COASTAL CONSERVANCY

Staff Recommendation
March 25, 2021

MAD RIVER FLOODPLAIN AND PUBLIC ACCESS ENHANCEMENT PROJECT

Project No. 14-042-02
Project Manager: Michael Bowen

RECOMMENDED ACTION: Authorization to disburse up to $634,823 of which $358,639 is from the U.S. Fish and Wildlife Service’s National Coastal Wetlands Conservation Grant Program to California Trout to implement the Mad River Floodplain and Public Access Enhancement Project along the Mad River, Humboldt County, CA; and adoption of findings under the California Environmental Quality Act.

LOCATION: Mad River at School Road, downstream of the Highway 101 crossing, McKinleyville, Humboldt County.

EXHIBITS

Exhibit 1: Project Location Map
Exhibit 2: Mad River Floodplain and Public Access Enhancement Project Initial Study, Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program
Exhibit 3: Project Letters

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution and findings:

Resolution:

The State Coastal Conservancy hereby authorizes disbursement of up to six hundred thirty four thousand eight hundred and twenty three dollars ($634,823) to California Trout, Inc. (“the grantee”), of which three hundred fifty eight thousand six hundred thirty nine dollars ($358,639) is from the U.S. Fish and Wildlife Service’s National Coastal Wetlands Grant Program, to implement the Mad River Floodplain and Public Access Enhancement Project along the Mad River, Humboldt County, CA.

Prior to commencement of the project, the grantee will submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following:
1. A detailed work program, schedule, and budget.

2. The names and qualifications of any contractors to be retained in completing the project.

3. A plan for acknowledgement of Conservancy funding from Proposition 1 and the USFWS National Coastal Wetlands Grant Program.

4. Evidence that all permits and approvals required to implement the project have been obtained.

5. Evidence that the grantee has entered into agreements sufficient to enable the grantee to implement, operate, and maintain the project and which protect the public interest in the improvements.

6. The grantee shall ensure that the project improvements are consistent with the Conservancy’s “Standards and Recommendations for Accessway Location and Development”.

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 5.5 of Division 21 of the Public Resources Code, regarding integrated coastal and marine resources protection.

2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.

3. The Conservancy has independently considered the Mitigated Negative Declaration for the Mad River Floodplain and Public Access Enhancement Project adopted by the McKinleyville Community Services District on September 2, 2020 pursuant to the California Environmental Quality Act, and the Mitigation Monitoring and Reporting Program (both attached as Exhibit 2 to the accompanying staff recommendation), and finds that the project as designed 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 disbursement of up to $634,823 to California Trout, Inc. (“the grantee”), with up to $276,184 of Conservancy funds, and up to $358,639 from the U.S. Fish and Wildlife Service’s National Coastal Wetlands Grant Program, to implement the Mad River Floodplain and Public Access Enhancement Project (project) along the Mad River, Humboldt County, CA (see Exhibit 1). The project will significantly expand floodplain habitat for aquatic and riparian species, while also expanding and enhancing a conveniently and scenically located public access site along the lower Mad River. The project will provide important habitat
improvements for State and federally listed salmon species, while also significantly augmenting public access amenities in the area and is proposed for construction in late 2021. The project includes:

HABITAT ENHANCEMENT

Increase floodplain habitat: 4.25 acres of diked percolation ponds will be decommissioned, restored to native floodplain elevations, recontoured to provide varying elevations for ecotones and planted with native riparian and wetland vegetation. The hydrologic connection between the river and floodplain will be restored.

Create off-channel and backwater habitat: A backwater channel, including short tributary channels (1,775 ft total length), will be created to provide for tidal inundation and backwater refugia habitat that extends to a pond located within the restored floodplain habitat.

Increase winter juvenile salmonid rearing habitat: Reconnection of the river to the floodplain through the project area will provide off-channel refugia for juvenile salmon and steelhead during high flow events with shallower depths and lower velocities than the main river channel. Large wood will also be added to increase habitat quality and availability. Riparian areas will be replanted during construction to offer juvenile salmon protection from predation and slow-moving water and enable the conservation of energy for juvenile salmonids in preparation for outmigration.

