Meeting Date: 04/27/21
Application Number: A2413
Staff: J. Toy

Staff Report 10

APPLICANT:

McKinleyville Community Services District

PROPOSED ACTION:

Issuance of a General Lease – Public Agency Use

AREA, LAND TYPE, AND LOCATION:

Sovereign land in the Mad River, adjacent to Assessor's Parcel Numbers 508-021-007 and 508-021-006, near McKinleyville, Humboldt County.

AUTHORIZED USE:

Construction of a backwater channel and aquatic habitat, floodplain restoration and enhancement, placement of riparian vegetation, temporary placement of fish and sediment screens, and the construction of a river access point as part of the Mad River Floodplain and Public Access Enhancement Project.

TERM:

5 years, beginning April 27, 2021.

CONSIDERATION:

The public use and benefit, with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interests.

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:

Public Resources Code sections 6005, 6216, 6301, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

The McKinleyville Community Services District (MCSD) maintains and operates a Wastewater Treatment Facility that serves the community of McKinleyville in Humboldt County. MCSD is working with California Trout, Inc., which received a grant from the California Department of Fish and Wildlife to design the reconnection of the lower Mad River (River) to the historical active floodplain, providing critical juvenile salmonid rearing habitat and off-channel refugia for Coho Salmon. The State Coastal Conservancy also provided funding for the Mad River Floodplain and Public Access Enhancement Project (Project) and expanded the scope of the Project to improve public access to the River.

The 9.3-acre Project is located approximately 3 miles upstream from the mouth of the River, within and adjacent to parcels owned by the Applicant. The southern portion of the Project includes a permitted wastewater facility with 4.3 acres of two existing percolation ponds and a portion of the 95 acres of pasture for wastewater reuse operations, spray, and flood irrigation. An historic backwater channel remains as a depression in the mature, intact riparian forest floor of this floodplain. The channel is inundated during high flows and connects to an existing stormwater ditch at the northern end of the floodplain, which flows out to an existing backwater area of the River formed by a gravel bar to the west. The northern portion of the Project is on a bluff that rises above the floodplain. The Applicant owns the parcel used as a riparian zone to the south and uses the floodplain to the east for seasonal treated wastewater reclamation.

Secondary treated wastewater is discharged into the River, except from May 15 through September 30 when it is prohibited, and effluent is discharged into the percolation ponds and/or to land for reclamation. The leveed ponds were constructed in 1983 on the active floodplain. Their use for effluent disposal is allowed under the Applicant's current California Regional Water Quality Control Board permit; however, future discharge permits may limit this use.

The Project proposes to restore the floodplain by decommissioning the ponds and removing related infrastructure including the levees to the north, south, and west of the ponds to adjacent floodplain elevations. The ponds will be excavated to remove settled wastewater material. Riparian and wetland vegetation will then be planted to restore the area as native floodplain and backwater habitat. The Project would then construct a 1,775-foot-long and 12-foot-deep backwater off-channel habitat (Channel) along the historic backwater channel, connecting the remaining depressed pond areas to the River year-round for anadromous salmonids and other aquatic organisms. Twelve wood features of at least 12 inches in diameter will be installed into the Channel and pond banks from alder or willow species salvaged during construction to create habitat features.

Construction within the Commission's jurisdiction will be scheduled during low tide within the in-water work window (typically mid-June through October 31, or the first significant rainfall) and is anticipated to begin in 2021 and be completed in 2022. The final stage of construction will breach the mouth of the Channel to the existing stormwater ditch outlet. At times, the River backwaters this ditch from seasonal fluvial and tidal inundation. Silt fencing and weed-free straw wattles used for erosion control will be installed prior to the breaching. A fish barrier will be installed at the entrance of the stormwater ditch to exclude fish from the Channel if a wetted area remains within the construction zone. Any fish within the exclusion area will be removed. The mesh will be no greater than 1/8-inch diameter and would be installed under supervision of a qualified fisheries biologist. Erosion controls and the fish screen will be removed after the Channel is connected to the River. A temporary construction area will be used landward of the planned River connection.

The area is currently accessible to the public through trails formed from unmanaged foot and bicycle traffic. The public access portion of the Project is mostly atop a bluff (outside of the Commission's leasing jurisdiction) and includes a new paved Americans with Disabilities Act (ADA) accessible trail connecting the existing Hammond Trail to the River. The Hammond Trail is a critical segment of the California Coastal Trail where the public may walk and enjoy views of the coastline. Public access enhancements include bluff overlooks, allowing nature study and viewpoints of the River, the Hammond Bridge, the Arcata Bottoms, and the Pacific Ocean. Instruction and interpretive signage, including informational kiosks, will be installed throughout the trail network. Interpretive signage will provide information about guidelines for user conduct, the current and historical cultural importance of the location to the Wiyot tribe, and the ecological attributes of the project area and related restoration actions. The new paved ADA trail will transition from the bluff and hillslope into an unpaved trail leading to an access point to the River for the public to fish and launch small craft. Construction of this access includes minor bank regrading and rearrangement of existing large boulders or cutting steps into existing large boulders which is not expected to disturb the River. About 12 linear feet of willows will be removed or trimmed at the site to broaden the viewshed for the public.

