover	Start: 0	End: 0	Start:	End:
Precip (Yes/No)	Start: No	End: No	Start:	End:
Visibility (Good/Fair/Poor)	Start: Good	End: Good	Start:	End:

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
B12	0	NA	635	None.
B29	0	NA	635	None.
B15	0	NA	638	None.
B14	0	NA	638	None.
R1	0	NA	645	None.
B8	0	NA	651	None.
C4	0	NA	652	None.
B28	0	NA	652	None.
B37	0	NA	655	None.
B35	0	NA	655	None.
B33	0	NA	655	None.
B27	0	NA	714	None.
B34	0	NA	714	None.
B40	0	NA	701	None.
B39	0	NA	700	None.
B41	0	NA	701	None.
B36	0	NA	701	None.
B43	0	NA	705	None.
B44	0	NA	705	None.

Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

Burrowing Owl Survey Form

Date:	7/10/2024	Surveyor Names: Lauren Jennings, Ari Naiman	
Project/Site Name:	Janus		

Phase III Weather Data

	AM		PM	
Time (24 hr)	Start: 0543	End: 0745	Start:	End:
Temp (deg F)	Start: 65	End: 74	Start:	End:
Wind (mph)	Start: 0-2	End: 0-2	Start:	End:
% Cloud Cover	Start: 0	End: 0	Start:	End:
Precip (Yes/No)	Start: No	End: No	Start:	End:
Visibility (Good/Fair/Poor)	Start: Good	End: Good	Start:	End:

Phase III BUOW Survey

1. Surveyors must stay more than 50 meters (approx. 160 ft) away from any owls or occupied burrows.

2. Survey must occur two hours before sunset to one hour after sunset or from one hour before to two hours after sunrise.

3. DO NOT survey during heavy rain, high winds greater than 20 miles per hour, or dense fog.

Mapped BUOW ID (take photo)	# of Owls or Nesting Pairs (note nestlings, juveniles, adults, or unknown)	Behavior (feeding, resting, courtship, alarm, territorial defense, copulation)	Time observed (24 hr)	Comments (note associated Burrow ID)
B42	0	NA	705	None.
C24	0	NA	711	None.
B45	0	NA	711	None.
C23	0	NA	717	None.
B19	0	NA	728	None.
B7	0	NA	732	None.
D1	0	NA	730	None.
B10	0	NA	731	None.
B18	0	NA	733	None.
B16	0	NA	734	None.
B17	0	NA	734	None.
B6	0	NA	738	None.
B5	0	NA	740	None.
B4	0	NA	740	None.
B1	0	NA	745	None.
B2	0	NA	745	None.
B3	0	NA	745	None.

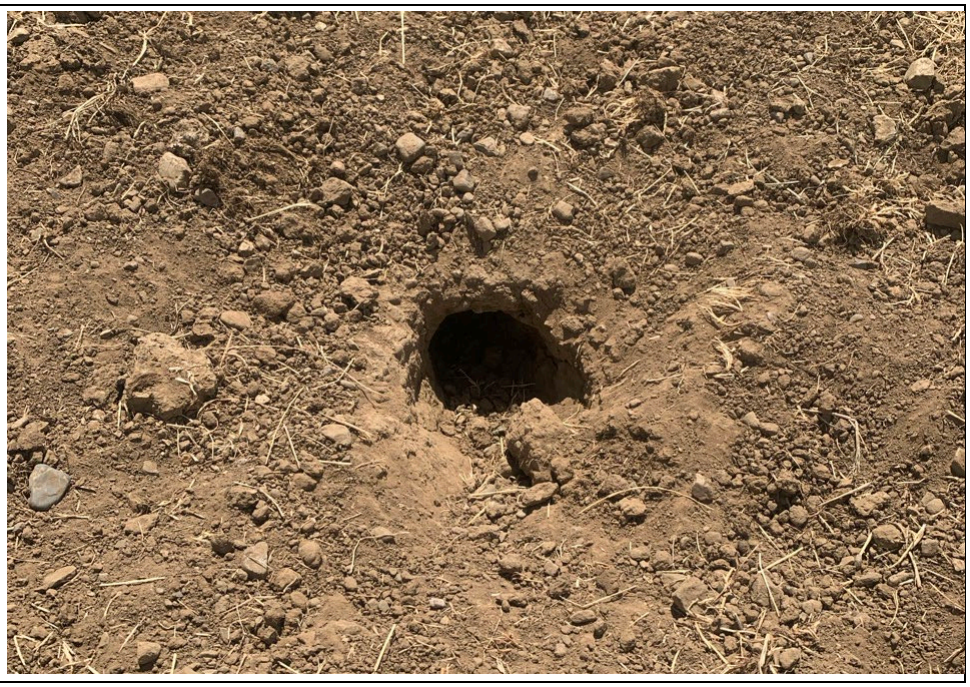
Comments

No additional sign observed at burrows/burrow surrogates.

Sign observed during burrow survey is still present.

Ground squirrels active at small mammal burrows.

APPENDIX C PHOTOGRAPHS

Photograph 1	
Notes: Burrow 32.	

Photograph 2	
Notes: Burrow 13, representative burrow along a fence line from burrow survey. Minor whitewash, likely from bird species that are not BUOW perching on the fence, was observed at this burrow.	

Photograph 3	
Notes: Burrow 39, representative burrow consisting of a complex of small mammal burrows built by ground squirrels.	

Photograph 4	
Notes: Culvert 2, representative culvert from burrow survey.	

Photograph 5	
Notes: Debris pile 1, a debris pile with many burrows and gaps suitable for BUOW, found during burrow survey.	

Photograph 6	
Notes: Riprap 1, from burrow survey. Whitewash was observed at this location.	

Photograph 7	
Notes: Whitewash observed at C1 during burrow survey.	

Photograph 8	
Notes: Representative photo of dense yellow star thistle (*Centaurea solstitialis*) field, within the *Amsinckia menziesii - Achyrachaena mollis* Herbaceous Alliance, observed during burrow survey. Not suitable habitat for BUOW; Phase II transects were not walked in this community.	

Jurisdictional Delineation Report

JURISDICTIONAL DELINEATION REPORT

Janus Solar and Battery Storage Project

Colusa County, California



July 26, 2024

RWE

RWE Solar Development, LLC

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APPENDICES

Appendix A Wetland Determination Data Forms
Appendix B Photographs

ACRONYMS/ABBREVIATIONS

BESS	battery energy storage system
CDFW	California Department of Fish and Wildlife
CFR	Code of Federal Regulations
EPA	U.S. Environmental Protection Agency
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
LSAA	Lake and Streambed Alteration Agreement
NWI	National Wetlands Inventory
NWP	Nationwide Permit
OBL	Obligate Wetland
OHWM	ordinary high water mark
Porter-Cologne Act	Porter-Cologne Water Quality Control Act of 1969
Procedures	State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State
Project	Janus Solar and Battery Storage Project
RWE	RWE Solar Development, LLC
RWQCB	Regional Water Quality Control Board
SWRCB	State Water Resources Control Board
trans	transition sampling point
up	upland sampling point
UPL	Upland
USACE	U.S. Army Corps of Engineers
USDA NRCS	U.S. Department of Agriculture National Resources Conservation Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WDRs	waste discharge requirements
wet	potential wetland area sampling point

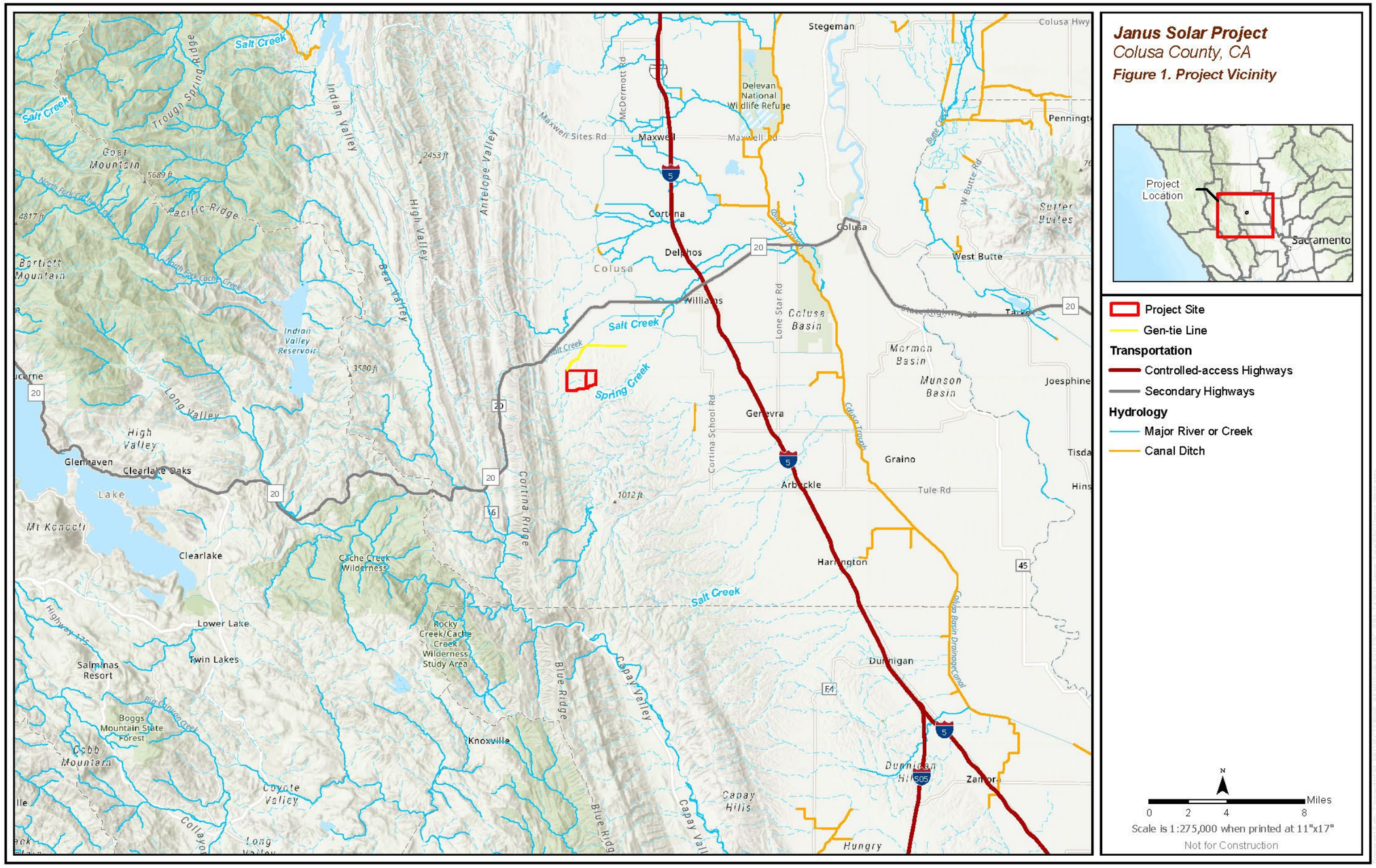
1.0 INTRODUCTION

Tetra Tech has prepared this jurisdictional delineation report for the proposed Janus Solar and Battery Storage Project (Project). RWE Solar Development, LLC (RWE) proposes to develop a solar energy facility located on the Project site (approximately 886 acres) in Colusa County, California (Figure 1).

The Project consists of constructing and operating a photovoltaic solar electricity generating facility, battery energy storage system (BESS), and associated infrastructure on privately-owned grazing and agricultural land. The Project would include the construction of a gen-tie line to Cortina substation, an electrical substation, a BESS, and solar panel arrays. Project design details and components may be modified during finalization of the site plan.

Tetra Tech conducted a literature review and a jurisdictional delineation of the Project site. Biologists conducted a jurisdictional delineation in 2021 and 2024 on any potential jurisdictional features within the Project site. The jurisdictional delineation in 2024 also included the proposed gen-tie line and a 250-meter survey buffer around the Project site and gen-tie line. The purpose of this jurisdictional delineation report is to:

- Summarize the major applicable federal and state laws that apply to protecting jurisdictional wetlands, waters, and water quality.
- Document the methods and results of the wetlands delineations conducted for the Project.
- Identify jurisdictional areas under the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) criteria.


Janus Solar Project
Colusa County, CA
Figure 1. Project Vicinity
Project Location
Sacramento
Project Site
Gen-tie Line
Transportation
Controlled-access Highways
Secondary Highways
Hydrology
Major River or Creek
Canal Ditch
N
0 2 4 8 Miles
Scale is 1:275,000 when printed at 11"x17"
Not for Construction
Stegeman
Colusa Hwy
Delevan National Wildlife Refuge
Maxwell
Maxwell Sites Rd
McDermott Rd
Penningto
Butte Creek
W Butte Rd
Sutter Buttes
Cortina
Colusa
Delphos
Colusa
West Butte
Williams
Salt Creek
Spring Creek
Lone Star Rd
Colusa Basin
Marman Basin
Munson Basin
Joesphine
Tarke
Genevra
Cortina School Rd
Colusa Trough
Tisda
Graino
Arbuckle
Tule Rd
Hins
Harrington
Dunnigan
Colusa Basin Drainage Canal
Zamor
Dunnigan Hills
Capay Hills
Hungry
Goat Mountain
5689 ft
Trough Spring Ridge
Indian Valley
Antelope Valley
2453 ft
Pacific Ridge
North Fork Cache Creek
4817 ft
Bartlett Mountain
High Valley
Bear Valley
Indian Valley Reservoir
3580 ft
Long Valley
Glenhaven
Clearlake Oaks
Lake
Mt Konocti
Clearlake
Cache Creek Wilderness
Cortina Ridge
1012 ft
Highway 175
Lower Lake
Twin Lakes
Rocky Creek/Cache Creek Wilderness Study Area
Blue Ridge
Capay Valley
Salminas Resort
Boggs Mountain State Forest
Big Canyon Creek
Cobb Mountain
Knoxville
Coyote Valley
Collayomi
Long Valley

2.0 ENVIRONMENTAL SETTING

The Project site is located on privately-owned grazing and agricultural land in a rural area of Colusa County, California. The Project site is within the Colusa Basin Watershed in the Sacramento Valley, which drains into the Sacramento River at Knights Landing via the Colusa Basin Drain (Colusa County Resource Conservation District 2012). Spring Creek occurs adjacent to the Project site to the south and Salt Creek occurs approximately 1 mile north of the site near the proposed gen-tie line. Both of these creeks converge and ultimately drain into the Colusa Basin Drain over 10 miles northeast of the Project site. Surface water connectivity on the Project site has been significantly disturbed by grazing and agricultural activities. The Project site is predominantly flat with low-sloped rolling hills and the elevation range including the proposed gen-tie line is approximately 43 to 105 meters. The Project site currently supports cattle grazing and grain cultivation. Vegetation on the Project site includes non-native grassland, cultivated grain fields, low growing herbaceous plants, and disturbed riparian areas and drainages with sparse native and non-native trees.

