

BIOLOGICAL RESOURCES DESCRIPTION AND RECOMMENDATIONS

Meeting Date: June 2, 2025 – Monday

Project Name: Tapia Canyon Road Bridge Replacement

Project No.: R2012-02667

Permit Nos.: RTM-TR072126, Conditional Use Permit No. 201200054, Oak Tree Permit No. 201200041, Environmental Assessment No. 2012000287

APNs: 2865-012-916, 2865-012-917, 2865-021-800, 2865-021-902

Location: Tapia Canyon Road, over Castaic Creek

SEA: Castaic Creek overlay of Castaic Community Standards District (coterminous with the Santa Clara River SEA)

USGS Quad: Newhall

Project Applicant: DACA-Castaic, LLC

Project Biologists: Thienan Pfeiffer, Glenn Lukos Associates, Inc.

Staff Planner: Alejandrina Baldwin

Staff Biologist: Joe Decruyenaere

Project Description with Respect to Biological Resource Conditions

The proposed Project Site is located on four parcels totaling 290.80 acres. Proposed development encompasses approximately 8.08 acres of new construction and grading. The Project application pre-dates adoption of the updated SEA Ordinance and is subject to SEATAC review pursuant to County Code Section 22.312.080.E (Area Specific Development Standards – Castaic Creek Area) because it is within the Castaic Community Standards District (CSD) which requires an SEA-CUP for development within Castaic Creek. Although the Project would provide access to the proposed Tapia Canyon development (RTM-TR072126), the remainder of the Tapia Canyon development is not subject to SEATAC review as the CSD does not require it, and the project is not within an adopted SEA.

The proposed Project would remove the existing closed-conduit culvert crossing and construct an “all weather” open-bottom arch culvert bridge within the same general alignment as the existing culverted crossing. The proposed structure would contain four arches, each approximately 65 feet wide and with a clear height of approximately 17 feet over the top of the Castaic Creek channel invert, and would be designed to accommodate a 50-year storm event. Riprap would be placed throughout to prevent scour at the inlet, outlet, piers, and roadway embankments, with some of the riprap exposed directly adjacent to the bridge. To the north and

south of the bridge, a 3-foot-thick section of earthen material would be placed over a 5-foot-thick armoring layer of riprap.

Construction of the new bridge would require the removal of the existing bridge, the provision of temporary vehicular and non-vehicular access bridge, and the temporary and permanent relocation of utilities and pipelines impacted by those actions. A separate temporary bridge would be constructed to allow continuous east-west access across Castaic Creek during construction of the permanent Tapia Canyon Road Bridge and would then be removed. Physical access to the existing Castaic Creek channel would be required for the demolition and removal of the existing bridge to provide temporary support for the replacement bridge's falsework. Dewatering of the creek may be required for construction of the replacement bridge and for the installation of the associated rock slope and channel protection. The dewatering system and creek crossing would be completely removed once the permanent replacement bridge is constructed.

Following construction of the bridge, associated roadway, and armoring layer of riprap, the 3-foot layer earthen material would be applied, consisting of substrate that currently occurs within Castaic Creek. The Project footprint would then be seeded with component riparian and upland species. Although the impacted areas in the Proposed Bridge Project footprint are expected to support native habitat after construction (except where permanent above-ground structures and materials will be placed), all impacts in the Project footprint are considered permanent for purposes of this analysis because of the future potential for maintenance that could result in habitat removal.

The project parcels support native and non-native woodland, shrubland, and herbaceous communities, including alliances of Fremont cottonwood, arroyo willow, California buckwheat, California sagebrush and purple sage, sandbar willow, scale broom, tamarisk, yerba santa, wild oats and annual bromes, southern cattail, and sandy wash. Most of the affected area is under the jurisdiction of CDFW, USACE, and RWQCB, requiring additional regulatory permits from those agencies.