The Mad River County Park Boat Ramp, authorized under Lease No. PRC 4239 on July 10, 1989 (Item C06, July 10, 1989), is located across the River from the Project. Water-related activities, such as boating and fishing, will not be disrupted by the Project's construction activities and the completed Project will increase public access through managed trails and a River access point. Humboldt County will construct a nearby parking area for trail users, separate from the Project.

The proposed Project will provide local, regional, and statewide benefits, through increased public access, restoration and enhancement of ecosystem processes, and directly address a major limiting factor for recovery of salmonids, as detailed in the Federal Endangered Species Act Recovery Plans. The National Oceanic and Atmospheric Administration (NOAA) Southern Oregon/Northern California Coho Recovery Plan prioritizes restoration actions that will increase overwintering habitat for Coho Salmon juveniles, an endangered species. This project will increase the amount and quality of off-channel habitat available for overwintering state and federally threatened species. Enhanced fisheries and public access are recognized Public Trust uses. The proposed lease is limited to a 5-year term and does not grant the lessee exclusive rights to the lease premises.

CLIMATE CHANGE:

Climate change impacts, including sea-level rise, more frequent and intense storm events, and increased flooding and erosion, affect both open coastal areas and inland waterways in California. The subject facilities are located on the Mad River in a tidally influenced site consisting of low-elevation floodplains that is less than 3 miles from the river's mouth. The Project site is vulnerable to flooding at current sea levels and at a higher risk of flood exposure given projected scenarios of sea-level rise.

The California Ocean Protection Council updated the State of California Sea-Level Rise Guidance in 2018 to provide a synthesis of the best available science on sea-level rise projections and rates. Commission staff evaluated the "high emissions," "low risk aversion" scenario to apply a conservative approach based on both current emission trajectories and the lease location and structures. The San Francisco tide gauge was used for the projected sea-level rise scenario for the lease area as listed in Table 1.

Table 1. Projected Sea-Level Rise for North Spit

Year	Projection (feet)
2030	0.7
2040	1.1
2050	1.5
2100	4.1

Source: Table 4, State of California Sea-Level Rise Guidance: 2018 Update
Note: Projections are with respect to a 1991 to 2009 baseline.

Rising sea levels could lead to more frequent flood inundation in low-lying areas and larger tidal events. In addition, as stated in *Safeguarding California Plan: 2018 Update* (California Natural Resources Agency 2018), climate change is projected

to increase the frequency and severity of natural disasters related to flooding, fire, drought, extreme heat, and storms (especially when coupled with sea-level rise). In rivers and tidally influenced waterways, more frequent and powerful storms can result in increased flooding conditions and damage from storm-created debris as well as decreased bank stability and structure. Conversely, climate-change induced droughts could decrease river levels and flow for extended periods of time. Climate change and sea-level rise will further influence riverine areas by changing erosion and sedimentation rates. Flooding and storm flow, as well as runoff, will likely increase scour and decrease bank stability at a faster rate.

The Project activities related to habitat enhancement will restore portions of the native floodplain to connect with the Mad River, create aquatic backwater habitat, and will lower the levees within the Project area to allow for connectivity to the floodplain. These restoration activities will reduce main channel scouring during storm-related flood events and have been designed to accommodate projected sea-level rise.

Pursuant to the proposed lease, the Applicant acknowledges that the lease premises and adjacent upland (not within the lease area) are located in an area that may be subject to effects of climate change, including sea-level rise.

CONCLUSION:

For all the reasons above, staff believes the issuance of this lease will not substantially interfere with Public Trust needs at this location, at this time, and for the foreseeable term of the proposed lease; is consistent with the common law Public Trust Doctrine; and is in the best interests of the State.

OTHER PERTINENT INFORMATION:

1. Approval or denial of the application is a discretionary action by the Commission. Each time the Commission approves or rejects a use of sovereign land, it exercises legislatively delegated authority and responsibility as trustee of the State's Public Trust lands as authorized by law. If the Commission denies the application, the Applicant may not conduct the proposed Project activities within lands under the Commission's jurisdiction. Upon expiration or prior termination of the lease, the lessee has no right to a new lease or to renewal of any previous lease.

2. This action is consistent with the "Leading Climate Activism" and "Meeting Evolving Public Trust Needs" Strategic Focus Areas of the Commission's 2021-2025 Strategic Plan.

3. A Mitigated Negative Declaration, State Clearinghouse No. 2020039047, and a Mitigation Monitoring Program (MMP) were prepared by the McKinleyville Community Services District and adopted on September 2, 2020, for this project. Staff reviewed these documents and prepared an independent MMP (attached, Exhibit C) incorporating the McKinleyville Community Services District's document and recommends its adoption by the Commission.

4. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq., but the activity will not affect those significant lands. Based upon participation from the agency nominating such lands through the California Environmental Quality Act (CEQA) review and permitting process, it is staff's opinion that the project, as proposed, is consistent with its use classification.

APPROVALS OBTAINED:

U.S. Army Corps of Engineers
California Department of Fish and Wildlife
North Coast Regional Water Quality Control Board
Humboldt County

APPROVAL REQUIRED:

California Coastal Commission

EXHIBITS:

A. Land Description
B. Site and Location Map
C. Mitigation Monitoring Program

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that a Mitigated Negative Declaration, State Clearinghouse No. 2020039047, and a Mitigation Monitoring Program were prepared by the McKinleyville Community Services District and adopted on September 2, 2020, for this project

and that the Commission has reviewed and considered the information contained therein; that in the Commission's independent judgment, the scope of activities to be carried out under the lease to be issued by this authorization have been adequately analyzed; that none of the events specified in Public Resources Code section 21166 or the State CEQA Guidelines section 15162 resulting in any new or substantially more severe significant impact has occurred; and, therefore no additional CEQA analysis is required.

Adopt the Mitigation Monitoring Program, as contained in the attached Exhibit C.

SIGNIFICANT LANDS INVENTORY FINDING:
Find that this activity is consistent with the use classification designated by the Commission for the land pursuant to Public Resources Code section 6370 et seq.

PUBLIC TRUST AND STATE'S BEST INTERESTS:
Find that the proposed lease will not substantially impair the public rights to navigation and fishing or substantially interfere with Public Trust needs and values at this location, at this time, and for the foreseeable term of the proposed lease; is consistent with the Public Trust Doctrine; and is in the best interests of the State.

AUTHORIZATION:
Authorize issuance of a General Lease – Public Agency Use to the Applicant beginning April 27, 2021, for a term of 5 years, for the construction of a backwater channel and aquatic habitat, floodplain restoration and enhancement, placement of riparian vegetation, temporary placement of fish and sediment screens, and the construction of a river access point as part of the Mad River Floodplain and Public Access Enhancement Project, as described in Exhibit A and shown on Exhibit B (for reference purposes only) attached and by this reference made a part hereof; consideration being the public use and benefit, with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interests.

EXHIBIT A

A 2413

LAND DESCRIPTION

A parcel of tide and submerged land lying adjacent to Fractional Section 1, Township 6 North, Range 1 West, Humboldt Meridian, County of Humboldt, State of California, more particularly described as follows:

BEGINNING at a point which bears S12˚40'10"W 15,288.01 feet from National Geodetic Survey Station HPGN CA 01 09 (PID LV1170), said station being a 2 ½ " aluminum disk on an aluminum rod, said station having published CCS83 coordinates (Epoch 2007.00) of: Northing 2245545.58, Eastin 5977097.80 (US Survey feet); thence the following six courses:

1) S15˚34'51"E 845.39 feet;
2) S27˚43'58"W 719.98 feet;
3) S13˚06'47"W 1076.08 feet;
4) S88˚45'41"E 1000.00 feet;
5) North 2500.02 feet;
6) N88˚07'29"W 648.01 feet to the POINT OF BEGINNING.

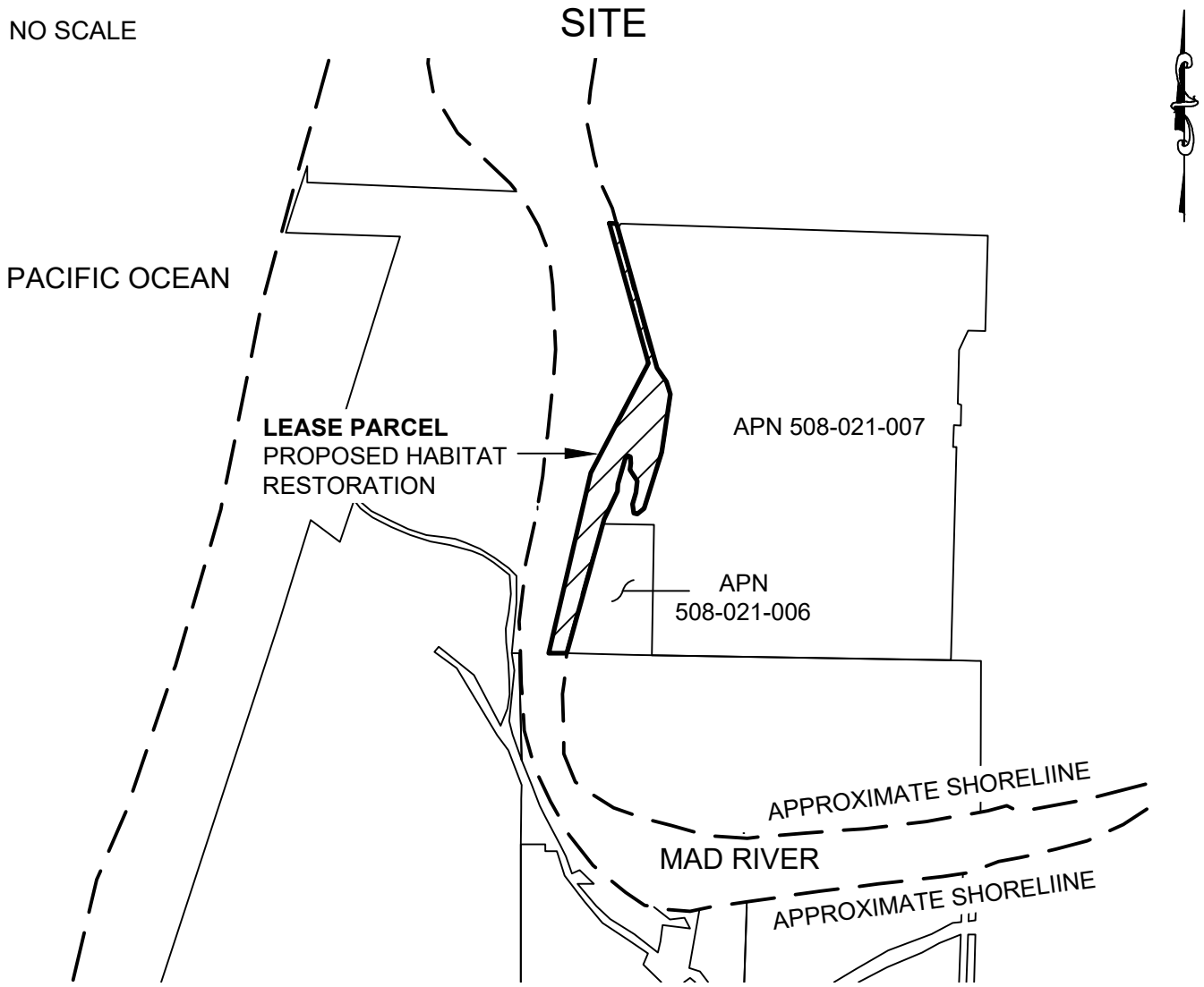
EXCEPTING THEREFROM any portion lying landward of the Ordinary High Water Mark of the Mad River.