Rainfall in 2024 has been normal for the Sacramento area. From July 1, 2023 through June 23, 2024, rainfall was 17.68 inches, which is 98 percent of the normal from 1991-2020 of 18.12 inches (Golden Gate Weather Services 2024).

3.0 REGULATORY OVERVIEW AND DEFINITIONS

3.1 U.S. ARMY CORPS OF ENGINEERS

Section 404 of the Clean Water Act provides the U.S. Environmental Protection Agency (EPA) and the USACE regulatory and permitting authority over activities that result in the discharge of dredged or fill material into "navigable Waters of the U.S." Section 502(7) of the Clean Water Act defines navigable waters as "Waters of the U.S., including territorial seas." Section 328 of Chapter 33 in the Code of Federal Regulations (CFR) defines the term Waters of the U.S. as it applies to the jurisdictional limits of the authority of the USACE under the Clean Water Act. A summary of this definition of Waters of the U.S. in 33 CFR Section 328.3 includes (1) waters which are: (i) currently used, or were used in the past, or may be susceptible to use in commerce, including all waters which are subject to tides; (ii) the territorial seas; or (iii) interstate waters; (2) impoundments of waters; (3) tributaries of waters; (4) wetlands adjacent to waters; (5) intrastate lakes and ponds (USACE and EPA 2023b). Therefore, for the purpose of determining USACE jurisdiction under the Clean Water Act, "navigable waters" as defined in the Clean Water Act are the same as Waters of the U.S. defined in the CFR above.

The limits of USACE jurisdiction under Section 404 as defined in 33 CFR Section 328.4 are as follows: (a) Territorial seas: three nautical miles in a seaward direction from the baseline; (b) Tidal waters of the U.S.: high tide line or to the limit of adjacent non-tidal waters; (c) Non-tidal waters of the U.S.: ordinary high water mark (OHWM) or to the limit of adjacent wetlands, or when the water of the U.S. consists only of wetlands to the limit of the wetland.

3.1.1 Section 404 Jurisdictional Wetlands

The USACE has defined the term "wetlands" as follows (33 CFR 328.3):

> *Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.*

The three parameters that are used to determine the presence of wetlands are: (1) hydrophytic vegetation, (2) wetland hydrology, and (3) hydric soils. Evidence of a minimum of one positive wetland indicator from each of the three parameters must be found in order to make a positive wetland delineation (USACE 2008).

Wetland areas which do not have a surface connection to, and are not adjacent to, navigable Waters of the U.S. may be considered isolated and not subject to USACE jurisdiction.

3.1.1.1 Vegetation

Hydrophytic vegetation is defined as areas where the frequency and duration of inundation or soil saturation exerts a controlling influence on the plant species present. Plant species are assigned wetland indicator status according to the probability of their occurrence in a wetland. More than fifty percent of the dominant plant species must have a wetland indicator status to meet the hydrophytic vegetation criterion. The USACE has published the *Arid West 2020 Regional Wetland Plant List* (USACE 2020) which separates vascular plants into the following categories based on plant species frequency of occurrence in wetlands:

- Obligate Wetland (OBL). Occur almost always (estimated probability >99%) under natural conditions in wetlands.

- Facultative Wetland (FACW). Usually occur in wetlands (estimated probability 67-99%), but occasionally found in non-wetlands.
- Facultative (FAC). Equally likely to occur in wetlands or non-wetlands (estimated probability 34-66%).
- Facultative Upland (FACU). Usually occur in non-wetlands (estimated probability 67-99%), but occasionally found in wetlands (estimated probability 1-33%).
- Obligate Upland (UPL). Occur almost always (estimated probability greater than 99%) under natural conditions in non-wetlands.

The USACE considers OBL, FACW, and FAC species to be indicators of a wetland. An area is considered to have hydrophytic vegetation when greater than 50 percent of the dominant species in each vegetative stratum (tree, shrub, and herb) fall within these categories. Any species not listed in the USACE wetland plant list is assumed to be an upland species, almost never occurring in wetlands.

A secondary hydrophytic vegetation identifier is a prevalence index of 3.0 or less. The prevalence index is a weighted-average wetland indicator status of all plant species at the sample point, where each indicator status category is given a numeric code (OBL=1, FACW=2, FAC=3, FACU=4, and UPL=5) and weighting is by abundance (percent cover). This method is a more comprehensive analysis of the hydrophytic status of the community than one based on just a few dominant species. The prevalence index is used as a supplement to determine whether hydrophytic vegetation is present on sites where indicators of hydric soil and wetland hydrology are present, but the vegetation initially fails the dominance test.

3.1.1.2 Hydrology

Wetland hydrology is inundation or soil saturation with a frequency and duration long enough to cause the development of hydric soils and vegetation communities dominated by hydrophytic vegetation. If direct observation of wetland hydrology is not possible (as in seasonal wetlands), or records of wetland hydrology are not available (such as stream gauges), assessment of wetland hydrology is frequently supported by indicators, such as watermarks, surface soil cracks, sediment deposits, or a high water table.

OHWM is a line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area.

3.1.1.3 Soils

Hydric soils are saturated or inundated for a sufficient duration during the growing season to develop anaerobic or reducing conditions that favor the growth and regeneration of hydrophytic vegetation. Field indicators of wetland soils include sulfidic odor, observations of ponding, inundation or saturation, dark (low chroma) soil colors, bright mottles (concentrations of oxidized minerals such as iron), or gleying (reduced conditions indicated by a blue- or green-grey color). Additional supporting information includes documentation of soil as hydric or reference to wet conditions in the local soil survey, both of which must be verified in the field.

Field indicators for hydric soils are particularly difficult to observe in sandy soils, which are often recently deposited soils of floodplains. These soils usually lack sufficient fines (clay and silt) and organic material to allow use of color as a reliable indicator of hydric soil. Hydric soil indicators in sandy soils include accumulations of organic matter and organic pan (soil layer in which organic matter and aluminum accumulate where the top of the water table most often occurs).

3.1.2 Section 404 Jurisdictional Waters of the U.S.

In April 2020, the USACE and EPA published the Navigable Waters Protection Rule in the Federal Register, which became effective on June 22, 2020. Following a federal district court decision on August 30, 2021, the USACE and EPA halted implementation of the Navigable Waters Protection Rule and began interpreting Waters of the U.S. consistent with the "pre-2015" regulatory regime (USACE and EPA 2021). On December 7, 2021, the USACE and EPA announced a Proposed Rule, published in the Federal Register, to revise the definition of Waters of the U.S. to formalize the Supreme Court's decisions and put back into place the "pre-2015" definition of Waters of the U.S. (USACE and EPA 2021). The final Revised Definition of Waters of the United States rule was published in the Federal Register on January 18, 2023, and took effect on March 20, 2023 (USACE and EPA 2023a). However, the Supreme Court reached a decision on May 25, 2023 (Sackett versus EPA), which found that only wetlands that are "indistinguishable" from adjacent jurisdictional waterbodies can be covered by the Clean Water Act. Most recently, on August 29, 2023, the USACE and EPA issued a final rule to amend the provisions in the final Revised Definition of Waters of the United States rule that are invalid under the Supreme Court's Sackett versus EPA decision. This rule, known as the Revised Definition of Waters of the United States; Conforming, became effective on September 8, 2023 (USACE and EPA 2023b). The analysis in this Report is based on the final conforming rule from August 2023 and the definitions below have been updated to match the conforming rule. Under the final conforming rule (33 CFR 328.3):

(a) **Waters of the United States** means:

(1) Waters which are:

(i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(ii) The territorial seas; or

(iii) Interstate waters;

(2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;

(3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;

(4) Wetlands adjacent to the following waters:

(i) (i) Waters identified in paragraph (a)(1) of this section; or

(ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;

(5) Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

3.1.3 Areas Exempt from Section 404 Jurisdiction

Under the final Revised Definition of Waters of the United States rule (33 CFR 328.3):

(b) The following are not "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(2) through (5) of this section:

(1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;
(2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;
(3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;
(4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;
(5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
(6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;
(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and
(8) Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.

3.2 REGIONAL WATER QUALITY CONTROL BOARD

The Dickey Water Pollution Act of 1949 and the Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act) established the State Water Resources Control Board (SWRCB) and nine RWQCBs in California. The SWRCB and each RWQCB regulate activities in Waters of the State which include Waters of the U.S. "Waters of the State" are defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." These may include intermittent or ephemeral waters as well as isolated waters. SWRCB/RWQCB jurisdiction extends to the OHWM for non-wetland Waters of the State, or for wetlands, to the limit of the wetland.

The SWRCB/RWQCB regulates the "discharge of waste," including discharges of fill and dredged material, into Waters of the State. All parties proposing to discharge waste that could affect Waters of the State must file a report of waste discharge with the appropriate RWQCB. The RWQCB will then respond to the report of waste discharge by issuing waste discharge requirements (WDRs) in a public hearing, or by waiving WDRs (with or without conditions) for that proposed discharge.

Pursuant to Section 401 of the Clean Water Act, the SWRCB/RWQCB established the State Water Quality Certification Program. This program issues certifications for projects which propose to discharge fill or dredged material into Waters of the State. Water Quality Certification is necessary for all projects that require a USACE Section 404 permit, or fall under other federal jurisdiction, and have the potential to impact Waters of the State. A Water Quality Certification issued by the SWRCB/RWQCB certifies that project activities will not violate water quality standards individually or cumulatively over the term of the action. A Water Quality Certification must be consistent with the requirements of the Federal Clean Water Act, the California Environmental Quality Act, the California Endangered Species Act, and the Porter-Cologne Act.

If a proposed project, or portion of a proposed project, does not require a federal permit, but does involve dredge or fill activities that may result in a discharge to Waters of the State, the RWQCB has the option to regulate the dredge and fill activity under its state authority in the form of WDRs or Certification of WDRs.

In these cases, a Water Quality Certification is not necessary under Section 401 of the Clean Water Act because federal jurisdiction does not apply.

The SWRCB has adopted the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (Procedures), which became effective on May 28, 2020 (SWRCB 2019). The Procedures consist of the following four components: (1) a statewide wetland definition; (2) a framework for determining if a feature that meets the wetland definition is a Water of the State; (3) wetland delineation procedures; and (4) supplemental procedures for application submittal, and the review and approval of Water Quality Certifications, WDRs, and waivers of WDRs for dredge or fill activities, including the *State Supplemental Dredge or Fill Guidelines* (Appendix A of the Procedures).

The Procedures define an area as a wetland as follows: an area is a wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation. This definition does not affect the meaning of Waters of the State as it pertains to SWRCB/RWQCB jurisdiction pursuant to the Porter-Cologne Act, nor does it modify the current authorities of the SWRCB/RWQCB to protect water quality. In accordance with the Procedures, the wetland delineation method outlined by the USACE has been utilized to map wetlands and Waters of the State, which extend to the limit of the wetland or to the OHWM for non-wetland waters. Jurisdiction has been evaluated in the regulatory context of the RWQCB, who may regulate intermittent or ephemeral waters as well as isolated waters.

3.2.1 Waters of the State

The SWRCB Procedures consider natural wetlands, wetlands created by modification of surface Waters of the State, and areas that meet the current or historic definitions of Waters of the U.S., to be Waters of the State (SWRCB 2019). In addition, the Procedures considers artificial wetlands (i.e., wetlands that result from human activity) that meet specific criteria to be Waters of the State (SWRCB 2019). The Procedures incorporate the established wetland delineation procedures set forth by the USACE (USACE 2008), which were used to map wetlands and Waters of the State. However, contrary to the USACE wetland definition, the State's wetland definition also protects non-vegetated wetlands. In addition, Waters of the State may also include intermittent or ephemeral waters as well as isolated waters that are not under federal jurisdiction.

3.2.2 Areas Exempt from State Jurisdiction

Areas exempt from SWRCB/RWQCB jurisdiction include all artificial wetlands that are less than 1 acre in size and do not satisfy the following criteria: (1) created by modification of a surface Water of the State; (2) approved by an agency as compensatory mitigation for impacts to other Waters of the State, except where the approving agency explicitly identifies the mitigation as being of limited duration; (3) specifically identified in a water quality control plan as a wetland or other Water of the State; or (4) resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape.

In addition, artificial wetlands greater than or equal to 1 acre in size are exempt from SWRCB/RWQCB jurisdiction if the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes: (1) industrial or municipal wastewater treatment or disposal; (2) settling of sediment; (3) detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program; (4) treatment of surface waters; (5) agricultural crop irrigation or stock watering; (6) fire suppression; (7) industrial processing or cooling; (8) active surface mining – even if the site is managed for interim wetlands functions and values; (9) log storage; (10) treatment, storage, or distribution of recycled water; (11)

maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or (12) fields flooded for rice growing.

3.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

The CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. Streams and lakes, as habitat for fish, wildlife, and native plant species, are subject to jurisdiction by CDFW under Sections 1600-1616 of the California Fish and Game Code. Section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW before beginning any activity that will do one or more of the following: (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake. These regulated activities require a Section 1602 Lake and Streambed Alteration Agreement (LSAA) from CDFW. Removal of riparian vegetation also requires a Section 1602 LSAA.

The Fish and Game Code, Sections 1600-1616, regulates activities that would alter the flow, bed, banks, channel, or associated riparian areas of a river, stream, or lake. CDFW jurisdiction over lakes and streams is to the top of bank, or edge of riparian vegetation as determined by edge of dripline, whichever is further (CDFW 1994).

3.4 SUMMARY OF REGULATIONS AND JURISDICTION DEFINITIONS

The jurisdiction of the USACE, RWQCB, and CDFW is summarized in Table 1. Key differences are highlighted in the table.

