United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

In Reply Refer To:
81420-2011-CPA-0084-2

APR 26 2013

Alicia Kirchner
Chief, Planning Division
Corps of Engineers, Sacramento District
1325 J Street
Sacramento, California 95825-2922

Dear Ms. Kirchner:

The Corps of Engineers has requested coordination under the Fish and Wildlife Coordination Act (FWCA) for the Berryessa Creek Flood Control Project. The proposed flood control project is located on Berryessa Creek in Santa Clara County, California. The enclosed report constitutes the Fish and Wildlife Service's FWCA report for the proposed project.

If you have any questions regarding this report, please contact Harry Kahler, Fish and Wildlife Biologist at (916) 414-6612, or Doug Weinrich, Habitat Conservation Division Chief at (916) 414-6563.

Sincerely,

Daniel Welsh
Acting Field Supervisor

Enclosure

cc:
Jamie LeFevre, COE, Sacramento, CA
NOAA Fisheries, Sacramento, CA
Regional Manager, CDFW, Yountville, CA
Central Valley Flood Protection Board, Sacramento, CA

FISH AND WILDLIFE COORDINATION ACT REPORT
BERRYESSA CREEK FLOOD CONTROL PROJECT
April 2013

This is the Fish and Wildlife Service's (Service) Fish and Wildlife Coordination Act (FWCA) report on the effects of the proposed Berryessa Creek Flood Control Project on fish and wildlife resources along Berryessa Creek in Milpitas, California. This report has been prepared under authority of, and in accordance with, the provisions of the Fish and Wildlife Coordination Act (16 U.S.C. sec 661).

BACKGROUND

The Berryessa Creek watershed is located in Santa Clara County, California, south of San Francisco Bay. Berryessa Creek is a tributary to the Coyote Creek system, which flows into the southernmost end of San Francisco Bay. The creek flows west out of the Diablo Range and into the residential neighborhoods of San Jose and Milpitas, finally turning north through industrial portions of Milpitas before joining Lower Penitencia Creek.

The proposed work is located on Berryessa Creek between East Calaveras Blvd. and Hwy 680. The downstream end of the reach terminates at East Calaveras Blvd and extends upstream 2.25 miles.

Since the completion of the Draft Berryessa Creek Project General Design Memorandum (GDM) in December 1993, the proposed plan has not been supported by the local community primarily due to the concrete channel features that were recommended. Also, refinements in design, costs, and benefits resulted in costs that exceeded benefits, thereby precluding Federal involvement in the project. A project study plan was developed in July 1996 to identify a more locally acceptable plan and complete a GDM. However, all planning and engineering work ceased in October 1996 due to unresolved issues on the direction and funding of the study. Since flooding is still a significant problem along Berryessa Creek, the Santa Clara Valley Water District (SCVWD) requested that the Corps reevaluate flood protection alternatives to find a more environmentally acceptable solution.

The primary purpose of the ongoing reevaluation study is to assess the feasibility of modifying the project to: 1) reduce flood damages to populated areas, 2) reduce sedimentation and maintenance requirements, 3) provide access and recreation to the public, as feasible, 4) restore environmental values whenever possible through the study reach consistent with the flood damage reduction purpose of the project, and 5) avoid and minimize effects to riparian and aquatic habitat.

PROJECT DESCRIPTION

Five project alternatives were evaluated; however, Alternative 1 and Alternative 5 were not being pursued (Corps 2013). Alternative 1 is the no action alternative and would not meet project objectives. Alternative 5 is the earlier authorized project which was not pursued due to high costs and lack of community support. Alternatives previously considered, Alternative 3A

and Alternative 3B, were removed upon refined consideration of design performance in relation to project objectives. Alternative 2A, Alternative 2B, and Alternative 4 have similar project footprints, but offer different levels of protection. Alternative 2A provides a 100-year flood protection, whereas Alternative 2B and Alternative 4 provide a Federal Emergency Management Agency (FEMA) certified level of protection (i.e., the means to pass a 200-year flood event). The project features unique to each alternative are briefly described below.

