



US Army Corps
of Engineers®
San Francisco District

SAN FRANCISCO DISTRICT

Regulatory Division
1455 Market Street, 16th Floor
San Francisco, CA 94103-1398

PUBLIC NOTICE

PROJECT: Newell Creek Dam Intake Repairs

PUBLIC NOTICE NUMBER: 2010-00087S

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COMMENTS DUE DATE: 1-6-2012

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1. **INTRODUCTION:** The City of Santa Cruz (POC: John Everett (831) 420-5326), 212 Locust Street, Suite C, Santa Cruz, California 95060), has applied to the U.S. Army Corps of Engineers (USACE), San Francisco District, for a Department of the Army Permit to conduct repairs to existing gate structures of Newell Dam and to dredge sediment deposits along an existing intake gate structure and to dispose this dredge material on the reservoir bed. This Department of the Army permit 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 project site is located within Loch Lomond Reservoir which is fed by Newell Creek, near the town of Ben Lomond, Santa Cruz County, California.

Project Site Description: Loch Lomond Reservoir receives surface water flow from Newell Creek. The reservoir is approximately 2.5 miles long with a maximum width of approximately 1,500 feet wide. The City of Santa Cruz utilizes the reservoir as a municipal water supply. Newell Creek Dam, which impounds Loch Lomond Reservoir, consists of an intake structure utilizing five intake gates. Flow is currently being routed through Gate 4. The current operational status of Gates 1 through 3 is unknown and Gate 5 has been covered with sediment deposits making it non-operational.

Project Description: As shown in the attached drawings, the applicant proposes to repair all five of the existing gates involving the replacement of sluice gates, hydraulic operating cylinders with knife gate

assemblies, and replacement of ten knife gate hydraulic lines. Additional repairs to Gates 1 through 4 of the existing intake structures involve the replacement of valve vault corrosion resistant trash rack and intake gate screen assemblies. Additional repairs to Gate 5 involve relocation of historical sediment deposits approximately sixty feet outside of their current conditions. Dredging of historical sediment deposits will occur prior to the repair of the existing gates. The project proposes to dredge approximately 350 cubic yards of sediment in the area of the existing Gate 5 intake gate and to deposit the dredged material to one of three potential sites on the reservoir bed via a slurry line. The disposed sediment will be covered with filter fabric secured to the lake bottom.

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 conduct maintenance and upgrades to the existing intake structure at Newell Creek Dam.

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 repair and maintain the water supply intake structure of Newell Creek Dam to allow for continued operation of the municipal water supply infrastructure.

Project Impacts: Dredge and fill material being placed within jurisdictional waters of the U.S. includes structural components being installed to conduct repairs to the gate structures and the placement of 350 cubic yards of sediment.

Impacts related to the repair of the intake gates are temporary and minimal in nature. This element requires minimal amounts of fill within jurisdictional waters of the United States.

The majority of potential impacts caused from this project will occur from the sediment that is being dredged from the area above the existing Gate 5 to one of three areas within the reservoir. Impacts related to this element include the potential suspension of sediment and related increases in downstream turbidity. To minimize project related impacts related to increase surface water turbidity, the applicant is proposing measures to mitigate impacts to the downstream environment. These project related impacts are seen as temporary and will be mitigated to minimize such impacts.

Proposed Mitigation: As the primary impacts of the proposed project are related to downstream turbidity issues, mitigation measures are focused on the avoidance and minimization of this impact. The project will utilize filter fabric to trap fill material and minimize release of sediments into surface water. Proposed monitoring will evaluate turbidity throughout the construction period. Turbidity levels will be set based upon basin plans objectives. If these levels are exceeded, a sediment curtain will be installed and/or the disposal pipe will be extended further away. If turbidity issues persist a sediment filter will be installed along the spillway to prevent release of sediment.

The project will not result in the net removal of waters of the U.S. therefore no compensatory mitigation is being required.

Project Alternatives: The applicant has evaluated potential alternatives to the proposed project. Elements of the project related to the replacement of structural components of the intake structure are viewed as a no project alternative and a project as proposed alternative. Project related impacts involved in the repair of the gate structures are temporary and minimal in nature. Analysis of alternatives primarily focuses on the excavation and disposal of dredge material above the existing Gate 5 as this element contains the majority of the potential impacts of the project.

The no project alternative would cause a reduction in the accessibility of stored water in Loch Lomond Reservoir as a limited number of gates would likely be operational. This could become problematic during times of extreme weather events which require increased releases from Newell Creek Dam. The no project alternative would also limit the accessibility of stored water as a municipal water supply.

Excavation method alternatives that were analyzed include the use of a suction dredge with a slurry line and the use of a clamshell dredge. Use of clamshell dredge has been eliminated due to limitation in access and potential risk of damaging the intake structure during operations. The slurry line option allows for the transfer of sediment with less potential for intake structure damage and greater ease in mobilizing equipment needed for the process.

