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May 22, 2026

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Subject: GLENN-COLUSA IRRIGATION DISTRICT GRADIENT FACILITY  
REHABILITATION PROJECT  
NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT  
REPORT (DEIR)  
SCH NO. 2025091009

Dear Brad Mattson:

The California Department of Fish and Wildlife (CDFW) received and reviewed the Notice of Preparation of an Environmental Impact Report (EIR) from Glenn-Colusa Irrigation District (GCID) for the Gradient Facility Rehabilitation Project (Project) pursuant to the California Environmental Quality Act (CEQA) statute and guidelines.<sup>1</sup> CDFW previously submitted comments in response to the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the project on October 21, 2025.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish, wildlife, plants and their habitats. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that it, by law, may need to exercise its own regulatory authority under the Fish and Game Code (Fish & G. Code).

### **CDFW ROLE**

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Fish & G. Code, § 1802.). Similarly, for purposes of CEQA, CDFW provides, as available, biological expertise during public agency

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<sup>1</sup> CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW may also act as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

### **PROJECT DESCRIPTION SUMMARY**

The Project site is located within the boundaries of Butte, Tehama, and Glenn counties in a rural area approximately 4 miles north-northwest of Hamilton City. The Project site lies along an approximately 1-mile stretch of the Sacramento River on both sides of the river. The Project site extends from just north of Montgomery Island to just downstream of the return flow channel from GCID's fish screen and main pumping station between river miles 205 and 206.

The Project involves bank stabilization and river channel protection along approximately 1 mile of the Sacramento River. The work would address bank erosion and a deep scour hole that threatens the continued functionality of GCID's Gradient Facility and the intake channel fish screen through measures such as spur dikes, rock slope protection, excavation/fill activities, and revegetation, implemented in phases as needed.

### **COMMENTS AND RECOMMENDATIONS**

CDFW offers the comments and recommendations presented below to assist GCID in adequately identifying and/or mitigating the Project's significant, or potentially significant, impacts on biological resources. The comments and recommendations are also offered to enable CDFW to adequately review and comment on the proposed Project with respect to impacts on biological resources. CDFW recommends that the forthcoming EIR address the following:

#### **General Issues**

1. Section 15125 of the CEQA Guidelines requires that an EIR include a description of the physical environmental conditions in the vicinity of the proposed project. The EIR should explain why the environmental conditions warrant action.
  - a. The NOP states "The purpose of the proposed project is to iteratively address ongoing bank erosion and the existing scour hole, which are threatening the continuing functionality of the [Gradient Facility] to maintain proper fish passage protection conditions at GCID's intake channel fish screen" (page 5). Therefore, the EIR should describe the



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- d. The EIR should assess the no-project alternative. This should include modeling to assess when the river may reach a natural equilibrium state (i.e., erosion and river meander may stabilize), potentially negating the need for active intervention.
3. The Project description should include the whole action as defined in the CEQA Guidelines § 15378 and should include appropriate detailed exhibits disclosing the Project area including temporarily impacted areas such as equipment stage area, spoils areas, adjacent infrastructure development, staging areas and access and haul roads if applicable.
4. The Project's Phase 2 activities would be completed between 5 and 15 years after Phase number 1, are hypothetical, and will be conducted in an environmental setting that differs from the environmental setting that will be described in the EIR. Phase 2 may not commence until the year 2042 (assuming that Phase 1 is completed by 2027 and that Phase 2 is initiated 15 years later). Forces that will continue to alter the Project area in this timeframe include ongoing changes to environmental and biological resources baseline within the dynamic riverine environment and, importantly, completion of Phase 1 which will substantially alter the Project area.

While CDFW commends GCID for disclosing future plans for Phase 2 activities in the Notice of Preparation, the EIR will be unable to effectively predict environmental conditions, and the resultant impacts of Phase 2 activities, that far into the future. Accordingly, the impacts of Phase 2 will not be accurately analyzed, disclosed to the public, and mitigated to less-than-significant levels in this EIR. This will preclude the opportunity for adequate future public review of Phase 2. Therefore, if and when GCID seeks to perform Phase 2, GCID should prepare separate and/or supplemental CEQA environmental review documents that include a current description of the environmental setting, modeling that incorporates current environmental conditions (including conditions following alteration by Phase 1), an assessment of impacts to environmental resources, and mitigation as necessary.