Increase fisheries productivity: The project’s off-channel aquatic habitat areas will provide an abundance of terrestrial and aquatic food sources. Restoration of riparian vegetation with hydrological connectivity to the river will facilitate nutrient and organic material exchange between land and water and increase habitat complexity by way of food subsidies and debris. An increase in riparian habitat will benefit species such as aquatic insects and beaver that in turn, are important elements of salmon ecology.

Floodplain/channel structure and estuary function: Wetland and riparian floodplain habitat will be expanded through the removal of levees and infrastructure, thereby improving the hydrologic connection between the river and floodplain, and if feasible providing tidal inundation and estuarine habitat.

PUBLIC ACCESS

The project’s public access amenities will be constructed to provide an improved trail system, including Americans with Disability Act (ADA) access from the paved School Road Trail to a new river overlook, with multiple interpretive and bench resting sites. Beyond the ADA-compliant access portion of the trail will be a wildland interface trail that allows for river level access and a lightly developed river access feature. The existing informal trails will be upgraded to allow for safe and well-defined access routes that accommodate mobility-challenged users, confine use to a limited, controlled corridor to protect wildlife and riparian resources, and provide for limited access to the floodplain level.

Increase opportunities for nature study: Public access trails and viewpoint overlooks will improve opportunities for nature study and wildlife viewing.
Create ADA coastal access: The project will provide an improved trail network and ADA-compliant access to river and coastal habitats and viewpoints.

Improve river access: A defined point of river access will improve recreational opportunities for fisherman (anglers), bird watchers, lightweight non-motorized boaters, and others.

Protect habitat: Improved trails and viewpoints will provide a well-defined path for users that will reduce impacts from unplanned access routes now used by the public within the project area.

Install instructional and interpretative signage: A welcome kiosk will inform users of the intended uses, a map of the area, and rules and regulations for public access on the property. Interpretive materials will include information about the Wiyot tribal perspective on the landscape.

Site Description:

The Mad River drains a 497-square mile basin on the north coast of California. The mouth is approximately six miles north of Humboldt Bay, near McKinleyville. The river provides habitat to a variety of Endangered Species Act (ESA)-listed and non-listed fish, including but not limited to coho and Chinook salmon, summer and winter-run steelhead, resident rainbow trout, coastal cutthroat trout, California roach, three-spine stickleback, riffle and prickly sculpins, Pacific lamprey, brook lamprey, and green sturgeon. There are at least seven species of documented but occasional visitors including, Longfin smelt and starry flounder. The increasingly rare eulachon or “candlefish” a small, migratory fish of great historic and cultural importance to local native Americans has also been documented in the Mad River estuary. The floodplains and the riparian corridor of the Mad River estuary provide habitat to wildlife, including, but not limited to deer, beaver, river otter, harbor seals, raptors, and songbirds.

The project area is owned by the McKinleyville Community Services District (MCSD) and is located along the east bank of the lower Mad River; it is bordered to the north by School Road, to the east by Fischer Road and to the south by private land (Exhibit 1).

The Mad River fault bisects MCSD’s property from east to west, paralleling the river, forming a marine terrace at School Road that dips down to the lower floodplain to the south (Exhibit 1). This feature was central to a recent bank stabilization effort by the County of Humboldt.

The County of Humboldt built an emergency bluff stabilization project with FEMA emergency funding in 2008. That project, located adjacent to the proposed trailhead, used bio-engineering techniques, planting willow benches on top of boulder stabilized slopes to create a vegetated stable bluff. The stabilization project was considered an innovative and successful project. However, it did not enhance public access, though it leveled and stabilized the site thereby rendering it suitable for a public access opportunity that is the subject of this proposal. The top of the bluff to the first willow bench is in places a steep drop ranging from 10-30 feet. However, the designated approach to the river from the bluff affords a gentler approach and an existing informal trail network suitable for enhancement. The access features provide practical solutions to address features along the trail such as drainages, low-lying wetlands and poor river access, thereby improving and providing safe access to the MCSD property.
The MCSD property descends gently from that 30-foot bluff overlook down to a flat riparian floodplain along 0.7 miles of the river extending away from the river for almost a half mile. The majority of the approximately 120 acres owned by MCSD is fenced and being used for wastewater disposal through land application and infiltration. Along the river and outside the fence an existing though unofficial and informal “volunteer” trail leads through the riparian corridor leads to the southern border of MCSD property, where there are two ponds that occupy approximately 4.25 acres of floodplain. These ponds are diked to prevent surface water exchange between the ponds and the river and fenced to prohibit public access. They currently serve as percolation ponds for MCSD’s treated wastewater disposal. That use is proposed to be discontinued, and their infrastructure is proposed for decommissioning.

The riparian area is dominated by dense willow and horsetail vegetation and serves as habitat for local wildlife. An existing informal trail through the riparian corridor is frequented by mountain bike enthusiasts.

**Grantee Qualifications:** CalTrout has pioneered fishery enhancement work in California for 50 years. The organization has managed several Conservancy and Department of Fish and Wildlife Fishery Restoration grants for comparable work. It currently manages several grants from the Conservancy and from CDFW for floodplain and estuarine restoration work at the mouth of the Eel River, Elk River habitat enhancement and various fish passage improvement projects. CalTrout has demonstrated the technical and procedural competence necessary to manage and complete the proposed work.

The landowner, MCSD, is a special district formed in 1970 that provides municipal water, wastewater services, parks and recreation to the community of McKinleyville, located in the lower Mad River watershed. MCSD has been treating wastewater and providing recreational opportunities for the community since 1984, operating the wastewater treatment facility and monitoring water quality at their points of discharge: in the Mad River and in the groundwater wells of their reclamation areas.

MCSD has historically taken an active and avid interest in community improvement and public access projects in McKinleyville. Hiller Park, for example, is a park located north of the project site. Hiller Park is partially owned and maintained by MCSD. The project connects to other SCC-funded projects to the north, including a trail that connects to the Mill Creek restoration project and then on to Clam Beach (Exhibit 1). Hiller and its extension trails are considered an important feature of the McKinleyville community. MCSD is currently working with Green Diamond Timber and Trust for Public Land to acquire an extensive tract of land for establishing a community forest on the edge of McKinleyville.

**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 below.

2. Consistency with purposes of the funding source: See the “Project Financing” section below.

3. Promotion and implementation of state plans and policies: The proposed project is consistent with the following plans and policies:

   a. The proposed project is consistent with the themes for habitat restoration identified in the “Steelhead Restoration and Management Plan for California” (California Department of Fish and Wildlife, 1996). Specifically, that 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). Providing unimpeded access to support the reproduction, growth and survival of salmonids is one of the highest priority habitat improvement actions known.

   b. More recently, the proposed project is consistent with the “Recovery Strategy for California Coho Salmon” (California Department of Fish and Wildlife, 2004) in that the highest priority recommendation of that plan relating to the Mad River is to “[w]ork with landowners and other entities to protect existing large woody debris recruitment potential through the retention of mature coniferous trees in the riparian zone...” and “establish adequate streamside buffer areas.”

   c. The project is consistent with federal National Marine Fisheries Service 2014 “Final Recovery Plan for the Southern Oregon/Northern California Coast (SONCC) Evolutionarily Significant Unit of Coho Salmon (Oncorhynchus kisutch)” in that the report states that “lack of floodplain and channel structure, impaired estuary function, impaired water quality and altered sediment supply are the key limiting factors for coho salmon production in the Mad River basin. Top recover priorities in the basin should include improving channel structure and off-channel rearing habitat....” (p. 24-18).

   d. Finally, the project is consistent with the “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 manager 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, include two particular to this project that the Conservancy can help 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) and 7) Increase flood protection (encourage flood projects that plan for climate change and achieve multiple benefits). By restoring access to a functional floodplain at the edge of a coastal estuary, the Project will improve ecological function in a coastal estuary and restore habitat connectivity in a fashion consistent with this report.