The BASIS OF BEARINGS for this description is the California State Plane Coordinate System (CCS83), Zone 1, Epoch 2007.00. All distances are grid.

END OF DESCRIPTION

Prepared 12/4/2020 by the California State Lands Commission Boundary Unit.

NO SCALE



MAD RIVER, NEAR McKINLEYVILLE

NO SCALE

LOCATION

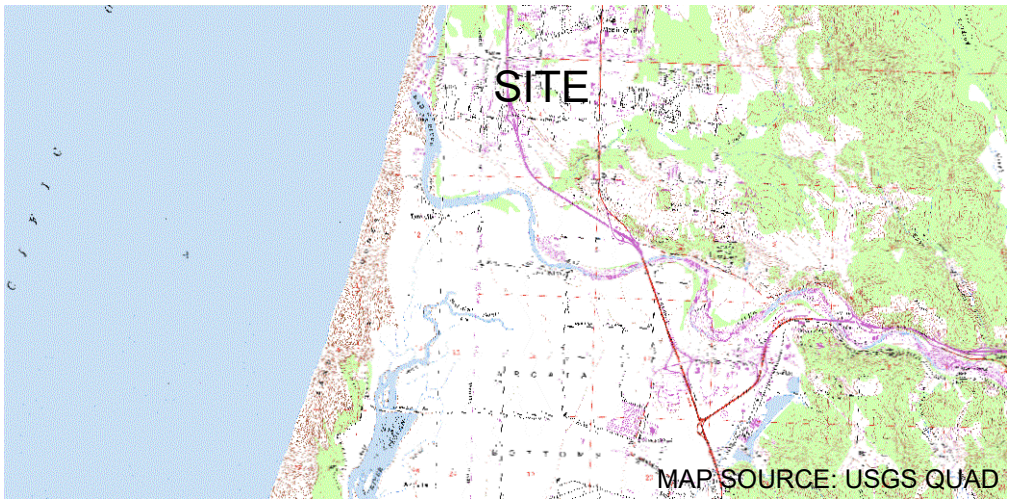


EXHIBIT B

A2413
McKINLEYVILLE COMMUNITY SERVICES DISTRICT
APN 508-021-006 & 007
GENERAL LEASE -
PUBLIC AGENCY USE
HUMBOLDT COUNTY

THIS EXHIBIT IS SOLELY FOR PURPOSES OF GENERALLY DEFINING THE LEASE PREMISES, IS BASED ON UNVERIFIED INFORMATION PROVIDED BY THE LESSEE OR OTHER PARTIES AND IS NOT INTENDED TO BE, NOR SHALL IT BE CONSTRUED AS, A WAIVER OR LIMITATION OF ANY STATE INTEREST IN THE SUBJECT OR ANY OTHER PROPERTY.

DJF 12/3/2020

EXHIBIT C
CALIFORNIA STATE LANDS COMMISSION
MITIGATION MONITORING PROGRAM

MAD RIVER FLOODPLAIN AND PUBLIC ACCESS ENHANCEMENT PROJECT
(A2413, State Clearinghouse No. 2020039047)

The California State Lands Commission (Commission or CSLC) is a responsible agency under the California Environmental Quality Act (CEQA) for the Mad River Floodplain and Public Access Enhancement Project (Project). The CEQA lead agency for the Project is the McKinleyville Community Services District.

In conjunction with approval of this Project, the Commission adopts this Mitigation Monitoring Program (MMP) for the implementation of mitigation measures for the portion(s) of the Project located on Commission lands. The purpose of a MMP is to impose feasible measures to avoid or substantially reduce the significant environmental impacts from a project identified in an Environmental Impact Report (EIR) or a Mitigated Negative Declaration (MND). State CEQA Guidelines section 15097, subdivision (a), states in part:[1]

> *In order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.*

The lead agency adopted an MND, State Clearinghouse No. 2020039047, adopted a MMP for the whole of the Project (see Exhibit C, Attachment C-1), and remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with its program. The Commission's action and authority as a responsible agency apply only to the mitigation measures listed in Table C-1 below. The full text of each mitigation measure, as set forth in the MMP prepared by the CEQA lead agency and provided in Attachment C-1, is incorporated by reference in this Exhibit C. Any mitigation measures adopted by the Commission that differ substantially from those adopted by the lead agency are shown as follows:

- Additions to the text of the mitigation measure are <u>underlined</u>; and
- Deletions of the text of the mitigation measure are shown as ~~strikeout~~ or as otherwise noted.