### **Assessment of Biological Resources**

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable CDFW staff to adequately review and comment on the Project, the EIR should include a complete assessment of the flora and fauna within and adjacent to the Project footprint, with emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats. CDFW recommends the EIR specifically include:

1. An assessment of all habitat types located within the Project footprint, and a map that identifies the location of each habitat type. CDFW recommends that floristic,

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alliance- and/or association-based mapping and assessment be completed following, *The Manual of California Vegetation*, second edition (Sawyer 2009). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the Project. CDFW recommends that the California Natural Diversity Database (CNDDDB), as well as previous studies performed in the area, be consulted to assess the potential presence of sensitive species and habitats. A nine United States Geologic Survey 7.5-minute quadrangle search is recommended to determine what may occur in the region, larger if the Project area extends past one quad (see *Data Use Guidelines* on the CDFW webpage [www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data](http://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data)). Please review the webpage for information on how to access the database to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the Project. CDFW recommends that CNDDDB Field Survey Forms be completed and submitted to CNDDDB to document survey results. Online forms can be obtained and submitted at: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>.

Please note that CDFW's CNDDDB is not exhaustive in terms of the data it houses, nor is it an absence database. CDFW recommends that it be used as a starting point in gathering information about the *potential presence* of species within the general area of the Project site. Other sources for identification of species and habitats near or adjacent to the Project area should include, but may not be limited to, State and federal resource agency lists, California Wildlife Habitat Relationship System, California Native Plant Society Inventory, agency contacts, environmental documents for other projects in the vicinity, academics, and professional or scientific organizations.

3. A complete and recent inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern and California Fully Protected Species (Fish & G. Code § § 3511, 4700, 5050, and 5515). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species. The EIR should include the results of focused species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable. Species-specific surveys should be conducted in order to ascertain the presence of species with the potential to be directly, indirectly, on or within a reasonable distance of the Project activities. CDFW recommends that GCID rely on survey and monitoring protocols and guidelines available at:

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[www.wildlife.ca.gov/Conservation/Survey-Protocols](http://www.wildlife.ca.gov/Conservation/Survey-Protocols). Alternative survey protocols may be warranted; justification should be provided to substantiate why an alternative protocol is necessary. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary. Some aspects of the Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought or deluge.

4. A thorough, recent (within the last two years), floristic-based assessment of special-status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see [www.wildlife.ca.gov/Conservation/Plants](http://www.wildlife.ca.gov/Conservation/Plants)).
5. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]).

### **Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources**

The EIR should provide a thorough discussion of the Project's potential direct, indirect, and cumulative impacts on biological resources. To ensure that Project impacts on biological resources are fully analyzed, the following information should be included in the EIR:

1. The NOP states "The purpose of the proposed project is to iteratively address ongoing bank erosion and the existing scour hole, which are threatening the continuing functionality of the [Gradient Facility] to maintain proper fish passage protection conditions at GCID's intake channel fish screen" (page 5). This information should be used to analyze the resulting impacts on "fish passage conditions at GCID's intake channel fish screen" (project purpose, page 5) and the ability to "maintain safe fish passage" through the Gradient Facility (key objective, page 7).
2. A discussion regarding impacts to River form and function. The intent of the Project is to fundamentally change the river hydraulics and sediment transport in the Project area. By armoring and substantially narrowing a stretch of the Sacramento River within the Project area, the Project may alter velocity and sediment transport on downstream locations, which in turn could significantly alter hydraulics and geomorphology in downstream structures of the river. This could result in substantial deposition, erosion or other alteration to downstream properties, causing property damage, and be a source of liability for GCID. Changes in downstream river form immediately downstream following construction of the spur dikes include gravel bar formation, river meandering, and significant bank erosion.