4. **Support of the public**: The project enjoys the support of the Wiyot Tribe, the County of Humboldt, NOAA Fisheries, the California Department of Fish and Wildlife and others (Exhibit 3 – Project Letters).

5. **Location**: See the “Site Description”.

6. **Need**: Long since decommissioned, the former percolation ponds have been inaccessible to wildlife and, to a certain extent, to people for too long. The primary funding is from the Conservancy and NCWC; absent this funding, the project will not proceed.

7. **Greater-than-local interest**: The project helps fulfill the objectives of state and federal species recovery plans, while expanding a regionally important public access feature, and is therefore of greater-than-local interest

8. **Sea level rise vulnerability**: Located at the edge of the Mad River Estuary, the project site is certainly susceptible to the effects of sea level rise. Therefore, the project designs, including projected elevations and vegetation characteristics, have been formulated to accommodate rising seas and deliver evolving and beneficial habitat types.

**Additional Criteria**

9. **Urgency**: MCSD has the option of pursuing the Project, or of simply abandoning the percolation ponds in their current condition. With CEQA approved and funding in place the time has arrived to implement the project.

10. **Resolution of more than one issue**: The Project improves flood water management, waste management and public access issues that currently exist at the site. Levees and infrastructure in the floodplain impair habitat potential on the lower Mad River. The project proposes to remedy that situation.

Private grazing operations, residential neighborhoods, a steep bluff, and irrigated wastewater disposal on MCSD land limit public access opportunities on the lower north bank of the Mad River. There are no planned and managed access points that provide recreational opportunities and reduce impacts from unmanaged recreational use. There is an unmanaged trail network that runs south within the riparian zone with lateral spur trails branching off toward the river. However, the existing trail is periodically cleared by residents who cut into the riparian vegetation extensively, block or open views of the river, and dig holes to produce dirt ramps and banks for off-road cycling recreation. There is no formal parking area at the entrance to the site on School Road; there is no formal small craft launch, and no information nor interpretive signs or kiosks exist on-site. The proposed project would lead to resolution of these issues.
11. **Leverage**: See the “Project Financing” section below.

12. **Readiness**: The grantee proposes to begin construction in 2021 and is prepared to finish the project timely.

13. **Realization of prior Conservancy goals**: The Conservancy funded design of the Project on March 3, 2015 and is positioned to realize implementation in 2021.

14. **Cooperation**: The Conservancy initiated the design of the project under a prior planning grant. MCSD has generously made their property available for extensive ecological and public benefit. The US Fish and Wildlife Service National Coastal Wetlands Conservation Grant Program has awarded $376,754 to implement the project. The Wiyot Tribe has contributed extensive knowledge of the site to the development of signage and interpretive materials.

15. **Vulnerability from climate change impacts other than sea level rise**: Rivers and the species dependent upon them are vulnerable to flood events of increasing frequency and intensity. Expanding the available floodplain habitat, with its reduced velocities and sediment deposition zones, will increase the resilience of the Mad River to increasingly unpredictable and intense events.

16. **Minimization of greenhouse gas emissions**: The project will utilize small amounts of diesel fuel to construct the project. Construction emissions were estimated using CalEEMod version 2016.3.2 and are estimated to be approximately 88 MTCO$_2$e from all construction activities over the construction period. The project’s construction emissions equal 7,589 pounds/day of CO$_2$. This level of emission was determined to be less than significant in the environmental analysis. Nonetheless, the project will plant ~100 conifer and hardwood trees within disturbed areas as part of its revegetation program. A Douglas-fir is expected to sequester 12.7 tonnes of carbon in the first 100 years. Assuming that 10% of planted trees survive 100 years, the trees will absorb 127 metric tonnes of carbon within one hundred years, in excess the CO$_2$ emitted during construction. A higher survival rate is anticipated.

