



United States Department of the Interior



FISH AND WILDLIFE SERVICE
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In reply refer to:
08FBDT00-2016-I-0048

JAN 20 2016

Memorandum

To: Area Manager, Bay Delta Office, Bureau of Reclamation, Sacramento, California

From: Assistant Field Supervisor, Bay-Delta Fish and Wildlife Office, Sacramento, California
Jonat Whitbeck

Subject: Informal Consultation on the Upper Sacramento River Anadromous Fish Habitat Restoration Project, Market Street, North Cypress Avenue and Kapusta Open Space, the City of Redding, Shasta and Tehama Counties, California

This memorandum is in response to your December 15, 2015, electronic mail message sent to the U.S. Fish and Wildlife Service (Service), with an attached Biological Evaluation (BE) of the Market Street (St.) South, Cypress Avenue (Ave.) Bridge North and the Kapusta Open Space habitat restoration projects (proposed projects) (Figure 1) located in the City of Redding, which are all part of the Upper Sacramento River Anadromous Fish Habitat Restoration Project. The BE describes potential impacts by the proposed projects to federally listed species. The Bureau of Reclamation (Reclamation) is requesting the Service concur with their determination of may affect, not likely to adversely affect for the proposed projects. At question are the possible effects of the proposed projects on the federally-threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (VELB), the western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) (WYBC), and the California red-legged frog (*Rana draytonii*) (CRLF). The proposed projects are not within any designated critical habitat for listed species, therefore critical habitat will be unaffected by the proposed projects. Our primary concern and mandate is the protection of federally listed species, and this response has been prepared in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act).

The Service used the following in our review of your request: 1) your December 15, 2015, BE; and 2) other information on file at the Sacramento and San Francisco Bay-Delta Fish and Wildlife Offices.

Background

Reclamation proposes to create new side channels, modify existing side channels, and place gravel and instream habitat structure in the Sacramento River below Keswick Dam, near Market St., Cypress Ave and Kapusta Open Space. The proposed projects will increase and improve Chinook salmon and steelhead spawning and rearing habitat by replenishing spawning gravel and establishing additional side-channel habitat in the Sacramento River as part of the Central Valley Project Improvement Act (CVPIA), Section 3406 (b)(13). The need for the action derives from declining naturally spawned salmonid stocks due, in part, to loss of spawning and rearing habitat through curtailment of gravel recruitment from the blockage of the river channel by dams and the alteration in flow patterns.

Proposed Project Description

The proposed projects include the areas near Market St. (river mile [RM] 298.3), north of Cypress Ave. (RM 295), and the north end of Kapusta Open Space (RM 288). Work at the Market St. site will include gravel placement at a historic habitat improvement site for salmonid spawning. Work at Cypress Ave. and Kapusta Open Space will create side-channel habitat. Construction activities are anticipated to begin January 27, 2016, and to be completed no later than May 30, 2016. Any project sites that are not able to be completed by the end of May will be rescheduled for the end of 2016 depending on appropriate work windows.

Market Street South – RM 298.3

Market St. South is located at RM 298.3 on the southwest bank of the Sacramento River. The proposed project will place up to 15,000 cubic yards (yd³) of gravel within the river during low river flow conditions (i.e., less than 10,000 cubic feet per second [cfs]). Gravel will be placed along the bank and spread as far as is feasible into the channel using front end loaders under the flow conditions occurring during construction. The low river bank in the area allows easy access to the river so that front end loaders can transport and place gravel into the river channel. River access points are through gaps in vegetation selected to avoid the removal of, or disturbances to, large mature riparian trees and any sensitive plant species or habitats (e.g., elderberry, wetlands). Stockpile areas will be located within the project site boundaries.

Tandem transfer trucks (trucks pulling a trailer that can be telescoped into the truck bed) capable of carrying 24 tons will be used for transporting gravel to project sites. Single bed off road trucks capable of carrying approximately 50 tons will be used for transporting gravel within project work sites off of public roads.