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CDFW is aware of one project, the Wilson Landing Side Channel project, that could be impacted by this Project. This restoration project, being conducted by River Partners in partnership with CDFW and others, could be severely impacted by the Project's alteration to river hydraulics and sediment transport immediately upstream.

The Project's potential to significantly increase downstream erosion may force downstream landowners to, in turn, armor their properties. Hence, armoring GCID's section of the Sacramento River could have cascading effects of prompting downstream landowners to armor additional stretches of the river (Nelson 1985; Micheli & Larsen 2002). Armoring of the Sacramento River reduces river complexity and the ability of the river to adjust, thus reducing habitat for aquatic and terrestrial species, and disrupts natural abiotic processes (Naiman et. al. 1993). The Project would counter recent efforts by state agencies and conservation groups to reduce the quantity of armoring along the Sacramento River, such as the currently proposed Kopta Slough Multi-Benefit Project (California Department of Water Resources 2022).

Therefore, the EIR should:

- a. Analyze the potential for the Project to cause additional erosion downstream of the Project area and the resultant impacts to fish and wildlife habitat.
  - b. Analyze sediment movement changes due to the proposed in channel work and the resultant impacts to fish and wildlife habitat. This analysis should include but not be limited to impacts to CESA-listed fish species' deep-pool, migration, rearing, and holding habitat.
  - c. Analyze the potential property damage for downstream parcels and the resultant impacts to fish and wildlife habitat.
  - d. Analyze the potential prompting of additional armoring and the resultant impacts to fish and wildlife habitat within the Sacramento River. This analysis should include but not be limited to impacts to CESA-listed fish species' deep-pool, migration, rearing, and holding habitat.
  - e. Proper analysis of these potential impacts should be supported by hydraulic and sediment modeling. Pre- and post-construction modeling (e.g. 2D hydraulic modeling, HEC-RAS, etc.) which demonstrates minor Project generated changes to flow velocities and depths should be prepared as part of the analysis.
3. A discussion of potential impacts to floodplain habitat and stranded fish. The IS/MND anticipated construction of a spur dike (spur dike E-8) and placement of excavated material on top of an existing low-lying area on the east bank of the Sacramento River. This low-lying area likely floods multiple times each winter, creating flooded riverine habitat that is essential for aquatic resources like

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rearing, juvenile salmonids. Additionally, this floodplain habitat appears to support forested wetland, which has the potential to support other special-status species. This work may directly eliminate habitat within the spur dike footprint, alter the hydrology of low-lying habitat to the east, and potentially form a plug that would entrap fish. Therefore, the EIR should consider the impacts to these resources.

4. A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the Project footprint, such as nearby public lands (e.g., National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Conservation or Recovery Plan, or other conserved lands).

In particular, the Wilson Landing Unit of the Sacramento River Wildlife Area is near the Project area. The Sacramento River Wildlife Area's land management plan seeks to preserve and restore riparian habitat, maintain and enhance habitat for special status species, and support scientific research and monitoring. Additional objectives are to provide opportunities for wildlife-related, low impact public recreational activities such as fishing, hunting, hiking, wildlife observation, photography, interpretation and environmental education. This wildlife area provides varied successions of riparian forest habitat for terrestrial species. The EIR should analyze the potential for the Project to erode the Wilson Landing Unit of the Sacramento River Wildlife Area and the resultant impacts to public recreational opportunities and the other management plan objectives.

5. A cumulative effects analysis developed as described under CEQA Guidelines section 15130. The EIR should discuss the Project's cumulative impacts to natural resources and determine if that contribution would result in a significant impact. The EIR should include a list of present, past, and probable future projects producing related impacts to biological resources or shall include a summary of the projections contained in an adopted local, regional, or statewide plan, that consider conditions contributing to a cumulative effect. The cumulative analysis shall include impact analysis of vegetation and habitat reductions within the area and their potential cumulative effects. Please include all potential direct and indirect Project-related impacts to riparian areas, wetlands, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and/or special-status species, open space, and adjacent natural habitats in the cumulative effects analysis. In particular, the EIR should consider:
  - a. Other projects that armor the Sacramento River or reduce natural riverine processes, such as meander. Armoring of the Sacramento River reduces habitat for aquatic and terrestrial species and disrupts natural abiotic processes. Therefore, the Project may have significant cumulative impacts on fish and wildlife habitat within the Sacramento River.

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- b. Substantial diversions from the Sacramento River. The Project will alter the hydraulics of the Project area and the Sacramento River. Likewise, diversions of water from the Sacramento River via the Hamilton City Pump Station alter hydraulics and hydrology in the Project area. Both the Project and the diversions will have impacts, both independently and cumulatively, on fish and wildlife resources. Relevant diversions include both the existing and reasonably foreseeable future diversions (for instance, from the Sites Reservoir Project) from the Hamilton City Pump Station.
  - c. Other projects and operations that impact aquatic resources in nearby areas of the Sacramento River.
- 6. The EIR should define the threshold of significance for each impact and describe the criteria used to determine whether the impacts are significant (CEQA Guidelines, § 15064, subd. (f)). The EIR must demonstrate that the significant environmental impacts of the Project were adequately investigated and discussed and it must permit the significant effects of the Project to be considered in the full environmental context.
- 7. A discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions created by Project activities especially those adjacent to natural areas, exotic and/or invasive species occurrences, and drainages. The EIR should address Project-related changes to drainage patterns and water quality within, upstream, and downstream of the Project site, including: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site.

**Mitigation Measures for Project Impacts to Biological Resources**

The EIR should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts that are expected to occur as a result of the construction and long-term operation and maintenance of the Project. CDFW also recommends the environmental documentation provide scientifically supported discussion regarding adequate avoidance, minimization, and/or mitigation measures to address the Project's significant impacts upon fish and wildlife and their habitat. For individual projects, mitigation must be roughly proportional to the level of impacts, including cumulative impacts, in accordance with the provisions of CEQA (Guidelines § § 15126.4(a)(4)(B), 15064, 15065, and 16355). In order for mitigation measures to be effective, they must be specific, enforceable, and feasible actions that will improve environmental conditions. When proposing measures to avoid, minimize, or mitigate impacts, CDFW recommends consideration of the following:

- 1. *Fully Protected Species*: Fully Protected Species (Fish & G. Code § 3511) have the potential to occur within or adjacent to the Project area. Project activities described in the EIR should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project

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area. If fully protected species cannot be completely avoided, the Project should obtain incidental take coverage for all species that have the potential to be present within or adjacent to the Project Area<sup>2</sup>. CDFW also recommends the EIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends that GCID include in the analysis how appropriate avoidance, minimization and mitigation measures will reduce indirect impacts to fully protected species.

2. *Species of Special Concern*: Several Species of Special Concern (SSC) have the potential to occur within or adjacent to the Project area, including, but not limited to: Central Valley spring-run ESU Chinook salmon (*Oncorhynchus tshawytscha*), Southern distinct population segment (SDPS) green sturgeon (*Acipenser medirostris*), hardhead (*Mylopharodon conocephalus*); western pond turtle (*Actinemys marmorata*); yellow breasted chat (*Icteria virens*), yellow warbler (*Setophaga petechia*); and western red bat (*Lasiurus blossevillii*). Project activities described in the EIR should be designed to avoid any SSC that has the potential to be present within or adjacent to the Project area. CDFW also recommends that the EIR fully analyze potential adverse impacts to SSC due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends GCID include in the analysis how appropriate avoidance, minimization and mitigation measures will reduce impacts to SSC. Issues include, but are not limited to:
  - a. Larval or juvenile green sturgeon may occur in the Project Area during the in-water work window of July 15 through October 31. Individuals may occupy the Project Area during downstream migration or while utilizing the area for short-term rearing habitat. Larval and juvenile green sturgeon are primarily nocturnal, taking cover in deep water habitat areas or in interstitial spaces during the day to avoid predation. Because of this, typical diurnal monitoring and exclusion efforts, such as seining during the daytime, may be ineffective for detecting, herding, and excluding larval and juvenile green sturgeon. Therefore, the EIR should consider alternative mitigation measures to minimize impacts and, if necessary, mitigate for impacts.
3. *Sensitive Plant Communities*: CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDDB and are included in *The Manual of California Vegetation* (Sawyer 2009). The EIR should include

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<sup>2</sup> CDFW may only issue incidental take permits for specified projects if certain conditions are satisfied per SB 147.