### PROJECT FINANCING

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<tr>
<th>Source</th>
<th>Amount</th>
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<tr>
<td>Coastal Conservancy</td>
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<tr>
<td>U.S. Fish and Wildlife Service (via a grant to the Conservancy)</td>
<td>$376,754</td>
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<td><strong>Project Total</strong></td>
<td><strong>$652,938</strong></td>
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The expected source of Conservancy funds for this project are funds appropriated to the Conservancy from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1, Water Code sections 79700 et seq.). Funds appropriated to the Conservancy derive from Chapter 6 (commencing with section 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(a) identifies specific purposes of Chapter 6 and includes: (1) protect and increase the economic benefits arising from healthy watersheds, fishery resources, and instream flow;
(4) Protect and restore aquatic, wetland, and migratory bird ecosystems, including fish and wildlife corridors and the acquisition of water rights for instream flow; (6) Remove barriers to fish passage; (10) Protect and restore coastal watersheds, including, but not limited to, bays, marine estuaries, and nearshore ecosystems, and; (12) Assist in the recovery of endangered, threatened, or migratory species by improving watershed health, instream flows, fish passage, coastal or inland wetland restoration, or other means, such as natural community conservation plan and habitat conservation plan implementation.

The project helps achieve the above-identified Chapter 6 purposes and provides multiple benefits. By restoring channel form and function, the project will restore historic access to spawning and rearing habitat, improve water quality by preventing and reducing erosion and reduce flooding. The proposed 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 section 79706(a)). The project 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 in the “Consistency with Conservancy’s Project Selection Criteria & Guidelines” section of this report.

The other source of Conservancy funding is a grant to the Conservancy for the project from the U.S. Fish and Wildlife Service pursuant to its National Coastal Wetlands Conservation grant program. The Conservancy will retain $18,115 of the total award for project management costs.

**CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:**

The project is authorized pursuant to Chapter 5.5 of the Conservancy’s enabling legislation, Public Resource Code section 31220. Pursuant to section 31220(b), the Conservancy may award grants to nonprofit organizations in order to improve and protect coastal, coastal watershed and marine water quality and habitat, including projects that restore fish habitat within coastal watersheds (31220(b)(2)), and projects that protect and restore floodplains and other sensitive watershed lands (31220(b)(6)). As discussed above, the project will benefit coho salmon and will improve water quality in a coastal watershed by restoring natural hydrologic function and increased fish passage opportunity while also reducing water quality impacts.

As required by Section 31220(a), staff has consulted with State Water Resources Control Board. Staff also consulted with the Division of Water Rights and the North Coast Regional Water Quality Control Board about the project and reached consensus that the project will help enhance the beneficial uses, such as cold-water fisheries, identified in the basin plan for the Mad River.

Finally, consistent with section 31220(c), the project will include a monitoring and evaluation component in that it will establish criteria to be used to monitor and evaluate the restoration, once implemented.
CONSISTENCY WITH CONSERVANCY’S 2018-2022 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with Goal 2, Objective D of the Conservancy’s 2018-2022 Strategic Plan the Project will construct one new coastal recreational facility.

Consistent with Goal 4, Objective B of the Conservancy’s 2018-2022 Strategic Plan, the Project supports the design and installation of interpretive or educational displays and exhibits related to coastal, watershed, and ocean-resource education, maritime history, and climate-change.

Consistent with Goal 6, Objective D of the Conservancy’s 2018-2022 Strategic Plan, the Project will implement a project that preserves and enhances a coastal watershed and floodplain.

Consistent with Goal 6, Objective G of the Conservancy’s 2018-2022 Strategic Plan, the proposed project will implement a project to improve water quality to benefit coastal and ocean resources.

Consistent with Goal 8, Objective C, the project will implement one project to increase resilience to climate change impacts by using a nature-based solution. Specifically, by removing decaying levees and modifying grade at the site, the Project will provide greater resilience, ecological integrity and flood protection in the future. In addition, the revegetation component will provide a net carbon sequestration benefit for the project.

Consistent with Goal 16, Objective A, the project is located in, and will benefit, a disadvantaged community.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/STATE WATER QUALITY CONTROL PLAN:

Under Public Resources Code section 31220(c), projects funded under Chapter 5.5 of Division 21, the Conservancy’s enabling legislation, must be consistent with the Integrated Watershed Management Program established pursuant to PRC Section 30947 and local watershed management plans, “if available and relevant to the project.” The proposed project is consistent with the relevant plan and program described below.