Alternative 1: *No Action*
The No Action Alternative was carried forward and analyzed to provide a basis from which to assess the advantages and disadvantages of the other study alternatives. This alternative assumes the likely future conditions in the project area without implementation of any of the action alternatives. Under this alternative, the Authorized Project would not be completed, objectives for flood protection would not be met, and an unacceptable public health and safety hazard (flooding in the cities of Milpitas and San Jose) would continue to occur.

Alternative 2A: Incised Trapezoidal Channel (Moderate Protection)
Alternative 2A involves modification and/or replacement of bridge and culvert crossings and modification of the channel reaches downstream of I-680. The leveed channel reaches would have a modified earthen trapezoidal shape with bottom width varying from 10 feet to 50 feet. The side slopes would have 2 horizontal (H) to 1 vertical (V) ratio and cellular bank protection. The earthen levees would vary from 0 to 4 feet high and are designed to contain the 0.01 over-topping probability event discharges.

Alternative 2B: Incised Trapezoidal Channel (FEMA Protection)
Alternative 2B involves modifications and/or replacement of bridges and culvert crossings. The channel reaches would have a modified earthen trapezoidal shape with bottom width varying from 10 feet to 70 feet. Side slopes would have 2H: 1V ratio and cellular bank protection. The floodwalls would be constructed 2 to 5 feet high where necessary. The location of the access road would vary.

Alternative 4: Walled Trapezoidal Channel (FEMA Protection)
The bridge and culvert modifications for Alternative 4 are consistent with Alternative 3. Alternative 4 involves the construction of vertical concrete floodwalls ranging from 0 to 5 feet high. Two vegetated floodplain benches; a 32-foot-wide bench on the left bank, and a 10-foot-wide bench on the right bank would be constructed. The right-of way restrictions require adaptation of the typical channel cross section to accommodate an access road within the available right-of-way. In areas with limited right-of-way, the access road would need to be located on the inside of the floodwall in order to allow for additional conveyance area. Transition ramps would be needed in areas where the access road location changes.

Alternative 5: Previously Authorized Project
The previously authorized project consists of a sediment basin constructed upstream of Old Piedmont Road, modifications of the existing sediment basin, earthen levees in the greenbelt, and a concrete trapezoidal channel downstream of I-680.

The Recommended Plan

Project costs were developed for Alternatives 2A, 2B, and 4. Project costs for Alternative 5, the previously authorized alternative, have been updated to the 2012 price levels. In contrast, project benefits for each alternative were determined, based on protection from expected annual damages. The expected annual damages were estimated using risk-based statistical analyses. Annual benefits represent the difference between the without- and with-project equivalent annual damage. For analysis purposes the project life is estimated to be 50 years. Based on the resultant cost/benefit ratio for each alternative over the life of the project, Alternative 2A was chosen as the Recommended Plan (Plan).

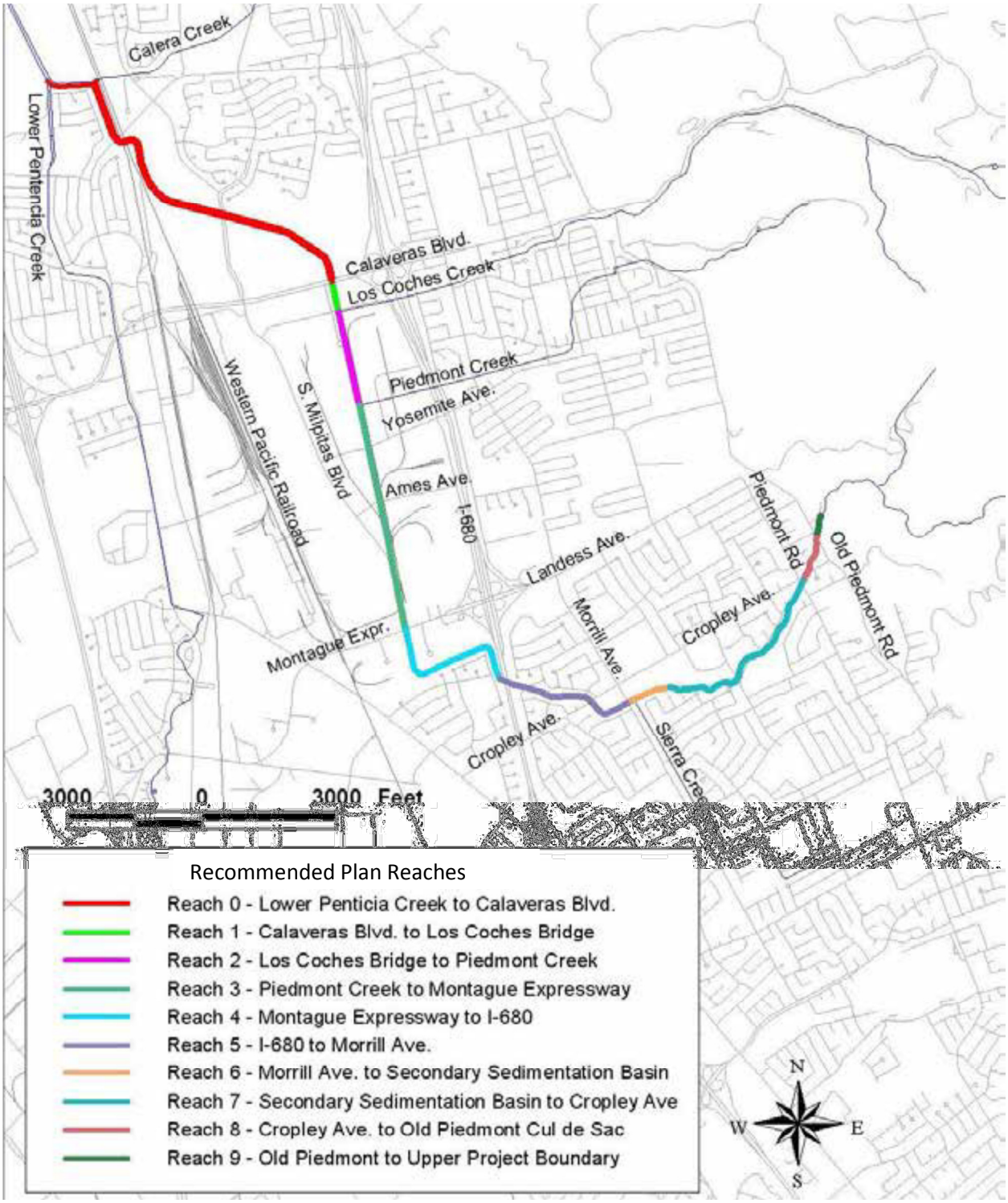
The Plan consists of an earthen trapezoidal channel section with varying bottom width and 2H:1V sideslopes. Levee top widths (applied to fill placement along the channel banks) would have a minimum width of 12 feet. Where the top of the levee serves as the primary access road, the minimum width would be 18 feet. Free-standing concrete floodwalls would be constructed by Montague Expressway as well as between the Piedmont Creek confluence and Calaveras Boulevard (Figure 1). Concrete floodwalls would include 42-inch safety railing for any wall heights above 2 feet. An access road would be located along the left bank channel slope downstream of Yosemite Avenue. Transition structures at Montague Expressway, the Union Pacific Railroad (UPRR) culvert (in Reach 3), Los Coches Street, and Calaveras Boulevard would be constructed. Transition structures (with variable sloping wingwalls) would extend for 50 to 75 feet upstream or downstream of the bridge face. The existing UPRR trestle would be replaced with a triple barrel concrete box culvert, and a temporary bypass would be needed during construction. Storm drains entering the channel, or running parallel to the channel, situated within the proposed channel excavation areas would be relocated.

A 15 foot-wide obstruction-free zone covers the entire project extent and is proposed outside of any excavation or floodwall on both sides of the Berryessa Creek channel. A maintenance road would be constructed to allow access to the channel for flood-fighting and inspection purposes. The use of this maintenance road as a recreational trail is being investigated in coordination with the City of Milpitas and SCVWD.

Implementation of the Plan would disturb 0.39 acre of wetlands dominated by cattails, a wetland obligate plant species. However, since stream hydrology would not be permanently affected, the cattails would likely reestablish naturally within a year to 3 years after construction. The existing waterside habitat consists of a sparse cover of herbaceous vegetation and nonnative grasses. Herbaceous vegetation would be removed during construction; however, the project reaches would be re-vegetated by hydroseeding after construction. In-creek channel work would occur in the dry season (mid-April to mid-October) when flows are expected to be low or nonexistent. To ensure that there would be no effect on any listed species, preconstruction surveys would be conducted prior to any work scheduled.