Sensitive biological resources within and in proximity of the project include the following:

- white rabbit-tobacco (*Pseudognaphalium leucocephalum*, CRPR¹ 2B.2) and protected Fremont cottonwood, sandbar willow, and blue elderberry trees;

¹ California Rare Plant Rank. Rank 2B species are rare, threatened, or endangered in California but common elsewhere. Decimal numbers following the rank (.1,.2, or .3) indicate level of threat, as follows:

- 0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- 0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- 0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

- special-status wildlife species, including observed or potentially present Crotch's bumble bee (*Bombus crotchii*), monarch butterfly (*Danaus plexippus*), southern California legless lizard (*Anniella stebbinsi*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), coast horned lizard (*Phrynosoma blainvillii*), burrowing owl (*Athene cunicularia*), northern harrier (*Circus cyaneus*), olive-sided flycatcher (*Contopus cooperi*), white-tailed kite (*Elanus leucurus*), loggerhead shrike (*Lanius ludovicianus*), yellow warbler (*Setophaga petechia*), least Bell's vireo (*Vireo bellii pusillus*), Townsend's big-eared bat (*Corynorhinus townsendii*), spotted bat (*Euderma maculatum*), western mastiff bat (*Eumops perotis californicus*), California leaf-nosed bat (*Macrotus californicus*), southern grasshopper mouse (*Onychomys torridus ramona*), California mountain lion (*Puma concolor californica*), and American badger (*Taxidea taxus*).

Project Analysis

The hydrology of Castaic Creek is currently constrained due to the existing culverts that were placed there in 2005 and which were intended to be temporary. The proposed design would allow for widening of the floodplain beneath the road and would better accommodate the natural braided-channel system of the creek upstream and downstream of the crossing, whereby a shifting mosaic of sandy wash and stands of vegetation can be expected to re-establish over a greater expanse than is possible under existing conditions. Wildlife movement along the creek would also be expected to improve under the proposed design due to the removal of rip rap that currently presents a substantial obstacle, especially for aquatic animals.

Because many of the project impacts will be mitigated at a greater than 1:1 ratio, on-site mitigation is not possible for all impacts; however, any natural substrates within the project footprint will be allowed to revegetate naturally following construction. Off-site mitigation will be sited within the Santa Clara River SEA at ratios up to 5:1 depending on the resource affected. Where areas dominated by non-native species are impacted by the Project, they would be mitigated at 1:1 but with native formations. Proposed mitigation would be effectuated through a combination of restoration, reestablishment, establishment, enhancement, and preservation techniques and subject to five years of qualitative and quantitative monitoring.

SEA Ordinance Consistency Analysis

The following discussions list the required SEA Ordinance Findings, followed by Staff's determination of the proposed Project's consistency with those findings. Pursuant to Los Angeles County Code Section 22.102.080.D, the applicant shall substantiate the following facts:

A. The requested development is designed to be highly compatible with the biotic resources present, including the setting aside of appropriate and sufficient undisturbed areas.

Biotic resources present in the 6.61-acre disturbed area of the Project and the 1.47-acre temporary disturbed area include SEA water resources, sensitive riparian, alluvial, and upland scrub vegetation communities, SEA protected trees, special-status plant and wildlife species, and

common raptor species. The proposed project area provides for movement of medium and large wildlife species that may include Southern California mountain lion and American badger.

To offset the loss of SEA Projected Trees, replacement trees will be planted at a 2:1 ratio in Castaic Creek or project landscaping. To offset the loss of white rabbit tobacco, both the onsite project area and the offsite preservation area will be seeded with seed collected from the onsite population to obtain a replacement population consistent with the preservation ratios set forth by the Significant Ecological Areas Ordinance Implementation Guidelines. To offset permanent impacts to water resources, sensitive vegetation communities and wildlife habitat within the proposed development area, offsite lands in the Santa Clara River with similar alluvial, riparian, and upland habitats and equivalent ecological function to the impacted lands will be preserved. The total area of preserved land is consistent with the preservation ratios set forth by the Significant Ecological Areas Ordinance Implementation Guide. In total, 19.12 acres of alluvial, riparian, and upland habitat are proposed to be preserved offsite within the Santa Clara River SEA to offset permanent impacts for the proposed development, and up to 2.93 acres of alluvial, riparian, and upland habitat are proposed to be preserved offsite within the Santa Clara River SEA to offset potential temporary impacts within a temporary construction easement required for the proposed development.

Long term ecological function of the offsite preservation area will be ensured through the establishment of a conservation easement and endowment to provide for management in perpetuity. In addition to offsite preservation, the 6.61-acre project area will be revegetated through seeding, planting, and passive revegetation from propagules from upstream and adjacent habitat. The project area will remain a soft-bottom channel, and the project is expected to provide a functional lift for all ecological functions adversely affected by the current structure due to improved hydrology and habitat connectivity, which provides for the long-term maintenance of ecosystem functions. No edge effects are associated with the project. The 6.61-acre project area will be maintained for five years following seeding and planting to ensure that non-native plants do not colonize the site while the native habitat is re-established.