Disposal methods that were evaluated include disposal on the reservoir bed, upland disposal and landfill disposal. Upland and landfill disposal would require the drying of the sediment prior to transportation. The analysis finds that there is not adequate space in the project area, due to topography and limitation in space to conduct the sediment drying. Road infrastructure in the project areas is not adequate to facilitate transportation of the sediment off-site due to windy and narrow roads. This would also be a limitation for landfill disposal.

3. STATE AND LOCAL APPROVALS:

Water Quality Certification: State water quality certification or a waiver 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.*). No Department of the Army Permit will be issued until the applicant obtains the required certification or a waiver of certification. A waiver can be explicit, or it may be presumed, if the RWQCB fails or refuses to act on a complete application for water quality certification within 60 days of receipt, unless the District Engineer determines a shorter or longer period is a reasonable time for the RWQCB to act.

Water quality issues should be directed to the Executive Officer, California Regional Water Quality Control Board, Central Coast Region, 895 Aerovista Place, Suite 101, San Luis Obispo, California 93401, by the close of the comment period.

Coastal Zone Management: Section 307(c) of the Coastal Zone Management Act of 1972, as amended (16 U.S.C. § 1456(c) *et seq.*), requires a non-Federal applicant seeking a federal license or permit to conduct any activity occurring in or affecting the coastal zone to obtain a Consistency Certification that indicates the activity conforms with the State's coastal zone management program. Generally, no federal license or permit will be granted until the appropriate State agency has issued a Consistency Certification or has waived its right to do so. The project does not occur in the coastal zone, and a *preliminary* review by USACE indicates the project would not likely affect coastal zone resources. This presumption of effect, however, remains subject to a final determination by the California Coastal Commission.

Coastal zone management issues should be directed to the District Manager, California Coastal Commission, Central Coast District Office, 725 Front Street, Suite 300, Santa Cruz, California 95060-4508, by the close of the comment period.

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. Parts 1500-1508, and USACE Regulations at 33 C.F.R. Part 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 insure 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 conducted a review of the California Natural Diversity Data Base, digital maps prepared by USFWS and NMFS depicting critical habitat, and other information provided by the applicant, to determine the presence or absence of such species and critical habitat in the project area. Based on this review, USACE has made a preliminary determination that the following Federally-listed species and designated critical habitat are present at the project location or in its vicinity, and may be affected by project implementation. Newell Creek, downstream of Loch Lomond Reservoir, is designated critical habitat for steelhead trout (*Oncorhynchus mykiss*) and coho salmon (*Oncorhynchus kisutch*). Increased turbidity in Newell Creek downstream of the dam is a potential result of the project. Increased turbidity may affect normal feeding behavior, reduce growth rates, increase stress levels, and reduce respiratory functions of these species. Proposed measures to mitigate impacts to these species include the use of covering spoils with filter fabric and project timing to control delivery of sediment downstream. To address project related impacts to these species and designated critical habitat, USACE has conducted informal consultation with NMFS, pursuant to Section 7(a) of the Act.

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 National Marine Fisheries Service (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*, and 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 determination that EFH is not present at the project location or in its vicinity, and that consultation will not be required. 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 NMFS.

Marine Protection, Research, and Sanctuaries Act (MPRSA): Section 302 of the MPRSA of 1972, as amended (16 U.S.C. § 1432 *et seq.*), authorizes the Secretary of Commerce, in part, to designate areas of ocean waters, such as the Cordell Bank, Gulf of the Farallones, and Monterey Bay, as National Marine Sanctuaries for the purpose of preserving or restoring such areas for their conservation, recreational, ecological, or aesthetic values. After such designation, activities in sanctuary waters authorized under other authorities are valid only if the Secretary of Commerce certifies that the activities are consistent with Title III of the Act. No Department of the Army Permit will be issued until the applicant obtains the required certification or permit. The project does not occur in sanctuary waters, and a *preliminary* review by USACE indicates the project would not likely affect sanctuary resources. This presumption of effect, however, remains subject to a final determination by the Secretary of Commerce, or his designee.

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 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. If unrecorded archaeological resources are discovered during project implementation, those operations affecting such resources will be temporarily suspended until USACE concludes Section 106 consultation with the State Historic Preservation Officer or the Tribal Historic Preservation Officer to take into account any project related impacts to those resources.

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)). An evaluation pursuant to the Guidelines indicates the project is not dependent on location in or proximity to waters of the United States to achieve the basic project purpose. This conclusion raises the (rebuttable) presumption of the availability of a less environmentally damaging practicable alternative to the project that does not require the discharge of dredged or fill material into special aquatic sites. The applicant has been informed to submit an analysis of project alternatives to be reviewed for compliance with the Guidelines.

6. PUBLIC INTEREST EVALUATION: 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 of the project.

8. SUBMITTING COMMENTS: During the specified comment period, interested parties may submit written comments to Kyle Dahl, San Francisco District, Regulatory Division, 1455 Market Street, 16th Floor, San Francisco, California 94103-13978; 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 *Current Public Notices* tab on the USACE website: <http://www.spn.usace.army.mil/regulatory/>.