The bank lacks any trees or shrubs that may provide cover or wildlife movement opportunities. The ability of the landside vegetation to function as wildlife movement corridors is limited because of residential and industrial development. However, Corps guidance requires the removal of woody vegetation on the levee prism and within 15 feet of the toe of the levee.

Figure 1. Berryessa Creek Flood Control Project reaches included in the Recommended Plan, City of Milpitas, Santa Clara County, California, 2013. The Recommended Plan is Alternative 2A.



About 15 trees, located between East Calaveras Boulevard and Los Coches Street, may need to be removed for construction access. These trees are located only on the landside of the floodwall.

Construction would occur from May to October over two or three construction seasons depending on funding. Mobilization would occur the first week of May and demobilization would last one week at the end of October. The construction schedule would be a 5 day work week with an 8-10 hour work day.

BIOLOGICAL RESOURCES

Berryessa Creek is a tributary to Penitencia Creek and part of the Coyote Creek system, which flows out of the Diablo Range, through the residential neighborhoods of San Jose and Milpitas, and into the southernmost end of San Francisco Bay.

Vegetation

Suitable habitat for wildlife in Berryessa Creek occurs outside project boundaries in Berryessa Park and the greenbelt, as well as upstream of Old Piedmont Road. Downstream of the greenbelt, the vegetation consists of patchy annual grasses separated by bare dirt. The SCVWD maintains the levees and the channel inside the project area. Practices include removal of vegetation and sediment from the bottom of the channel and the use of herbicides on the stream banks. Frequent spraying or mowing of creek bank vegetation prevents the establishment of riparian species. The vegetation in and around the project area include cattails, floating primrose, willow, hyssop loosestrife, watercress, brooklime, rabbit foot grass, barnyard grass, and knotweed. Landside trees include small patches of non- native and/or invasive trees including eucalyptus, black acacia, Mexican palm, Australian willows, fruit trees, and ornamental trees. These trees are along industrial property boundaries by the levee access road.

Wildlife

The project area has poor to non-existent wildlife habitat due to channelization and vegetation removal. Field surveys conducted in the project area have documented some of the common species that inhabit the area. Bird species observed include: great egret, black-crowned night heron, western scrub jay and mourning dove. Amphibians found in the creek include Pacific treefrog and western toad. Mammals observed include ground squirrels and muskrat, as well as feral cats. As Berryessa Creek is located adjacent to highly urbanized areas, feral cats were also observed (SCVWD 2005).

Fish

Berryessa Creek upstream of Calaveras Boulevard is an intermittent stream with occasional flows in the winter, but middle reaches of the creek are dry throughout most of the year. The only portion of the creek with perennial flow and potentially suitable habitat for small, warmwater fish species is downstream of the confluence with Piedmont Creek. However, this

reach has seasonally high water temperatures and low dissolved oxygen that would be lethal to anadromous fish and most other fish species during the summer months.

Based on the results of a fisheries investigation conducted by Environmental Science Associates, the only fish species likely to be found in the project area are the mosquitofish and California roach and only in the reach between Calaveras Boulevard and Piedmont Creek where there are constant flows (Rieger and Podlech 2002). The mosquitofish is a non-native freshwater species introduced throughout California for mosquito control. This fish is adapted for life in shallow, often stagnant water where predatory fish are absent and temperatures are too high for other species. The California roach is a native species widely distributed throughout central and northern California. This species is tolerant of high temperatures and low oxygen levels, which enables them to survive in areas unsuitable for most other fish species. California roach thrive when found alone or in association with one or two other species. Neither the mosquitofish or California roach is State or federally listed, or has any special status.

Potential steelhead use of Berryessa Creek is limited by several physical conditions. Continuous flows of suitable depth (at least 7 inches) for adult steelhead passage occurred for only an estimated 2 to 5 days during the 2-year flow monitoring study. Reaches with a normally dry creek bed, low flows, sheet flows over concrete channels, poor spawning substrate, and physical barriers to passage preclude steelhead migration into Berryessa Creek.