[1] The State CEQA Guidelines are found at California Code of Regulations, title 14, section 15000 et seq.

Table C-1. Project Impacts and Applicable Mitigation Measures

Potential Impact	Mitigation Measure (MM)[2]	Difference Between CSLC MMP and Lead Agency MMP
Fugitive Dust	**AIR-1**. Dust Control.	None
Impacts to Fish Species	**BIO-1**. Isolation of Work Area and Seasonal Window for In-Water Work. **BIO-2**. Preconstruction Surveys for Aquatic Species. **BIO-3**. Removal of Aquatic Species Prior to Dewatering. **BIO-8**. Fish Protection.	None
Impacts to Amphibian Species	**BIO-1**., **BIO-2**.	None
Impacts to Reptile Species	**BIO-1**., **BIO-2**., **BIO-3**.	None
Impacts to Special Status Plant Species	**BIO-4**. Protection of Botanical Resources.	None
Impacts to Nesting Birds	**BIO-5**. Seasonal Work Window to Protect Birds.	None
Impacts to the Willow Flycatcher	**BIO-5**., **BIO-6**. Protection of Willow Flycatcher.	None
Impacts to the Northern Red-Legged Frog	**BIO-1**., **BIO-2**., **BIO-7**. Protection of Northern Red-Legged Frog.	None
Impacts to Lyngbye's Sage	**BIO-4**., **BIO-9**. Protection of Lyngbye's Sage.	None
Impacts to Archaeological Resources	**CR-1**. Inadvertent Discovery of Archaeological Material. **CR-3**. Title to Resources.	See text below for CR-1. No changes to CR-3.
Impacts to Human Remains	**CR-2**. Inadvertent Discovery of Human Remains., **CR-3**.	None
Impacts to Paleontological Resources	**GEO-1**. Inadvertent Discovery of Paleontological Resources., **CR-3**.	None
Impacts from Hazardous Materials	**HAZ-1**. Management of Hazardous Materials On-Site. **HAZ-2**. Spill Prevention.	None
Water Quality Turbidity	**HWQ-1**. Limit Construction Window. **HWQ-2**. Placement of Fill to Protect Water Quality. **HWQ-3**. Excavation of Saturated Soils and Erosion Control. **HWQ-4**. Limits to Materials Storage and Placement to Protect Waters.	None

[2] See Attachment C-1 for the full text of each MM taken from the MMP prepared by the CEQA lead agency.

Potential Impact	Mitigation Measure (MM)[2]	Difference Between CSLC MMP and Lead Agency MMP
	HWQ-5. Post-Construction Erosion Control. **HWQ-6**. Implementation of Stormwater Best Management Practices.	

CR-1. Inadvertent Discovery of Archaeological Material. Through ongoing consultation efforts, affected tribes (including but not limited to the Wiyot and Blue Lake Rancheria tribes) will be notified of project construction dates and arrangements shall be made to accommodate tribal personnel wishing to observe project excavation activities. Tribal Historic Preservation Officers will be contacted immediately should potential cultural resources be discovered during construction. If cultural materials for example: chipped or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendations for further action, in consultation and coordination with any affected tribe.

ATTACHMENT C-1

Mitigation Monitoring Program Adopted by the

McKinleyville Community Services District

Note: CSLC staff consulted with GHD, the McKinleyville Community Services District's consultant for the Mad River Floodplain and Public Access Enhancement Project, on April 12, 2021, to confirm the following metrics for mitigation measures CR-1, CR-3, GEO-1, HAZ-1, HAZ-2, HWQ-1, HWQ-2, HWQ-3, HWQ-4, HWQ-5, and HWQ-6:

Timing for Implementation/Compliance: During Construction.
Person/Agency Responsible for Monitoring: Construction Manager
Monitoring Frequency: During project construction
Evidence of Compliance: Ongoing visual inspection during construction

Mad River Floodplain and Public Access Enhancement Project

Mitigation, Monitoring, and Reporting Plan

Prepared for:

McKinleyville Community Services District
1656 Sutter Road
McKinleyville, CA 95519

June 23, 2020

Funding for this project has been provided in full or in part through an agreement with the California State Coastal Conservancy and the California Department of Fish and Wildlife.

The purpose of this mitigation and monitoring plan is to identify all the IS MND mitigation measures for implementation and compliance. The plan identifies the person or agency responsible for monitoring; the frequency and evidence of compliance. A full description of the Mitigation Measures is located in the IS MND under the relevant checklist heading.

1. Mitigation Measures:

1.1 AIR-1 Dust Control

MCSD, at all times during construction, shall comply with Air Quality Regulation 1, Rule 104 (D) to the satisfaction of the NCUAQMD. This would require, but may not be limited to:

- Water all active construction areas regularly to limit dust; control erosion and prevent water runoff containing silt and debris from entering the storm drain system.
- Cover trucks hauling soil, sand, and other loose material.
- Pave, water, or apply non-toxic soil stabilizers on unpaved access roads and parking areas.
- Sweep paved streets, access roads and parking areas daily if visible material is carried onto adjacent public streets.