Table 1. USACE, RWQCB, and CDFW Jurisdiction

Agency (Regulation)	Jurisdiction Type	Jurisdiction Extent	Notes
USACE (Section 404 of Clean Water Act)	Wetlands, non-wetland Waters of the U.S.	Boundary of wetland, or OHWM for non-wetland Waters of the U.S.	The feature must be either relatively permanent, standing, or continuously flowing, and if adjacent, must also have a continuous surface connection to Waters of the U.S. to be considered jurisdictional.
RWQCB (Section 401 of Clean Water Act – Waters of the U.S./State) (Porter-Cologne – Waters of the State)	Wetlands, non-wetland Waters of the State (includes all Waters of the U.S.)	Boundary of wetland, or OHWM for non-wetland Waters of the State (includes all Waters of the U.S.)	Waters of the State include all Waters of the U.S. (Section 404). Jurisdiction also includes ephemeral waters and isolated waters that may not be under USACE jurisdiction (Porter-Cologne).
CDFW (Section 1600-1616 of Fish and Game Code)	River, stream, or lake	Top of bank or edge of riparian vegetation (whichever is further)	Requires bed, banks, and channel or riparian vegetation.

Notes:
CDFW: California Department of Fish and Wildlife
OHWM: Ordinary high water mark
RWQCB: Regional Water Quality Control Board
USACE: U.S. Army Corps of Engineers

4.0 METHODS

4.1 LITERATURE REVIEW

Prior to the field survey, a literature review was conducted to evaluate potential jurisdictional areas within the Project site, gen-tie line, and a 250-meter buffer. The U.S. Geological Survey (USGS) 7.5-Minute Topographic Map *Salt Canyon* Quadrangle Map, aerial and historical imagery (Google Earth©), the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) database (USFWS 2024), and the U.S. Department of Agriculture National Resources Conservation Service (USDA NRCS) Web Soil Survey (USDA NRCS 2024) were reviewed.

4.2 JURISDICTIONAL WATERS AND WETLANDS DELINEATION

A jurisdictional waters and wetlands delineation was performed within the Project site from January 18 to 21, 2021 and within the Project site, gen-tie line, and a 250-meter buffer from May 20 to 24, 2024. The delineation was conducted at any potential jurisdictional wetlands, waters of the U.S. and State, and areas potentially under CDFW jurisdiction, including the standing water, drainages, potential wetlands, and riparian areas that were found within the Project site in 2019 (Tetra Tech 2020). The 2024 delineation was conducted to update the 2021 results and to survey the gen-tie line and 250-meter buffer. The procedures described in the *Interim Regional Supplement to the Corps of Engineering Wetland Delineation Manual: Arid West Region* (USACE 2008) were used to identify wetlands and Waters of the U.S. that are potentially subject to regulation under Section 404 of the Clean Water Act. The potential jurisdictional features were also examined for an OHWM. The USACE delineation methodology was also used to map potential Waters of the State that were evaluated for RWQCB jurisdiction. Areas of CDFW jurisdiction were determined by the presence of defined bed, banks, and channel, or presence of a lake or pool, and were measured to the top of bank or the edge of riparian vegetation.

Sample points were taken to determine areas of potential jurisdiction and were mapped in the field using a Global Positioning System receiver with sub-meter accuracy. Field indicators were examined, and wetland data reporting forms were used to record three parameters: hydrophytic vegetation, wetland hydrology, and hydric soils. Completed wetland determination data forms are provided in Appendix A. Photographs taken during the field surveys are provided in Appendix B.

Plant species present and the presence or absence of hydrophytic vegetation was recorded. Hydrophytic vegetation was determined to be present if greater than 50 percent of the dominant species at the sample point were OBL, FACW, or FAC (USACE 2020). If the hydrophytic vegetation dominance test was not greater than 50 percent, then the prevalence index was conducted if both hydric soils and hydrology were met unless disturbed or problematic. If the prevalence index was less than or equal to 3.0 then the vegetation was considered hydrophytic. Soil pits were excavated to a depth of at least 14 inches when feasible to examine soils for evidence of hydric indicators or saturation at the sample points. Soil pit locations are synonymous with sample points. Hydric soils and wetland hydrology were determined based on the presence of one or more of the applicable indicators.

Sample points were collected in each potential jurisdictional feature and as needed at paired upland points to determine the extent of the feature. Transitional sample points were also collected in areas where change was suspected but additional data was required. A sample point is considered to be within a jurisdictional USACE wetland if the area met all three wetland parameters and is also a Waters of the U.S. If one or more of these parameters was not met in a typical situation, the point was considered to not be within a USACE wetland. In atypical or problematic situations (i.e., when vegetation, soil, or hydrology indicators are absent due to recent human disturbance or natural causes), all three parameters are not required to designate a feature as a USACE wetland.

5.0 RESULTS

5.1 LITERATURE REVIEW

The Project site does not contain any blue-line streams on the USGS topographic map. Blue-line streams are shown as either broken or solid blue lines on the USGS topographic map and are defined as flowing waters that are ephemeral/intermittent (broken lines) or perennial (solid lines). One broken blue-line stream, Spring Creek, occurs directly south of the Project site, and a second, Salt Creek, occurs approximately 1 mile north of the site near the proposed gen-tie line. Both of these broken blue-line streams occur within the 250-meter buffer. The man-made Tehama Colusa Canal aqueduct also occurs approximately 1 mile north of the site near the proposed gen-tie line within the 250-meter buffer. Mountains, canyons, and ridgelines are absent from the Project site but minor changes in elevation and low-sloped rolling hills are present in the site. The NWI database was reviewed for potential wetland areas prior to the field survey. Multiple areas are mapped within and near the Project site and along the gen-tie line in the NWI database, including freshwater ponds, riverine areas, and freshwater emergent wetlands (USFWS 2024). These areas were assessed during the jurisdictional delineation since the NWI data is not field verified.

Soils mapped by the USDA NRCS at the sample point locations include Ayar clay, Clear Lake clay, Capay clay loam, and Corning clay loam (USDA NRCS 2024). Hydric soils have been documented by the USDA NRCS in the Ayar clay, Clear Lake clay, and Corning clay loam map units at approximately 1 percent of each unit, and in the Capay clay loam map unit at approximately 3 percent of the unit (USDA NRCS 2024). The presence of hydric soils was assessed during the jurisdictional delineation.

5.2 JURISDICTIONAL DELINEATION

A total of 15 potential jurisdictional features were found within the Project site, along the proposed gen-tie line, and/or within the 250-meter buffer (Figures 2a, 2b, and 3). Features 1 to 9, 12, and 13 are located completely or partially within the Project site; Features 10 and 11 are located within the 250-meter buffer; and Features 14 and 15 are located along the gen-tie line. Although a small portion of Feature 8 occurs within the Project site, the majority of this feature is located within the 250-meter buffer. Feature 14 runs along the east side of the gen-tie line approximately 30 feet away or more and is located on private property outside the Spring Valley Road right-of-way where the gen-tie line will be installed. The gen-tie line will also cross Feature 14 where it runs through a culvert under Spring Valley Road. Feature 15 occurs approximately 40 feet away or more from the gen-tie line and would not be crossed.

All features within the Project site and vicinity are disturbed by active cattle grazing or agriculture. Feature 1 is an ephemeral drainage that had defined bed, banks, and channel throughout. Feature 3 is also an ephemeral drainage that that had defined bed, banks, and channel in portions of the feature. Feature 1 had standing water and riparian vegetation within the channel in some areas, which consisted of low cover of red willow (*Salix laevigata*), Fremont cottonwood (*Populus fremontii*), cattail (*Typha* sp.), and rush (*Juncus* sp.). Feature 3 did not have standing water but had a small area within the channel with low cover of Fremont cottonwood and rush. Feature 1 and a portion of Feature 3 are shown in the NWI database as riverine (USFWS 2024). These two features converge in the central portion of the Project site and lead to Spring Creek offsite to the southeast.

Feature 2 is an ephemeral drainage feature that connects to Feature 1, but no standing water or riparian vegetation was found. Feature 2 did not have defined bed, banks, and channel but an OHWM was evident. Feature 2 is not mapped in the NWI database (USFWS 2024).

Feature 9 is an erosional feature that did not have defined bed, banks, and channel or an OHWM. Feature 9 does not have NWI data (USFWS 2024).

Features 4 and 8 are disturbed riparian areas that did not have defined bed, banks, and channel, although Feature 8 had an OHWM. Feature 4 had riparian vegetation consisting of sparse Fremont cottonwood, red willow, Goodding's black willow (*Salix gooddingii*), and dock (*Rumex* sp.). Feature 8 consisted of sparse red willow and FAC/FACW grasses including rye grass (*Festuca Perennis*) and canary grass (*Phalaris* sp.). Feature 4 is not shown in the NWI database but Feature 8 is shown as riverine and freshwater pond (USFWS 2024). Feature 4 may have historically connected to Spring Creek offsite to the southeast but soil berms adjacent to Feature 12 have blocked the flow out of this area. Feature 8 leads offsite to the north and occurs predominantly outside the Project site within the 250-meter buffer.

Features 5 and 7 are ponds where standing water was observed in 2019 (Tetra Tech 2020) and 2024 and can be observed in aerial imagery. Feature 6 is a depressional feature based on topography but water has not been observed in this area and it is not visible in aerial imagery. These features ranged from low to moderate cover of FAC/FACW grasses including rye grass and canary grass. Feature 7 is shown in the NWI database as riverine but Features 5 and 6 do not have NWI data (USFWS 2024). Feature 7 may have historically connected to Feature 8, and Feature 5 may have historically connected to Feature 6 and Spring Creek offsite to the southeast, but soil berms adjacent to Features 5 and 7 have blocked the flow out of these areas.

Feature 12 is a pond where standing water was observed in 2024 and can be observed in aerial imagery. Feature 13 is a depressional feature based on topography but only 1 inch of standing water was observed in 2024 and it is not visible in aerial imagery. Features 12 and 13 were predominantly unvegetated with very low cover of herbs and non-native grasses. Features 12 and 13 are not mapped in the NWI database (USFWS 2024).

Features 10 and 11 are within the 250-meter buffer on private property and could not be accessed during the survey. Observations were made using binoculars where feasible for these areas. Feature 10 is a pond with standing water that supported rush plants. Feature 11 is Spring Creek, which had standing water and defined bed, banks and channel throughout. Vegetation within Feature 11 consisted of predominantly non-native grasses with sparse rush, willows, and Fremont cottonwood. Although a small portion a Feature 11 is within the Project boundary, it occurs entirely outside the fenced Project property on adjacent private property. Feature 10 does not have NWI data and Feature 11 is mapped in the NWI database as freshwater pond (USFWS 2024).

Features 14 and 15 are along the gen-tie line within the 250-meter buffer. Both features are located on private property and could not be accessed during the survey, but binoculars were used to make observations. Feature 15 is Salt Creek. These two features are drainages that had defined bed, banks, and channel and are mapped as riverine in the NWI database (USFWS 2024). Standing water was not observed within Feature 14 but Feature 15 had standing water throughout. Vegetation within Feature 14 consisted of non-native grasses, with sparse and patchy willows, dock, and rush. Feature 15 consisted of riparian woodland vegetation with willows and Fremont cottonwood and dense patches of cattail (*Typha* sp.), rush, dock, and wetland grasses.

A jurisdictional delineation was conducted at each potential feature and the results are provided in Table 2.

Table 2. Jurisdictional Delineation Results

Sample Area	Sample Point	Hydrophytic Vegetation	Hydric Soil	Wetland Hydrology	USACE Jurisdiction	RWQCB Wetland Waters of the State	RWQCB Non-Wetland Waters of the State	CDFW Jurisdiction	Notes
Feature 1	1-1a upland (up)	-	-	-	-	✓ (portions of Feature 1)	✓ (portions of Feature 1)	✓	Ephemeral drainage channel with defined bed, banks, and channel. Top of bank width ranged from 1.5 to 9 meters and OHWM ranged from 0.5 to 6 meters. Although portions of this feature met all three wetland parameters required to be a USACE wetland, the feature itself is not relatively permanent; therefore, the wetlands in Feature 1 are not adjacent to navigable Waters of the U.S. and are not jurisdictional. Feature 1 is located within the Project site.
	1-1a wetland (wet)	-	-	Yes					
	1-1b up	-	-	-					
	1-2a up	-	-	-					
	1-2a wet	Yes	Yes	Yes					
	1-2b up	-	-	-					
	1-3 wet	-	-	Yes					
	1-4 wet	Yes	Yes	Yes					
	1-5 wet	-	-	Yes					
	1-6 wet	Yes	Yes	Yes					
	1-7 wet	Yes	Yes	Yes					
	1-8 wet	Yes	Yes	Yes					
	1-9 wet	Yes	Yes	Yes					
	1-10 wet	-	-	Yes					
Feature 2	2-1 wet	-	-	Yes	-	-	✓	-	Ephemeral drainage feature that did not have defined bed, banks, and channel but OHWM was evident. OHWM ranged from 0.5 to 1.5 meters. Feature 2 is located within the Project site.
	1-2b up	-	-	-					
Feature 3	3-1 up	-	-	-	-	-	✓	✓ (portions of Feature 3)	Ephemeral drainage channel with defined bed, banks, and channel in some portions. Top of bank width
	3-1 wet	-	-	Yes					
	3-2 wet	-	-	Yes					
	3-3 wet	-	-	Yes					

Table 2. Jurisdictional Delineation Results

Sample Area	Sample Point	Hydrophytic Vegetation	Hydric Soil	Wetland Hydrology	USACE Jurisdiction	RWQCB Wetland Waters of the State	RWQCB Non-Wetland Waters of the State	CDFW Jurisdiction	Notes
	3-4 wet	-	-	Yes					ranged from 2.5 to 6 meters and OHWM ranged from 0.5 to 1.5 meters. Feature 3 is located within the Project site.
Feature 4	4-1 up	-	-	-	-	-	-	-	Disturbed riparian area that did not have defined bed, banks, or channel or OHWM. Although this feature had riparian vegetation, it was not associated with a river, stream, or lake, and therefore, is not under CDFW jurisdiction Feature 4 is located within the Project site.
	4-1 wet	Yes	-	-					
Feature 5	5-1 up	-	-	-	-	✓	-	✓	Pond isolated from other water features. Although this feature met all three wetland parameters required to be a USACE wetland, it is not a Waters of the U.S. because it is isolated and is therefore not under USACE jurisdiction. This is a surface water feature under RWQCB jurisdiction and it has defined bed and banks required for CDFW jurisdiction. Feature 5 is located within the Project site.
	5-1 transition (trans)	Yes	Yes	Yes	-				
	5-1 wet	Yes	Yes	Yes					