Endangered Species

Appendix A contains a list of federally-listed species which may be found in Santa Clara County. There are several State and federally listed species which could occur within or around the project area. The Corps has determined that the project would have no effect on federally-listed threatened or endangered species, and therefore no further consultation is required with the Service or NOAA Fisheries (Corps 2013).

A variety of suitable habitats for the western pond turtle, a State-listed species of concern, are present within the Coyote Creek watershed. These habitats include aquatic, riparian woodland, and adjacent upland. Adults have been observed at various locations in Coyote Creek (SCVWD 2005). The stream channel downstream from Los Coches Creek has a small, constant flow throughout the year, and may provide suitable aquatic habitat for the western pond turtle. However, steep channel slopes do not provide suitable nesting habitat for western ponds turtles within the study area. Lower Berryessa and Lower Penitencia creeks do provide some marginal basking habitats within the channel; yet this species has not been documented to occur. The Corps has determined that due to the limitations in suitable habitat, the project would have no effect on State-listed species as well (Corps 2013).

DISCUSSION

Service Mitigation Policy

The recommendations provided herein for the protection of fish and wildlife resources are in accordance with the Service's Mitigation Policy as published in the Federal Register (46:15; January 23, 1981).
The Mitigation Policy provides Service personnel with guidance in making recommendations to protect or conserve fish and wildlife resources. The policy helps ensure consistent and effective Service recommendations, while allowing agencies and developers to anticipate Service recommendations and plan early for mitigation needs. The intent of the policy is to ensure protection and conservation of the most important and valuable fish and wildlife resources, while allowing reasonable and balanced use of the Nation's natural resources.

Under the Mitigation Policy, resources are assigned to one of four distinct Resource Categories, each having a mitigation planning goal which is consistent with the fish and wildlife values involved. The Resource Categories cover a range of habitat values from those considered to be unique and irreplaceable to those believed to be much more common and of relatively lesser value to fish and wildlife. The Mitigation Policy does not apply to threatened and endangered species, Service recommendations for completed Federal projects or projects permitted or licensed prior to enactment of Service authorities, or Service recommendations related to the enhancement of fish and wildlife resources.

In applying the Mitigation Policy during an impact assessment, the Service first identifies each specific habitat or cover-type that may be impacted by the project. Evaluation species which utilize each habitat or cover-type are then selected for Resource Category analysis. Selection of evaluation species can be based on several rationale, as follows: (1) species known to be sensitive to specific land- and water-use actions; (2) species that play a key role in nutrient cycling or energy flow; (3) species that utilize a common environmental resource; or (4) species that are associated with Important Resource Problems, such as anadromous fish and migratory birds, as designated by the Director or Regional Directors of the Fish and Wildlife Service. (Note: Evaluation species used for Resource Category determinations may or may not be the same evaluation species used in a HEP application, if one is conducted). Based on the relative importance of each specific habitat to its selected evaluation species, and the habitat's relative abundance, the appropriate Resource Category and associated mitigation planning goal are determined.

Mitigation planning goals range from "no loss of existing habitat value" (i.e., Resource Category 1) to "minimize loss of habitat value" (i.e., Resource Category 4). The planning goal of Resource Category 2 is "no net loss of in-kind habitat value"; to achieve this goal, any unavoidable losses would need to be replaced in-kind. "In-kind replacement" means providing or managing substitute resources to replace the habitat value of the resources lost where such substitute resources are physically and biologically the same or closely approximate those lost.

In addition to mitigation planning goals based on habitat values, Region 8 of the Service, which includes California, has a mitigation planning goal of no net loss of acreage and value for wetland habitat. This goal is applied in all impact analyses.

In recommending mitigation for adverse impacts to fish and wildlife habitat, the Service uses the same sequential mitigation steps recommended in the Council on Environmental Quality's regulations. These mitigation steps (in order of preference) are: avoidance, minimization, rectification of measures, measures to reduce or eliminate impacts over time, and compensation.

Two fish and/or wildlife habitats were identified in the Berryessa Creek Flood Control Project areas which have the potential to be impacted by the project. These are emergent wetland and annual grassland. The resource categories, evaluation species, and mitigation planning goal for the habitats impacted by the project are summarized in Table 1.