B. The requested development is designed to maintain water bodies, watercourses, and their tributaries in a natural state.

The Proposed Bridge Project occurs in Castaic Creek, which will be restored to a more natural state relative to the existing condition at the site of the road crossing following construction. The existing road crossing includes multiple culverts that constrict flows and result in channelization and downcutting of the streambed. After construction of the proposed bridge, the natural flow regime and soft-bottom channel under the bridge will be restored. Additional permanent structures will be placed in Castaic Creek including both buried and above-ground riprap, inlet and outfall structures and associated pipes, and access roads. However, these structures will not degrade the hydrological or ecological function and are necessary as accessory structures to the new bridge. No new sources of runoff relative to the existing condition are associated with the project. To preserve the natural state of Castaic Creek, the

majority of the 6.61-acre project area will be retained as soft bottom channel or upland terraces and will be seeded and planted with appropriate native vegetation and maintained for five years to promote reestablishment of native habitats and prevent establishment of non-native species.

C. The requested development is designed so that wildlife movement corridors (migratory paths) are left in an undisturbed and natural state.

The Proposed Bridge Project is designed to be highly compatible with the biotic resources present in Castaic Creek. The proposed bridge structure will provide full passage for fish during all flow regimes and will provide passage for all sizes of terrestrial wildlife including small, medium, and large mammals as well as reptiles. Additionally, the proposed bridge would enhance functions such as seed dispersal. The proposed bridge structure provides for a substantial functional lift for all biological functions adversely affected by the current structure.

The project's development footprint consists of the existing Tapia Canyon Road culverted road crossing within a 6.61-acre portion of Castaic Creek that will be subject to remedial grading and riprap armoring for the proposed bridge structure. The footprint of work in Castaic Creek has been minimized to the greatest extent possible, and a significant portion of the permanent impact footprint will be seeded and planted with appropriate native species following construction. Offsite open space lands to be preserved are located in the Santa Clara River and consist of a block of intact habitat contiguous with other undisturbed habitat. Under existing conditions, the project site supports limited wildlife movement that is restricted by the existing culverted road crossing because the culverts are situated well above the Castaic Creek channel, substantially limiting passage of fish during low and moderate flows and precluding use of the culverts by small mammals and reptiles for movement up- and down-stream through the Project site. Construction of the project will result in improved movement for fish, reptiles, and small mammals, as well as improved movement for medium and large mammals as they will be able to travel under the bridge instead of over the road surface.

D. The requested development retains sufficient natural vegetative cover and/or open spaces to buffer critical resource areas from said requested development.

The Proposed Bridge Project's critical resource areas in the 6.61-acre disturbed area of the project area are located throughout Castaic Creek. Because the proposed project consists of a bridge to replace an existing road crossing, inclusion of a buffer is not applicable. The proposed project includes some limited roadside landscaping, all of which will consist of locally native plant species. To ensure the continued habitat value and natural vegetative cover of the 6.61-acre disturbed area of project following construction, non-developed areas will be seeded with appropriate native riparian, alluvial, and/or upland scrub species including white rabbit tobacco seed collected prior to the start of construction. The seeded areas will be subject to a five-year maintenance program that includes non-native species removal. No fences or walls are associated with the project, and the project will remove barriers to wildlife movement and increase habitat connectivity.

E. That where necessary, fences or walls are provided to buffer important habitat areas from development.

The Proposed Bridge Project does not propose fences or walls within the Bridge Project Site area and instead it improves on the existing culverts that are currently situated well above the Castaic Creek channel substantially limiting passage of fish during low and moderate flows and precluding use of the culverts by small mammals and reptiles for movement up- and downstream through the Bridge Project site. The Proposed Bridge Project includes four 65-foot spans with a three-foot support between each span that will enhance wildlife movement through Castaic Creek.

F. That the roads and utilities serving the proposed development are located and designed so as not to conflict with critical resources, habitat areas or migratory paths.

The existing and proposed utilities within the Project Site will be routed through the Proposed Bridge. The Proposed Bridge, including new access roads will not impede the streamflow or wildlife movement through Castaic Creek.

Staff Recommendation: Consistent X Consistent after Modifications & Bio
Report Completion

 Inconsistent No decision

Comments: