COASTAL CONSERVANCY

Staff Recommendation September 3, 2020

Indian Creek Habitat Connectivity and Restoration Project Revision

Project No.16-038-01
Project Manager: Peter Jarausch

RECOMMENDED ACTION: Authorization to revise the project scope for the Indian Creek Habitat Connectivity and Restoration Project, previously authorized for Conservancy funding on September 29, 2016, to prepare final designs and restore approximately 3,000 linear feet of salmonid habitat between the upper and lower reaches of Indian Creek, a tributary to the Trinity River in Trinity County, and adoption of findings pursuant to the California Environmental Quality Act.

LOCATION: Indian Creek, Trinity County

PROGRAM CATEGORY: Resource Enhancement

EXHIBITS

Exhibit 1: Project Maps

Exhibit 2: 2016 Staff Recommendation

Exhibit 3: CEQA Document

Exhibit 4: Project Letters

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31251 et seq. of the Public Resources Code:

"The State Coastal Conservancy hereby amends its September 19, 2016 authorization to grant funds for the Indian Creek Habitat Connectivity and Restoration Project to enable the grant to be disbursed for a revised project that expands the project area and implements new restoration techniques to more effectively improve the habitat connectivity for Coho and Chinook salmon between the upper and lower reaches of Indian Creek, a tributary to the Trinity River in Trinity County. The revised project will prepare final designs and restore approximately 3,000 linear feet of salmonid habitat in Indian Creek, a tributary to the Trinity River. This authorization is subject to the conditions that prior to construction of the project the grantee

shall submit for review and written approval of the Executive Officer a revised work program, schedule, and budget, and shall comply with all of the conditions contained in the September 29, 2016 Conservancy authorization."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

- 1. The proposed authorization is consistent with Chapter 6 of Division 21 of the Public Resources Code, regarding Coastal Resource Enhancement Projects.
- 2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
- 3. The Conservancy has independently reviewed and considered the Indian Creek Connectivity and Restoration Project Preliminary Assessment/Initial Study dated June 2020 and associated Mitigation, Monitoring, and Reporting Program, attached collectively to the accompanying staff recommendation as Exhibit 3. The Conservancy finds that the proposed project as designed and mitigated avoids, reduces, or mitigates the potentially significant environmental effects to a less-than-significant level, and that there is no substantial evidence based on the record as a whole that the Project may have a significant effect on the environment, as defined in 14 Cal. Code Regulations Section 15382."

PROJECT SUMMARY:

Staff recommends the Conservancy authorize a revised project scope for the Indian Creek Enhancement Project, for which the Conservancy authorized funding on September 29, 2016 (Exhibit 2). The goal of the project remains the same-- to improve habitat conditions for anadromous fish by increasing summer flows in the stream, thereby hydrologically connecting the upper and lower sections of Indian Creek. This will reduce a barrier to fish passage for juvenile salmonids and increase their rate of survival. The Yurok Tribe originally proposed to achieve the project goal by constructing off-stream ponds, installing large wood in the channel, and planting riparian vegetation. However, as the project moved through the final design process, several issues were identified that made the original project approach infeasible.

The Yurok Tribal Fishery staff performed a detailed analysis of geology and groundwater in the proposed restoration area. In March of 2019 the Tribe installed groundwater monitoring wells throughout the area and dug trenches to assess the geology and soils. After careful analysis of the geomorphology, it became apparent that the original approach would not meet the project goals. Constructing off-stream ponds and installing large wood works well in situations where there is a strong connection between the floodplain and the stream channel itself. Off-stream ponds help feed the stream during the dry months and the large wood structures create shaded pools which are also able to retain cool water. Unfortunately, the conditions in this stretch of Indian Creek are not conducive to these restoration activities. First, the floodplain consists of

cobble which drains unusually well, particularly near the underlying bedrock. Second, the stream channel is incised which also serves to drain the area quickly. The current conditions are the result of a massive amount of soil and rock that filled the area while it was being hydraulically mined and from subsequent forestry practices upstream. As in many other locations in the Klamath Basin, this has buried the original valley bottom and stream channel. Accumulated sediment combined with the underlying geology results in a section of Indian Creek that does not retain water long enough to provide fish passage during the summer. Both the stream and the floodplain are currently unable to retain sufficient water.

The Yurok have developed a new restoration approach for the site that will meet the original project goals of hydrologically reconnecting the upper and lower sections of Indian Creek to improve the summer survival of juvenile salmonids. The proposed restoration uses a "Stage 0" approach to slow the water down and retain more of it as ground water. This involves excavation of high portions of the valley floor and filling in low areas to create a valley grade surface that approximates the average longitudinal profile of the valley floor. As initially constructed, valley grade surfaces lack a defined low-flow channel and so are perpetually in a state of flood. Water spreads out over a wide area, providing abundant salmonid rearing habitat and efficiently recharging groundwater supplies. In time, a multi-thread network of channels with easily overtopped banks should start to develop. Because even minor floods can spread widely across the valley floor and reduce stream power and sediment transport capacities. Consequently, the potential for erosion that could re-incise the channel decreases, whereas the potential for sediment deposition, which promotes dynamic processes such as channel migration and avulsion that maintain habitat diversity, increases.

The "State 0 approach" to restoring streams damaged by hydraulic mining was first pioneered in Oregon and is now being applied in Northern California as well. As it was first described by Cluer and Thorne (2013), the Stage-0 concept has been applied to restoration of ground water connectivity in impaired alluvial valleys with incised channels at multiple sites around the region (Powers et al. 2019). This approach would benefit salmonids by providing additional water for the stream as well as other wildlife because the higher groundwater table will support revegetation of the area and result in better terrestrial habitat.

The revised project expands the construction footprint to include 3,000 linear feet of restoration in Indian Creek. Improving fish passage at this location will benefit salmonids by both improving both adult spawning habitat and juvenile rearing conditions. In addition to improving conditions in this stretch, the project will open up access to 10 miles of good quality habitat above the barrier.

The revised project contains four major components. First the Yurok Tribe has been preparing final designs and obtaining permits for the project. Second, the construction phase will raise the groundwater level through grading and riparian planting. Third, monitoring will be conducted before and after the project to evaluate its effectiveness. Long term monitoring of the area will be conducted by the Yurok Tribe Fisheries Department in partnership with the Watershed Research and Training Center (WRTC) staff. Together they will conduct pre- and post-construction physical and biological on-site monitoring. This will include snorkel surveys during critical migration periods, water quality monitoring and topographic surveys. And the fourth

component is a partnership between the Tribe and the WRTC to involve the community directly in project design and construction, which will help educate the community about the importance of improving conditions for salmonids. The outreach efforts will build on WRTC's ongoing program which brings school-age students into the field to learn about watershed restoration.

Site Description: Indian Creek has an approximately 34 square mile watershed and enters the Trinity River just east of the community of Douglas City in Trinity County at river-mile 95 (See Exhibit 1). The nearest larger community, Weaverville, is about eight miles to the west. This is also the upper portion of the Trinity River about 15 miles below Lewiston Dam. The Trinity River is part of the larger Klamath Basin and flows into the Klamath River below the community of Hoopa, in Humboldt County.

Indian Creek provides approximately 10 miles of anadromous headwater habitat critical to the development of several life stages of the three native salmonid species found in the Trinity River watershed, Chinook Salmon, endangered Southern Oregon/ Northern California Coho Salmon, and Steelhead. The Trinity River is the most popular sport fishery for steelhead in the state. It also supports two Tribal subsistence fisheries, the only commercial in-river fishery for Chinook Salmon in the state, as well as the commercial Chinook salmon ocean fisheries of the North Coast.

The project stream reach itself is located in a relatively wide alluvial valley bottom much of which is occupied by sparsely vegetated floodplain and higher terraces composed of course gravel, cobble, and boulders. The reach is highly disturbed by past land use practices and has undergone significant aggradation in the last century, presumably in response to natural resource extraction activities in the watershed.

The lower portion of the project area is on property owned by the Bureau of Land Management and the upper portion of the project area is on private property. The two private landowners that have property on Indian Creek have given permission to move forward with the project. Both are long term landowners who have been supportive of previous restoration work on Indian Creek.

Grantee Qualifications: The Yurok Tribe Fisheries Department is well suited to implement this project, as it has a long track record of successfully completing projects in the Klamath Basin with funding from the Environmental Protection Agency, NOAA, and the California Department of Fish and Wildlife. The Tribe has spearheaded numerous projects both in the Klamath Watershed and near the Klamath River Estuary which included the removal of fish passage barriers, habitat restoration to benefit both spawning and off channel rearing, and systematic planning for how to improve the conditions for salmonids throughout the entire estuary.

Project History: With the discovery of gold in 1850, and the panning, sluicing, and dredging that followed, large areas of the Trinity River were stripped of vegetation: A legacy of gravel deposits left along many tributaries created permanent changes in floodplain and channel characteristics. Then, completion of the Lewiston and Trinity Dams above the project site in 1964 blocked over 100 miles of headwaters habitat critical to anadromous fish. This makes

preserving and restoring the headwater streams below the dams critical to maintaining healthy fisheries in the Trinity River and its tributaries.

This project builds on the work already underway through the Trinity River Restoration Program (TRRP) which began with studies in the 1980s and 1990s that revealed weak flows had significantly altered fisheries habitat in the Trinity River. A 2011 assessment of the Indian Creek Watershed, funded by the TRRP, identified this reach of Indian Creek as a high priority project because it is critical in helping restore fish passage during dry times of year. Indian Creek was once a large perennial stream, but due to the impacts from mining and logging this stretch of the creek only has water intermittently during the summer months, stranding juvenile salmon in pools without adequate cover from rising water temperatures and predators. The BLM has been actively restoring Indian Creek on its property, just downstream from the proposed project site. The Yurok Tribe developed a partnership with the Watershed Research and Training Center in Hayfork to work with private landowners and address the stretch of creek on their property, which has led to the development of the proposed project.

On September 29, 2016 the Conservancy authorized a grant of up \$187,000 for this project. During the planning and design phase funded in part by that authorization, the grantee recognized the need to change their approach to the project to better match local conditions. The initial project would have had a direct impact of less than 5 acres and therefore was categorically exempt from CEQA. The footprint of the new design is close to 20 acres and therefore, the grantee in partnership with the BLM and Trinity County prepared an Environmental Assessment/Initial Study for the project, and the County subsequently adopted a Mitigated Negative Declaration for the revised project.

PROJECT FINANCING

Coastal Conservancy (authorized September 29, 2016)	\$187,000
Federal Watershed Restoration Grant	\$157,000
Project Total	\$344,000

The source of Conservancy funds is a previously approved (September 29, 2016) grant for this project from an appropriation to the Conservancy from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1, Water Code § 79700 et seq.). Funds appropriated to the Conservancy derive from Chapter 6 (commencing with § 79730) and may be used "for multi- benefit water quality, water supply, and watershed protection and restoration projects for the watersheds of the state" (Section 79731). Section 79732 identifies specific purposes of Chapter 6 and includes: protect and restore aquatic, wetland and migratory bird ecosystems, including fish and wildlife corridors; protect and restore coastal watersheds, including, but not limited to bays, marine estuaries, and nearshore ecosystems; and assist in the recovery of endangered, threatened or migratory species by improving watershed health, instream flows, fish passage and coastal or inland wetland restoration. The proposed project will help achieve these purposes of Proposition 1 by restoring aquatic habitat, removing limits to fish passage, and improving watershed health to benefit endangered fish.

As required by Proposition 1, the proposed project provides multiple benefits. By restoring flood plain and channel form and function, the project will restore historic access to spawning and rearing habitat, improving water quality by preventing and reducing erosion, and reduce temperatures to levels suitable for aquatic life.

The Indian Creek Restoration Project was selected through a competitive grant process under the Conservancy's Proposition 1 Grant Program Guidelines adopted in June 2015 ("Prop 1 Guidelines"). (See § 79706(a)). The revised project meets the goals of the originally proposed project to restore salmonid habitat, and meets each of the evaluation criteria in the Prop 1 Guidelines as described in further detail in this "Project Financing" section, the "Project Summary" section and the "Consistency with Conservancy's Project Selection Criteria & Guidelines" section of this report.

The Yurok Tribe has also received a fisheries restoration grant from the federal government for the project as reflected in the project budget, above.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed authorization is undertaken pursuant to Chapter 6 of Division 21 of the Public Resources Code, as follows:

Pursuant to section 31251, the Conservancy may award grants to local public agencies and nonprofit organizations for the purpose of enhancement of coastal resources which, because of human-induced events, or incompatible land uses, have suffered loss of natural and scenic values. Consistent with this section, the proposed authorization provides funds to the Yurok Tribe to enhance coastal fishery resources disturbed by incompatible land uses, such as intensive mining, timber harvest and other legacy land uses that have disrupted the channel and floodplain processes in the Klamath River watershed.

Section 31251.2(a) provides that "[i]n order to enhance the natural or scenic character of coastal resources within the coastal zone, the Conservancy may undertake a project or award a grant . . . to enhance a watershed resource that is partly outside of the coastal zone..."

Consistent with this section, the Yurok Tribe, which operates inside and outside of the coastal zone, requested Conservancy assistance to implement this habitat restoration project that is located outside the coastal zone. This assistance was sought in order to implement a project intended to enhance and benefit salmon populations known to travel many miles upstream of the coastal zone boundary in order to fulfill their life history patterns. Indeed, salmon depend on unimpeded access to high quality habitat both within and outside of the coastal zone in order to survive. If salmon and other highly prized aquatic resources are to be maintained and restored to historic levels, projects to improve salmon habitat must be undertaken both within and outside the coastal zone. Section 31251.2 also requires the review and approval of the California Department of Fish and Wildlife. The Department is a frequent co-funder of Yurok Tribe projects and supports this project. See Exhibit 2.

Under section 31253, "[t]he Conservancy may provide up to the total of the cost of any coastal resource enhancement project" Consistent with this section, staff has proposed the funding amount in light of the fiscal resources of the applicant, the urgency of the matter, and

the application of other factors relevant to project eligibility, as detailed in the "Consistency with Conservancy's Project Selection Criteria & Guidelines" section, below.

CONSISTENCY WITH CONSERVANCY'S 2018-2022 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 6, Objective E** of the Conservancy's 2018-2022 Strategic Plan, the proposed project implements a project to restore fish habitat by providing sufficient in-stream flow.

Consistent with **Goal 16, Objective A**, the proposed project will directly benefit a disadvantaged community by helping restore habitat for salmon, a culturally very important species for the Yurok and Hoopa Tribes.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on October 2, 2014, in the following respects:

Required Criteria

- 1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
- 2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
- 3. **Promotion and implementation of state plans and policies:** The proposed project promotes and implements the following state plans and policies concerning restoration of riparian habitat and increasing natural production of the coastal salmon populations that depend upon that habitat for certain life history stages:
 - a. Steelhead Restoration and Management Plan for California (California Department of Fish and Wildlife, 1996). The Plan advises that "(h)abitat improvement projects should be focused on the many areas throughout the State where steelhead habitat is severely degraded and restoration work is sorely needed" (p. 74). The proposed project will carry out this purpose by restoring a section of Indian Creek, an important salmonid tributary to the Trinity River.
 - b. Recovery Strategy for California Coho Salmon (California Department of Fish and Wildlife, 2004). The proposed project will improve conditions for salmonids in Indian Creek which is specifically listed in the Recovery Strategy as a "key population to maintain or improve."
 - c. 2014 Final Recovery Plan for the Southern Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon (Oncorhynchus kisutch) (U. S. National Marine Fisheries Service). Under this Recovery Plan, the Upper Trinity River Coho Salmon populations are considered to be among the best populations to help with recovery in the Trinity River. This project would improve spawning and juvenile habitat in the upper reaches of the river.

- d. California Water Action Plan, a collaborative effort of the California Natural Resources Agency, the California Environmental Protection Agency, and the California Department of Food and Agriculture, issued in 2014. This Plan was developed to meet three broad objectives: more reliable water supplies, the restoration of species and habitat, and a more resilient, sustainably managed water resources system. It lays out the state's challenges, goals and actions needed to put California's water resources on a safer, more sustainable path. The plan identifies ten overarching strategies to protect our resources, including one which this project will implement: "4) Protect and restore important ecosystems (restore coastal watersheds and strategic coastal estuaries to restore ecological health and nature system connectivity to benefit local water systems and help defend against sea level rise, eliminate barriers to fish migration)". Restoring this section of Indian Creek will remove a barrier to fish passage.
- 4. **Support of the public:** See Exhibit 4: Project Letters
- 5. **Location:** The project site is outside the coastal zone, but will benefit numerous coastal resources by providing coastal salmon populations with sufficient access throughout a watershed to fulfill their life history patterns
- 6. **Need:** Without this grant funding, the Yurok Tribe will not be able to proceed with the project
- 7. **Greater-than-local interest:** The project helps fulfill the objectives of state and federal species recovery plans and is therefore of greater-than-local interest.
- 8. **Sea level rise vulnerability:** Located well outside the coastal zone, the proposed project is not vulnerable to sea level rise.

Additional Criteria

- 9. Leverage: See the "Project Financing" section above.
- 10. **Innovation**: The proposed project has an innovative approach addressing the partial barrier to fish passage. Typically, a new channel would be constructed with pools and vegetation to reduce water temperatures. This project takes a Stage 0 approach which uses a new technique to retain groundwater more effectively.
- 11. **Readiness**: The Yurok are ready to work on the project and have cooperative partners.
- 12. **Cooperation**: The Yurok are partnering with the Watershed Research and Training Center, the BLM, and private landowners to undertake this project.
- 13. Vulnerability from climate change impacts other than sea level rise: This project has been selected to extend the season during which fish are able to pass through the area. This will be accomplished by increasing flows as well as reducing the water temperature. This should buffer the populations from future increases in temperature and potential decreases in rainfall. It will also allow juvenile salmonids to relocate to higher altitude and more hospitable conditions within the watershed as conditions change.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The proposed project is located in the Klamath-Trinity watershed, outside the coastal zone. Nonetheless, it addresses a coastal zone resource and comports to the goals and objectives outlined under the LCPs for Del Norte and Humboldt County, in which the watershed is located. The project is consistent with the applicable LCPs as follows:

Del Norte County

The authorization is consistent with the relevant portions of the Del Norte County Local Coastal Program (DNLCP), which was certified by the Coastal Commission on October 12, 1983. It is due to the diversity in life history patterns of anadromous fish species that the Del Norte LCP acknowledges the importance of coastal streams and riparian vegetation systems as Sensitive Coastal Habitat, necessary to both the aquatic life and the quality of water courses. Under the DNLCP, Chapter VI, the following goals and objectives are identified:

The County shall maintain all existing species of fish, wildlife, and vegetation for their economic, intrinsic and ecological values as well as providing adequate protection of rare and endangered species." (p. 55)

The County should establish riparian corridors along local streams, creeks, and sloughs to maintain their aesthetic appeal, wildlife habitat, control of erosion. . . (p. 56)

The County encourages programs (e.g., fish hatcheries, habitat rehabilitation) designed to improve the quality of coastal fisheries and other marine resources. (p. 57)

All surface and subsurface waters shall be maintained at the highest level of quality to ensure the safety of public health and the biological productivity of coastal waters. (p. 58)

The proposed project will improve anadromous fish habitat by removing barriers to fish passage, and providing access to historic habitat, thereby enhancing the aquatic resources of the county, and, thus, is consistent with the DNLCP.

Humboldt County

The authorization is consistent with relevant portions of the Humboldt Bay Local Coastal Program (HBLCP), which was certified by the Coastal Commission on October 14, 1982, and which states:

The biological productivity and the quality of coastal waters, (and) streams... appropriate to maintain optimum populations of marine organisms... shall be maintained, and, where feasible, restored...(HBLCP, 3-55)

New development within stream channels shall be permitted when there is no less environmentally damaging feasible alternative, where the best feasible mitigation measures have been provided to minimize environmental effects, and shall be limited to . . . wetlands, fishery, and wildlife enhancement and restoration projects. . . (HBLCP, 3-56)

The proposed authorization will construct projects designed to re-create riparian habitat where it has been lost; increase streamflow, and open up previously unavailable habitat and, thus, is consistent with the HBLCP.

CEQA COMPLIANCE:

As lead agency, Trinity County conducted an environmental review of the project and prepared the "Indian Creek Connectivity and Restoration Project Preliminary Environmental Assessment/Initial Study" and Mitigation Monitoring Reporting Program. Based on that study, Trinity County adopted a Mitigated Negative Declaration on July 23, 2020 (MND). The initial study identified potential impacts in the areas of air quality, biological resources, cultural resources, geology and soils, noise, hydrology and water quality, hazards, and public services & transportation, which are discussed in more detail below.

Air Quality

Construction activities associated with the project could result in the increase in dust and associated particulate matter (PM10 and PM2.5). Due to the short duration of the project and the fact that Trinity County is within attainment on air quality standards both short term and cumulative impacts will not be significant. Nevertheless the Yurok Tribe will implement a dust control plan which is a set BMPs including but not limited to, sweeping paved roads, staggering excavation to reduce the amount of exposed soil, and watering exposed soil. (Mitigation Measures 3.1-3.3)

Biological Resources

In addition to salmonids six special status species were identified that would potentially be impacted by the project: yellow legged frog, western pond turtle, little willow flycatcher, loggerhead shrike, yellow-breasted yellow-breasted chat, and California yellow-warbler. There are no rare plant communities within the 20.4-acre project site. Impacts to the special status species could include damage to their nesting sites or habitat. Mitigation for the potential impacts relies on scheduling construction to ensure that the species are not present during the construction period. All will have completed nesting by August 1st with the exceptions of the yellow-warbler and willow flycatcher which can nest until mid-August. Pre-construction surveys will be conducted to do determine if any of the species are present. If they are present the inhabited area will be marked and a buffer will be created to avoid impacts.

Indian Creek in known to support four anadromous and six resident fish species. The anadromous fish species utilizing the Indian Creek Watershed include fall Chinook Salmon (Oncorhynchus tshawyscha), Coho salmon (Oncorhynchus kisutch), Steelhead (Oncorhynchus mykiss), and Pacific Lamprey (Entosphenus tridentatus). Summer-run steelhead and spring-run Chinook salmon are not believed to occur in Indian Creek due to a lack of large pools and cold water. The resident fish species known to utilize Indian Creek are brown trout (Salmo Trutta), rainbow trout (Oncorhynchus mykiss), speckled dace (Rhincthys osculus), three-spined stickleback (Gasterosteus aculeatus), Klamath smallscale sucker (Catostomus rimiculus), and sculpin (Cottus sp.).

The project itself will benefit all fish species in Indian Creek once completed by providing additional surface water and better habitat. Construction may result in a short-term increase in turbidity and additional sediment downstream of the construction site. This can have a negative impact to fish as it limits their ability to spawn and find food. To avoid and mitigate these

potential impacts all construction activities will strictly adhere to the conservation measures listed in section 3 of the Trinity River Restoration Program Biological Assessment for Threatened, Endangered, and Proposed Fish Species that May be Affected by the Trinity River Restoration Program's Mechanical Rehabilitation, Sediment Management, Watershed Restoration, and Monitoring Actions (2020). This was created to provide a set of Best Management Practices to avoid impacts created by restoration projects. In addition, the majority of construction activities will take place during the summer months when there is little if any water in the area being restored. Guidance from NOAA as well as the California Department of Fish and Wildlife will also be followed. (Mitigation Measures 4.1 – 4.6)

Cultural Resources

The project site was surveyed by archeologists from the BLM and no areas of significance were discovered. All construction workers will be trained in how to identify cultural resources. If resources are discovered during construction, work will be halted in that immediate area and BLM staff will be notified. In the case that human remains are discovered all work will be halted and the Trinity County Coroner and the appropriate tribal representatives will be notified. (Mitigation Measures 5.1 - 5.2)

Geology & Soils

Construction activities associated with the Proposed Project could result in increased erosion and short-term sedimentation of Indian Creek. This could have a short-term impact on fish in Indian Creek. To mitigate these impacts the project will follow an erosion and sediment control plan (SWPPP). (Mitigation Measures 7.1a -7.1c)

Hazards and Hazardous Materials

Construction of the proposed project could cause contamination of Indian Creek from hazardous materials spills with a negative impact on fishery resources. To mitigate for this possibility the project will develop a spill containment plan. In addition, all fueling will take place 150 feet from the active channel and equipment will be inspected daily for leaks. (Mitigation Measures 9.1 - 9.2)

Noise

There is little potential for noise impacts from the project as there are few residences in the area. Construction will be limited to 7:00am – 7:00pm Monday through Saturday. (Mitigation Measure 13)

Hydrology and Water Quality

During work there is the potential for erosion and silt to enter the stream. Turbidity will be monitored to ensure that it does not exceed levels established by the Regional Water Quality Control Board. Sediment will also be controlled through the development of an Erosion Control Plan or a Stormwater Pollution Prevention Plan (SWPPP) (Mitigation Measure 10.1).

Public Services & Transportation

Heavy equipment use may temporarily close sections of nearby roads. This can limit the ability of emergency services such as fire and ambulances, or local residents to travel through the area. Construction will be staged to minimize these impacts and local residents will be notified of when the delays are likely to occur. (Mitigation Measures 15 - 16)

Conclusion

Staff has independently evaluated the MND for the proposed project and concurs that the there is no substantial evidence that the proposed project will have a significant effect on the environment. Staff therefore recommends that the Conservancy find that the project as mitigated avoids, reduces or mitigates the possible significant environmental effects to a level of less-than-significant and that there is no substantial evidence that the project will have a significant effect on the environment as that term is defined by 14 Cal. Code Regs. §15382.

Upon approval of the project, Conservancy staff will file a Notice of Determination.