



US Army Corps  
of Engineers®  
San Francisco District

SAN FRANCISCO DISTRICT

Regulatory Division  
1455 Market Street, 16<sup>th</sup> Floor  
San Francisco, CA 94103-1398

# PUBLIC NOTICE

## PROJECT: STRAWBERRY CREEK RESTORATION

PUBLIC NOTICE NUMBER: 2009-00041N

PUBLIC NOTICE DATE: July 30, 2013

COMMENTS DUE DATE: August 30, 2013

PERMIT MANAGER: James Mazza

TELEPHONE: 415-503-6755

E-MAIL: James.C.Mazza@usace.army.mil

1. **INTRODUCTION:** Redwood National and State Park (POC: David Anderson, telephone 707-465-7771), 1111 Second Street in Crescent City, California 95531 has applied to the U.S. Army Corps of Engineers (USACE), San Francisco District, for a Department of the Army Permit to excavate the floating vegetation mat and discharge approximately 11,830 cubic yards (cy) of sediment for planting mounds along approximately 1200 linear feet of Strawberry Creek. The proposed project is intended to suppress the growth of reed canary grass (*Phalaris arundinacea*) and open Strawberry Creek to fish passage. 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 proposed project is located north of the Old South Operations Center (SOC) for the park, and east of the Old SOC Access Road, which branches off Hilton Road, South of U.S. Highway 101 in the town of Orick, Humboldt County, California. The project would occur within the parcels identified by APN 519-291-01 and 519-291-02, Southwest Section 4, T10N-R1E, HBM. The approximate location of the project is shown in Figure 1.

**Project Site Description:** The project site is positioned along the east side of the Old SOC Access Road, which is adjacent to the toe of the slope. The hillslope has a coniferous forest, which transitions to alders at the toe of the slope. The entire project site includes approximately 4.3 acres of herbaceous wetlands dominated by invasive weeds and 1200 linear feet of Strawberry Creek, which has been grown over by the invasive weeds. Within the project site, reed canary grass

and other associated emergent hydrophytes have grown over and completely obscured Strawberry Creek, causing it to become anoxic. The site is dominated by herbaceous emergent hydrophytes but also supports four 24-inch sitka spruces, one 12-inch sitka spruce, and one 24-inch alder, which all will be retained.

**Project Description:** The applicant proposes to restore approximately 3 acres of the historic riparian wetlands (palustrine forested in place of the current ponded emergent herbaceous wetlands), labeled as Riparian Planting Zones and Planting Mounds/Planting Zones in the attached drawing, titled "Planting Plan", Sheet 31 of 33. Additionally, the applicant would clear 1200 linear feet of Strawberry Creek that have been choked with weeds and 390 feet of the West Tributary would be restored by grubbing and excavating the channel, constructing planting berms and anchoring structures in the channels. The applicant would grub/excavate 1224 linear feet of Strawberry Creek, including approximately 1930 cy of reed canary grass and 420 cy of sediment to clear approximately 2.9 acres, which would be removed and stockpiled adjacent to the Old SOC.

The mainstem channel begins at the confluence of the East Tributary and the SOC Tributary and would curve gently with a 10-foot bottom and side slopes of 1.5H:1V.

In the tributary channel near the Old SOC (SOC Tributary), the channel would be excavated up to 4 feet deep, and about 4 feet wide with log steps placed about 20-25 feet apart.

The restoration of the West Tributary would begin approximately 150 feet upstream of the culvert under the SOC Access road and continue downstream of the culvert

another 220 feet to join the mainstem of Strawberry Creek. The West Tributary would be restored as a series of step-pools with log steps and weirs separated by scour pools, glides, and riffles. Additionally, the applicant would excavate approximately 340 cy of fill from the road bed to replace the undersized culvert for the West Tributary.

The plan also includes a 255 linear feet flow-through side channel constructed parallel to the mainstem. Several dead-end spurs, totaling approximately 245 feet, would also connect to the mainstem and the side channel, providing habitat complexity and off-channel refugia.

The applicant would plant a riparian buffer at least 25 feet wide on each side of the mainstem. The applicant proposes to plant alder and spruce seedlings and willow shoots on planting mounds that would provide the seedlings some drainage to better facilitate their hydrologic needs. The applicant proposes to plant the seedlings and shoots densely so that they will quickly shade the reed canary grass. Approximately 5000 willow stakes would be planted at 1 foot spacing along the base of the planting mounds. Spruce and alder seedlings would be planted with 2-foot spacing on 0.6 acres. The willows and alders would be planted below the 23-foot elevation; the applicant would plant spruce above the 23-foot elevation. Ten nurse logs would be anchored in the wetland adjacent to the side channels and strigged with spruce.