Table 2. Jurisdictional Delineation Results

Sample Area	Sample Point	Hydrophytic Vegetation	Hydric Soil	Wetland Hydrology	USACE Jurisdiction	RWQCB Wetland Waters of the State	RWQCB Non-Wetland Waters of the State	CDFW Jurisdiction	Notes
Feature 6	6-1 wet	Yes	-	Yes	-	-	✓	-	Depressional area isolated from other water features. This is a surface water feature under RWQCB jurisdiction but it does not have defined bed and banks required for CDFW jurisdiction. Feature 6 is located within the Project site.
	5-1 up	-	-	-					
Feature 7	7-1 up	-	-	-	-	✓	-	✓	Pond isolated from other water features. Although this feature met all three wetland parameters required to be a USACE wetland, it is not a Waters of the U.S. because it is isolated and is therefore not under USACE jurisdiction. This is a surface water feature under RWQCB jurisdiction and it has defined bed and banks required for CDFW jurisdiction. Feature 7 is located within the Project site.
	7-1 trans	Yes	Yes	Yes					
	7-1 wet	Yes	Yes	Yes					

Table 2. Jurisdictional Delineation Results

Sample Area	Sample Point	Hydrophytic Vegetation	Hydric Soil	Wetland Hydrology	USACE Jurisdiction	RWQCB Wetland Waters of the State	RWQCB Non-Wetland Waters of the State	CDFW Jurisdiction	Notes
Feature 8	8-1 wet	Yes	-	-	-	-	✓	-	Disturbed riparian area that did not have defined bed, banks, or channel but OHWM was evident. OHWM ranged from 3 to 15 meters onsite. Although this feature had riparian vegetation, it was not associated with a river, stream, or lake, and therefore, is not under CDFW jurisdiction Feature 8 is located within the Project site.
	7-1 up	-	-	-					
Feature 9	9-1 wet	-	-	Yes	-	-	-	-	Erosional feature that did not have defined bed, banks, and channel or OHWM. Feature 9 is located within the Project site.
	4-1 up	-	-	-					
Feature 10	No Sampling Access (Private Property)				-	-	✓	✓	Pond isolated from other water features. This is a surface water feature under RWQCB jurisdiction and it has defined bed and banks required for CDFW jurisdiction. Feature 10 is located within the 250-meter buffer.

Table 2. Jurisdictional Delineation Results

Sample Area	Sample Point	Hydrophytic Vegetation	Hydric Soil	Wetland Hydrology	USACE Jurisdiction	RWQCB Wetland Waters of the State	RWQCB Non-Wetland Waters of the State	CDFW Jurisdiction	Notes
Feature 11	No Sampling Access (Private Property)				✓	✓ (portions of Feature 11)	✓ (portions of Feature 11)	✓	Spring Creek with defined bed, banks, and channel. Top of bank width ranged from 4.5 to 7.5 meters and OHWM was 1 meter. Feature 11 is located within the 250-meter buffer.
Feature 12	12-1 wet	-	-	Yes	-	-	✓	✓	Pond isolated from other water features. This is a surface water feature under RWQCB jurisdiction and it has defined bed and banks required for CDFW jurisdiction. Feature 12 is located within the Project site.
	12-1 up	-	-	-					
Feature 13	13-1 wet	-	-	Yes	-	-	✓	-	Depressional area isolated from other water features. This is a surface water feature under RWQCB jurisdiction but it does not have defined bed and banks required for CDFW jurisdiction. Feature 13 is located within the Project site.
	12-1 up	-	-	-					

Table 2. Jurisdictional Delineation Results

Sample Area	Sample Point	Hydrophytic Vegetation	Hydric Soil	Wetland Hydrology	USACE Jurisdiction	RWQCB Wetland Waters of the State	RWQCB Non-Wetland Waters of the State	CDFW Jurisdiction	Notes
Feature 14	No Sampling Access (Private Property)				-	-	✓	✓	Ephemeral drainage channel with defined bed, banks, and channel. Top of bank width ranged from 1 to 3 meters and OHWM ranged from 0.5 to 1.5 meters. Feature 14 is located along the gen-tie line.
Feature 15	No Sampling Access (Private Property)				✓	✓ (portions of Feature 15)	✓ (portions of Feature 15)	✓	Salt Creek with defined bed, banks, and channel. Top of bank width was 9 meters and OHWM was 4.5 meters. Feature 15 is located along the gen-tie line.

Note: "-" = criteria not met.

Based on the results of the jurisdictional delineation, it was determined that portions of Feature 1 and the entirety of Features 5 and 7 met all three wetland parameters required to be USACE wetlands and jurisdictional RWQCB wetland Waters of the State. However, since these features were determined to not be Waters of the U.S. they are not jurisdictional to the USACE. Feature 1 is an ephemeral drainage that is not relatively permanent and Features 5 and 7 are isolated ponds. Feature 11 (Spring Creek) and Feature 15 (Salt Creek) are jurisdictional to the USACE since they are intermittent tributaries that are likely relatively permanent. In addition, portions of Feature 1 and all of Features 2, 3, 6, 8, and 10 to 15 are RWQCB Waters of the State because they are surface water features. Portions of Feature 3 and all of Features 1, 5, 7, 10 to 12, 14, and 15 met the criteria for CDFW jurisdiction due to the presence of defined bed, banks, and channel, or as ponds. Features 4 and 9 did not meet the criteria for jurisdiction under the USACE, RWQCB, or CDFW. Feature 4 is a disturbed riparian area and Feature 9 is an erosional feature, neither of which have defined bed, banks, channel, or OHWM. The boundaries of non-jurisdictional features (i.e., purple areas in Figures 2a, 2b, and 3) represent centerlines or general areas of the features and are provided to show the locations where the jurisdictional delineation was conducted but were determined to not be jurisdictional. The Tehama Colusa Canal is a man-made open water aqueduct that also occurs 60 feet away or greater from the proposed gen-tie line; this Canal is likely jurisdictional to the USACE, RWQCB, and CDFW.

Table 3 provides the acres of the jurisdictional areas within the Project site. The results of the delineation in the context of the USACE, RWQCB, and CDFW are discussed in the sections below.

Table 3. Jurisdictional Areas within Project site*

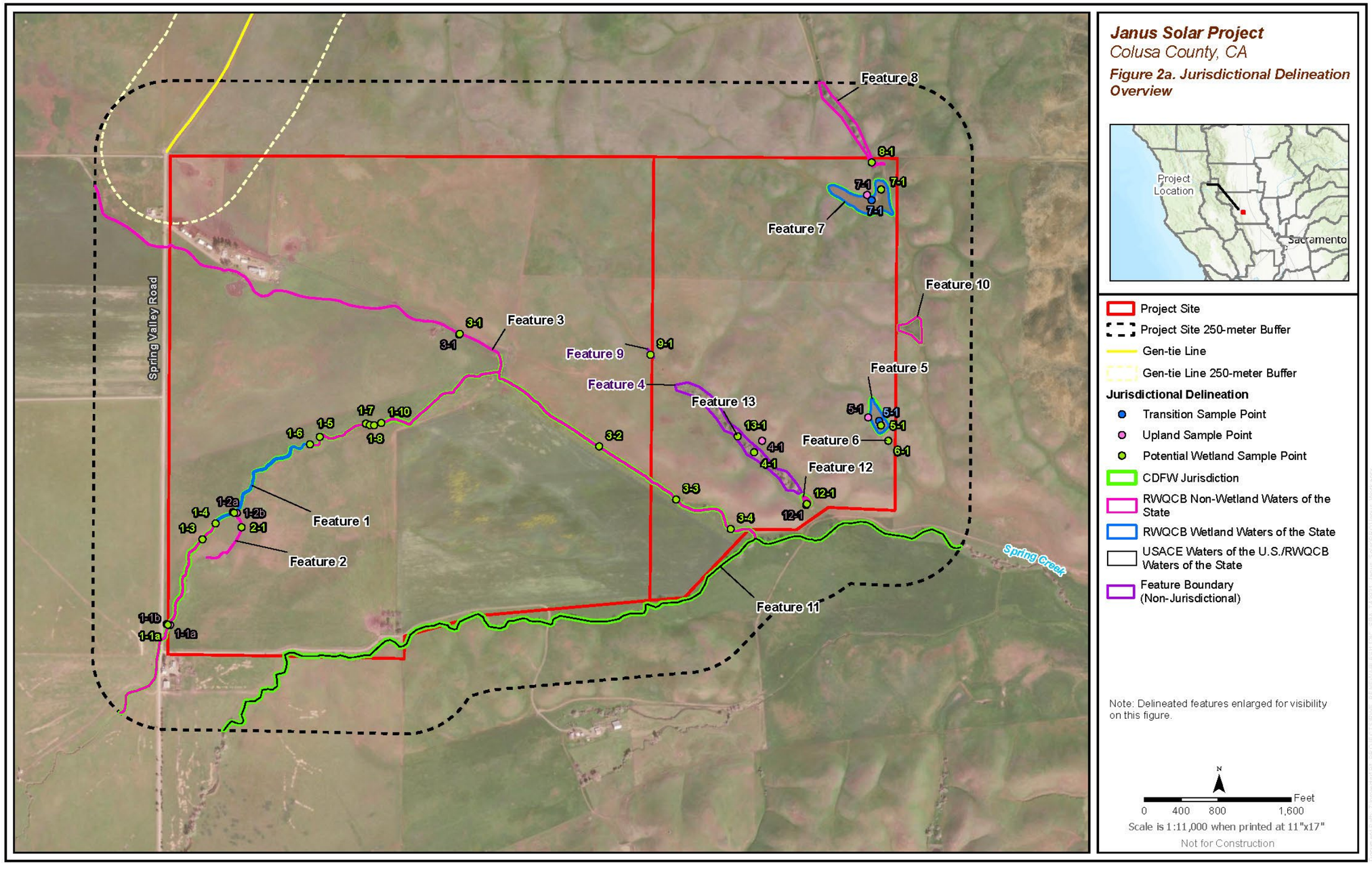
Sample Area	USACE Jurisdiction (acres)	RWQCB Wetland Waters of the State (acres)	RWQCB Non-Wetland Waters of the State (acres)	CDFW Jurisdiction (acres)
Feature 1	-	0.38	0.29	2.30
Feature 2	-	-	0.05	-
Feature 3	-	-	0.47	1.62
Feature 4	-	-	-	-
Feature 5	-	0.88	-	1.10
Feature 6	-	-	0.04	-
Feature 7	-	2.78	-	3.09
Feature 8	-	-	0.13	-
Feature 9	-	-	-	-
Feature 10	-	-	+	+
Feature 11**	0.21	+	0.21	1.11
Feature 12	-	-	0.10	0.17
Feature 13	-	-	0.01	-
Feature 14	-	-	+	+
Feature 15	+	+	+	+
Total	**0.21**	**4.04**	**1.30**	**9.39**

Note:

*Only acres within the Project site are provided; acres within the 250-meter buffer are not provided. Some mapped jurisdictions in Figures 2a and 2b may appear the same despite small differences in acres due to the scale of figures.

**A small portion a Feature 11 is within the Project boundary, but it occurs entirely outside the Project property fence. Although portions of Feature 11 are likely wetlands, sampling could not be conducted because this feature is on private property, and therefore acres have been included under non-wetland Waters of the State in this table.

+Jurisdictional area occurs outside the Project site within the 250-meter buffer.



Janus Solar Project
Colusa County, CA
Figure 2a. Jurisdictional Delineation Overview

- Project Site
- Project Site 250-meter Buffer
- Gen-tie Line
- Gen-tie Line 250-meter Buffer

Jurisdictional Delineation

- Transition Sample Point
- Upland Sample Point
- Potential Wetland Sample Point
- CDFW Jurisdiction
- RWQCB Non-Wetland Waters of the State
- RWQCB Wetland Waters of the State
- USACE Waters of the U.S./RWQCB Waters of the State
- Feature Boundary (Non-Jurisdictional)

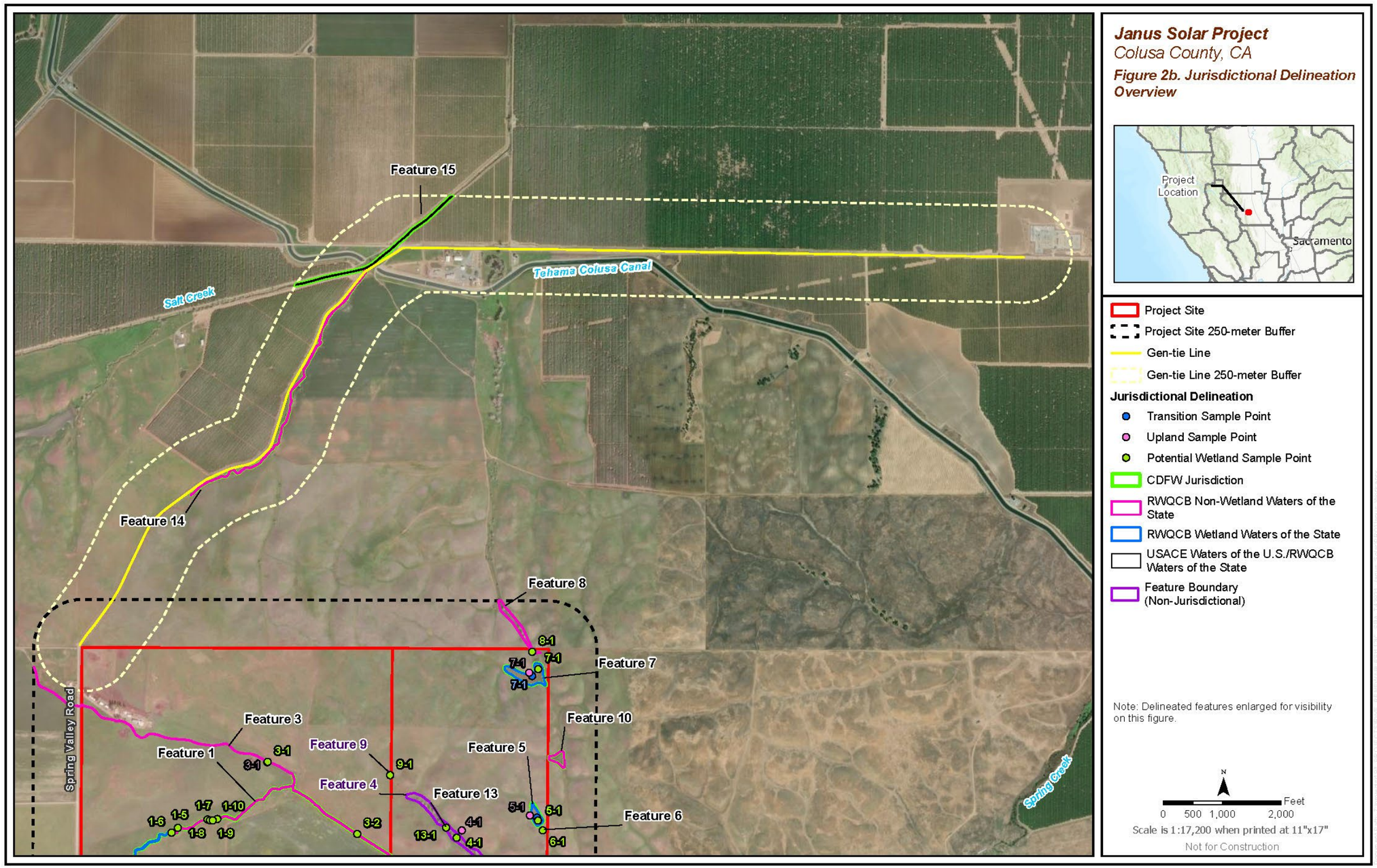
Note: Delineated features enlarged for visibility on this figure.

