8 Draft EIR Comments and Responses

This chapter includes the comment letters received on the Draft Environmental Impact Report (EIR) for the Laguna Creek Diversion Retrofit Project (Proposed Project), and provides responses to individual comments that were submitted by agencies, organizations, and individuals as summarized below in Section 8.1, List of Comment Letters Received. Section 8.2, Summary of Changes to EIR Text, summarizes sections of the EIR document that have been revised by the City to provide corrected or clarified text. The comment letters and responses to comments that address environmental issues and the Draft EIR are included in Section 8.3, Public Comments and Responses.

The California Environmental Quality Act (CEQA) Guidelines Section 15088(a) requires a lead agency to evaluate comments on environmental issues and provide written responses. Section 15204(a) provides guidance on the focus of review of EIRs as follows:

> In reviewing draft EIRs, persons and public agencies should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project. CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commentors. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR.

In reviewing comments and providing responses on the following pages, this section of the CEQA Guidelines is considered. The focus is on providing responses to comments that raise significant environmental issues.

8.1 List of Comment Letters Received

The Draft EIR was published and circulated for review and comment by the public and other interested parties, agencies, and organizations for a 45-day public review period from September 18, 2020 through November 2, 2020. Copies of the document were distributed to the State Clearinghouse, regional and local agencies, and interested organizations and individuals for their review and comment. A Notice of Availability of the Draft EIR was sent to agencies and interested parties. The Draft EIR also was available for public review online and by appointment at the City of Santa Cruz (City) Water Department Engineering Counter (212 Locust Street, Suite C in Santa Cruz).

The following three comment letters were received:

- California Department of Fish and Wildlife (CDFW) (Gregg Erickson)
- County of Santa Cruz (Matt Johnston)
- Amah Mutsun Tribal Band of Mission San Juan Bautista (Michelle Zimmer)

8.2 Summary of Changes to EIR Text and Figures

This section presents figure and text changes to the EIR to update, correct, or clarify the EIR text. Revisions to the Draft EIR text are shown as follows: double-underlined text is used to represent language added or modified in the Draft EIR and ~~strikethrough~~ is used to represent language deleted from the Draft EIR.

The changes have not resulted in significant new information with respect to the Proposed Project, including any new significant environmental impacts that cannot be mitigated to a less-than-significant level, or new mitigation measures that cannot be implemented. Therefore, recirculation of the Draft EIR pursuant to CEQA Guidelines Section 15088.5 is not required.

The following minor text corrections are made to the Draft EIR.

Chapter 1, Summary, has been revised on page 1-8 to show the revised MM BIO-2, Compensate for Impacts to Sensitive Vegetation Communities, and on page 1-11 to show the new MM CUL-4, Cultural Resources Awareness Training. Text revisions to both mitigation measures are described below.

Chapter 3, Project Description, has been revised to include an additional temporary staging area along a portion of the west access road. Figure 3-4, Proposed Site Plan and Construction Access/Staging, on page 3-10 has been revised to include this new staging area.

Chapter 3, Project Description, has been revised to clarify the construction schedule. The start of construction for initial site preparation activities may occur as early as March 2021, after completion of permitting. The construction duration and activities remain as previously described, and all creek construction activities would occur during the low-flow period (between the months of June to October) as previously described. Revisions on page 3-16 are as follows:

> Construction is projected to occur in 2021 upon completion of the environmental review process, approval of the Proposed Project by the City Council, and acquisition of the necessary permits. The duration of c~~C~~onstruction would ~~take place~~ occur over approximately 3 months. Initial activities including improvement of access roads, site preparation including tree removal, and mobilization would occur as early as March 2021, and in-creek construction activities ~~planned to~~ would occur during the low-flow period (between the months of June to October). Construction work would be performed from 7:00 a.m. to 5:00 p.m. on weekdays. Work outside of these hours, including weekend work is not anticipated. However, if it is required, work outside of these hours would require approval from the SCWD Director.

Chapter 3, Project Description, has been revised on page 3-17 to clarify the off-site staging areas:

> In addition to the on-site staging areas described above, off-site staging areas on City of Santa Cruz property may be used for construction worker parking and/or storage of materials. These staging areas have been previously paved or graded and are along the construction access routes described in Section 3.6.2.9, Construction Routes, for the Proposed Project.

Section 4.3, Air Quality, has been revised to clarify the methodology for modeling criteria pollutant and greenhouse gas emissions with regard to the construction timing in the footnote on page 4.3-16:

> [4] The analysis assumes a construction start date in 2021. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and greenhouse gas emissions, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years. Emission factors for vehicle trips and off-road equipment are updated every calendar year. Therefore, shifts to construction phase start dates within the same calendar year would not result in changes to the modeled emissions.

Section 4.3, Air Quality, has been revised to clarify the construction schedule on page 4.3-18:

> ~~Construction of t~~The Proposed Project's construction duration would total ~~is anticipated to occur over~~ approximately 3 months in 2021, with some initial activities (i.e., access road improvements, site preparation, and mobilization) occurring as early as March, and in-creek activities targeted to occur between June and October., ~~and~~ Project construction would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and ROG off-gassing) and off-site sources (i.e., on-road haul trucks and worker vehicle trips). Construction emissions would vary substantially from day-to-day, depending on the level of activity, the specific type of operation, and specifically for dust, the prevailing weather condition. Detailed assumptions used to estimate criteria air pollutant emissions are discussed above.

Section 4.4, Biological Resources, has been revised to address the staging areas on page 4.4-20:

> The impact analysis presented below focuses on temporary construction-related impacts and permanent impacts due to the placement of a Coanda screen and new intake structure, a new concrete control vault to house new control valves and additional diversion piping, downstream streambank stabilization, new access and safety provisions including stairways, and a drop inlet at the interconnection of the new diversion pipe and the existing Laguna Pipeline. Figure 4.4-2 shows the general location of direct biological resources impact areas that would occur within the project site. The new concrete control vault, access stairways, and streambank stabilization would be located within a small segment of the wetted and top-of-bank portions of Laguna Creek, just downstream of the existing intake screen. The bulk of temporary impacts during construction would be limited to the use of the existing unimproved access routes; however, additional grading beyond the limits of both western and eastern access routes would be necessary to establish staging/laydown areas and to adequately access the upstream and downstream dam areas. Installation of a new diversion pipeline adjacent to the existing diversion flume, temporary dewatering of the work area with downstream and upstream cofferdam installation, diversion of Laguna Creek flows past the active work area, minor channel grading, and sediment removal upstream and downstream of the dam would also contribute to construction-related temporary impacts within the project site, as shown on Figure 4.4-2. Access road improvements are also proposed as a part of project implementation.

Section 4.4, Biological Resources, has been revised to address the additional temporary staging area. Minor clearing of the redwood understory brush would result in approximately 0.06 acres of temporary impacts. This addition would increase the total temporary impact footprint for the Proposed Project from 0.14 acres to 0.20 acres. This new staging area is not located within the federal or state jurisdictional boundaries (waters of the U.S. or waters of the state) associated with Laguna Creek. However, establishment of the new staging area would result in additional temporary impacts during construction-related ground disturbance to the redwood forest alliance and potential habitat for the Santa Cruz black salamander, California giant salamander, and San Francisco dusky-footed woodrat previously evaluated within the Draft EIR. Mitigation measure MM BIO-2, Compensate for Impacts to

Sensitive Vegetation Communities, has been updated to reflect the minor increase of direct temporary impacts to 0.20 acres of redwood forest alliance that require compensatory mitigation. Text has been revised to address this change on the following pages.

Figure 4.4-2, Biological Resource Impacts, on page 4.4-21 has been revised to include the additional temporary staging area.

Impact BIO-1, Special-Status Species, on page 4.4-23, has been revised as follows to address the additional temporary staging area:

> Santa Cruz Black Salamander, California Giant Salamander, and San Francisco Dusky-Footed Woodrat. As described above in Table 4.4-2, these three special-status wildlife species would have a moderate to high potential to occur within the project site. A total of ~~0.14~~0.20 acres of temporary impacts and 0.01 acres of permanent impacts to potential habitat for these species would be affected during construction-related ground disturbance. Construction-related activities could have a substantial adverse effect on these species, if present. The impact of the Proposed Project on these species would be potentially significant.

Impact BIO-2, Sensitive Vegetation Communities, on page 4.4-24, has been revised as follows to address the additional temporary staging area:

> The only natural vegetation community within the project site is the redwood forest alliance, which is considered a sensitive vegetation community. Direct temporary and permanent impacts to the redwood forest alliance would result from grading activities to establish temporary access and construction work areas, as well as installation of a new concrete control vault/stairway and bank stabilization. A total of 0.01 acres of permanent impacts and ~~0.14~~0.20 acres of temporary impacts to this natural vegetation community could result from Proposed Project implementation.

Section 4.4, Biological Resources, has been revised to clarify the conclusion, consistent with the analysis provided on page 4.4-26:

> Implementation of the Proposed Project would not have direct temporary and permanent effects to state- or federally protected wetlands ~~non-wetland waters of the United States/state~~ as a result of operation and maintenance activities ~~as such~~, as no such wetlands occur within the study area and project activities would not result in the fill of such ~~waters~~ wetlands. Therefore, operation of the Proposed Project would result in no impacts to state- or federally protected wetlands ~~jurisdictional non-wetland waters~~.

MM BIO-2, Compensate for Impacts to Sensitive Vegetation Communities, on page 4.4-30, has been revised as follows to address the additional temporary staging area:

> **MM BIO-2** **Compensate for Impacts to Sensitive Vegetation Communities.** Direct temporary impacts to ~~0.14~~0.20 acres of redwood forest alliance would be mitigated through on-site rehabilitation to conditions similar to those that existed prior to grading and/or ground-disturbing activities. This would consist of re-contouring temporarily impacted areas to match pre-project grade and non-native species removal and monitoring over a 3-year period to inhibit non-native species encroachment. A one-time rehabilitation effort followed by monitoring and non-native weed removal for a minimum of 3 years shall compensate for temporary direct impacts to the redwood forest alliance vegetation community….

Section 4.5, Cultural Resources and Tribal Cultural Resources, has been revised on page 4.5-22:

> Implementation of MM CUL-2, which includes protocols related to the inadvertent discovery of archaeological resources consistent with Standard Construction Practice #24, would reduce the potentially significant impact to a less-than-significant level by ensuring that the archaeological resources, if discovered during construction, would remain protected. See Section 4.5.3.5, Mitigation Measures, for details.

Section 4.5, Cultural Resources and Tribal Cultural Resources, has been revised on page 4.5-22:

> Implementation of MM CUL-3, which includes protocols related to the inadvertent discovery of human remains consistent with Standard Construction Practice #25, would reduce the potentially significant impact to a less-than-significant level by ensuring proper handling of human remains, if discovered during construction. See Section 4.5.3.5, Mitigation Measures, for details.

Section 4.5, Cultural Resources and Tribal Cultural Resources, has been revised to update a mitigation measure on pages 4.5-22 and 4.5-23 to 4.5-24:

> Implementation of MM CUL-2 and MM CUL-3, which include protocols related to the inadvertent discovery of archaeological resources and human remains that could include tribal cultural resources, would reduce the potentially significant impact to a less-than-significant level by ensuring the protection and proper treatment of any previously unknown tribal cultural resources, if discovered during construction. In addition, MM CUL-2 requires cultural resources awareness training for all construction personnel working on the project site to facilitate the proper identification and treatment of any resources that are discovered during construction. See Section 4.5.3.5, Mitigation Measures, for details.
>
> MM CUL-2: **Cultural Resources Awareness Training and Unanticipated Discovery of Archaeological Resources.** Prior to site mobilization or construction activities on the project site, a qualified archaeologist with training and experience in California prehistory and historical period archaeology shall conduct a cultural resources awareness training for all project construction personnel. The training shall address the identification of buried cultural deposits, including Native American and historical period archaeological deposits and potential tribal cultural resources, and cover identification of typical prehistoric archaeological site components including midden soil, lithic debris, and dietary remains as well as typical historical period remains such as glass and ceramics. The training must also explain procedures for stopping work if suspected resources are encountered. Any personnel joining the work crew subsequent to the training shall also receive the same training before beginning work....

Section 4.8, Greenhouse Gas Emissions, has been revised to update the status of litigation pertaining to federal vehicle standards on pages 4.8-8:

> On September 27, 2019, the EPA and NHTSA published the SAFE Vehicles Rule Part One: One National Program (84 FR 51310), which became effective November 26, 2019. The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On March 31, 2020, the EPA and NHTSA issued the Part Two Rule, which will go into effect 60 days after being published in the Federal Register. The Part Two Rule sets CO_2 emissions standards and

corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. This issue is evolving as California and 22 other states, as well as the District of Columbia and four cities, filed suit against the EPA and a petition for reconsideration of the rule on November 26, 2019. As of ~~June 2020~~January 2021, the litigation is pending resolution.

Section 4.8, Greenhouse Gas Emissions, has been revised to clarify the construction schedule on page 4.8-16:

Construction of the Proposed Project is estimated to last a total of approximately 3 months in 2021, with initial activities planned to occur as early as March and in-creek activities planned to occur between ~~during the timeframe of~~ June ~~to~~ and October. On-site sources of GHG emissions would include off-road equipment and off-site sources would include haul trucks, vendor trucks, and worker vehicles. Table 4.8-2 presents construction emissions for the Proposed Project from on-site and off-site emission sources.

Section 4.10, Hydrology and Water Quality, has been revised to include the new staging area in the temporary impacts on page 4.10-1:

The project site is near the community of Bonny Doon, California, in unincorporated Santa Cruz County, approximately 7 miles northwest of downtown Santa Cruz (straight-line distance). The elevation of the site ranges from approximately 605 feet above mean sea level (amsl) at the downstream end of the proposed work area within Laguna Creek to approximately 660 feet amsl at the highest point along the east construction access road. The limits of the construction zone for the Proposed Project encompass approximately 2.1 acres, including the Laguna Creek Diversion Facility (Facility), 200 to 300 feet of the upstream and downstream reaches of Laguna Creek, and three access roads from Smith Grade. Smith Grade marks the site's southern boundary. The temporary disturbance footprint within the 2.1-acre project site is estimated to be ~~0.44~~0.51 acres, which includes both in-stream and land-based construction disturbances (staging areas, access roads, dewatered creek bed, and structural work).

Section 4.10, Hydrology and Water Quality, has been revised to include the new staging area in the temporary impacts and clarify the construction schedule on page 4.10-15:

Within the 2.1-acre project site, the construction of the Proposed Project would result in approximately ~~0.45~~0.51 acres of disturbance, approximately 0.01 acres of which would remain as the permanent footprint for the new intake structure, valve vault, diversion pipeline, access stairway, and riprap bank protection. The Proposed Project would include appropriate site restoration measures, including removal of the cofferdam and temporary bypass system, mobile office and any other temporary facilities installed prior to construction initiation; along with stabilization of disturbed soils using erosion controls such as hydroseeding, hand-seeding, and/or restoration plantings. Accordingly, the potential water quality impacts associated with construction disturbance areas would be limited to ~~the~~ a 3-month construction period, with initial activities planned to occur as early as March 2021 and in-stream activities during the dry season (June to October).

Section 4.10, Hydrology and Water Quality, has been revised to clarify the construction schedule on page 4.10-16:

Due to the Proposed Project's short-term construction ~~schedule~~ duration of approximately 3 months (primarily occurring during the low-flow period within Laguna Creek ~~(June to October~~) and implementation of City's Standard Construction Practices related to erosion control and water quality protection (i.e., standard water quality BMPs), potential impacts on water quality would be reduced… Based on the data for

average daily flows at Upper Laguna Creek Gaging Station, 12 cfs streamflow has only been exceeded three days during the ~~proposed~~ months ~~of~~ when in-stream construction would occur (June to October) ~~during~~ over the period data ~~has been~~ was collected at the project site (from October 1969 to October 1976 and October 2003 to September 2019). Specifically, from June 4 to June 6, 2011, the Upper Laguna Creek Gaging Station registered an average daily flow rate of 19 cfs and a maximum flow rate of 45 cfs (City of Santa Cruz 2019). Because this discreet stream flow event was an anomaly, stream overtopping of the cofferdam and associated erosion of sediments during a rainfall event during construction is not anticipated.

Section 4.12, Noise, has been revised to clarify potential impacts related to off-site staging on pages 4.12-20 and 4.12-21:

In addition to heavy-duty construction equipment noise, the movement of equipment, haul trucks, and workers to and from the site during construction would generate temporary traffic noise along access routes to the project site, including at off-site staging areas used for construction worker parking and/or storage of materials. The transport of heavy-duty construction equipment onto the project site would be minimized during construction by keeping construction equipment staged on site for the duration of the construction phase.

Section 4.13, Transportation, has been revised to clarify the construction schedule and off-site staging on page 4.13-6:

Construction would occur in 2021 over a period of approximately 3 months, with mobilization as early as March 2021, and in-creek construction activities targeted to occur between June and October. As described in Chapter 3, Project Description, the construction activities would occur in one 10-hour shift between 7:00 a.m. and 5:00 p.m., Monday through Friday.

Section 4.13, Transportation, has been revised to clarify potential impacts related to off-site staging on page 4.13-9:

The Proposed Project would be accessed from Smith Grade via two existing access roads, the west and main access roads. During construction, both roads would be maintained and improved to allow construction vehicles safe egress and ingress. The west access road leads to the western edge of the dam, while the main access road leads to the control building and it also splits into the east access road, which leads to the eastern edge of the dam. ~~All p~~Parking and staging areas for construction ~~would~~ that occur on site~~, and~~ would not block traffic along Smith Grade. Off-site staging areas used for construction worker parking and storage of materials would be located along construction routes used for the Proposed Project and similarly would not block traffic.

Section 6.5, Environmentally Superior Alternative, has been revised to clarify the conclusion, consistent with the analysis provided in that section on page 6-20:

While the No Project Alternative would reduce impacts to the majority of environmental resource topics, it would result in a new significant and unavoidable impact to historical resources as the dam would no longer function as a water management structure under the No Project Alternative, which is one of the resource's essential character-defining features that enables it to convey its significance. Alternative 1 (Spillway Gate and Fish Screen) would also result a new significant and unavoidable impact to historical resources. Although the dam would continue to function, the larger structures on the face of the dam (compared to the Proposed Project) would introduce a visual obstruction and obscure the face of the dam, such that it

would no longer be able to convey its significance. For other resource topics, Alternative 1 would result in generally similar types of impacts as the Proposed Project, however, it would have a greater severity of construction-related impacts due to greater temporary and permanent disturbance footprints and a longer construction period. ~~All of t~~These significant impacts would be reduced to less-than-significant levels with implementation of mitigation measures identified for the Proposed Project.

8.3 Public Comments and Responses

Agencies, organizations, and individuals that submitted written comments on the Draft EIR are outlined above in Section 8.1, List of Comment Letters Received. Each comment letter is included in this section, followed by responses to the comments. As indicated above, Section 15088(a) of the CEQA Guidelines requires a lead agency to evaluate comments on environmental issues and provide a written response. Therefore, the emphasis of the responses is on significant environmental issues raised by the commenters (CEQA Guidelines Section 15204[a]). Changes that have been made to the Draft EIR text based on these comments and responses are provided in the EIR text and summarized in Section 8.2, Summary of Changes to EIR Text.

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

November 4, 2020

Ms. Jessica Martinez-Mckinney
Associate Planner II
City of Santa Cruz
212 Locust Street, Suite C
Santa Cruz, CA 95060
jmartinezmckinney@cityofsantacruz.com

Dear Ms. Martinez-Mckinney:

Subject: Laguna Creek Diversion Retrofit Project, Draft Environmental Impact Report, SCH No. 2020030456, City and County of Santa Cruz

The California Department of Fish and Wildlife (CDFW) has reviewed the draft Environmental Impact Report (EIR) prepared by the City of Santa Cruz (City) for the Laguna Creek Diversion Retrofit Project (Project) located in the County of Santa Cruz. CDFW is submitting comments on the draft EIR regarding potentially significant impacts to biological resources associated with the Project.

CDFW ROLE

CDFW is a Trustee Agency with responsibility under the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et seq.) pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources (e.g., biological resources). CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Program, and other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

1-1

PROJECT DESCRIPTION SUMMARY

The proposed Project will retrofit the existing Laguna Creek diversion structure to provide in-stream sediment transport past the diversion and be deposited downstream.

The proposed Project will include: a new intake structure and a Coanda screen; new valve control vault; installation of riprap at the streambank and at the base of the spillway; installation of grouted riprap at stream bank slopes greater than 1:1; new monitoring and control equipment; and modifications to the existing intake and sediment control bypass valves.

COMMENTS AND RECOMMENDATIONS

1-1 CDFW offers the following comments and recommendations to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on biological resources.

COMMENT 1: Grouted Riprap

Issue: The draft EIR Project Description identifies that the grouted riprap will be installed where the stream bank reaches slopes greater than 1:1. Incorporation of bio-technical engineering design is not appropriate for slopes greater than 1:1.

1-2

Recommendation: CDFW recommends recontouring the slope of the eastern stream bank to decrease the slope of the stream bank and avoid installing grouted riprap. Once the slope is recontoured, bio-technical engineering design elements can be installed and avoid impacts that result in installation of hardscape and creation of stream banks with no habitat value.

COMMENT 2: Riprap

Issue: The draft EIR does not discuss the effects of riprap proposed at the base of the spill way and the eastern streambank nor does the draft EIR include mitigation measures to address the increase in permanent hardscape.

Evidence impact would be significant: The installation of riprap has the potential to
1-3 alter natural stream processes, natural substrate characteristics, natural habitat structure, and stream flows (Fischenich 2003).

Recommendation: CDFW recommends including an analysis of riprap impacts within the draft EIR and develop mitigation measures to decrease riprap impacts. To potentially decrease riprap impacts, CDFW recommends planting riprap with native vegetation or identifying if riprap can be covered with sediment or installation of stream simulation bed material to provide habitat for fish and wildlife.

REGULATORY REQUIREMENTS

Lake and Streambed Alteration Program

Notification is required, pursuant to CDFW's LSA Program (Fish and Game Code,
1-4 section 1600 et. seq.) for any Project-related activities that will substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. CDFW, as a Responsible Agency under CEQA, will consider the CEQA

document for the Project. CDFW may not execute the final LSA Agreement until it has complied with CEQA (Public Resources Code section 21000 et seq.) as the responsible agency.

Devices Impeding Fish

Pursuant to Fish and Game Code section 5901, it is unlawful to construct or maintain in any stream any device or contrivance that prevents, impedes, or tends to prevent or impede, the passing of fish up and down stream.

Passage of Water for Fish Below Dam

Pursuant to Fish and Game Code section 5937, the owner of any dam shall allow sufficient water at all times to pass through a fishway, or in the absence of a fishway, allow sufficient water to pass over, around or through the dam, to keep in good condition any fish that may be planted or exist below the dam.

Fish

1-4

Please note that fish is defined in Fish and Game Code section 45 as a wild fish, mollusk, crustacean, invertebrate, amphibian, or part, spawn, or ovum of any of those animals.

FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish and Game Code, section 711.4; Pub. Resources Code, section 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

Thank you for the opportunity to comment on the Project's draft EIR. If you have any questions regarding this letter or for further coordination with CDFW, please contact Ms. Monica Oey, Environmental Scientist, at (707) 428-2088 or Monica.Oey@wildlife.ca.gov; or Mr. Wesley Stokes, Senior Environmental Scientist (Supervisory), at Wesley.Stokes@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Gregg Erickson
BE74D4C93C604EA...

Gregg Erickson
Regional Manager
Bay Delta Region

cc: State Clearinghouse #202003456

REFERENCES

Fischenich, C. J. 2003. Effects of Riprap on Riverine and Riparian Ecosystems. U.S. Army Engineering Research and Development Center Wetland Regulatory Assistance Program, Vicksburg, MS. Report No.: ERDC/EL TR-03-4.

8.3.1 Letter 1: California Department of Fish and Wildlife (Gregg Erickson)

1-1 The comment describes CDFW's role as a Trustee Agency and a Responsible Agency in the Proposed Project approval process. The comment is noted.

1-2 Grouted Riprap. The comment recommends recontouring (i.e., decreasing) the slope of the eastern streambank to allow for the use of bio-technical engineering design elements rather than grouted riprap hardscape.

Recontouring the slope as recommended by the commenter is not feasible as described below. However, the City has evaluated several design options for the Proposed Project to reduce fill in waters of the U.S. and waters of the state (referred to herein as waters), reduce the amount of riprap and hardscape materials in the creek and on the streambank, and to use bioengineered stabilization for the streambank, as described further below.

Ultimately, reinforcement of the streambank adjacent to the intake Facility was determined to be necessary to protect the Facility from erosion and the Proposed Project would entail the minimum amount of hardscape necessary to protect the Facility. The Proposed Project has been designed to avoid and minimize direct and indirect impacts to waters, to the maximum extent practicable.

In addition to the design options described below, several other design alternatives with varying amounts of riprap were evaluated in the Draft EIR, as described in Chapter 6, Alternatives. Alternatives evaluated included: Alternative 1 (Spillway Gate and Fish Screen), which would entail a greater amount of riprap along the streambank as well as riprap at the base of the dam; and Alternative 2 (Plate Screen with Brush), which would not require the installation of riprap. Although Alternative 2 would reduce the magnitude of most project impacts and is identified as the environmentally superior alternative under CEQA (see Section 6.5, Environmentally Superior Alternative), it would only moderately meet many of the project objectives. Furthermore, it would have poor achievement of protecting the City's Laguna Creek water supply (project objective #1) as it would reduce the City's maximum capability to intake water by about half (from 7 cubic feet per second to 3.5 cubic feet per second) and poor achievement of operational efficiency (project objective #3) due to the reduction in diversion capacity.

Slope Recontouring

Recontouring the slope of the eastern streambank to decrease the slope of the streambank and avoid the installation of grouted riprap is infeasible. Furthermore, the steepness of the slope does not necessitate the need for grouted riprap in the project design; it is the requirement to protect the Facility from erosion due to high streamflow velocities and localized turbulence that necessitates the grouted riprap as further explained below (B&V 2020a).

The streambank itself is rocky in this vicinity and the slope is greater than 1:1 adjacent to the dam under existing conditions. Due to the shape of the plunge pool at the base of the dam and the outgoing creek channel, laying back the slope could create instability of the streambank further downstream within the creek channel and could require the removal of additional trees along the bank. Additionally, the current habitat value of the eastern streambank along this specific reach is marginal. The eastern streambank is

steep and rocky in this section with a 60% to 80% grade that supports a few redwood trees and no understory vegetation or burrows for wildlife refugia. Incorporation of the suggested bio-technical engineering design elements within this limited project footprint would not result in a substantial increase in the vicinity's habitat value.

In addition, laying back the slope of the eastern streambank is infeasible under the current design due to the project components that are required to be along the streambank to allow for the functioning of the diversion. Specifically, several alternative locations for the placement of the valve vault outside of waters were considered. Alternatives considered included co-locating the valve vault within the existing flume structure and moving the vault further away from the creek within upland areas. These locations were found infeasible due to hydraulic constraints; there would not be enough pressure to divert water passively (by gravity). Similarly, while original designs co-located the diversion pipeline with the flume structure, it was found that co-locating the pipeline would prevent water from flowing via gravity into the City's raw water transmission system. No other pipeline locations were feasible.

Furthermore, the City has designed the Proposed Project with hardscape improvements to address high streamflow velocities and localized turbulence below the dam. To support the reliability, stability, and longevity of the Proposed Project, hardscaping was identified by the hydraulic modeling as the appropriate treatment to protect against velocities eroding the eastern streambank downstream of the Proposed Project components. Due to channel geometry and flow regime transitions (i.e., plunging flow causing hydraulic jump), hydraulics within the creek section could destabilize and compromise the Proposed Project over time. Treatment of the eastern streambank with some limited area of grouted riprap is needed to address potential bank disturbance while accomplishing erosion protection (B&V 2020a).

Streambank Design Options

The City's engineering team evaluated the need for and extent of the riprap along the streambank and determined that the limited amount proposed for the project is necessary as described below (B&V 2020a; City of Santa Cruz 2020). Furthermore, unlike a prior project design considered by the City, the Proposed Project would not include riprap at the base of the spillway and would have a reduced amount of riprap along the eastern streambank to prevent erosion along the project components installed in the streambank, including the new Coanda screen and intake structure, valve vault, and access stairs. The original designs included a large spillway feature and/or rock riprap within the creek channel to reduce velocities downstream of the Coanda screen. The spillway and rock riprap were ultimately determined to not be necessary since they would have filled in the plunge pool that currently provides aquatic habitat and the hydraulic analysis supported the findings that the streambed would not need erosion protection at that location.

As part of the design process, hydraulic modeling using computational fluid dynamics was completed for the Proposed Project to evaluate the potential that erosive hydraulic conditions could occur as a result of the proposed improvements (B&V 2020b). The model indicated that under both existing and proposed conditions, high velocities and high levels of turbulence occur immediately downstream of the dam. Under existing conditions, the streambed is not subject to scour, nor is the original bankline due to its rocky geology. However, with installation of the Proposed Project valve vault and stairwell, the bankline could be exposed to changed hydraulics that could cause erosion. In addition, some degree of high velocities and turbulence continue downstream of the proposed improvements, causing potential for streambank erosion. Therefore, armoring a short reach of the eastern bankline is required.

The results of the model were compared with stability thresholds for bioengineered stabilization in the U.S. Army Corps of Engineers' (USACE) technical note (Fischenich 2001), California Department of Transportation (Caltrans) specifications (Caltrans 2000), Natural Resources Conservation Service (NRCS) sizing guides, and engineering analysis conducted by consulting design engineering firm, Black & Veatch (B&V).

Designs options were evaluated for the streambank stabilization as further described below. Based on the results of the hydraulic analysis, it was determined that vegetation alone and rolled erosion control products as well as soil bioengineering were unable to protect the Facility and only hard surfacing was found to be appropriate. Additionally, the only two appropriate linings for the 100-year event velocities were riprap and concrete (per Table 4 of the USACE technical note by Fischenich [2001]). Therefore, the Proposed Project would entail use of a grouted riprap method of bank stabilization.

Elimination of Riprap from the Design. A design with no riprap on the eastern streambank was evaluated. Under this design, the Coanda screen, valve vault, and access stairways would be constructed in the proposed locations for the Proposed Project, without additional streambank stabilization. The proposed Coanda screen would concentrate flows on the eastern side of the Laguna Creek channel. This side of the channel experiences high streamflows and maintains the existing plunge pool under existing conditions. This design would continue to support the plunge pool, however it would change the distribution of velocity such that the access stairway would experience high velocities and would be inundated under the modeled storm events. These flows could undermine the access stairs and valve vault. Therefore, the elimination of riprap from the eastern streambank was found to not be practicable because stabilization would be required to protect and maintain the Facility.

Bioengineered Stabilization and Various Approaches to Hard Surfacing. Bioengineering methods of stabilization and several different hard surfacing designs were evaluated for the placement of concrete or rock riprap to stabilize the bank including gabion baskets, articulated block mattresses, rock riprap, and grouted riprap (City of Santa Cruz 2020). For the rock riprap method of bank stabilization, the City evaluated vegetating the rock riprap per the City's standard practice, to determine if the rock riprap could be backfilled with soil and vegetated. While the spacing between the rock riprap would be satisfactory for planting, the soil depth and the degree of shading were determined to be of concern. Given the high potential for this area to be inundated during modeled storm events, only a small portion of the rock riprap farthest from the creek could be hydroseeded with a thick mulch and fast growing seed to provide temporary stabilization and some quick rooting while the mitigation plantings get established. However, there would be no guarantee this would resist the scour, and based on the modeled velocities, the chance of failure for the revegetation was found to be too high. Under this design, the amount of fill would be greater than other feasible alternatives.

Furthermore, the engineering team does not recommend covering the riprap with earth, or incorporating plantings into the grouted riprap. Surficial material placed at the outer surface of the riprap would not survive and penetrations into the riprap for plantings would jeopardize the integrity of the streambank stabilization and reduce its ability to function properly (B&V 2020a).

1-3 Riprap. The comment states that the EIR does not adequately analyze or provide mitigation for potentially significant impacts related to riprap and includes recommendations to analyze the impacts of riprap, development mitigation measures, and potentially plant riprap, cover with sediment, or install stream simulation bed material.

As described in Chapter 3, Project Description, of the Draft EIR, the Proposed Project would include riprap bank stabilization (see Section 3.5.3.3, Riprap Bank Stabilization). As described therein, limited reinforcement of the creek bank may be necessary and may entail installation of riprap bank stabilization at the east side of the creek to protect the bank from erosion. Stabilization of an area approximately 20 feet long by 10 feet wide (approximately 25 cubic yards) may be required.

As discussed above in Response to Comment 1-2, the Proposed Project would not include riprap at the base of the spillway. Although an earlier project design included riprap at the base of the spillway, the City's engineering team determined that this riprap was not required to stabilize the new Coanda screen intake structure, given the rock geology at the base of the dam and within in the streambed. Therefore, the Proposed Project evaluated in the Draft EIR would only entail riprap bank stabilization.

As described in Section 4.4, Biological Resources, of the Draft EIR, the impact analysis presented focuses on temporary construction-related impacts as well as permanent impacts due to the placement of the riprap streambank stabilization along with the other project components including the Coanda screen and new intake structure, concrete control vault, access and safety provisions including stairways, and a drop inlet at the interconnection of the new diversion pipe and the existing Laguna Pipeline. Each of these components are evaluated as part of the permanent project footprint and are shown as such in Figure 4.4-2. Therefore, the analysis of impacts to biological resources addresses the 0.01 acres of permanent impacts (the combined footprint of these permanent components including the riprap along the streambank).

The temporary and permanent impacts associated with the Proposed Project are evaluated for each impact statement in Section 4.4, Biological Resources, and mitigation measures are identified for each potentially significant impact. Under Impact BIO-3, which addresses impacts to jurisdictional wetlands and waters, direct impacts of the Proposed Project on jurisdictional non-wetland waters are identified as potentially significant and mitigation measures are identified that would reduce impacts to less than significant. Potentially significant direct impacts to jurisdictional non-wetland waters of the United States/state would be mitigated to less than significant through implementation of MM-BIO-3, which requires on-site rehabilitation of areas temporarily impacted (approximately 0.13 acres) and permanently impacted (approximately 0.01 acres) within jurisdictional limits at a 1:1 mitigation ratio. Areas impacted shall be returned to conditions similar to those that existed prior to grading and/or ground-disturbing activities. The mitigation also notes that direct temporary and permanent impacts to jurisdictional non-wetlands waters will be addressed through Section 401 and Section 404 of the Clean Water Act, the Porter-Cologne Water Quality Act, and Section 1602 of the California Fish and Game Code. Mitigation measures that address potentially significant impacts to special-status species (MM-BIO-1a through MM BIO-1d) and sensitive vegetation communities (MM-BIO-2) would also address the temporary and permanent impacts of the Proposed Project.

Furthermore, Section 4.10, Hydrology and Water Quality, of the Draft EIR, addresses the potential hydrology and water quality issues related to the Proposed Project, including the installation of riprap for streambank stabilization. Specifically, Impact HYD-1, which addresses water quality, discusses the hydraulic modeling completed for the Proposed Project that used computational fluid dynamics to determine if undesirable or erosive hydraulic conditions could occur as a result of the proposed improvements (B&V 2020b). Through detailed comparison of flow velocities under several peak flow scenarios (corresponding to the 2-year, 100-year, and upper 95th percentile confidence limit of the 100-year flood event) under both existing and project conditions, it was determined that the Proposed Project would result in similar flow conditions downstream of the diversion structure, as compared to existing conditions. Specifically, under both existing

and project conditions, high velocities and high levels of turbulence would occur immediately downstream of the dam during peak flow scenarios. The Proposed Project, as designed, would not increase erosion or scour resulting from peak flow velocities due to the rocky geology of the project site. Therefore, the Draft EIR found that during operation, the Proposed Project would have a less-than-significant impact with respect to water quality standards or waste discharge requirements and would not substantially degrade surface or groundwater quality.

Therefore, the Draft EIR adequately addresses the temporary and permanent impacts of the Proposed Project, including the installation of riprap streambank stabilization, and identifies mitigation measures, which would reduce potentially significant impacts to less-than-significant levels. Please see Response to Comment 1-2 above for a response to the design recommendations.

1-4 The comment summarizes regulatory requirements and filing fees applicable to the Proposed Project. The comment is noted.

RE:

Matt Johnston [Matt.Johnston@santacruzcounty.us]
Sent: Friday, September 18, 2020 12:04 PM
To: Jessica Martinez-McKinney

2-1 Thanks Jessica – was the facility impacted by the fire? And if so, does it impact the condition around which mitigations were established? I don't want to dig into this if there is a need for recirculation. Seems odd to release this without some mention of the fire and how it might affect this project, even if there's no effect…

Matt Johnston
Environmental Coordinator
Principal Planner for Code Compliance
County of Santa Cruz
(831) 454-5357

From: Jessica Martinez-McKinney <jmartinezmckinney@cityofsantacruz.com>
Sent: Friday, September 18, 2020 11:56 AM
To: Jessica Martinez-McKinney <jmartinezmckinney@cityofsantacruz.com>
Subject:

Dear Interested Parties:

Please see the attached Notice of Availability for the Laguna Creek Diversion Retrofit Project. Information about viewing the draft EIR and participating in upcoming meetings are included in the attachment. Project documents are also posted on the City's Water Department Environmental Documents page, here: http://www.cityofsantacruz.com/waterenvdocs

Thank you,

Jessica Martinez-McKinney
Associate Planner
City of Santa Cruz Water Department
212 Locust St., Suite C / Santa Cruz, CA 95060
(831) 420-5322 (direct) | (831) 222-0069 (cell)
cityofsantacruz.com/water

8.3.2 Letter 2: County of Santa Cruz (Matt Johnston)

2-1 CZU Lightning Complex Effects. The comment inquires about whether the Laguna Creek Diversion Facility (Facility) was impacted by the CZU Lightning Complex fire and its associated effects on project mitigation.

The City addressed the fire impact on the Facility during the public meetings held for the Draft EIR. The Facility did not incur fire damage and no changes to the Draft EIR, including its mitigation measures, is warranted. See Section 4.2.8, Wildfire, for an analysis of the potential wildfire-related impacts of the Proposed Project, including whether the Proposed Project could exacerbate wildfire risks or wildfire-related hazards, expose people or structures to wildfire, or interfere with emergency response or evacuation in the event of a wildfire. As discussed in Section 4.2.8, the Proposed Project would have a less-than-significant impact related to wildfire.