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measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts.

4. *Native Wildlife Nursery Sites*: CDFW recommends the EIR fully analyze potential adverse impacts to native wildlife nursery sites, including but not limited to bat maternity roosts. Based on review of Project materials and observation by CDFW staff, the Project site contains potential nursery site habitat for structure and tree roosting bats and is near potential foraging habitat. Bats are considered non-game mammals and are afforded protection by state law from take and/or harassment, (Fish & G. Code, § 4150; Cal. Code of Regs, § 251.1). CDFW recommends that the EIR fully identify the Project's potential impacts to native wildlife nursery sites, and include appropriate avoidance, minimization and mitigation measures to reduce impacts or mitigate any potential significant impacts to bat nursery sites.
5. *Mitigation*: CDFW considers adverse Project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the EIR should include mitigation measures for adverse Project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, onsite habitat restoration, enhancement, or permanent protection should be evaluated and discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

The EIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset Project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.

6. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in the regional ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across

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a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

CDFW recommends that local onsite propagules from the Project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be appropriately timed to ensure the viability of the seeds when planted. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various Project components as appropriate. Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the Project. Examples may include retention of woody material, logs, snags, rocks, and brush piles. Fish and Game Code sections 1002, 1002.5 and 1003 authorize CDFW to issue permits for the take or possession of plants and wildlife for scientific, educational, and propagation purposes. Please see our website for more information on Scientific Collecting Permits at [www.wildlife.ca.gov/Licensing/Scientific-Collecting#53949678-regulations-](http://www.wildlife.ca.gov/Licensing/Scientific-Collecting#53949678-regulations-).

7. *Nesting Birds*: Please note that it is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory nongame native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). CDFW implemented the MBTA by adopting the Fish and Game Code section 3513. Fish and Game Code sections 3503, 3503.5 and 3800 provide additional protection to nongame birds, birds of prey, their nests and eggs. Sections 3503, 3503.5, and 3513 of the Fish and Game Code afford protective measures as follows: section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the Fish and Game Code or any regulation made pursuant thereto; section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by the Fish and Game Code or any regulation adopted pursuant thereto; and section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Potential habitat for nesting birds and birds of prey is present within the Project area. The Project should disclose all potential activities that may incur a direct or indirect take to nongame nesting birds within the Project footprint and its vicinity. Appropriate avoidance, minimization, and/or mitigation measures to avoid take must be included in the EIR.

CDFW recommends the EIR include specific avoidance and minimization measures to ensure that impacts to nesting birds or their nests do not occur. Project-specific avoidance and minimization measures may include, but not be

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limited to: Project phasing and timing, monitoring of Project-related noise (where applicable), sound walls, and buffers, where appropriate. The EIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the Project site. In addition to larger, protocol level survey efforts (e.g., Swainson's hawk surveys) and scientific assessments, CDFW recommends a final preconstruction survey be required no more than three days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted earlier.