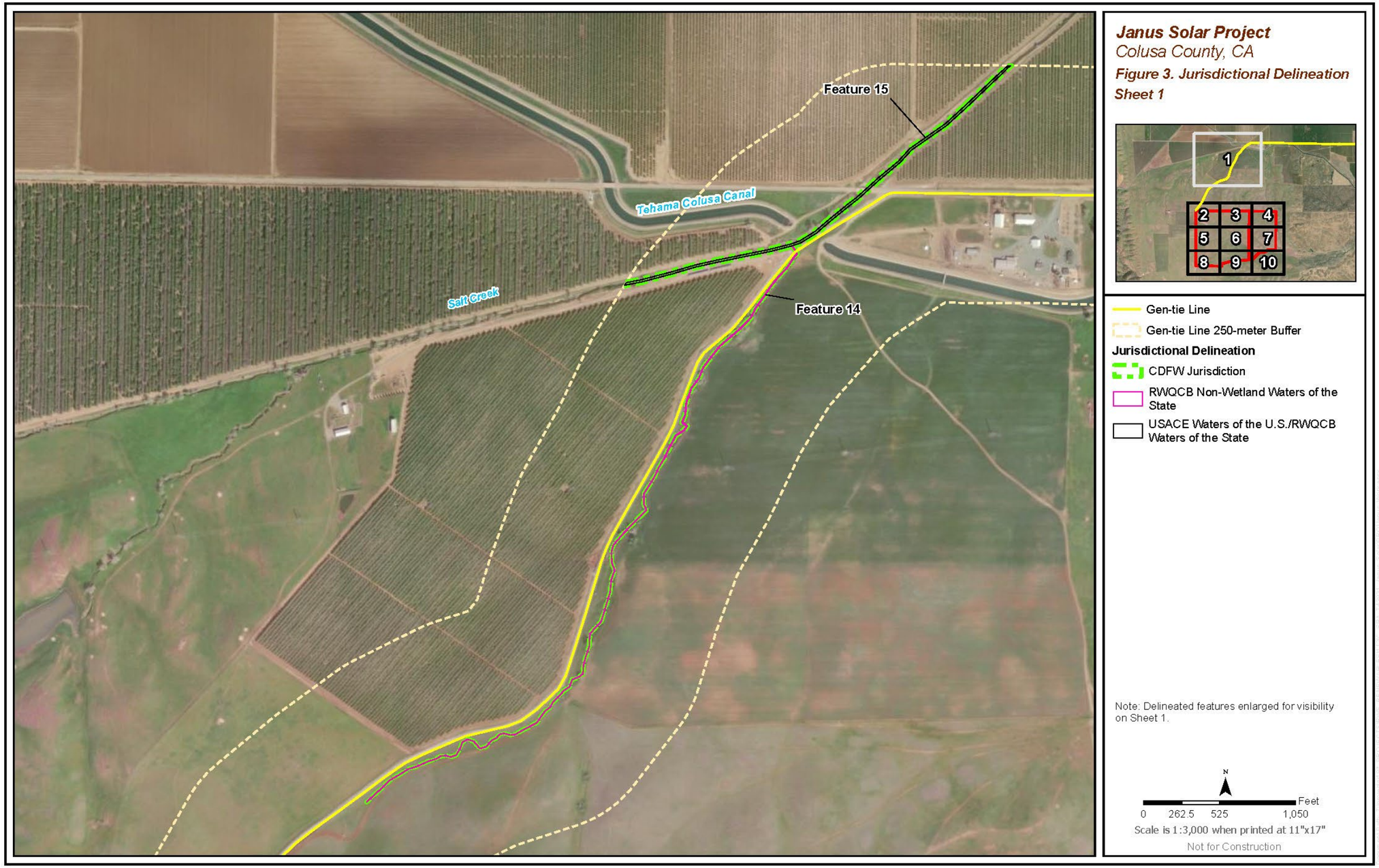
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Scale is 1:11,000 when printed at 11"x17"

Not for Construction


Feature 15
Tehama Colusa Canal
Salt Creek
Feature 14
Feature 8
8-1
7-1
7-1
7-1
Feature 7
Feature 10
Feature 3
Feature 1
3-1
3-1
Feature 9
9-1
Feature 5
Feature 4
Feature 13
5-1
6-1
Feature 6
1-6
1-5
1-7
1-10
1-8
1-9
3-2
4-1
13-1
4-1
6-1
Spring Valley Road
Spring Creek
Janus Solar Project
Colusa County, CA
Figure 2b. Jurisdictional Delineation Overview
Project Location
Sacramento
Project Site
Project Site 250-meter Buffer
Gen-tie Line
Gen-tie Line 250-meter Buffer
Jurisdictional Delineation
Transition Sample Point
Upland Sample Point
Potential Wetland Sample Point
CDFW Jurisdiction
RWQCB Non-Wetland Waters of the State
RWQCB Wetland Waters of the State
USACE Waters of the U.S./RWQCB Waters of the State
Feature Boundary (Non-Jurisdictional)
Note: Delineated features enlarged for visibility on this figure.
N
Feet
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Not for Construction



Janus Solar Project
Colusa County, CA
Figure 3. Jurisdictional Delineation
Sheet 1

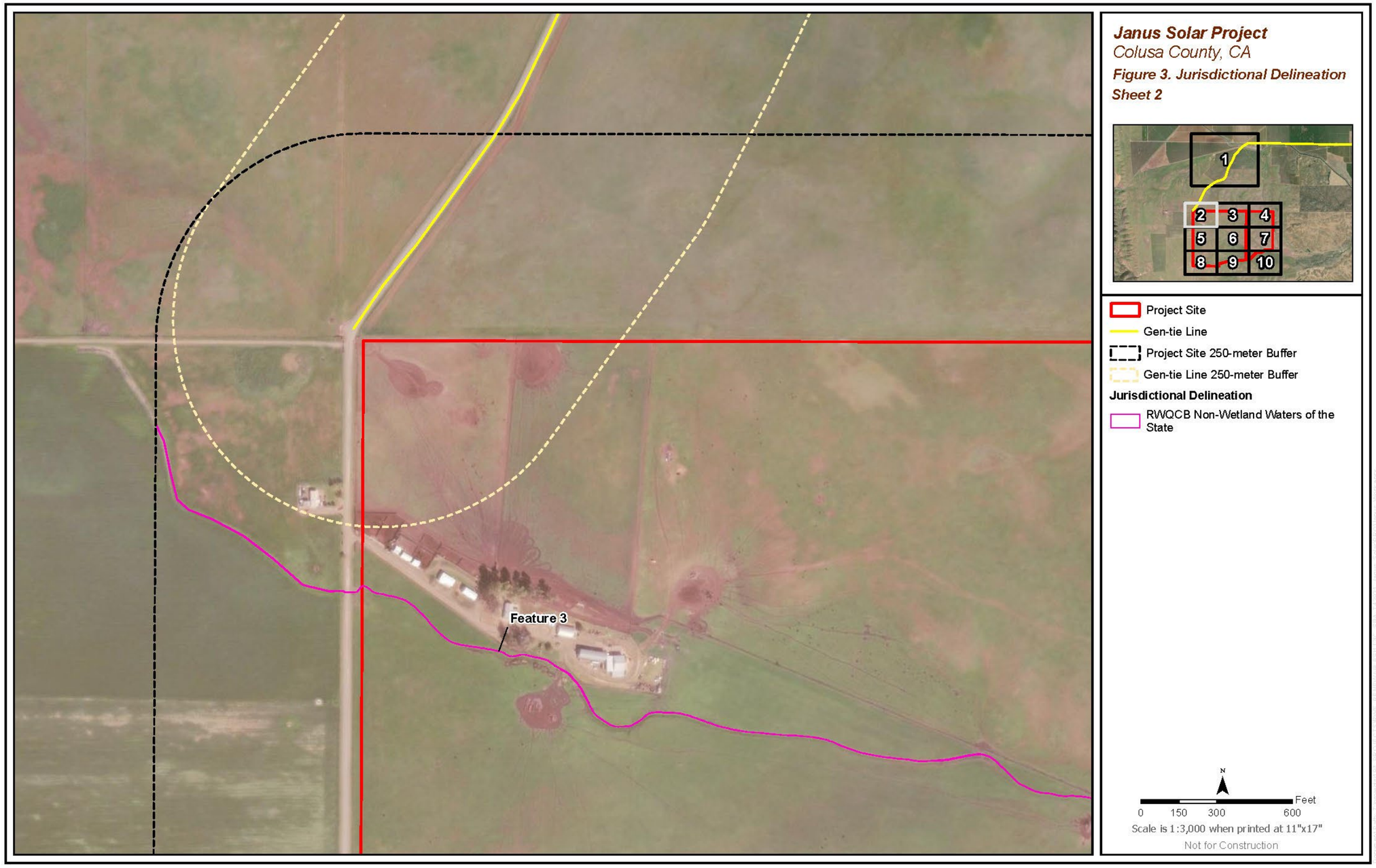
Gen-tie Line
Gen-tie Line 250-meter Buffer