Timing for Implementation/Compliance: During Construction

Person/Agency Responsible for Monitoring: Construction Manager

Monitoring Frequency: During project construction

Evidence of Compliance: Ongoing visual inspection during course of construction

1.2 BIO-1 Isolation of Work Area and Seasonal Window for In-Water Work

MCSD, at all times during construction, shall isolate the instream work area and construction related to the backwater off-channel habitat complex shall 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.

Timing for Implementation/Compliance: During Construction

Person/Agency Responsible for Monitoring: Construction Manager

Monitoring Frequency: During project construction

Evidence of Compliance: Ongoing visual inspection during course of construction

1.3 BIO-2 Preconstruction Surveys for Aquatic Species

MCSD, two weeks prior to construction and in areas to be de-watered, shall survey freshwater habitat for fish, amphibian, and reptile species of concern.

MCSD, immediately prior (1-3 days) to initiation of construction activities, shall survey all dewatered channels and adjacent habitat that will have vegetation removed or impacted by project activities. A qualified biologist will detect and re-locate any amphibians that have entered (dewatered ponds, channels) or reside (riparian vegetation) in these areas in the proposed construction boundary. All species observed

should be moved to an appropriate, pre-determined relocation site, upstream from the footprint of the proposed construction area.

Should construction activities cease for a period greater than two (2) days during damp periods, when amphibians may be moving greater distances, the construction site should be surveyed by a qualified biologist to detect and move and amphibians to an appropriate, pre-determined relocation site, either upstream or downstream from the footprint of the proposed construction area.

Timing for Implementation/Compliance: During Construction, two weeks prior to disturbance activities in the areas to be de-watered, and immediately prior (1-3 days) to initiation of construction activities and upon resuming construction that has ceased for greater than 2 days.

Person/Agency Responsible for Monitoring: Qualified Biologist

Monitoring Frequency: During project construction

Evidence of Compliance: Visual inspection prior to construction after more than 2 days of non-construction

1.4 BIO-3 Removal of Aquatic Species Prior to Dewatering

MCSD, prior to dewatering, shall install a fish barrier at the entrance to the existing ditch to exclude fish from a small wetted area within the zone of construction, near the entrance of the constructed off-channel habitat complex. The fish barrier will be fully compliant with all CDFW and NMFS requirements and installed under the supervision of a qualified fisheries biologist. Fish capture and relocation of fish and herpetofauna will occur in accordance with CDFW and NMFS protocols and guidelines to avoid impacts to sensitive species. Reintroduction of stream flow will occur by removing the fish barrier and the final earth plug into the constructed off-channel habitat complex.

Timing for Implementation/Compliance: Prior to Construction.

Person/Agency Responsible for Monitoring: Qualified Biologist

Monitoring Frequency: Prior to dewatering

Evidence of Compliance: Ongoing visual inspection during course of construction when dewatering is occurring

1.5 BIO-4 Protection of Botanical Resources

MCSD, prior to construction, shall conduct pre-construction botanical surveys to detect and avoid or minimize impacts by implementing suitable measures for impacting any special status plant species in the proposed project site. If avoidance or minimization is not possible, develop mitigation measures in cooperation with CDFW.

Timing for Implementation/Compliance: Prior to Construction.

Person/Agency Responsible for Monitoring: Qualified Biologist

Monitoring Frequency: Prior to project construction

Evidence of Compliance: Visual inspection prior to construction; avoidance or mitigation measures

1.6 BIO-5 Seasonal Work Window to Protect Birds

MCSD, during the breeding period (February 1st through August 15th), shall avoid degradation or removal of riparian or scrub habitats for bird species likely to nest in the proposed project area.

MCSD, during the breeding period (February 1st through August 15th) shall not conduct project activities resulting in noise disturbance that may potentially occur in or adjacent to the proposed project site. Noise disturbing activities are defined as those resulting in volumes significantly greater than current ambient levels. Should these seasonal restrictions to construction activities be unfeasible to the project proponent, clearance surveys for potentially nesting birds should be conducted by a qualified biologist to survey habitat that will be directly impacted by construction actives and within a 1,000 foot radius of said activities.

It is also recommended that should riparian vegetation removal be proposed to occur between August 15th and August 31st, a minimum of one visit by a qualified biologist should occur to detect any late-season active nesting birds immediately prior to vegetation removal activities. This recommendation is based on recent evidence from elsewhere in the proposed project region that native nesting birds, primarily residents (e.g., song sparrow) often double brood near the coast and may have active nests beyond August 15th.

To the extent possible, minimize removal of large-diameter (≥12 inch DBH) riparian trees and any trees with visible cavities capable of supporting breeding birds and roosting bats.

Timing for Implementation/Compliance: Prior to Construction.

Person/Agency Responsible for Monitoring: Qualified Biologist

Monitoring Frequency: Prior to project construction

Evidence of Compliance: Visual inspection prior to construction; avoidance or mitigation measures

1.7 BIO-6 Protection of Willow Flycatcher

MCSD, during the breeding period (February 1st through August 15th), shall conduct Willow flycatcher surveys, using the recommended survey protocol by CDFW (Bombay et al. 2003 in Slauson) during the June and June-July survey periods. Survey should be conducted by a qualified biologist prior to the initiation of construction activities to identify occupied nesting habitat. Because Willow flycatchers are amongst the latest of the migratory species to arrive and initiate nesting activities in Humboldt County, there is the potential that nesting territories may remain active beyond August 15th. Should one or more occupied Willow flycatcher nesting territories be located during these surveys, consultation with CDFW will be necessary to evaluate appropriate mitigation measures to minimize degradation of each nesting territory from proposed project activities that may degrade or remove riparian habitat.