Table 1. Resource categories, evaluation species, and mitigation planning goals for the habitats impacted by the Berryessa Creek Flood Control Project.

COVER-TYPE	EVALUATION SPECIES	RESOURCE CATEGORY	MITIGATION GOAL
Emergent wetland	Great egret	2	No net loss of habitat while minimizing loss of in-kind value
Annual grassland	Red-tailed hawk	4	Minimize loss of habitat value

The evaluation species selected for the emergent wetland cover-type that would be impacted is the great egret. This species was selected because of: (a) their key role as predators in the ecosystem, (b) the Service's responsibility for their protection and management under the Migratory Bird Treaty Act, and (c) their overall high non-consumptive value to humans (i.e., bird watching). In general, emergent wetland habitat is valuable for a multitude of wildlife species, which include birds, mammals, reptiles, and amphibians. In the project area this cover-type is only located in the floodplain of the creek. Due its relative scarcity, the Service designates the emergent wetland cover-type in the project area as Resource Category 2. Our associated mitigation planning goal for these areas is "no net loss of habitat value while minimizing loss of in-kind habitat value."

The evaluation species selected for the annual grassland cover-type is the red-tailed hawk, which utilizes these areas for foraging. This species was selected because of the Service's responsibility for their protection and management under the Migratory Bird Treaty Act, and their overall high non-consumptive values to humans. Annual grassland areas potentially impacted by the project vary in their value to the evaluation species, depending on the degree of human disturbance, plant species composition, and juxtaposition to other foraging and nesting areas. Overall, the annual grassland values in the project area are low. Therefore, the Service designates the annual grassland cover-type in the project area as Resource Category 4. Our associated mitigation planning goal for these areas is "minimize loss of habitat value."

Wildlife species inhabiting habitat around the construction area may be temporarily displaced during construction activities, but are expected to return when construction is completed. Construction impacts to annual grassland on the levee and adjacent to the levee toe would be temporary and would be restored following construction activities by reseeding the impacted areas with native grasses.

Based on our review, the proposed project would result in the temporary loss of habitat acreage and value for species inhabiting emergent wetland and annual grassland habitat. Wildlife species utilizing these areas would be displaced during construction activities and would likely return to the area following the completion of the project.
The highly impacted nature of the creek provides little habitat or diversity for fish and wildlife species in its current state. Designs focused on alternatives which provide benefits to fish and wildlife through the creation of a more natural stream profile should be completed. The creation of vegetated floodplain benches is a step in this direction and could significantly improve the utility of the creek for fish and wildlife as well as provide an appropriate level of flood protection.

Alternative 2A, identified as the Recommended Plan, is also identified as the environmentally preferred alternative. The environmentally preferred alternative is the alternative that causes the least damage to the biological and physical environment and protects, preserves, and enhances natural resources while accomplishing the proposed project's objectives.

RECOMMENDATIONS

The Service recommends that the Corps:

1) Avoid impacts to any native trees, shrubs, and aquatic vegetation within and adjacent to the site to the extent possible. If a native tree or shrub with a diameter at breast height (dbh) of 2 inches or greater is encountered and cannot be avoided, it should be replaced in-kind so that the combined diameter of the container plantings is equal to the combined diameter of the trees removed.

2) Avoid future impacts at the site by ensuring any fill material used for construction is free of contaminants.

3) Avoid impacts to migratory birds nesting in trees along the access routes and adjacent to the proposed sites by conducting preconstruction surveys for active nests along proposed haul roads, staging areas, and construction sites. This would be especially important if construction begins in the spring. Work activity around active nests should be avoided until young have fledged.

4) Minimize impacts by reseeding all disturbed areas at the completion of construction with native forbs and grasses.

5) Minimize the impact of removal and/or trimming of any trees and shrubs by having these activities supervised and/or completed by a certified arborist.

6) Implement as described all mitigation measures in Chapter 5 of the March 2013, Draft General Reevaluation Report and Environmental Impact Statement of the Berryessa Creek Project.

7) Continue work with the Service and other resource agencies to quantify project affects and determine mitigation needs as modifications to the selected project alternative develop.