To facilitate the construction, two temporary access roads would be necessary. One, from the Old SOC access road to the mainstem would not require additional fill material. The second would be 160 feet long and bypass the undersized culvert where the road crosses the West Tributary. The fill material used for the temporary bypass would be excavated from the wetlands adjacent to the West Tributary after the culvert is replaced and used again for construction of the planting berms.

In addition to grubbed and excavated channels and planting berms, the applicant proposes to construct and anchor 5 log steps in the main channel, 7 log steps and weirs in the West Tributary, 2 rock and boulder steps and weirs in the West Tributary, 7 log habitat structures in the main channel, and 10 nurse logs adjacent to the main channel. The applicant would bolt the logs together with piles driven in to the banks. Rock and boulder steps would be installed inside the West Tributary culvert to provide a natural streambed substrate. Log steps and log weirs would control the channel bed elevation.

Additional project details are provided in the plans titled, "Strawberry Creek Restoration Project," sheets 1, 3, 5-9, 14, and 22-33 of 33, dated March 2012.

**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 creek restoration and fish passage.

**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 restore Strawberry Creek as a migratory and rearing stream for fishes.

**Project Impacts:** The applicant proposes to grub approximately 7200 cy of invasive vegetation from the project area and excavate 2054 cy of sediment from the channels, which would be suitable for reuse in the project. The applicant would deposit approximately 11,830 cy total to construct the planting mounds. The footprint of the mound would be approximately 2.2 acres, but only 0.9 acres would be converted to non-wetland, as indicated by the Sitka spruce zone in "Planting Details and Notes," sheet 32 of 33. The remaining 1.3 acres would be elevated but still wetlands planted with willows, alders and *Carex* sp. that would be planted and managed as forested wetlands, as indicated by the Sitka spruce zone in "Planting Details and Notes," sheet 32 of 33. Approximately 2,470 cy of the fill would be from a CalTrans landslide spoil site within the park, and 1050 cy from excavation of channels within the project. Approximately 9 cy of boulders will be used as rock steps at culvert inlets and outlets. Ten nurse logs, at least 12 feet long with diameters between 1.5 feet and 3 feet would be anchored within the wetlands.

After construction, the project area would no longer be a barrier to fish migration, have improved water quality, and support a greater diversity of aquatic plant and animal species. Permanent impacts to wetland waters of the U.S. would include the excavation of 2054 cy of sediment from approximately 0.55 acre and the discharge of approximately 11,830 cy of fill material to construct 2.2 acres of planting mounds in wetlands. The mounds represent the conversion of 1.3 acres of herbaceous emergent wetlands to forested wetlands and the

conversion of 0.9 acre of herbaceous emergent wetlands to forested upland. The permanent impacts are depicted on the attached plan, "Impacts Summary," dated June 2013, Sheet 1.

**Proposed Mitigation:** The applicant has stated the project avoids and minimizes the adverse impacts to existing wetland waters of the U.S. to the maximum extent practicable and proposes to reestablish non-wetland waters of the U.S. (stream) by increasing diversity, and removing a barrier to fish passage. California Rapid Assessment Method (CRAM) was performed at the project site using the riverine module. The current condition of the SOC Tributary had a CRAM riverine module score of 57, and the projected post-project score is expected to rise to 82 after project implementation, implying a lift in the overall condition of the site. The increased score is expected in all attributes, with the largest increases in biotic structure and physical structure. The current condition of the mainstem has a CRAM riverine module score of 59, and the score is expected to increase to 85 after implementation, due to increases in biotic and physical structure.

### 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.*). The applicant is hereby notified that, unless USACE is provided documentation indicating a complete application for water quality certification has been submitted to the California Regional Water Quality Control Board (RWQCB) within 30 days of this Public Notice date, the District Engineer may consider the Department of the Army permit application to be withdrawn. 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, North Coast Region, 5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403,

**Coastal Zone Management:** 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.

The San Francisco CCC is responsible for all Federal Consistency Determinations within CCC jurisdiction, regardless of the project location. Coastal zone management issues should be directed to the District Supervisor, California Coastal Commission, North Central Coast District Office, 45 Fremont Street, Suite 2000, San Francisco, California 94105-4508, by the close of the comment period.

**Other Local Approvals:** The applicant has applied for a Streambed Alteration Agreement to be issued by 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. 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 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, the applicant is responsible for determining the presence or absence of Federally-listed species and designated critical habitat, and the need to conduct consultation. To complete the administrative record and the decision on whether to issue a Department of the Army Permit for the project, USACE will obtain all necessary supporting documentation from the applicant concerning the consultation process. Any required consultation must be concluded prior to the issuance of a Department of the Army Permit for the project.

**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 Coast Salmon FMP*. As the Federal lead agency for this project, the applicant will be responsible for determining the presence or absence of EFH, and the need to conduct consultation. To complete the administrative record and the decision on whether to issue a Department of the Army Permit for the project, USACE will obtain all necessary supporting documentation from the applicant concerning the consultation process. Any required consultation must be concluded prior to the issuance of a Department of the Army Permit for the project.