Timing for Implementation/Compliance: Prior to Construction.

Person/Agency Responsible for Monitoring: Qualified Biologist

Monitoring Frequency: Prior to project construction

Evidence of Compliance: Visual inspection prior to construction; avoidance or mitigation measures

1.8 BIO-7 Protection of Northern Red-legged Frog

MCSD, shall 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.

MCSD, in order to avoid seasonal restrictions, within 2 weeks prior to the start of in-stream activities, shall conduct clearance surveys within the proposed construction boundary for potentially breeding frogs in suitable habitat prior to the initiation of in-pond work (see below). If larvae or eggs are detected, the biologist will relocate them to a suitable location outside of the proposed construction boundary.

In the event that a Northern red-legged frog is observed within the construction boundary during construction activities, in-stream work should be temporarily halted until the frog has been moved to a safe location with suitable habitat outside of the construction area footprint.

Timing for Implementation/Compliance: Prior to Construction.

Person/Agency Responsible for Monitoring: Qualified Biologist

Monitoring Frequency: During project construction

Evidence of Compliance: Ongoing visual inspection during construction

1.9 BIO-8 Fish Protection

MCSD, shall avoid impacting all fish species present in the main Mad River channel by conducting all construction activities prior to connecting the northern channel of the project to the main river channel. If avoidance of aquatic connectivity of the main river channel until the completion of the construction of all features is not possible, utilize a fish screen approved by CDFW to block fish from entering the backwater channel during construction.

Timing for Implementation/Compliance: During Construction.

Person/Agency Responsible for Monitoring: Construction Manager

Monitoring Frequency: During project construction

Evidence of Compliance: Ongoing visual inspection during construction

1.10 BIO-9 Protection of Lyngbye's Sedge

If temporary and/or permanent impacts to Lyngbye's sedge cannot be avoided, it is recommended that a mitigation and monitoring plan be developed with input from permitting and resource agencies.

Timing for Implementation/Compliance: During Construction.

Person/Agency Responsible for Monitoring: Construction Manager

Monitoring Frequency: During project construction

Evidence of Compliance: Ongoing visual inspection during construction

1.11 CR-1 Inadvertent Discovery of Archaeological Material

If cultural materials for example: chipped or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendations for further action.

1.12 CR-2 Inadvertent Discovery of Human Remains

If human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie adjacent to human remains (Public Resources Code, Section 7050.5). The Humboldt County coroner will be contacted to determine if the cause of death must be investigated. If the coroner determines that the remains are of Native American origin, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner will contact the NAHC. The descendants or most likely descendants of the deceased will be contacted, and work will not resume until they have made a recommendation to the landowner or the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.

Timing for Implementation/Compliance: During Construction.

Person/Agency Responsible for Monitoring: Construction Manager

Monitoring Frequency: During project construction

Evidence of Compliance: Ongoing visual inspection during construction

1.13 CR-3 Title to Resources

The final disposition of archaeological, historical, and paleontological resources recovered on state lands under the jurisdiction of the California State Lands Commission (Pub. Resources Code, § 6313) must be approved by the Commission.

1.14 GEO-1 Inadvertent Discovery of Paleontological Resources

If potential paleontological resources are encountered during project subsurface construction activities or geotechnical testing, all work within 50 feet of the find shall be stopped, and a qualified archaeologist shall be contacted to evaluate the find, determine its significance, and identify any required mitigation. The applicant shall be responsible for implementing the mitigation prior to construction activities being re-started at the discovery site**.**

1.15 HAZ-1 Management of Hazardous Materials On-Site

During construction, the following BMPs will be implemented;

- Heavy equipment used in the project shall be in good condition and shall be inspected for leakage of coolant and petroleum products and repaired, if necessary, before work is started.
- Equipment operators shall be trained in the procedures to be taken should an accidental spill occur.

- Prior to the onset of work, the contractor shall prepare a plan for the prompt and effective response to any accidental spills.

- Absorbent materials designed for spill containment and cleanup shall be kept at the project site for use in case of an accidental spill.

- Refueling of equipment shall occur within the staging area or a minimum of 150 feet away from stream channels or perennial wetlands. All refueling will occur on a pad to capture any drips or spills.

- If equipment must be washed, washing shall occur off-site.

- Stationary equipment shall be positioned over drip pans.

1.16 HAZ-2 Spill Prevention

Equipment on site during construction shall be required to have emergency spill cleanup kits immediately accessible in the case of any fuel or oil spills. Staging, fueling and maintenance of equipment shall be conducted only in in staging areas or no closer than 150 ft from open water or in any location where hazardous material spills could become entrained in flowing water.

1.17 HWQ-1 Limit Construction Window

Construction related to the backwatered off-channel habitat complex shall 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 shall not be stockpiled overwinter. Sediment control measures shall be in place while materials are being stockpiled to minimize sediment and pollutant transport from the project site.

1.18 HWQ-2 Placement of Fill to Protect Water Quality

Placement of fill in the project area shall occur when the area is not inundated by water.