Integrated Watershed Management Program. The North Coast Integrated Regional Water Management Plan, Phase III (NCIRWMP, prepared by North Coast Resource Partnership, August 2014) was developed pursuant to PRC § 30947. The NCIRWMP identifies six primary integrated water management goals and twelve associated objectives for the North Coast region, relevant at both the local and regional scale, of which Goal 3, Objectives 5 and 6 apply to the proposed project as follows:

- Goal 3, Objective 5 – “Ecosystem Conservation and Enhancement. Conserve, enhance and restore watershed and aquatic ecosystems, including functions, habitats and elements that support biological diversity”. The proposed project will ensure fish passage to and watershed health within the lower Mad River.
• Goal 3, Objective 6 – “Ecosystem Conservation and Enhancement. Enhance salmonid populations by conserving, enhancing, and restoring required habitats and watershed processes”. The proposed project will provide access to floodplain habitat and improve fish passage into and stream function within the lower Mad River watershed.

Finally, the project will enhance the beneficial uses, such as coldwater fisheries, identified in the Basin Plan for the Mad River and provide a deposition zone for high sediment loads identified in the TMDL listing for the Mad River.

**CEQA COMPLIANCE:**

MCSD prepared a mitigated negative declaration (MND) and Mitigation Monitoring and Reporting Program (MMRP) for the project, attached as Exhibit 2 to this staff recommendation. MCSD adopted the MND and MMRP and approved the project on September 2, 2020.

The MND identified potential impacts in the categories of Cultural Resources, Geology/Soils, Noise, Biological Resources and Hydrology and Water Quality. Several revisions were made to the proposed project in order to avoid or minimize impacts in these categories. Ultimately, mitigation measures were included in the MMRP in the categories of Air Quality, Biological Resources, Cultural Resources, Geology, and Hazardous Materials and Hydrology and Water Quality. Most mitigation measures were standard Best Management Practices (BMPs) incorporated into construction projects, those and other mitigation measures are outlined below.

**Air Quality**

MCSD and the grantee will during construction comply with Air Quality Regulation 1, Rule 104 (D) to the satisfaction of the NCUAQMD. This is primarily achieved through various dust control methods.

**Biological Resources**

MCSD will isolate the instream work area, and construction related to the backwater off-channel habitat complex will only occur between July 1st and October 31st when freshwater inflow and groundwater elevations are lowest and when the ground surface is dry and to reduce the chance of stormwater runoff occurring during construction. MCSD will not conduct construction activities in freshwater wetland habitat located in the percolation ponds work during the breeding (January-May) and metamorphosis (June-August) periods for the Northern Red-legged Frog.

Prior to and during construction, MCSD will perform various surveys and (if necessary) removals for amphibians, plant species of special concern and fish located in the construction zone.

In addition, MCSD, during the breeding period for birds (February 1st through August 15th), will limit noise, conduct surveys and avoid degradation or removal of riparian or scrub habitats for bird species likely to nest in the proposed project area.

**Cultural Resources**
Inadvertent Discovery protocol will be incorporated into construction guidance documents and practice to address potential impacts to cultural resources.

**Hazardous Materials**

Hazardous materials are addressed through standard storage and handling techniques to be incorporated into contractor guidance documents.

**Hydrology and Water Quality**

Construction related to the backwater off-channel habitat complex will only occur between July 1 and October 30 when the ground surface is dry and to reduce the chance of stormwater runoff occurring during construction and when background freshwater inputs are at summer baseflow thresholds. Excavated materials will not be stockpiled overwinter. Sediment control measures will be in place while materials are being stockpiled to minimize sediment and pollutant transport from the project site.

As lead agency under CEQA, MCSD will ensure that all necessary avoidance or mitigation measures are properly performed, as provided in the Mitigation, Monitoring and Reporting Plan.

Staff has reviewed the MND and MMRP and concurs with its findings and proposed measures. Staff recommends that the Conservancy find that the project as designed 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.

Staff will file a notice of determination upon approval of the project.