



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Northern Region
601 Locust Street
Redding, CA 96001
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



September 26, 2024

Tiffany Lightle
Associate Environmental Specialist
City of Redding
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**SUBJECT: REVIEW OF CANTER COURT SEWER PROJECT, SHASTA COUNTY,
STATE CLEARINGHOUSE NUMBER: 2024080916**

Dear Tiffany Lightle:

The California Department of Fish and Wildlife (CDFW) has reviewed the Initial Study and Mitigated Negative Declaration (ISMND), dated August 2024, for the above-referenced project (Project). CDFW appreciates this opportunity to comment on the Project, pursuant to the California Environmental Quality Act (CEQA) Guidelines¹.

CDFW's 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 Agency capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

¹ 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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CDFW is also submitting comments 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. 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.) or state listed rare plants pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code § 1900 et seq.), authorization as provided by the applicable Fish and Game Code may be required.

Project Description:

The project area is located on a band of open space and is centered on Churn Creek, an intermittent stream. The open space is bounded by residential neighborhoods to the east and west, each neighborhood includes a connection road to the open space and Project area. The Project as described in the ISMND, is as follows:

“The project would consist of the removal and replacement of the two existing 348-foot-long, 6-inch diameter concrete-encased sewer siphons across Churn Creek. The siphons would be excavated and replaced in the same alignment. An open-trench method requiring a work area approximately 20 feet wide and an excavation depth of approximately 12 feet would be used along the entire length of pipe to be replaced. The two existing 6-inch-diameter acrylonitrile butadiene styrene siphon pipes would be removed and replaced with new 6-inch-diameter high-density polyethylene pipes in the same alignment. New pipe sections would be placed in the trench, fused together, and connected to manholes on both ends of the pipeline. When completed, the trench would be backfilled with slurry and a concrete cap to prevent erosion during high winter flows. The disturbed stream channel bed and bank would be returned to its original contours and seeded with a local native seed mix. Work also includes the removal of one manhole, the replacement of one manhole, and the rehabilitation of a third manhole.”

Comments and Recommendations

CDFW staff recognize that the City of Redding (Lead Agency) has taken some appropriate steps to evaluate this Projects impacts to biological resources including a biological resources report with potentially occurring special-status species and the included Avoidance and Minimization Measures (AMM's). CDFW offers the following comments and recommendations to further assist

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the Lead Agency in adequately identifying, avoiding, and minimizing potentially significant, direct, and indirect impacts on biological resources with the implementation of the Project.

Pipeline Depth Analysis

Streams are dynamic, and buried pipelines can become exposed or damaged when the bed and banks of streams change over time. Exposed sewer pipelines within a stream pose a hazard to the health of humans and wildlife if breached due to high flows or stream evolution; they can also become barriers to the upstream and downstream movement of fish during a range of stream flows. Many of the fixes proposed for exposed pipelines, such as cement caps and installation of riprap, can also create fish passage problems and additionally interrupt natural stream processes by increasing localized scour and redirection flow. CDFW recommends that pipelines be installed below the total calculated scour depth, with that burial depth extended far enough to account for future channel migration or widening. Additional analysis using standard methodologies, such as the guidelines found in the Federal Highway Administration's [*Stream Stability at Highway Structures*](#)² document, should occur to determine hazards related to scour, bed degradation, and channel migration risk in order to determine the appropriate burial depth and length of the proposed pipeline.

Impacts to Riparian and Aquatic Resources

The ISMND indicates that temporary and/or permanent impacts to streambed and riparian habitats would occur. Page 19 of the ISMND states "the project would temporarily impact 0.136 acre of waters." Additionally, the ISMND describes that the project would require the permanent removal of approximately nine native trees in the riparian zone including four Oregon ash (approximately 6-inch diameter at breast height [dbh] to 12-inch dbh), velvet ash (12-inch dbh), white alder (6-inch dbh), foothill pine (24-inch dbh), and interior live oak (12-inch dbh).

California has lost much of its original wetland and riparian habitat, with acreage and values continuing to decline³. CDFW maintains responsibility for wetland and riparian habitats and considers impacts to these habitats as

² <https://www.fhwa.dot.gov/engineering/hydraulics/pubs/hif12004.pdf>

³ California Department of Fish and Wildlife (2007). *California wildlife: conservation challenges*. California Department of Fish and Game. Sacramento, CA.

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significant. Riparian trees and vegetation, and associated floodplains provide many essential benefits to stream and river fish habitat ⁴. Riparian areas are valuable for their ecosystem processes such as protecting water quality by filtering pollutants and transferring nutrients; stabilizing stream banks to prevent erosion and sedimentation/siltation; and dissipating flow energy during flood conditions, thereby spreading the volume of surface water, reducing peak flows downstream, and increasing the duration of low flows by slowly releasing stored water into the channel through subsurface flow.