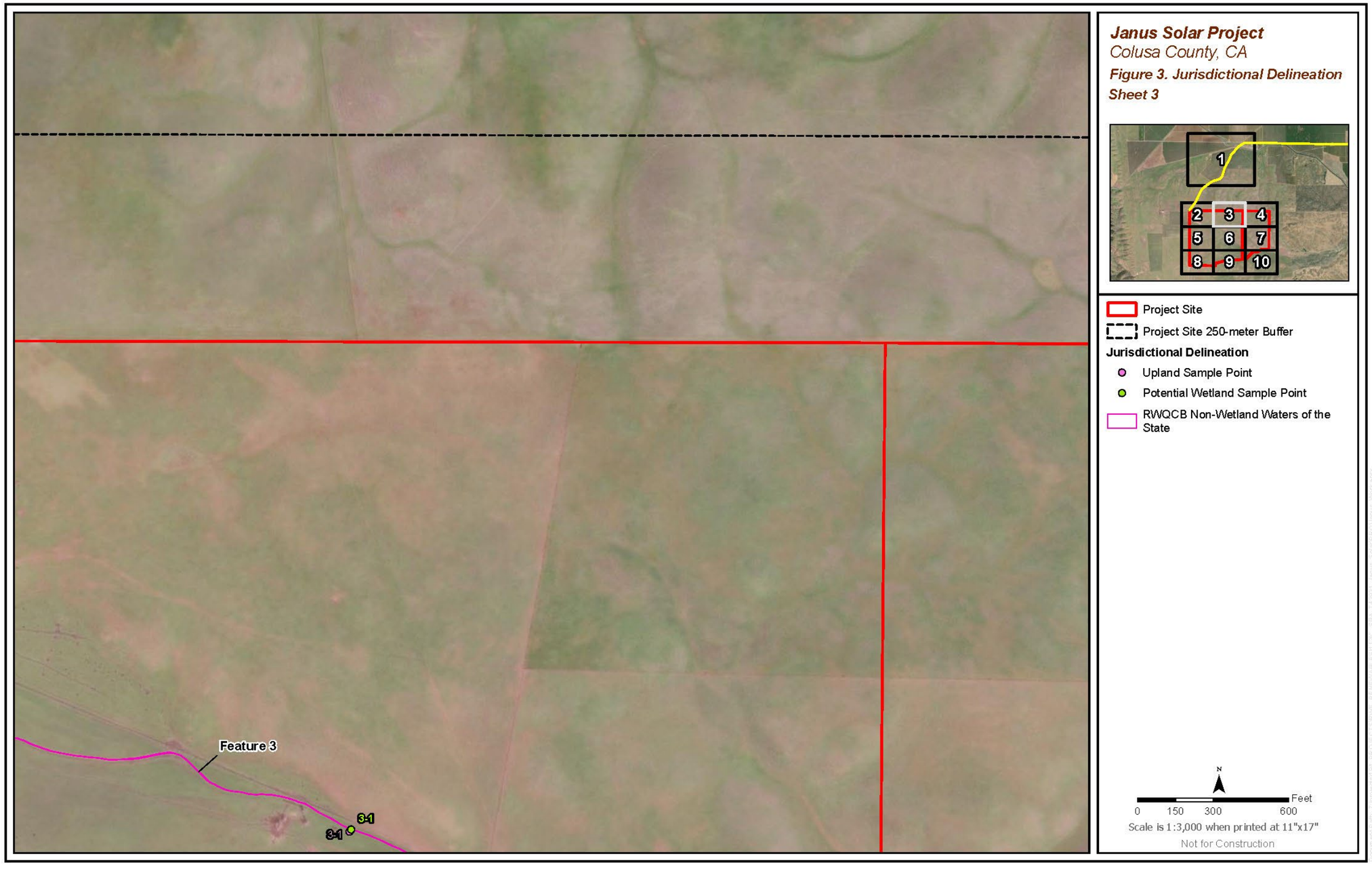
Jurisdictional Delineation

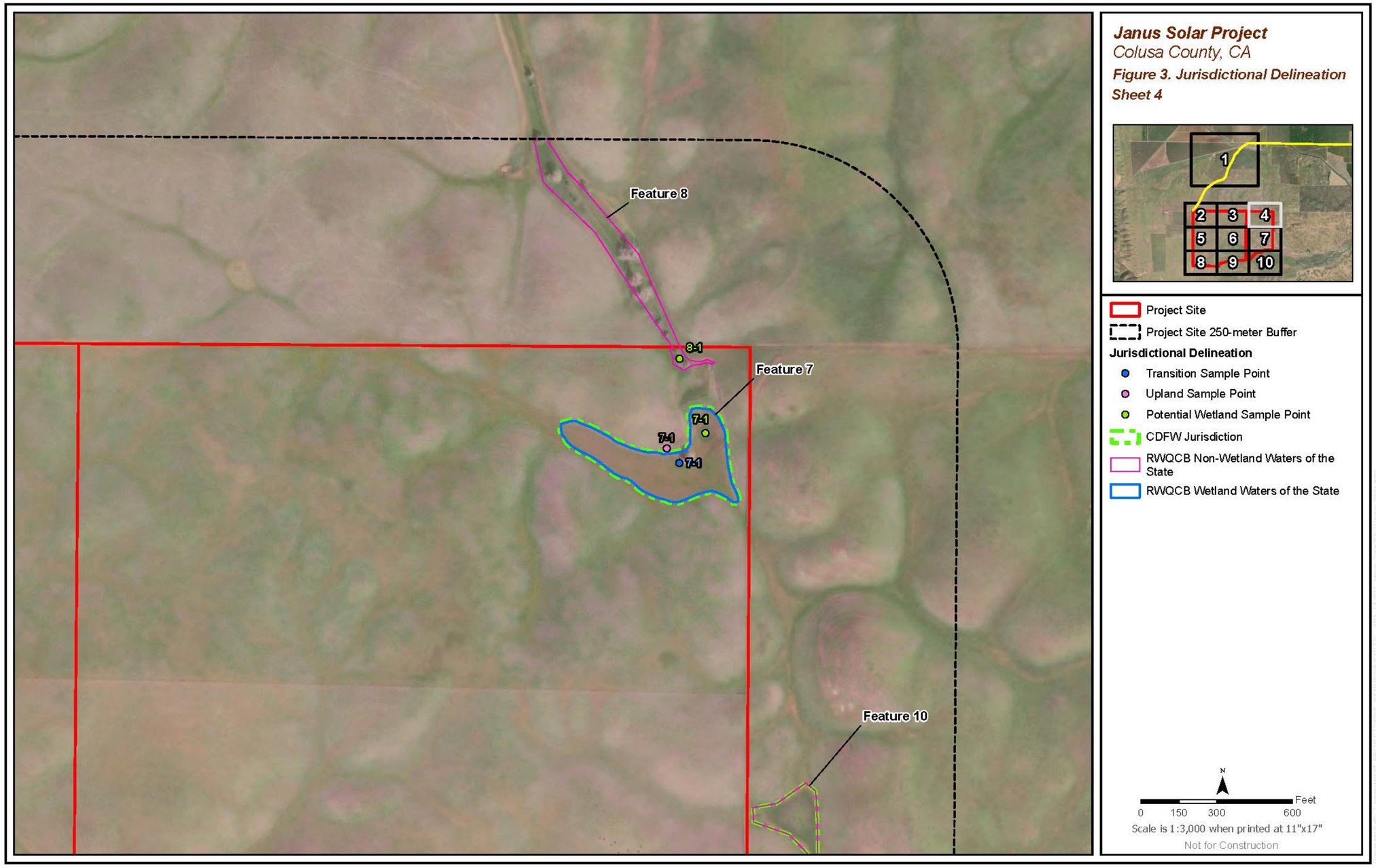
CDFW Jurisdiction
RWQCB Non-Wetland Waters of the State
USACE Waters of the U.S./RWQCB Waters of the State

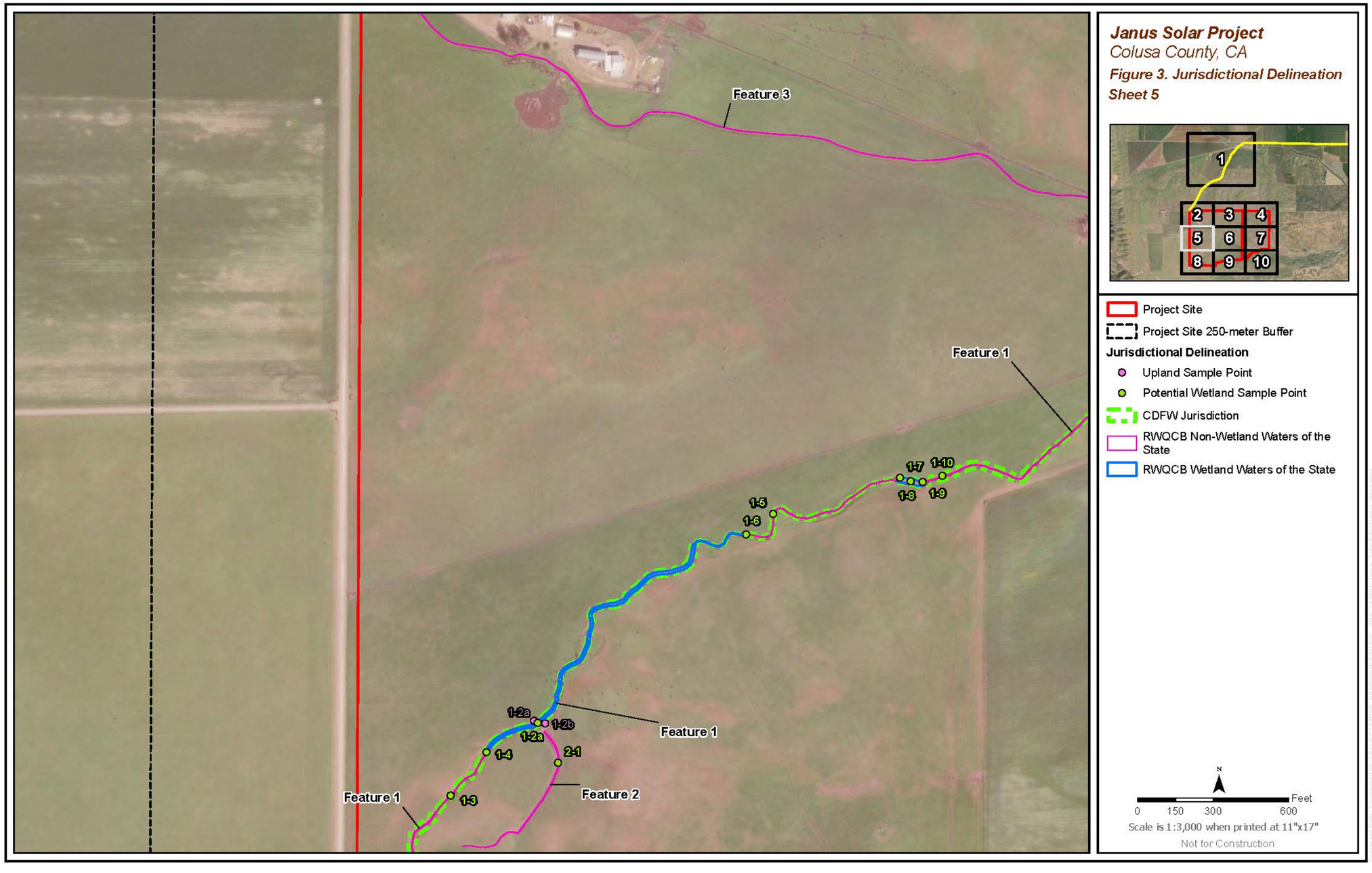
Note: Delineated features enlarged for visibility on Sheet 1.

N
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Scale is 1:3,000 when printed at 11"x17"
Not for Construction


Feature 3
Janus Solar Project
Colusa County, CA
Figure 3. Jurisdictional Delineation
Sheet 2
1
2
3
4
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10
Project Site
Gen-tie Line
Project Site 250-meter Buffer
Gen-tie Line 250-meter Buffer
Jurisdictional Delineation
RWQCB Non-Wetland Waters of the State
N
Feet
0
150
300
600
Scale is 1:3,000 when printed at 11"x17"
Not for Construction


Janus Solar Project
Colusa County, CA
Figure 3. Jurisdictional Delineation
Sheet 3
1
2
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4
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10
Project Site
Project Site 250-meter Buffer
Jurisdictional Delineation
Upland Sample Point
Potential Wetland Sample Point
RWQCB Non-Wetland Waters of the State
Feature 3
3-1
3-1
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300
600
Feet
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Not for Construction

