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US Army Corps of Engineers ®
San Francisco District

SAN FRANCISCO DISTRICT

PUBLIC NOTICE

PROJECT: MAD RIVER MAINTENANCE ACTIVITIES

PUBLIC NOTICE NUMBER: SPN-2003-286620
PUBLIC NOTICE DATE: January 11, 2023
COMMENTS DUE DATE: February 11, 2023

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1. **INTRODUCTION**: The Humboldt Bay Municipal Water District, P.O. Box 95, Eureka, California 95502, (Contact: John Friedenbach at 707-443-5018) has applied for a Department of the Army Corps of Engineers (USACE) individual permit to conduct on-going maintenance of the Humboldt Bay Municipal Water District's (herein referred to as the "District") water supply and diversion operations at two locations on the Mad River. This project would be a renewal of activities previously authorized under Department of the Army Permit SPN-2003-286620 issued on April 12, 2010. This application is being processed pursuant to the provisions of Section 404 of the Clean Water Act of 1972, as amended (33 U.S.C. § 1344 *et seq*.).

2. **PROPOSED PROJECT**:

Project Site Location: The proposed work would occur in the Mad River at two locations (Essex Site and Ruth Site) located approximately 75 river miles apart. The Essex site includes the Mad River near the City of Arcata, California, from the Annie and Mary Railroad Bridge (AMRRB, RM-11) to the Highway 299 Bridge (RM-8), which is approximately 1,500 ft downstream of the Station 6 facilities. The Ruth Site includes the Mad River from the base of Matthews Dam (RM-84) to a point approximately 1,500 ft downstream of the dam tailrace.

Project Site Description: The Mad River drains 485 square mi (mi2) in Humboldt County, California, and enters the Pacific Ocean just north of the City of Arcata. The Mad River is confined within bedrock walls for most of its course, but its lower 12 mi are alluvial. This reach is designated the “lower Mad River” and begins where the river enters a broad alluvial valley (up to 2 mi wide) at the Mad River Fish Hatchery (Hatchery), upstream of Blue Lake. Major land uses in the Mad River that have affected the channel include dams, water development, road building, highways and bridges, river engineering (flood control levees, riprapping, etc.), logging, agriculture, gravel extraction, urban development, and recreation. The upper portion of the lower Mad River basin lies in a mountainous region, mostly forested with redwood and Douglas-fir trees. The river flows through a V-shaped canyon, aligned along a northwest trend. This trend is structurally controlled by thrust faulting. The lower portion of the river flows out onto a broad alluvial valley (the Blue Lake Valley) at the Hatchery, 1.5 mi upstream of Blue Lake. Another canyon reach confines the river between the AMRRB and the Highway 299 Bridge. Below Highway 299, along the Arcata Bottoms, the river flows across a deltaic floodplain to its mouth.

Two large dams and associated water diversions have been constructed on the Mad River, including Sweasey Dam, which was constructed in 1938 to supply water for the City of Eureka. This dam was removed in July 1970, releasing up to 3,000 acre-ft of sediment that was trapped behind it. A second dam, Matthews Dam, was completed in 1961 to form Ruth Reservoir. Ruth Reservoir and its associated releases have augmented low-flow aquatic habitat within the mainstem Mad River during the summer and fall low-flow period.

Project Description: The proposed project would occur on an annual or as-needed basis over a ten-year period. The applicant proposes the following activities at the Essex site. See Figures for a map of locations of these activities.

(1) Annual activities (Activity # 1) - Channel dredging and side casting of river-bed material for approximately 500 feet from the District's direct diversion inlet (Station # 6) across the river to the north bank. The material derived from this excavation would be placed adjacent to the low water's right

margin and shaped into a berm parallel to the direction of flow. The excavation and fill would start at the end of the existing rock jetty on the north bank of the river and parallel the low flow channel terminating at the existing rock weir grade control structure. The berm would be constructed from river-run gravel derived from excavation near Station 6 or from a point bar downstream near the north bank. The exact location and length of the berm would vary based on channel conditions, but fill would be limited to that necessary to connect the rock jetty with the weir. The berm would be about 350-feet long by 20-feet wide, and 4-feet high. The weir and jetty (two rock structures) and this berm comprise a grade-control system which ensures sufficient water surface elevation at Station 6 during low-flow months. This work would be done each year to ensure the proper flow of water into the forebay of the surface diversion facility during low river flow periods. Total estimated fill volume discharged in the Mad River for the above diversion berm would be 1,050 cubic yards (CY).

(2) Activity 2 – Maintaining adequate flow to direct diversion facility (station 6) on an as-needed basis only. Excavation may occur on the south bank between stations 1 and 6. Excavation may occur in front of station 6 if aggradation occurs blocking the forebay entrance and limiting exchange of water with the low-flow channel down river or in front of station 6. The excavation would range from 250 to 500-feet long, 10 to 20-feet wide, and 3 to 6-feet deep. Estimated fill volume ranges are 275-2,225 CY.

(3) Activity 3 on an as-needed basis only - Construction and maintenance of temporary access roads, platforms, gravel berms, and ramps to Water Collectors Numbers 1, 2, 4, or 5 to allow the District to repair, test, and maintain the pumps housed within these Collectors. These temporary access structures would be constructed by pushing river material from the surrounding area by backhoe. The ramps would be constructed during low-flow periods, out of the low-flow channel. No filling of the active low-flow channel would occur. Below are specific activities:

Activity 3a - Construction of gravel access road from the top of the bank to the riverbed and along the river bed to the location where the maintenance activities are to be performed (estimated fill volume a maximum of 8,000 CY). The portion of the temporary road along the river bed ranges in length from approximately 100 to 250 yards, and would be graded only as necessary to allow vehicles to traverse to the maintenance location. These temporary roads would be constructed by pushing river-run gravel from the surrounding river bed by backhoe or tractor. The roads would be constructed only during low-flow periods, out of the low-flow channel - no filling of the active low-flow channel would occur. The construction roads include access to Collector Numbers 2 and 4.

Activity 3b - Construction of a gravel access platform at Collector 1 or 2. The platform would be 3 to 4 feet in height and cover a 40-foot by 40-foot area adjacent to the Collector. Estimated fill volume is 250 CY.

Activity 3c - Construction of a gravel access ramp at Collector 4. The ramp would extend from the elevation of the bed to two feet below the valve deck of the Collector. The ramp would range in length from 75 to 200 feet and in height from 10 feet to 20 feet, depending on channel topography. It would be about 17 feet wide and includes a flattened 25-foot by 25-foot area at the top for crane placement. Estimated fill volume is 1,600 to 2,600 CY.

Activity 3d - Construction of a berm adjacent to the Collectors to allow occasional flushing of the Collector (Sheet 5). The berm would be constructed by pushing river bed material three to four feet high around a portion of the Collector. The length and exact configuration of the berm would depend on the location of the river shoreline in relation to the Collector flushing discharge. The berm would be removed when flushing is complete, and the discharged river water has percolated back through the riverbed. Estimated fill volume would be 50-100 CY.

(4) Activity 4a - Maintenance or repair of existing low flow channel dike downstream of Station # 6 (3,500 to 5,000 CY of 1/4 ton to 4-ton rock and gravel) to maintain proper flow to the surface diversion. The dike ensures adequate water surface elevation in the forebay of the direct diversion facility (Station # 6).

Activity 4b - Maintenance or repair of existing rock jetties in the vicinity of Collector No. 1 and Station # 6 (3,500 to 5,000 CY of 1/4 ton rock and gravel per jetty.

Activity 4c - Maintenance or repair of existing bank revetments on the right and left banks near Station # 6 and the right bank Collector No. 3. The revetments are approximately 200 to 800 feet in length and consist of 1/4 ton to 4-ton rocks.

Activity 4d - Maintenance or repair of existing rip-rap around Collector No. 1 and its discharge line, around Collector No. 2, and at the hydraulic control structures near Station # 6.

The following continuing activities are proposed for the Ruth site at Matthews Dam:

Ruth Activity 1 - periodic excavation of approximately 250 cubic yards of aggraded material from the tailrace channel and spillway pool below Matthews Dam. Sediment removed from the tailrace and plunge pool would be stored on District property at a distance sufficient to ensure no sediment is delivered to the active channel during storm events.

Ruth Activity 2 - repair or replacement of existing rock structures or revetments within the vicinity of the tailrace channel and spillway plunge pool using ¼–1 ton rock.

Basic Project Purpose: The basic project purpose comprises the fundamental, essential, or irreducible purpose of the project, and is used by USACE to determine whether the project is water dependent. The basic project purpose is to perform maintenance activities at the District facilities.

Overall Project Purpose: The overall project purpose serves as the basis for the Section 404(b)(1) alternatives analysis and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project while allowing a reasonable range of alternatives to be analyzed. The overall project purpose is to maintain flow conveyance capacity, maintain reliable access to the Ranney collectors to conduct flushing of the collectors, restoring capacity in the dam tailrace and spillway plunge pool, and repairing revetments and rock structures to ensure a reliable water supply to the Humboldt Bay area.

Project Impacts: Excavation and redistribution of gravel and rock, and repair of the existing revetments and jetties using rock fill would require temporary fill impacts related to construction access and dewatering of the channel. Construction of the berms, trenches, access roads, and platforms would result in minor, short-term increases in turbidity and intrusion of fine sediment. Fill volumes for activities 4a-4d would vary based on the extent of damage or degradation. Total estimated fill volumes for the entire project are estimated at approximately 25,000 CY over a ten-year period.

Proposed Mitigation: The applicant is not proposing additional mitigation beyond restoring impacted sites to pre-construction conditions.

3. **STATE AND LOCAL APPROVALS**:

Water Quality Certification: State water quality certification or a waiver thereof is a prerequisite for the issuance of a Department of the Army Permit to conduct any activity which may result in a fill or pollutant discharge into waters of the United States, pursuant to Section 401 of the Clean Water Act of 1972, as amended (33 U.S.C. § 1341 *et seq*.). The applicant has submitted an application to the California Regional Water Quality Control Boards (RWQCB) and obtained a water quality certification for the project.

Water quality issues should be directed to the Executive Officer, California Regional Water Quality Control Board, North Coast Region, 5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403, by the close of the comment period.

Other Local Approvals: The applicant has obtained a Lake and Streambed Alteration Agreement issued by the California Department of Fish and Wildlife.

4. **COMPLIANCE WITH VARIOUS FEDERAL LAWS**:

National Environmental Policy Act (NEPA): Upon review of the Department of the Army permit application and other supporting documentation, USACE has made a *preliminary* determination that the project neither qualifies for a Categorical Exclusion nor requires the preparation of an Environmental Impact Statement for the purposes of NEPA. At the conclusion of the public comment period, USACE will assess the environmental impacts of the project in accordance with the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. § 4321-4347), the Council on Environmental Quality's regulations at 40 C.F.R. § 1500-1508, and USACE regulations at 33 C.F.R. § 325. The final NEPA analysis will normally address the direct, indirect, and cumulative impacts that result from regulated activities within the jurisdiction of USACE and other non-regulated activities USACE determines to be within its purview of Federal control and responsibility to justify an expanded scope of analysis for NEPA purposes. The final NEPA analysis will be incorporated in the decision documentation that provides the rationale for issuing or denying a Department of the Army Permit for the project. The final NEPA analysis and supporting documentation will be on file with the San Francisco District, Regulatory Division.

Endangered Species Act (ESA): Section 7(a)(2) of the ESA of 1973, as amended (16 U.S.C. § 1531 *et seq*.), requires Federal agencies to consult with either the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) to ensure actions

authorized, funded, or undertaken by the agency are not likely to jeopardize the continued existence of any Federally-listed species or result in the adverse modification of designated critical habitat. As the Federal lead agency for this project, USACE has initiated formal consultation with NMFS, pursuant to Section 7(a) of the Act to address project related impacts to Federally-listed species and designated critical habitat. The Mad River supports Federally threatened Southern Oregon/Northern California Coast coho salmon ESU (*Oncorhynchus kisutch*), California Coastal ESU Chinook salmon (*Oncorhynchus tshawytscha*), Northern California Steelhead ESU (*Oncorhynchus mykiss*), and Southern DPS Eulachon (*Thaleichthys pacificus*).

Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA): Section 305(b)(2) of the MSFCMA of 1966, as amended (16 U.S.C. § 1801 *et seq*.), requires Federal agencies to consult with the NMFS on all proposed actions authorized, funded, or undertaken by the agency that may adversely affect essential fish habitat (EFH). EFH is defined as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. EFH is designated only for those species managed under a Federal Fisheries Management Plan (FMP), such as the *Pacific Groundfish FMP*, the *Coastal Pelagics FMP,* or the *Pacific Coast Salmon FMP*. As the Federal lead agency for this project, USACE has conducted a review of digital maps prepared by NMFS depicting EFH to determine the presence or absence of EFH in the project area. Based on this review, USACE has made a *preliminary* determination that EFH is present at one of the project location or in its vicinity and that the critical elements of Pacific Salmon EFH may be adversely affected by project implementation. Listed species managed under this Fishery Management Plan include Chinook and Coho salmon. To address project related impacts to EFH, USACE initiated EFH consultation with NMFS, pursuant to Section 305(5(b)(2) of the Act. .

National Historic Preservation Act (NHPA): Section 106 of the NHPA of 1966, as amended (16 U.S.C. § 470 *et seq*.), requires Federal agencies to consult with the appropriate State Historic Preservation Officer to take into account the effects of their undertakings on historic properties listed in or eligible for listing in the *National Register of Historic Places.* Section 106 of the Act further requires Federal agencies to consult with the appropriate Tribal Historic Preservation Officer or any Indian tribe to take into account the effects of their undertakings on historic properties, including traditional cultural properties, trust resources, and sacred sites, to which Indian tribes attach historic, religious, and cultural significance. As the Federal lead agency for this undertaking, USACE has conducted a review of the latest published version of the *National Register of Historic Places*, survey information on file with various city and county municipalities, and other information provided by the applicant to determine the presence or absence of historic and archaeological resources within the permit area. Based on this review, USACE has made a *preliminary* determination that historic or archaeological resources are not likely to be present in the permit area and that the project either has no potential to cause effects to these resources or has no effect to these resources. USACE will render a final determination on the need for consultation at the close of the comment period, taking into account any comments provided by the State Historic Preservation Officer, the Tribal Historic Preservation Officer, the Advisory Council on Historic Preservation, and Native American Nations or other tribal governments.

5. **COMPLIANCE WITH THE SECTION 404(b)(1) GUIDELINES**: Projects resulting in discharges of dredged or fill material into waters of the United States must comply with the Guidelines promulgated by the Administrator of the Environmental Protection Agency under Section 404(b) of the Clean Water Act (33 U.S.C. § 1344(b)). The applicant states that there are no practicable alternatives for this project. An evaluation was made by this office under the 404(b)(1) guidelines, and it was determined that the proposed project is water dependent.

6. **PUBLIC INTEREST EVALUTION**: The decision on whether to issue a Department of the Army Permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the project and its intended use on the public interest. Evaluation of the probable impacts requires a careful weighing of the public interest factors relevant in each particular case. The benefits that may accrue from the project must be balanced against any reasonably foreseeable detriments of project implementation. The decision on permit issuance will, therefore, reflect the national concern for both protection and utilization of important resources. Public interest factors which may be relevant to the decision process include conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral

needs, considerations of property ownership, and, in general, the needs and welfare of the people.

7. **CONSIDERATION OF COMMENTS**: USACE is soliciting comments from the public; Federal, State, and local agencies and officials; Native American Nations or other tribal governments; and other interested parties in order to consider and evaluate the impacts of the project. All comments received by USACE will be considered in the decision on whether to issue, modify, condition, or deny a Department of the Army Permit for the project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, and other environmental or public interest factors addressed in a final environmental assessment or environmental impact statement. Comments are also used to determine the need for a public hearing and to determine the overall public interest in the project.

8. **SUBMITTING COMMENTS**: During the specified comment period, interested parties may submit written comments to Stephen Ryan, San Francisco District, Regulatory Division, Eureka Field Office, 601 Startare Drive Box 13, Eureka, California 95501; comment letters should cite the project name, applicant name, and public notice number to facilitate review by the Regulatory Permit Manager. Comments may include a request for a public hearing on the project prior to a determination on the Department of the Army permit application; such requests shall state, with particularity, the reasons for holding a public hearing. All substantive comments will be forwarded to the applicant for resolution or rebuttal. Additional project information or details on any subsequent project modifications of a minor nature may be obtained from the applicant and/or agent or by contacting the Regulatory Permit Manager by telephone or e-mail (cited in the public notice letterhead). An electronic version of this public notice may be viewed under the *Public Notices* tab on the USACE website: https://www.spn.usace.army.mil/Missions/Regulatory.