8. *Moving out of Harm's Way*: The Project is anticipated to result in the clearing of natural habitats that support native species. To avoid direct mortality, GCID should state in the EIR a requirement for a qualified biologist with the proper handling permits, will be retained to be onsite prior to and during all ground- and habitat-disturbing activities. Furthermore, the EIR should describe that the qualified biologist with the proper permits may move out of harm's way special-status species or other wildlife of low or limited mobility that would otherwise be injured or killed from Project-related activities, as needed. The EIR should also describe qualified biologist qualifications and authorities to stop work to prevent direct mortality of special-status species. CDFW recommends fish and wildlife species be allowed to move out of harm's way on their own volition, if possible, and to assist their relocation as a last resort. It should be noted that the temporary relocation of onsite wildlife does not constitute effective mitigation for habitat loss.
9. *Translocation of Species*: CDFW generally does not support the use of relocation, salvage, and/or transplantation as the sole mitigation for impacts to rare, threatened, or endangered species as these efforts are generally experimental in nature and largely unsuccessful. Therefore, the EIR should describe additional mitigation measures utilizing habitat restoration, conservation, and/or preservation, in addition to avoidance and minimization measures, if it is determined that there may be impacts to rare, threatened, or endangered species.

The EIR should incorporate mitigation performance standards that would ensure that impacts are reduced to a less-than-significant level. Mitigation measures proposed in the EIR should be made a condition of approval of the Project. Please note that obtaining a permit from CDFW by itself with no other mitigation proposal may constitute mitigation deferral. CEQA Guidelines section 15126.4, subdivision (a)(1)(B) states that formulation of mitigation measures should not be deferred until some future time. To avoid deferring mitigation in this way, the EIR should describe avoidance, minimization and mitigation measures that would be implemented should the impact occur.

**California Endangered Species Act**

CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to CESA. State-listed species with the potential to occur in the area include, but are not limited to: Central Valley spring-run evolutionarily significant unit (ESU) Chinook salmon (*Oncorhynchus tshawytscha*, CESA threatened); Sacramento

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River winter-run ESU Chinook salmon (*Oncorhynchus tshawytscha*, CESA endangered); bank swallow (*Riparia riparia*, CESA threatened); and Crotch's bumble bee (*Bombus crotchii*, CESA candidate). CDFW recommends that the Project obtain a CESA Incidental Take Permit (ITP) as the Project has a high likelihood of resulting in "take" (Fish & G. Code § 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of State-listed CESA species. The EIR should disclose the potential of the Project to take State-listed species and how the impacts will be avoided, minimized, and mitigated. Specific species and issues that should be addressed include, but are not limited to:

1. *Spring-run Chinook salmon, winter-run Chinook salmon, and other fish species.*

- a. Winter-run Chinook salmon fry has the potential to be in the Project area as early as July and will be present with increasing frequency and abundance as water temperatures begin to decline in mid-September. The EIR should address the potential for in-water construction activities to impact salmonids and other fish species.
- b. The EIR should include appropriate plans to collect data to inform avoidance and minimization efforts. GCID previously operated a rotary screw trap program up until 2022. Sampling and data collected at the GCID bypass channel rotary screw trap was critical in informing salmon and steelhead recovery, conservation, and management activities. CDFW strongly encourages GCID to obtain an MOU and restart its trapping program.
- c. The IS/MND proposed to monitor for and exclude fish from in-water work areas, but it stated that monitoring and exclusion would only be conducted where and when feasible depending on hydraulic conditions and did not commit to performing monitoring and exclusion for all the in-water construction activities. The EIR should provide plans to ensure that all in-water construction activities will benefit from monitoring and exclusion; where this is infeasible, the EIR should analyze and mitigate for remaining impacts.
- d. Installation of spur dikes has potential to increase predation rates on juvenile salmonids and green sturgeon by providing piscivorous fish species current refugia and ambush habitat. The EIR should address the potential increased predation rates. The EIR should discuss how the Project will "alleviate predator-congregating habitat to ensure juvenile salmon and other special-status species survival" (key objectives section, page 7).

2. *Bank swallow.*

- a. The Project area contains bank swallow habitat. The IS/MND states that bank swallow have regularly nested in the Project area (page 72). Most recently, CDFW staff observed an active nesting colony on the eastern bank during a site visit to the Project area on May 13, 2026. According to the Bank Swallow Conservation Strategy, "available information suggests that 70 - 90% of the

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current known Bank Swallow population in California nests in colonies along the Sacramento and Feather Rivers” (Bank Swallow Technical Advisory Committee, 2013).