LITERATURE CITED

Rieger, P. and M. Podlech. 2002. Berryessa Creek Levee Project Fisheries Investigations. Environmental Science Associates, Milpitas, California.

Santa Clara Valley Water District (SCVWD). 2005. Summary of Biological Surveys Conducted by Santa Clara Valley Water District. Prepared by Melissa Moore, biologist, Milpitas, California.

U.S. Army Corps of Engineers (Corps). 2013. Berryessa Creek Project, Santa Clara County, California, Volume 1 of 2: Draft General Reevaluation Report and Environmental Impact Statement, Sacramento, California. 424 pp.

Appendix A

Federal Endangered and Threatened Species that may occur in or may be affected by the project

U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 130422124442

Database Last Updated: September 18, 2011

No quad species lists requested.

County Lists

Santa Clara County

Listed Species

Invertebrates

Branchinecta conservatio
Conservancy fairy shrimp (E)

Branchinecta lynchi
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Euphydryas editha bayensis
bay checkerspot butterfly (T)
Critical habitat, bay checkerspot butterfly (X)

Lepidurus packardi
Critical habitat, vernal pool tadpole shrimp (X)
vernal pool tadpole shrimp (E)

Fish

Acipenser medirostris
green sturgeon (T) (NMFS)

Eucyclogobius newberryi
tidewater goby (E)

Hypomesus transpacificus
delta smelt (T)

Oncorhynchus kisutch
coho salmon - central CA coast (E) (NMFS)
Critical habitat, coho salmon - central CA coast (X) (NMFS)

Oncorhynchus mykiss
Central California Coastal steelhead (T) (NMFS)
Central Valley steelhead (T) (NMFS)
Critical habitat, Central California coastal steelhead (X) (NMFS)
South Central California steelhead (T) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)
Critical habitat, CA tiger salamander, central population (X)

Rana draytonii
California red-legged frog (T)
Critical habitat, California red-legged frog (X)

Reptiles

Gambelia (=Crotaphytus) sila
blunt-nosed leopard lizard (E)

Masticophis lateralis euryxanthus
Alameda whipsnake [=striped racer] (T)
Critical habitat, Alameda whipsnake (X)

Thamnophis gigas
giant garter snake (T)

Thamnophis sirtalis tetrataenia
San Francisco garter snake (E)

Birds

Brachyramphus marmoratus
Critical habitat, marbled murrelet (X)
marbled murrelet (T)

Charadrius alexandrinus nivosus
western snowy plover (T)

Pelecanus occidentalis californicus
California brown pelican (E)

Rallus longirostris obsoletus
California clapper rail (E)

Sternula antillarum (=Sterna, =albifrons) browni
California least tern (E)

Vireo bellii pusillus
Least Bell's vireo (E)

Mammals

Reithrodontomys raviventris
salt marsh harvest mouse (E)

Vulpes macrotis mutica
San Joaquin kit fox (E)

Plants

Acanthomintha duttonii
San Mateo thornmint (E)

Castilleja affinis ssp. neglecta
Tiburon paintbrush (E)

Ceanothus ferrisae
Coyote ceanothus (E)

Chorizanthe robusta var. robusta
robust spineflower (E)

Cirsium fontinale var. fontinale
fountain thistle (E)

Dudleya setchellii
Santa Clara Valley dudleya (E)

Eriophyllum latilobum
San Mateo woolly sunflower (E)

Hesperolinon congestum
Marin dwarf-flax (=western flax) (T)

Holocarpha macradenia
Critical habitat, Santa Cruz tarplant (X)
Santa Cruz tarplant (T)

Lasthenia conjugens
Contra Costa goldfields (E)
Critical habitat, Contra Costa goldfields (X)

Streptanthus albidus ssp. albidus
Metcalf Canyon jewelflower (E)

Suaeda californica
California sea blite (E)

Trifolium amoenum
showy Indian clover (E)

Proposed Species

Amphibians

Rana draytonii
Critical habitat, California red-legged frog (PX)

Key:

(E) *Endangered* - Listed as being in danger of extinction.

(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.

(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.

(C) *Candidate* - Candidate to become a proposed species.

(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.

(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be July 21, 2013.