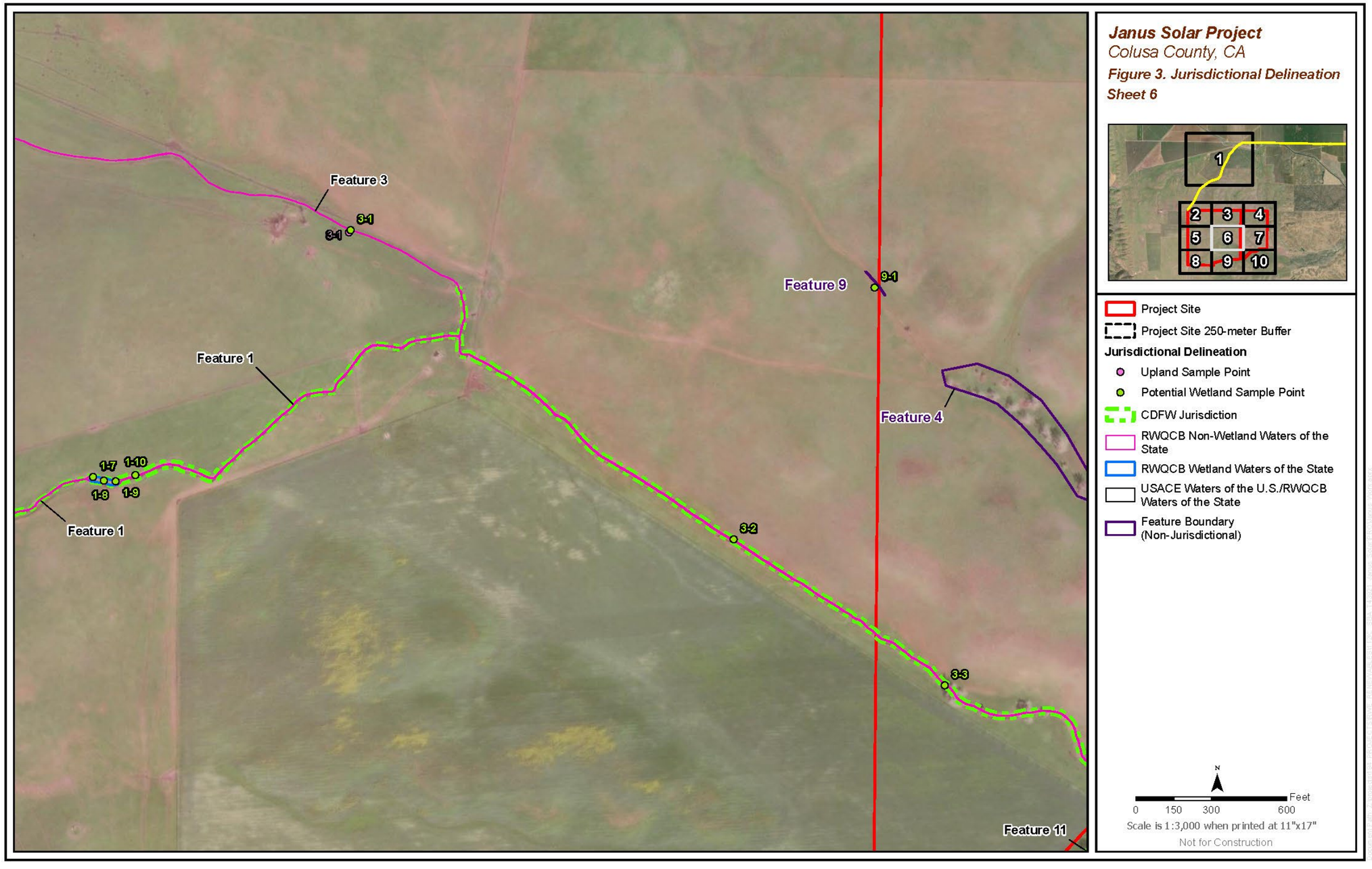

Feature 8
8-1
Feature 7
7-1
7-1
7-1
Feature 10
Janus Solar Project
Colusa County, CA
Figure 3. Jurisdictional Delineation
Sheet 4
1
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9
10
Project Site
Project Site 250-meter Buffer
Jurisdictional Delineation
Transition Sample Point
Upland Sample Point
Potential Wetland Sample Point
CDFW Jurisdiction
RWQCB Non-Wetland Waters of the State
RWQCB Wetland Waters of the State
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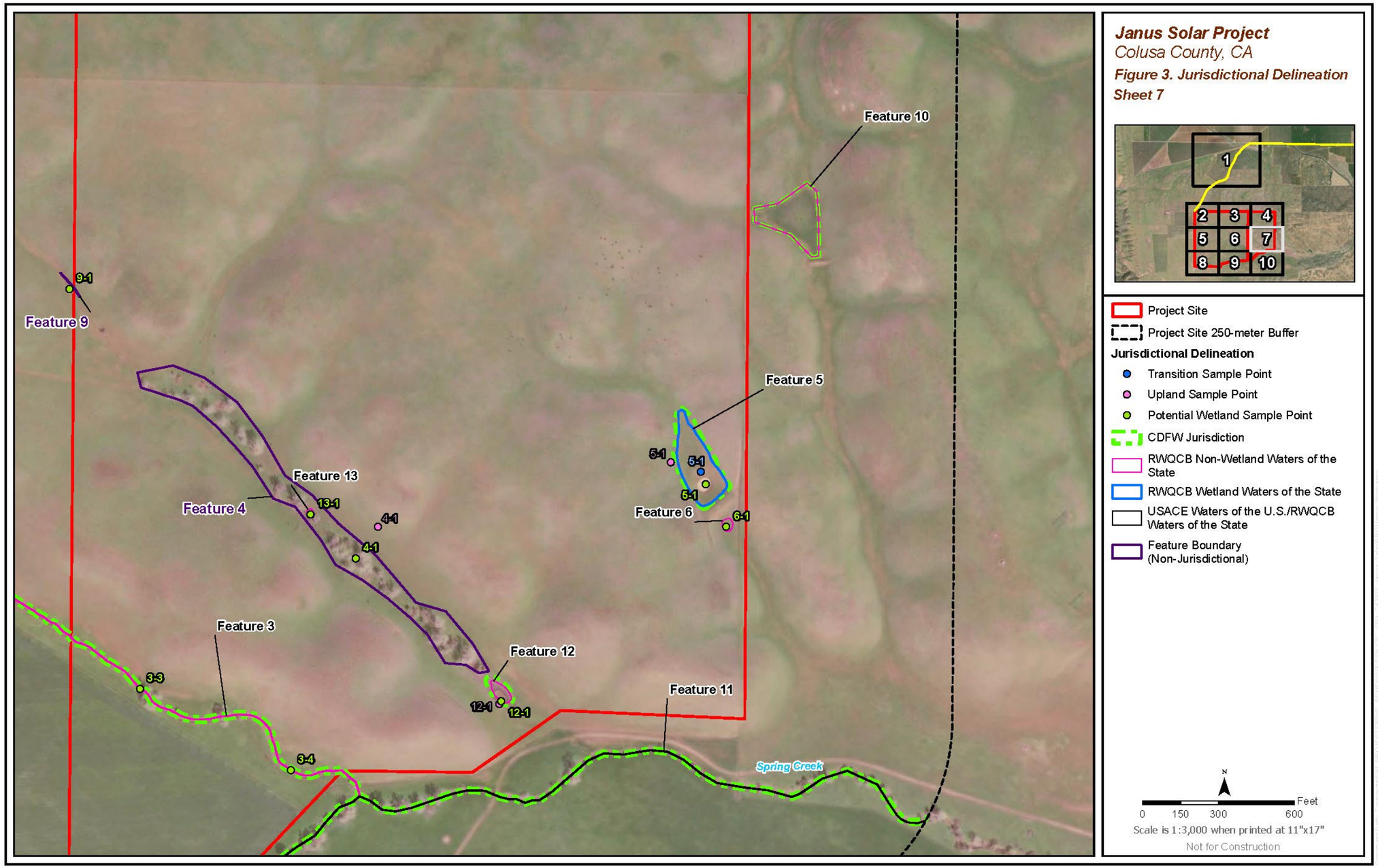


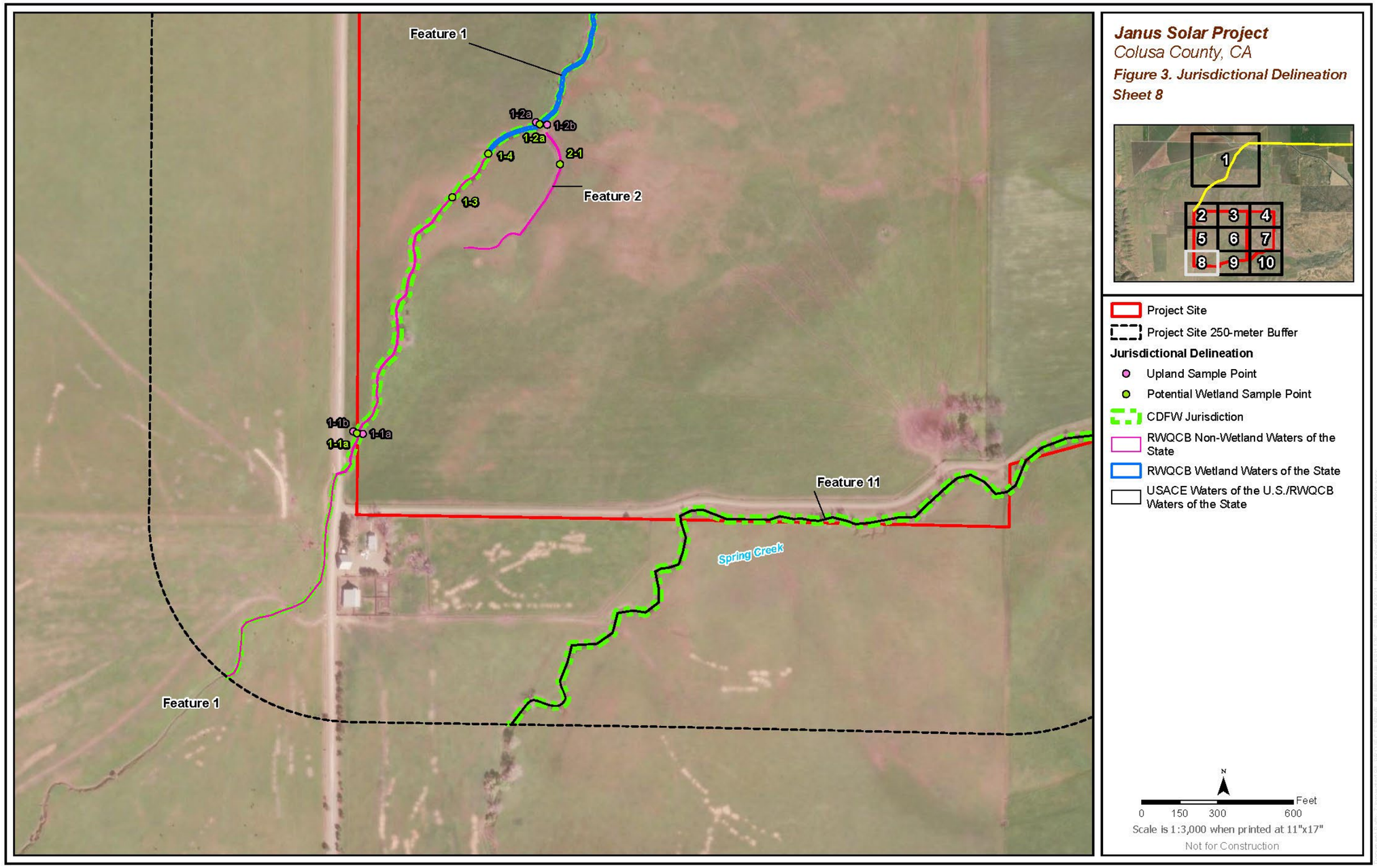
Janus Solar Project
Colusa County, CA
Figure 3. Jurisdictional Delineation
Sheet 5

Project Site
Project Site 250-meter Buffer
Jurisdictional Delineation
Upland Sample Point
Potential Wetland Sample Point
CDFW Jurisdiction
RWQCB Non-Wetland Waters of the State
RWQCB Wetland Waters of the State

N
0 150 300 600 Feet
Scale is 1:3,000 when printed at 11"x17"
Not for Construction


Feature 3
3-1
3-1
Feature 9
9-1
Feature 1
Feature 4
1-7
1-10
1-8
1-9
Feature 1
3-2
3-3
Feature 11
Janus Solar Project
Colusa County, CA
Figure 3. Jurisdictional Delineation
Sheet 6
1
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9
10
Project Site
Project Site 250-meter Buffer
Jurisdictional Delineation
Upland Sample Point
Potential Wetland Sample Point
CDFW Jurisdiction
RWQCB Non-Wetland Waters of the State
RWQCB Wetland Waters of the State
USACE Waters of the U.S./RWQCB Waters of the State
Feature Boundary (Non-Jurisdictional)
N
Feet
0
150
300
600
Scale is 1:3,000 when printed at 11"x17"
Not for Construction

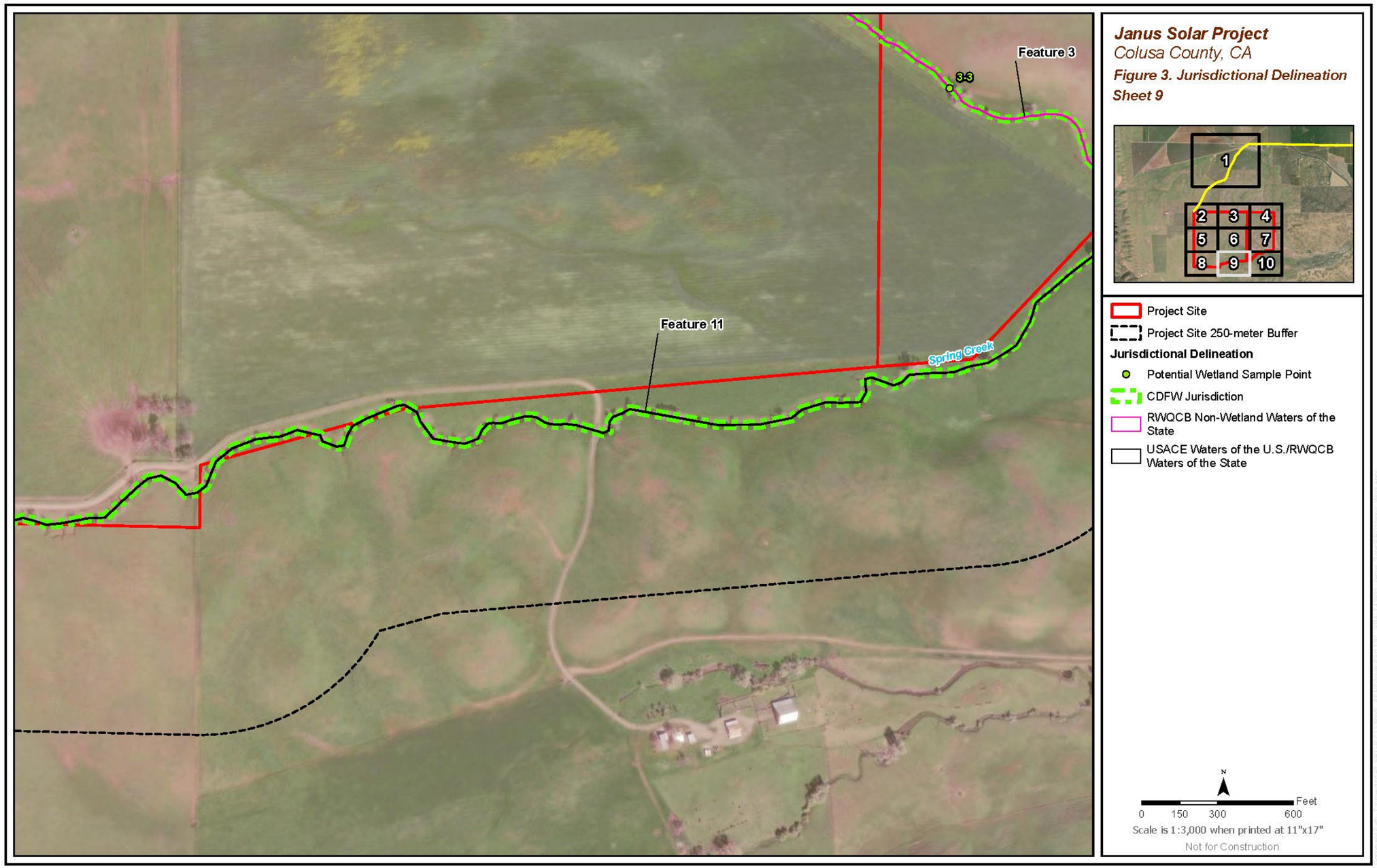

Feature 10
9-1
Feature 9
Feature 5
5-1
5-1
5-1
Feature 13
Feature 4
13-1
4-1
4-1
Feature 6
6-1
Feature 3
Feature 12
3-3
12-1
12-1
Feature 11
3-4
Spring Creek
Janus Solar Project
Colusa County, CA
Figure 3. Jurisdictional Delineation
Sheet 7
1
2
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7
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9
10
Project Site
Project Site 250-meter Buffer
Jurisdictional Delineation
Transition Sample Point
Upland Sample Point
Potential Wetland Sample Point
CDFW Jurisdiction
RWQCB Non-Wetland Waters of the State
RWQCB Wetland Waters of the State
USACE Waters of the U.S./RWQCB Waters of the State
Feature Boundary (Non-Jurisdictional)
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Feet
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150
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Scale is 1:3,000 when printed at 11"x17"
Not for Construction