- b. Project activities will reduce available habitat. According to the Bank Swallow Conservation Strategy, bank swallows create “burrows in vertical banks created by natural river processes. Natural river processes include bank erosion and deposition resulting from lateral migration of rivers within their natural meander belt and floodplain...The continued decline of the Bank Swallow population in California coincides with the increase of rock revetment placed on the banks of the Sacramento River between Red Bluff and Colusa” (Bank Swallow Technical Advisory Committee, 2013).

The Project will armor a stretch of the Sacramento River, through installation of spur dikes and rock slope protection resulting in suppression of natural river processes and the permanent loss of bank swallow nesting habitat. Additionally, the Project’s alteration of river hydraulics, erosion, and sediment transport may extend beyond the boundaries of the Project area. This could change the degree and location of downstream river processes and potentially affect habitat, colonies, or shift erosive forces to revetted sections of the river (that will not erode into habitat).

- c. EIR should analyze impacts. The EIR should analyze, supported by modeling, the Project’s impact on bank swallow habitat both in and downstream of the Project area. The EIR should also analyze the cumulative impact of other projects. The EIR should quantify the expected impacts and estimate the significance to the overall amount of available habitat and the population. CDFW recommends quantifying expected impacts by assessing both the number of burrows and the surface area available for nesting; the Bank Swallow Conservation Strategy suggests a methodology to estimate nesting pairs as 50% of observed burrows (page 14, Bank Swallow Technical Advisory Committee, 2013). Due to high inter-annual variability in riverine conditions and resulting bank swallow usage, the EIR should utilize data from multiple years; data is available for this area from 2009 onwards from the Bank Swallow Technical Advisory Committee.
- d. EIR should mitigate impacts. Finally, the EIR should mitigate any unavoidable Project impacts. The Bank Swallow Conservation Strategy recommends conservation actions and options for mitigation that should be considered in the EIR (page 26, Bank Swallow Technical Advisory Committee, 2013).

Please note that mitigation measures that are adequate to reduce impacts to a less-than significant level to meet CEQA requirements may not be enough for the issuance of an ITP. To facilitate the issuance of an ITP, if applicable, CDFW recommends the EIR include measures to minimize and fully mitigate the impacts to any State-listed species the Project has potential to take. CDFW encourages early consultation with staff to determine appropriate measures to facilitate future permitting processes and to

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engage with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service to coordinate specific measures if both State and federally listed species may be present within the Project vicinity.

### **Native Plant Protection Act**

The Native Plant Protection Act (Fish & G. Code §1900 *et seq.*) prohibits the take or possession of State-listed rare and endangered plants, including any part or product thereof, unless authorized by CDFW or in certain limited circumstances. Take of State-listed rare and/or endangered plants due to Project activities may only be permitted through an ITP or other authorization issued by CDFW pursuant to California Code of Regulations, Title 14, section 786.9 subdivision (b).

### **Lake and Streambed Alteration Program**

The EIR should identify all perennial, intermittent, and ephemeral rivers, streams, lakes, other hydrologically connected aquatic features, and any associated biological resources/habitats present within the entire Project footprint (including utilities, access and staging areas). The environmental document should analyze all potential temporary, permanent, direct, indirect and/or cumulative impacts to the above-mentioned features and associated biological resources/habitats that may occur because of the Project. If it is determined the Project will result in significant impacts to these resources, the EIR shall propose appropriate avoidance, minimization and/or mitigation measures to reduce impacts to a less-than-significant level.

Section 1602 of the Fish and Game Code requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following:

1. Substantially divert or obstruct the natural flow of any river, stream or lake;
2. Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or
3. Deposit debris, waste or other materials where it may pass into any river, stream or lake.

Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

If upon review of an entity's notification, CDFW determines that the Project activities may substantially adversely affect an existing fish or wildlife resource, a Lake and Streambed Alteration (LSA) Agreement will be issued which will include reasonable measures necessary to protect the resource. CDFW's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if one is necessary, the EIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance,

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mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the Project may avoid or reduce impacts to fish and wildlife resources. All LSA Notification types must be submitted online through CDFW's Environmental Permit Information Management System (EPIMS). For more information about EPIMS, please visit <https://wildlife.ca.gov/Conservation/Environmental-Review/EPIMS>. More information about LSA Notifications, paper forms and fees may be found at <https://www.wildlife.ca.gov/Conservation/Environmental-Review/LSA>.