**Marine Protection, Research, and Sanctuaries Act (MPRSA):** Section 302 of the MPRS 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 project, the applicant will be responsible for determining the presence or absence of historic properties or archaeological resources, and the need to conduct consultation. To complete the administrative record and the decision on whether to issue a Department of the Army Permit for the project, USACE will obtain all necessary supporting documentation from the applicant concerning the consultation process. Any required consultation must be concluded prior to the issuance of a Department of the Army Permit for the project. 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 James Mazza, San Francisco District, Regulatory Division, 1455 Market Street, 16<sup>th</sup> Floor, San Francisco, California 94103-1398; 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:

<http://www.spn.usace.army.mil/Missions/Regulatory/>.

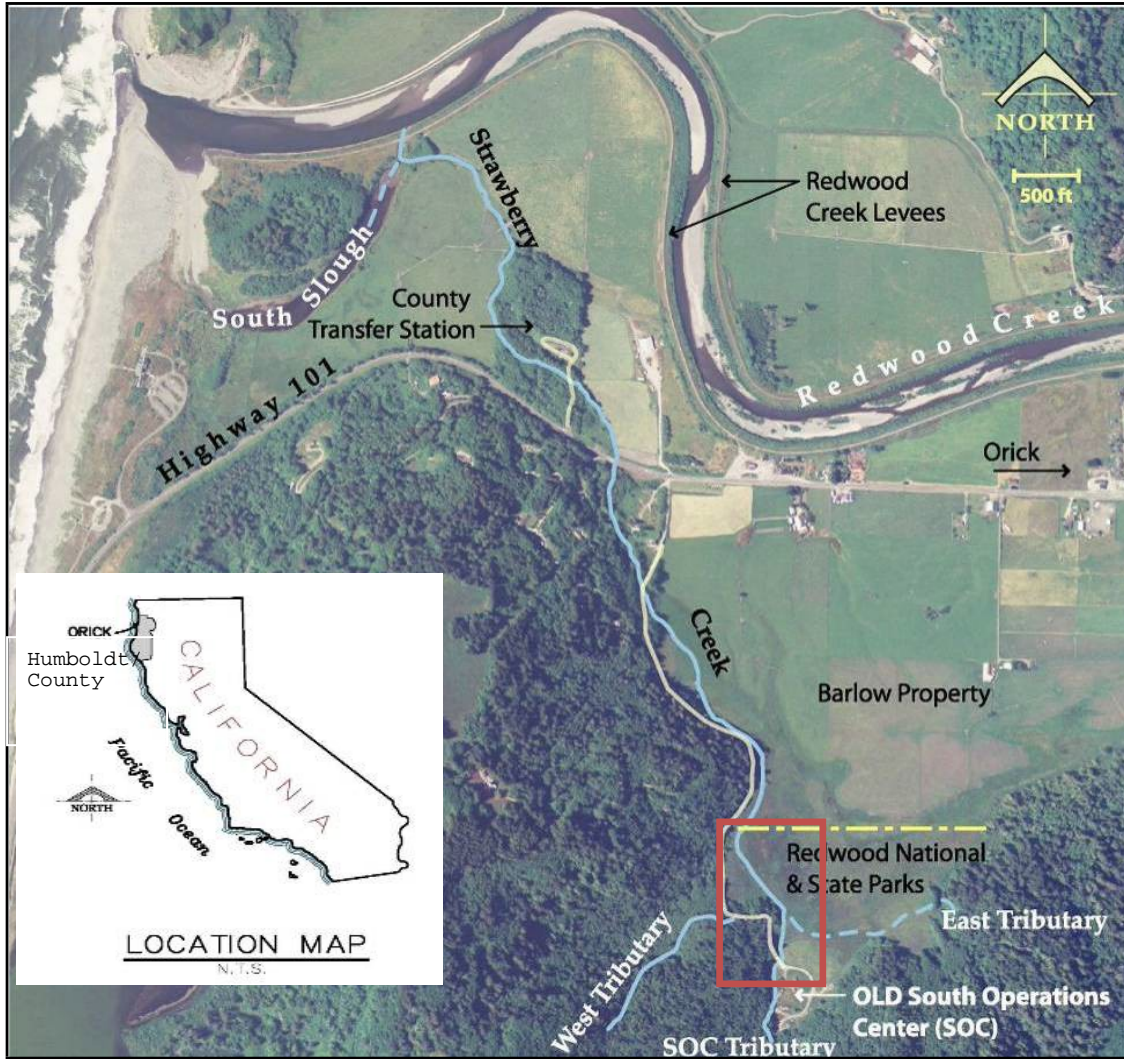


Figure 1. Approximate location of the proposed Redwood Creek Restoration project, indicated in Red box.