1.19 HWQ-3 Excavation of Saturated Soils and Erosion Control

Excavation shall include handling of saturated soils. Saturated soils shall be dewatered and/or transported saturated in a manner that prevents excess discharge or spillage of soils or water within the construction access areas. A silt fence shall be installed around the perimeter of temporary stockpiles of saturated soils to prevent runoff from leaving the site. During construction, a silt fence shall be deployed to isolate work areas from existing channels, and to trap suspended sediment that might leave the construction site if stormwater runoff were to occur. If the silt fence is not adequately containing sediment, the construction activity shall cease until remedial measures are implemented that prevent sediment from entering the waters below.

1.20 HWQ-4 Limits to Materials Storage and Placement to Protect Waters

No construction materials, debris, or waste, shall be placed or stored where it may be allowed to enter or be washed by rainfall into waters of the U.S./State. Soil and material stockpiles shall be properly protected to minimize sediment and pollutant transport from the construction site.

1.21 HWQ-5 Post-Construction Erosion Control

Following completion of excavation, placement of fill, and grading, all ground to the limits of disturbance above the wetted water surface elevation shall be treated for erosion prior to the onset of precipitation capable of generating run-off or the end of the yearly work period, whichever comes first. Treated areas that are not exposed to tidal influence shall be mulched with at least 2 to 4 inches of certified weed-free straw mulch with wheat or other straw for riparian and wetland areas and rice straw for uplands and use of a seed mix with coverage equivalent to 100 lbs/acre of native grass seed and appropriate riparian vegetation for immediate erosion control. No annual (Italian) ryegrass (Lolium multiflorum) shall be used. All temporary fill, synthetic mats and silt fences shall be removed from wetlands and waters of the U.S./State immediately on cessation of construction. Biodegradable geotextile fabrics shall be used, where possible.

1.22 HWQ-6 Implementation of Stormwater Best Management Practices

The following BMPs (California Storm Water Quality Association Storm Water Best Management Practice (BMP) Handbook for Construction 2003) shall be implemented to prevent entry of storm water runoff into the excavation site, the entrainment of excavated contaminated materials leaving the site, and to prevent the entry of polluted storm water runoff into the Mad River during the transportation and storage of excavated contaminated materials:

- EC-2 Preservation of Existing Vegetation. The best way to prevent erosion is to not disturb the land. To reduce the impacts of new development and redevelopment, projects may be designed to avoid disturbing land in sensitive areas of the site. To the extent feasible, and consistent with the project's design, goals, and objectives, some existing vegetation will be preserved on the site must be protected from mechanical and other injury while the land is being developed. The purpose of protecting existing vegetation is to ensure the survival of desirable vegetation for shade and erosion control.

- EC-6 Straw Mulch. Straw mulch is suitable for soil disturbed areas requiring temporary protection until permanent stabilization is established. Where appropriate, weed-free straw mulch will be used for erosion control on disturbed areas until soils can be prepared for permanent vegetation. Straw mulch is also used in combination with temporary and/or permanent seeding strategies to enhance plant establishment.

- EC-7 Geotextile and Mats. Mattings are commonly applied on short, steep slopes where erosion hazard is high and vegetation will be slow to establish. Mattings are also used on stream banks where moving water at velocities between 3 ft/s and 6 ft/s are likely to wash out new vegetation, and in areas where the soil surface is disturbed and where existing vegetation has been removed. Where appropriate, matting may also be used when seeding cannot occur (e.g., late season construction and/or the arrival of an early rain season). Erosion control matting will be considered in portions of the project area where soils are fine grained and potentially erosive.

- EC-8 Wood Mulching. Wood mulching is suitable for disturbed soil areas requiring temporary protection until permanent stabilization is established. The primary function of wood mulching is to reduce erosion by protecting bare soil from rainfall impact, increasing infiltration, and reducing runoff. Vegetation removed during construction will be chipped on-site and reused as erosion control mulch where feasible and appropriate.

- EC-9 Earth Dikes and Drainage Swales. The temporary earth dike is a berm or ridge of compacted soil, located in such a manner as to divert stormwater to a sediment trapping device or a stabilized outlet, thereby reducing the potential for erosion and offsite sedimentation. Where appropriate, earth dikes will also be used to divert runoff from off site and from undisturbed areas away from disturbed areas and to divert sheet flows away from unprotected slopes.

- SE-1 Silt Fences. Silt fences are suitable for perimeter control, placed below areas where sheet flows discharge from the site. Where appropriate, they will be used as interior controls below disturbed areas where runoff may occur in the form of sheet and rill erosion. Silt fences are generally ineffective in locations where the flow is concentrated and are only applicable for sheet or overland flows. Silt fences are most effective when used in combination with erosion controls.

- NS-5 Clear Water Diversion. Clear water diversion consists of a system of structures and measures that intercept clear surface water runoff upstream of a project, transport it around the work area, and discharge it downstream with minimal water quality degradation from either the project construction operations or the construction of the diversion. Dewatering the in-channel work areas and establishing a flow bypass will serve as the clear water diversion for the project.

- WM-3 Stockpile Management. Stockpile Management procedures and practices will be designed to reduce or eliminate air and stormwater pollution from stockpiles of soil excavated from in-channel and floodplain areas.

- WM-9 Sanitary/Septic Waste Management. Proper sanitary and septic waste management prevent the discharge of pollutants to stormwater from sanitary and septic waste will be provided via convenient, well-maintained facilities, and arranging for regular service and disposal.