Several stream alterations are described in the Project description, such as vegetation removal, grading, trenching, placement of fill, etc. The Project could also have lasting impacts to the stream after construction is complete by altering topography, modifying existing water flow paths, and modifying sediment transport. Absent appropriate minimization and mitigation, Project impacts may result in substantial changes in habitat features such as pools and riffles, channel erosion, and episodic and/or chronic sedimentation within and adjacent to the Project area. The ISMND does not propose any specific mitigation for the loss of riparian or streambed habitat.

To adequately minimize and mitigate impacts to less than significant for both riparian and aquatic habitat, CDFW recommends the preparation of Riparian Restoration Mitigation and Monitoring Plan (RRMP) that includes a discussion of how the stream corridor will be restored and/or enhanced following project completion. The RRMP should include onsite replacement of riparian vegetation at a minimum 3:1 ratio. The RRMP should identify success criteria for riparian plantings, such as percent survival or percent cover, actions necessary for maintaining the plants for five years, including, but not limited to, invasive species management, weeding, deer protection, replacement and other anticipated maintenance activities. The RRMP should include an outline of the information to be collected for annual reports. It should also provide an outline of corrective actions that may be necessary during a five-year mitigation monitoring period and procedures necessary for implementing corrective actions. If revegetation survival and/or cover requirements do not meet established goals, replacement planting, additional watering, weeding, invasive exotic eradication, or any other practice, should be required to achieve these requirements. Replacement plants should be monitored with

⁴ Moyle P.B. (2002). Inland fishes of California. University of California Press. Berkeley, CA.

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the same survival and growth requirements for five years after planting. If onsite habitat restoration is not feasible, CDFW recommends restoring and/or enhancing these habitats at an offsite location using the above referenced RRMP recommendations.

If offsite habitat restoration is not feasible, CDFW recommends purchasing credits, at a minimum 3:1 ratio, to a CDFW-approved mitigation bank, contributing funds to a conservation easement for the enhancement and protection of these habitats in perpetuity, or contributing funds to a conservation fund aimed to restore and/or enhance these habitats within Shasta County. A minimum 3:1 ratio would adequately mitigate for the loss of ecological function, habitat value, and temporal elements related to Project impacts.

Lake and Streambed Alteration Agreement

Fish and Game Code section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW prior to beginning any activity that may do one or more of the following:

- Substantially divert or obstruct the natural flow of the bed, channel, or bank of any river, stream, or lake; or
- Substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

To obtain information about the 1602 Notification process, please access the [Lake and Streambed Alteration Program](#)⁵.

Trenching, Excavation, and Pipe Staging

Any open trench and excavated areas should be covered securely prior to stopping work each day and/or a wildlife exit ramp should be provided in the trench to prevent wildlife entrapment. If pipes are left out onsite, they should be inspected for wildlife prior to burying, capping, moving, or filling.

⁵ <https://wildlife.ca.gov/Conservation/Environmental-Review/LSA>

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California Endangered Species Act

The ISMND identifies Central Valley (CV) spring-run evolutionarily significant unit (ESU) Chinook salmon (*Oncorhynchus tshawytscha*), and Sacramento River winter-run ESU Chinook salmon (*Oncorhynchus tshawytscha*) as likely to be present in Churn Creek. If project impacts are anticipated, please be advised that a [CESA Incidental Take Permit](#)⁶ must be obtained if the Project has the potential to result in “take” (hunt, pursue, catch, capture, kill, or attempt thereof) of plants or animals listed under CESA, either during construction or over the life of the project. Issuance of a CESA permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project has the potential to result in take of a CESA-listed species, early consultation is encouraged, as significant modification to the Project may be necessary to minimize and fully mitigate impacts as required by Fish and Game Code Section 2081(b)(2).

Submitting Data

CEQA requires that information developed in environmental documents is incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Public Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during surveys to the [California Natural Diversity Database](#)⁷ (CNDDDB).

Promoting Collaboration

CDFW is charged with preserving and protecting the state's diverse ecosystems and wildlife; therefore, CDFW maintains a strong commitment to collaborate with other state agencies. CDFW is enthusiastic to continue assisting the Lead Agency in implementing comprehensive avoidance and minimization strategies for the benefit of California's sensitive resources and aligning regulatory frameworks.

⁶ <https://wildlife.ca.gov/Conservation/CESA/Permitting>

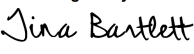
⁷ <https://wildlife.ca.gov/Data/CNDDDB>

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Conclusion

CDFW appreciates the opportunity to comment on the MND and to assist the Lead Agency in identifying, avoiding, minimizing and mitigating potentially significant Project impacts to biological resources. If you have any questions, please contact Davis Ferguson, Senior Environmental Scientist (Specialist) by email at R1CEQARedding@wildlife.ca.gov.

Sincerely,

DocuSigned by:

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Tina Bartlett, Regional Manager
Northern Region

cc: State Clearinghouse
State.Clearinghouse@opr.ca.gov

Davis Ferguson
California Department of Fish and Wildlife
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