



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: Lower Berryessa Creek Flood Control Improvements

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1. **INTRODUCTION:** The Santa Clara Valley Water District (SCVWD), through its agent, ESA, 225 Bush Street, Suite 1700, San Francisco, California, 94104 (Contact: Priya Finnemore, phone: 415-896-5900), has applied to the U.S. Army Corps of Engineers (USACE), San Francisco District, for a Department of the Army Permit for temporary impacts to jurisdictional waters of the United States associated with the Lower Berryessa Creek Flood Control Improvement Project (Project), located in Santa Clara County, California. 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's approximate 11,750 linear feet of flood control channels fall entirely within a developed portion of the City of Milpitas in eastern Santa Clara County, generally within the area bounded by Calaveras Boulevard to the south, I-880 to the west, Dixon Landing Road to the north, and within 1,000 feet of I-680 to the east. The area can be found on the Milpitas USGS 7.5" Quadrangle map (Figure 1, Regional/Vicinity Map).

The Project is located within 8,820 feet of Lower Berryessa Creek and 2,835 feet of Calera Creek; a short 75-foot section of Tularcitos Creek and a short 30-foot section of Lower Penitencia Creek would also be affected at their confluences with Lower Berryessa Creek (see Figure 2, Project Area). The extent of work within Lower Berryessa Creek extends upstream from the confluence of Lower Penitencia and Berryessa Creeks to the downstream face of the bridge crossing of Calaveras Boulevard (Figure 3). Work in Lower Calera Creek begins

at the confluence of Berryessa Creek and extends upstream approximately 2,835 linear feet to the drop structure behind Milpitas High School (Figure 4).

Project Site Description: Along the 8,820 feet of Berryessa Creek within the project footprint, the SCVWD has defined seven reaches: A through F (see Figure 3). Within these reaches, Berryessa Creek is a managed flood control channel, contained mostly in human made, earthen, trapezoidal channels within earthen levees. Exceptions include a 210-foot long concrete lined section at the Tularcitos Creek confluence and the SFPUC Hetch Hetchy Aqueduct crossing (Reach F), and a 700-foot long concrete lined section in the vicinity of the UPRR crossings near North Abel Street (Reach C). Both concrete lined channel lengths (reaches C and F within Berryessa Creek; Figure 3) exhibit a simple trapezoidal channel cross section with no maintenance roads. The remaining reaches A, B, D, E, and G within Lower Berryessa Creek, which constitute the majority of the proposed project area within Lower Berryessa Creek, exhibit a simple trapezoidal channel with bank slopes no steeper than 2:1. The reaches contain a total of four maintenance roads ranging in width between 10 to 18 feet that are located on both sides of the creek channel, with 2 maintenance roads on the top of levee banks, and two roads within the channel. These roads provide access for the SCVWD to conduct routine maintenance activities, including sediment and vegetation removal, along the banks and in the channel.

The Lower Calera Creek Element begins at the confluence of Berryessa Creek and extends upstream approximately 3,000 linear feet to the drop structure behind Milpitas High School. The SCVWD has divided this element of Lower Calera Creek into two reaches: A and B (see Figure 4). Within this project footprint, the

creek is contained in culverts under the UPRR tracks, Arizona Avenue and North Milpitas Boulevard. From the UPRR tracks to North Milpitas Boulevard (approximately 470 feet), the channel is a concrete control frame flood control channel with vertical concrete banks. Upstream of North Milpitas Boulevard, the bottom channel width is approximately 10 feet. Maintenance roads that are between eight and 12 feet wide occur along the channel top of bank between North Milpitas Boulevard and the drop structure behind Milpitas High School.

Project Description: As shown in the attached drawings, the applicant proposes to provide flood control improvements along approximately 8,820 feet of Lower Berryessa Creek from the downstream face of the bridge crossing of Calaveras Boulevard at the upstream end to the confluence of Lower Penitencia and Berryessa Creeks at the downstream end, and including both a short (30 foot) section of Lower Penitencia Creek at its confluence of Lower Berryessa Creek and a short (75 foot) section of Tularcitos Creek at its confluence with Lower Berryessa Creek. Improvements within this stretch of Lower Berryessa Creek have been broken into seven reaches, as depicted in Figures 5A through 5C, and would include: reconstructing levees and replacing existing levees with floodwalls, improvements to existing maintenance roads, and bridge improvements. Proposed improvements for Lower Calera Creek are depicted in Figure 6 and would include: reconfiguring the channel and constructing concrete floodwalls along each side of the existing channel, construction of new headwalls, construction of a low earthen bench within the channel that would help create habitat and maintain the low flow channel within the creek, and construction of a maintenance road. The approximate project staging and storage areas identified for the Lower Berryessa and Lower Calera Creek Project elements are shown on Figure 7, which provides a summary of the location and area for construction staging.

Reconstructing the levees along Lower Berryessa Creek would result in approximately 164,000 cubic yards of material cut from the existing levee on the floodwall side (southwest) and a portion of the existing levee on the reconstructed levee side (northeast). Some of this material would be used onsite as fill to increase the height and width of the existing levee. The Lower Berryessa Creek Project Element would require an estimated 184,000 cubic yards (23,000 truckloads) of fill, including native soil, cement, soil treatment, concrete, and other construction supplies. Construction within Lower Calera Creek would result in approximately 2,200 cubic yards of material that would be cut from one side of the creek upstream of

Milpitas Boulevard and approximately 2,000 cubic yards of material that would be excavated for floodwalls. Minor quantities of this material would be used onsite as fill. Lower Calera Creek would require an estimated 4,200 cubic yards (700 truckloads) of fill, including native soil, cement, soil treatment, concrete, and other construction supplies.

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 for the proposed Lower Berryessa Creek Flood Control Improvement Project is flood protection.

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 increase flood flow capacity within Lower Berryessa and Calera Creeks to contain the one percent flood, also known as the 100-year flood, with adequate freeboard to meet the SCVWD's requirements. The need for the proposed Project is grounded in the findings of the SCVWD's 2010 Lower Berryessa Creek Planning Study Report (PSR), which found inadequate capacity within the Lower Berryessa Creek system to convey the current calculations of 100-year storm flows

Project Impacts: An estimated total of 145,000 cy of soil, 17,000 cy of concrete, and 22,000 cy of soil-cement are proposed to be placed within and along the widened creek reaches within the project area, to accomplish the proposed project objective of improving flood protection. However, the placement of fill in jurisdictional waters would be offset by the excavation and widening of the channels as an integral part of the Project, thereby providing an overall increase in channel width, cross-section, and floodplain capacity, and resulting in a net increase in jurisdictional waters and wetlands and channel diversity. As a result, impacts to waters and/or wetlands are characterized as temporary, and the discharge of fill material within jurisdiction would not result in a net permanent loss of waters. Instead, project completion would result in a net gain in jurisdictional waters and wetlands and channel diversity.

A total of 9.383 acres of jurisdictional waters would

be temporarily impacted by project construction activities. Of these, a total of 5.22 acres of wetlands would be temporarily impacted; the remaining 4.17 acres of temporary impacts would be to unvegetated open waters. Table 4-1 summarizes the temporary impacts anticipated to jurisdictional waters, by aquatic resource type and creek location, associated with the Project.

Following completion of construction, which is scheduled to occur in two distinct construction (dry) periods over the course of two consecutive years, the areas of disturbance would be re-contoured to reflect the preconstruction contours, and habitats would be allowed to passively return. Open waters are expected to return immediately following the conclusion of construction activities; wetland habitat is expected to predominantly return within one rainy season.