Re:

Amah Mutsun Tribal [irennezwierlein@gmail.com]
Sent: Monday, September 21, 2020 9:15 AM
To: Jessica Martinez-McKinney

3-1 Our recommendations are as follows:
Cultural Sensitivity Training for all crews involved in any earth movement.
California Trained Archaeological monitoring.
Qualified Native American monitoring

I

On Fri, Sep 18, 2020 at 11:56 AM Jessica Martinez-McKinney <jmartinezmckinney@cityofsantacruz.com> wrote:

> Dear Interested Parties:
>
> Please see the attached Notice of Availability for the Laguna Creek Diversion Retrofit Project. Information about viewing the draft EIR and participating in upcoming meetings are included in the attachment. Project documents are also posted on the City's Water Department Environmental Documents page, here: http://www.cityofsantacruz.com/waterenvdocs
>
> Thank you,
>
> **Jessica Martinez-McKinney**
> *Associate Planner*
> **City of Santa Cruz Water Department**
> 212 Locust St., Suite C / Santa Cruz, CA 95060
> (831) 420-5322 (direct) | (831) 222-0069 (cell)
> cityofsantacruz.com/water

--
Michelle Zimmer

Enrollment and Communications Officer of the
Amah Mutsun Tribal Band of Mission San Juan Bautista

8.3.3 Letter 3: Amah Mutsun Tribal Band of Mission San Juan Bautista (Michelle Zimmer)

3-1 Cultural Sensitivity Training and Monitoring. The comment recommends that the Proposed Project include cultural sensitivity training, archaeological monitoring, and Native American monitoring for earth-moving activities.

As discussed in Section 4.5, Cultural Resources and Tribal Cultural Resources, the Draft EIR evaluated the potential for cultural resources, including archaeological and tribal resources, to occur at the project site. A records search of the area of potential effects (APE) and a 0.25-mile buffer, which together form the cultural resources study area, was conducted at the Northwest Information Center of the California Historical Resources Information System (CHRIS). The records search included a review of the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Inventory of Historic Resources, historical maps, and local inventories. Based on the results of the CHRIS search, no previously recorded cultural resources are located within the study area.

A search of the Native American Heritage Commission (NAHC) Sacred Lands File was conducted for the vicinity of the APE. No known sacred lands were identified from the Sacred Lands File search. The NAHC also provided a list of five Native American contacts who might have local knowledge of cultural and tribal cultural resources near the APE. The City sent outreach letters to the Native American contacts provided by the NAHC. The Costanoan Ohlone Rumsen-Mutsen Tribe responded and indicated that they are aware of five Native American sites in the area and asked that these sites not be disturbed. These five specific prehistoric resources are associated with lower Laguna Creek, and are located outside of the APE. In addition, a pedestrian survey of the APE consisting of an archaeological surface site reconnaissance did not identify any archaeological resources within the APE. Please see Section 4.5, Cultural Resources and Tribal Cultural Resources, of the Draft EIR and Appendix D for additional information.

Therefore, no known tribal cultural resources are located within the APE for the Proposed Project, and there is a low potential to encounter unknown archaeological resources or tribal cultural resources during project construction. However, the Draft EIR includes standard construction practices that would be implemented by the City and its contractors during construction activities associated with the Proposed Project as well as mitigation measures to ensure that archaeological resources or tribal cultural resources, if discovered during construction, would be properly handled and remain protected.

The City's standard construction practices include the following, which are described in Section 3.6.3, Standard Construction Practices, and summarized below:

- In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities, all construction work occurring within 100 feet of the find will stop until a qualified archaeologist evaluates the significance of the find and appropriate protections and procedures are followed (Standard Construction Practice #24); and
- Likewise, if potential human remains are found, the County Coroner will be immediately notified, excavation or disturbance will be stopped, and procedures for notification will be implemented (Standard Construction Practice #25).

The Draft EIR also identified mitigation measures related to the unanticipated discovery of archaeological resources and human remains (MM CUL-2 and MM CUL-3, respectively), which include protocols related to the inadvertent discovery of archaeological resources and human remains that could include tribal cultural resources. For Impact CUL-4 related to potential impacts to tribal cultural resources, the Draft EIR found that implementation of MM CUL-2 and MM CUL-3 would reduce the impact to a less-than-significant level by ensuring the protection and proper treatment of any previously unknown tribal cultural resources, if discovered during construction. In addition, in response to this comment, the City has added Cultural Resources Awareness Training to MM CUL-2, which requires cultural resources awareness training for all construction personnel working on the project site to facilitate the proper identification and treatment of any resources that are discovered during construction. See Section 4.5.3.5, Mitigation Measures, for details.

8.4 References

B&V (Black & Veatch). 2020a. Laguna Diversion Facility Retrofit Project – Response to CDFW Comments on Draft EIR and Notification of Streambed Alteration Regarding Proposed Streambank Armoring. December 9, 2020.

B&V. 2020b. *CFD Modeling Technical Memorandum – Laguna Diversion Facility Retrofit Project*. Prepared for the City of Santa Cruz. July 29, 2020.

Caltrans. 2020. *California Bank and Shore Rock Slope Protection Design, Practitioner's Guide and Field Evaluations of Riprap Methods: Final Report No. FHWA-CA-TL-95-10*. Caltrans Study No. F90TL03.

City of Santa Cruz. 2020. Memorandum – Laguna Creek Diversion Retrofit Project Alternatives Analysis. December 17, 2020.

Fischenich. 2001. *Stability Thresholds for Stream Restoration Materials, EMRRP Technical Notes Collection (ERDC TN-EMRRP-SR-29)*. U.S. Army Engineer Research and Development Center, U.S. Army Corps of Engineers, Vicksburg, MS.