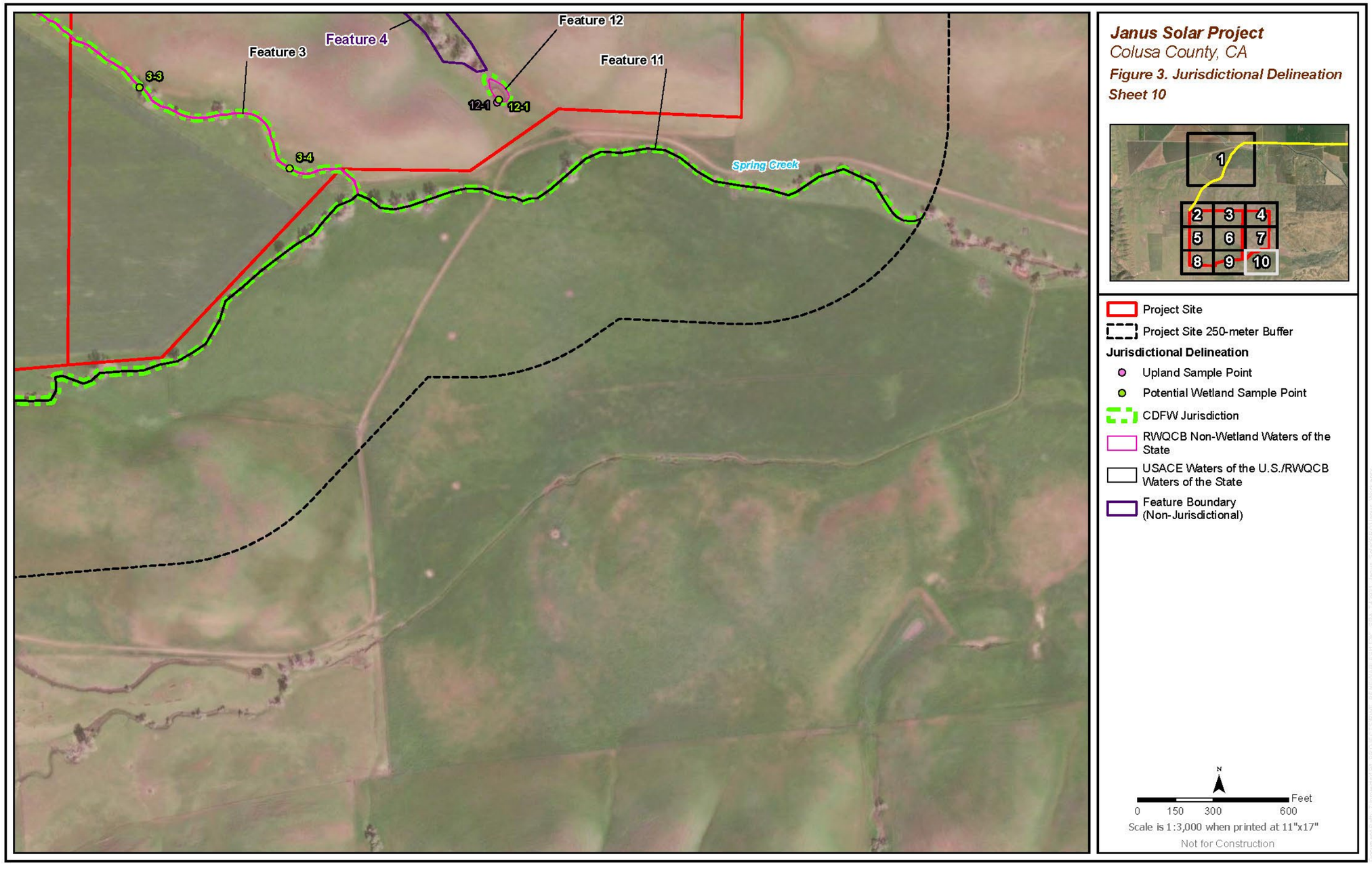


Janus Solar Project
Colusa County, CA
Figure 3. Jurisdictional Delineation
Sheet 8

Project Site
Project Site 250-meter Buffer
Jurisdictional Delineation
Upland Sample Point
Potential Wetland Sample Point
CDFW Jurisdiction
RWQCB Non-Wetland Waters of the State
RWQCB Wetland Waters of the State
USACE Waters of the U.S./RWQCB Waters of the State

N
Feet
0 150 300 600
Scale is 1:3,000 when printed at 11"x17"
Not for Construction


Feature 3
3-3
Feature 11
Spring Creek
Janus Solar Project
Colusa County, CA
Figure 3. Jurisdictional Delineation
Sheet 9
1
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3
4
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7
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9
10
Project Site
Project Site 250-meter Buffer
Jurisdictional Delineation
Potential Wetland Sample Point
CDFW Jurisdiction
RWQCB Non-Wetland Waters of the State
USACE Waters of the U.S./RWQCB Waters of the State
N
Feet
0
150
300
600
Scale is 1:3,000 when printed at 11"x17"
Not for Construction


Feature 3
Feature 4
Feature 12
Feature 11
3-3
3-4
12-1
12-1
Spring Creek
Janus Solar Project
Colusa County, CA
Figure 3. Jurisdictional Delineation
Sheet 10
1
2
3
4
5
6
7
8
9
10
Project Site
Project Site 250-meter Buffer
Jurisdictional Delineation
Upland Sample Point
Potential Wetland Sample Point
CDFW Jurisdiction
RWQCB Non-Wetland Waters of the State
USACE Waters of the U.S./RWQCB Waters of the State
Feature Boundary (Non-Jurisdictional)
N
Feet
0
150
300
600
Scale is 1:3,000 when printed at 11"x17"
Not for Construction

5.3 U.S. ARMY CORPS OF ENGINEERS

5.3.1 Section 404 Jurisdictional Wetlands

As shown in Table 2, six sample points within Feature 1 met all three criteria required to be a USACE wetland. These sample points had low cover of vegetation that was dominated by hydrophytic plants and had standing water and/or saturated soils. The vegetation within this feature was disturbed by cattle grazing; without this disturbance, wetland plants and associated muck (highly decomposed plant matter) would likely be present in higher quantities. Additional hydrology indicators observed were water-stained leaves, hydrogen sulfide odor, and/or water marks. Hydric soil indicators that were found at these points were hydrogen sulfide, loamy gleyed matrix, loamy mucky mineral, redox dark surface, and/or redox depressions. These areas represented topographically low points in the drainage channel with a propensity to pool water.

The sample points within Features 5 and 7 met all three criteria required to be a USACE wetland (Table 2). Sample points 5-1 wet and 7-1 wet were located in the lowest areas of the depressions and had low cover of vegetation that was dominated by hydrophytic plants (Figure 3). Sample points 5-1 trans and 7-1 trans were located in the transitional areas of the features between the low and upland areas and had moderate (Feature 5) or high (Feature 7) cover of vegetation that was dominated by hydrophytic plants. The redox depressions hydric soil indicator was found at all four of these sample points. While standing water was not observed at either of these features during the 2021 wetland delineation, it was observed during the initial survey in 2019 (Tetra Tech 2020) and during the 2024 wetland delineation. In addition, water marks, surface soil cracks, inundation visible on aerial imagery, saturation visible on aerial imagery, and/or drainage patterns (i.e., vegetation bent over at sample point 7-1 trans) were observed at these sample points. Based on the presence of large soil berms adjacent to Features 5 and 7, it is hypothesized that manmade flow blocks were previously created to stop flow and create ponding at these features for stock ponds or agricultural purposes. These features are not subject to ongoing operation and maintenance and have become a relatively permanent part of the natural landscape.

All features and sample points were examined for atypical situations where vegetation, soil, or hydrology indicators were absent due to active cattle grazing or agriculture. In these situations, all three parameters are not required to be considered a USACE wetland. Trampling by cattle has disturbed the topsoil in some areas on the Project site but has not significantly affected belowground soil processes such that hydric soil would be absent. While active grazing has significantly disturbed vegetation, no sample points were found that lacked hydrophytic vegetation but had hydric soil. Similarly, while trampling may have obscured wetland hydrology in some areas, no sample points were found that lacked wetland hydrology but had hydric soil. Therefore, no atypical situations were found that affected the results of this delineation.

Although portions of Feature 1 and all of Features 5 and 7 met all three criteria required to be a USACE wetland, these features are not relatively permanent; therefore, these wetlands are not adjacent to navigable Waters of the U.S. and are not jurisdictional to the USACE. Conversely, although portions of Features 11 and 15 are likely USACE jurisdictional wetlands, sampling could not be conducted in these features because they are on private property. Features 11 and 15 are jurisdictional Waters of the U.S. as described in the section below.

Data on vegetation, hydrology, and soils collected at the sample points during the delineation are provided on the USACE wetland data forms in Appendix A. All sample points are shown in Figures 2a, 2b, and 3.

5.3.2 Section 404 Jurisdictional Waters of the U.S.

The features on the Project site were evaluated as potential Waters of the U.S. in accordance with the Revised Definition of Waters of the United States; Conforming. Under this rule, regulated waters include

but are not limited to tributaries that are relatively permanent, standing or continuously flowing bodies of water; and wetlands adjacent to jurisdictional tributaries or impoundments with a continuous surface connection to those waters. While defined bed, banks, and channel and a discernable OHWM were found at some features on the Project site, these features only have surface flow or standing water in direct response to precipitation and are not considered relatively permanent. Relatively permanent waters either flow year-round or have continuous flow at least seasonally, which is typically quantified as three months or more. Features 1 and 3 are ephemeral drainages and would not have water present for three months or more. In addition, Features 5 and 7 are isolated wetlands and are not adjacent to jurisdictional Waters of the U.S. Overall, surface water connectivity within the Project site has been significantly disturbed by grazing and agricultural activities, which has resulted in impeded or blocked surface flow (e.g., large soil berms at Features 5 and 7 that stop offsite flow and create ponding).

Spring Creek (Feature 11) and Salt Creek (Feature 15) had standing water in 2024 and are intermittent creeks that could be interpreted as relatively permanent. Feature 14 is an ephemeral drainage that is not considered relatively permanent and is therefore not a Waters of the U.S. Features 11 and 15 converge offsite and lead into the Colusa Basin Drain, which ultimately leads into the Sacramento River. Therefore, Features 11 and 15 are jurisdictional Waters of the U.S.

5.3.3 Areas Exempt from Section 404 Jurisdiction

No areas exempt from Section 404 jurisdiction were identified.

5.4 REGIONAL WATER QUALITY CONTROL BOARD

5.4.1 Waters of the State

RWQCB Waters of the State include USACE Section 404 jurisdictional wetlands and Waters of the U.S. Features 11 and 15 are jurisdictional Waters of the U.S. and therefore are RWQCB Waters of the State. RWQCB Waters of the State also include wetland and non-wetland ephemeral, intermittent, and isolated surface water features that are not under federal jurisdiction. Portions of Feature 1 and all of Features 5 and 7 met all three parameters required to be a wetland, and therefore are RWQCB wetland Waters of the State. In addition, portions of Feature 1, and all of Features 2, 3, 6, 8, 10, and 12 to 14 are surface water features with a discernable OHWM, and therefore are RWQCB non-wetland Waters of the State.

5.4.2 Areas Exempt from State Jurisdiction

No areas exempt from RWQCB jurisdiction were identified.

5.5 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Portions of Feature 3, and all of Features 1, 11, 14, and 15 met the criteria for CDFW jurisdiction since these features had defined bed, banks, and channel. CDFW jurisdiction also includes lakes and ponds. Features 5, 7, 10, and 12 are jurisdictional to the CDFW since they are ponds with standing water and defined bed and banks. Disturbed riparian areas were found within the Project site (Features 4 and 8) but were not associated with a river, stream, or lake with defined bed, banks, and channel, and therefore, are not under CDFW jurisdiction. In addition, small depressional areas that were found on the Project site (Features 6 and 13) did not have ponded water or defined bed and banks, and therefore are not under CDFW jurisdiction.

6.0 SUMMARY AND CONCLUSIONS

The Project site contains areas that are under RWQCB and/or CDFW jurisdiction. Features 11 and 15 are under USACE jurisdiction but do not occur in the Project site. Table 4 summarizes the results of the delineation.

Table 4. Summary

Feature	Description	Jurisdictions
Feature 1	Ephemeral drainage channel within the Project site. Connects to Feature 3 and Spring Creek offsite.	Portions are RWQCB wetland and non-wetland Waters of the State. Whole channel is CDFW jurisdiction due to presence of defined bed, banks, and channel.
Feature 2	Ephemeral drainage feature within the southwestern portion of the Project site.	Due to presence of OHWM but lack of other parameters, only RWQCB non-wetland Waters of the State present.
Feature 3	Ephemeral drainage channel within the Project site. Connects to Spring Creek offsite.	RWQCB non-wetland waters of the State. Portions with defined bed, banks, and channel are also CDFW jurisdiction.
Feature 4	Disturbed riparian area within the eastern portion of the Project site not associated with defined bed, banks, and channel or OHWM.	None.
Feature 5	Pond within the southeastern area of the Project site.	RWQCB wetland Waters of the State and CDFW jurisdiction.
Feature 6	Depressional area within the southeastern area of Project site.	RWQCB non-wetland Waters of the State.
Feature 7	Pond within the northeastern corner of the Project site.	RWQCB wetland Waters of the State and CDFW jurisdiction.
Feature 8	Disturbed riparian area within a small portion of the northeastern corner of the Project site not associated with defined bed, banks, and channel.	RWQCB non-wetland Waters of the State due to the presence of an OHWM.
Feature 9	Erosional feature within the Project site.	None.
Feature 10	Pond within the 250-meter buffer.	RWQCB non-wetland Waters of the State and CDFW jurisdiction.
Feature 11	Spring Creek within the 250-meter buffer. A small portion of Spring Creek is within the Project site but is outside of the Project property fence.	USACE Waters of the U.S., RWQCB Waters of the State, and CDFW jurisdiction.
Feature 12	Pond within the southeastern portion of the Project site.	RWQCB non-wetland Waters of the State and CDFW jurisdiction.
Feature 13	Depressional area within the eastern portion of the Project site.	RWQCB non-wetland Waters of the State. Lack of bed and banks indicates not CDFW jurisdiction.
Feature 14	Drainage channel near the gen-tie line. The gen-tie line will cross this feature in one location where it runs through a culvert under Spring Valley Road.	RWQCB non-wetland Waters of the State and CDFW jurisdiction.
Feature 15	Salt Creek near the gen-tie line. The gen-tie line not cross Salt Creek.	USACE Waters of the U.S., RWQCB Waters of the State, and CDFW jurisdiction.

As design of the proposed Project continues, coordination with the USACE, RWQCB, and CDFW will be required if impacts to these areas are anticipated. Avoidance or minimization of the impacts to the areas under the jurisdiction of each of these agencies is recommended if feasible. A Section 404 permit from the USACE, a Section 401 Water Quality Certification or WDRs from the RWQCB, and a LSAA from the CDFW

would be required if these areas cannot be avoided, in which case early coordination with these agencies is recommended. The jurisdictional determinations for features described in this report are subject to verification by the USACE, RWQCB, and CDFW.

USACE Nationwide Permit (NWP) 14 – Linear Transportation Projects may be used to cover access roads for up to 0.5 acre of impacts to non-tidal jurisdictional Waters of the U.S. Pre-construction notification to the USACE is not required under NWP 14 if less than 0.10 acre of Waters of the U.S. would be impacted and no discharges to special aquatic sites would occur. SWRCB General Order No. WQ 2021-0048-DWQ, which certifies use of NWP 14 – Linear Transportation Projects for Waters of the State, may be used to cover access roads up to the following size thresholds for all impacts to non-tidal Waters of the State (i.e., cannot be used for ocean, bay, tidal waters or shores thereof):

- Permanent Impact Acreage: no more than 0.01 of an acre.
- Total Impact Acreage: no more than 0.2 of an acre of total impacts.
- Permanent Impact Length: no more than 100 linear feet.
- Total Impact Length: no more than 300 linear feet of total impacts.

Coordination with the USACE and RWQCB is recommended to confirm their concurrence with the use of NWP or General Order for the Project.

7.0 LITERATURE CITED

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