Proposed Mitigation: The SCVWD has designed the Project to avoid converting flood control channel bed material from earthen to impervious materials such as concrete, rip-rap, or other hard structural lining under the proposed Project; instead, the existing natural channel bottom would be maintained. With the above measures, permanent impacts have been avoided entirely under the proposed Project. To minimize potential impacts to jurisdictional waters associated with the Project, the SCVWD would implement seasonal and wet weather avoidance, would sequence the in-water work schedule over two construction seasons to reduce compounded impacts, and would implement numerous BMPs from their BMP Handbook and SMP, designed to minimize impacts to jurisdictional waters, water quality, and sensitive species.

At the conclusion of project construction, natural streambed contours would be established and open water (non-wetland) habitat would return, as water returns to the channel and brings with it sediment and subsequent recolonization by volunteer species; therefore, impacts to these non-wetland habitats are expected to be self mitigating. Mitigation for the temporary impacts to 5.22-acres of fresh and tidal wetlands is proposed as a combination of increasing open water habitat within the project area, increasing opportunity for wetland reestablishment within the increased channel width of Lower Berryessa Creek, and the creation of earthen benches to allow for the establishment of in-channel habitat. The proposed channel widening and increase in channel topographic diversity would result in a net gain in wetland habitat following project completion. Specifically, the creation of low earthen benches would

result in wetland establishment and in-channel habitat for an estimated total of 2.68 acres in the project area. In addition, the Project would expand the Lower Berryessa Creek's channel area from 8.26 acres to 10.86 acres; consequently, 2.60 acres of additional aquatic habitat would develop naturally within Lower Berryessa Creek after project completion. When combined, the expansion of the channel and the creation of vegetated earthen benches would result in the establishment of 5.28 additional acres (2.68ac earthen benches + 2.60ac channel widening) of in-channel habitat beyond the 5.22 acres that currently exist. All 4.17 acres of open water habitat within the project area is expect to return following project completion, as in-stream flows, sediment, and volunteer species return at the conclusion of project construction.

The establishment of 5.28 acres of new in-channel aquatic habitat, plus the passive re-establishment of the 5.22 acres of wetlands temporarily impacted during construction, would mitigate for 5.22-acres of temporary wetland impacts within the project area at a ratio of slightly more than 2-to-1 (10.5 acres of mitigation for 5.22 acres of impact). The 4.17 acres of open water habitat temporarily impacted would re-establish at a 1:1 ratio.

Project Alternatives: The SCVWD considered numerous design alternatives during the development of the proposed project, in order to avoid and minimize impacts to the existing streambed and associated habitat to the extent possible. The consideration of alternatives and the selection of the currently proposed project design will be addressed in detail in a 404(b)(1) Alternatives Analysis. The Corps will conduct an independent review of these project alternatives.

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, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, California 94612, by the close of the comment period.

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 San Francisco Bay Conservation and Development Commission. Coastal zone management issues should be directed to the Executive Director, San Francisco Bay Conservation and Development Commission, 50 California Street, Suite 2600, San Francisco, California 94111, 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 (CNDDDB), 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 are present at the project location or in its vicinity, and may be affected by project implementation:

The California red-legged frog (CRLF: *Rana draytonii*) is federally listed as threatened (Federal Register, 1996a), and is a California species of special concern. The proposed project area does not fall within critical habitat for CRLF. The nearest CNDDDB records for CRLF are located approximately four miles away from the project area. Within Lower Berryessa and Lower Calera Creeks, only marginal dispersal habitat for CRLF has been observed. In-stream aquatic habitat within the project area does not provide suitable breeding habitat in the form of deep, cool pools or slack water. To address potential project related impacts to CRLF, USACE will initiate informal consultation with USFWS, pursuant to Section 7(a) of the Act. 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 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 *preliminary* 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 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. 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 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 practicable alternative to the project that would result in less adverse impact to the aquatic ecosystem, while not causing other major adverse environmental consequences. 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 Holly Costa, 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/>.