Please note that other agencies may use specific methods and definitions to determine impacts to areas subject to their authorities. These methods and definitions often do not include all needed information for CDFW to determine the extent of fish and wildlife resources affected by activities subject to Notification under Fish and Game Code section 1602. Therefore, CDFW does not recommend relying solely on methods developed specifically for delineating areas subject to other agencies' jurisdiction (such as United States Army Corps of Engineers) when mapping lakes, streams, wetlands, floodplains, riparian areas, etc. in preparation for submitting a Notification of an LSA.

CDFW relies on the lead agency environmental document analysis when acting as a responsible agency issuing an LSA Agreement. CDFW recommends lead agencies coordinate with us as early as possible, since potential modification of the proposed Project may avoid or reduce impacts to fish and wildlife resources and expedite the Project approval process.

The following information will be required for the processing of an LSA Notification and CDFW recommends incorporating this information into any forthcoming CEQA document(s) to avoid subsequent documentation and Project delays:

1. Mapping and quantification of lakes, streams, and associated fish and wildlife habitat (e.g., riparian habitat, freshwater wetlands, etc.) that will be temporarily and/or permanently impacted by the Project, including impacts from access and staging areas. Please include an estimate of impact to each habitat type.
2. Discussion of specific avoidance, minimization, and mitigation measures to reduce Project impacts to fish and wildlife resources to a less-than-significant level. Please refer to section 15370 of the CEQA Guidelines.

Based on review of Project materials, CDFW recommends the EIR fully identify the Project's potential impacts to the Sacramento River within the vicinity of the Project and its associated vegetation and wetlands.

### **ENVIRONMENTAL DATA**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database, which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to CNDDDB. The CNDDDB field survey form

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can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be submitted online or mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov).

**FILING FEES**

The Project, as proposed, would have an effect on fish and wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by GCID and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code § 711.4; Pub. Resources Code, § 21089.)

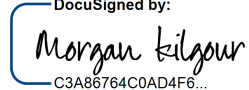
**CONCLUSION**

Pursuant to Public Resources Code sections 21092 and 21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the Project. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670 or emailed to [R2CEQA@wildlife.ca.gov](mailto:R2CEQA@wildlife.ca.gov).

CDFW appreciates the opportunity to comment on the Notice of Preparation of the EIR for the Gradient Facility Rehabilitation Project and recommends that the GCID address CDFW's comments and concerns in the forthcoming EIR. CDFW personnel are available for consultation regarding biological resources and strategies to minimize impacts.

If you have any questions regarding the comments provided in this letter, or wish to schedule a meeting and/or site visit, please contact Ian MacLeod, Senior Environmental Scientist (Specialist) at (916) 907-3782 or [ian.macleod@wildlife.ca.gov](mailto:ian.macleod@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
  
C3A86764C0AD4F6...

Morgan Kilgour  
Regional Manager

ec: Melissa Stanfield, Senior Environmental Scientist (Supervisory)  
Ian MacLeod, Senior Environmental Scientist (Specialist)  
*California Department of Fish and Wildlife*

Office of Land Use and Climate Innovation, State Clearinghouse, Sacramento

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## REFERENCES

Bank Swallow Technical Advisory Committee. 2013. Bank Swallow (*Riparia riparia*) Conservation Strategy for the Sacramento River Watershed, California.

[https://www.sacramentoriver.org/bans/bans\\_lib/BANSConsStrat\\_062813\\_final.pdf](https://www.sacramentoriver.org/bans/bans_lib/BANSConsStrat_062813_final.pdf)

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A Manual of California Vegetation, 2<sup>nd</sup> ed. California Native Plant Society Press, Sacramento, California.

<http://vegetation.cnps.org/>