Gravel will be placed in the river using dump trucks and front end loaders. Front end loaders will be wheeled to minimize impacts. Substrate will be graded with a bulldozer prior to gravel additions to remove armoring (surface layer of larger rock) or to meet topographic design specifications. Riffle supplementation involves gravel placed and contoured within the channel (partial or entire channel width) and graded to appropriate depths to provide immediate spawning habitat.

At Market St., front end loaders will pick up a bucket of gravel from the stockpile and drive from the stockpile into the river and carefully dump the gravel in a manner as to distribute it across the river bottom according to design parameters. Placement will proceed starting from the river access site and working out into the river from there. This will allow the loaders to drive on the newly placed gravel, thereby avoiding driving in overly deep water and distributing excess fines from the existing substrate. The loaders will distribute the gravel along the river bottom to create the hydraulic conditions necessary for salmonid spawning. This work will use two or three front end loaders for about one month. A tracked bulldozer or excavator will be used for grading the existing substrate and placed gravel as needed.

The Market St. project site contains several elderberry clusters located along access roads and near river access points.

Cypress Avenue Bridge North – RM 295.0

Cypress Ave. Bridge North is located at RM 295.0 just upstream of the Cypress Avenue Bridge along the east (left) river bank (Figure 2). This location involves reconnecting two partially functional side channels (northern and southern) to the main channel to increase juvenile salmonid rearing habitat. Existing unpaved trails will provide a route covering the length of the proposed project area. Trucks will access the trails by crossing under the Cypress Avenue Bridge from the south.

Heavy equipment (excavator, front end loader, and dump trucks) will be used to excavate the material according to the design specifications. The proposed project has been designed to minimize effects on existing vegetation and trees larger than six inches diameter by focusing on the areas where the side channel is currently inundated at flows greater than around 15,000 cfs. Woody material and boulders will be incorporated into the site to provide juvenile rearing habitat and stability to the entrances of the side channels.

Approximately 10,000 cubic yards of material will be excavated from the channels. It will be stockpiled on private land south of Cypress Avenue or in the river. The material stockpiled on land will be trucked to an offsite location.

Large woody material contributes to habitat diversity and creates and maintains foraging, cover, and resting habitat for both adult and juvenile anadromous fish. Woody material will be incorporated into the Cypress Ave Bridge North project site. The material will be field fitted during construction at locations with low velocity (1 foot/second or less at design flow) and held in place by burying a portion of the material in the substrate.

The Cypress Avenue Bridge North site contains a cluster of two elderberry shrubs located near each other, identified as elderberry #15 on Figure 2 (Figure 7 of the BE). Elderberry #15 is located on the upslope bank, about ten feet from where construction equipment will work in the channel. California Department of Fish and Wildlife (CDFW) personnel visited the site on November 17, 2015. The bank appears stable and shows no signs of active erosion (CDFW 2015). CDFW observed possible VELB exit holes in a dead elderberry stem.

Kapusta Open Space 1A Side Channel Restoration (Michalak Property) – RM 288.0

The Kapusta Open Space 1A Side Channel Restoration will create functional side channel rearing habitat for juvenile salmon. The channel currently is disconnected at the upstream and watered via the downstream connection. It is a backwater with invasive plant species and unsuitable conditions for salmonid rearing for much of the year. The restoration of flows in the side channel will create rearing habitat for salmonids including Chinook salmon (*Oncorhynchus tshawytscha*) and steelhead rainbow trout (*O. mykiss*). This will be done by excavating about 200 linear feet of the grass area along the upper portion of the alcove to re-connect to a historic side channel with the Sacramento River. The side channel will be excavated down approximately six feet to an elevation of 412.3 feet (ft) North American Vertical Datum of 1988 (NAVD 88) at the entrance. This excavation will be done completely from the grass area using an excavator. No machinery will enter the side channel or Sacramento River.

After excavation of the new channel segment, water from the Sacramento River will flow through the new channel restoring hydraulic connectivity through the side channel. The material from the channel (approximately 800 cubic yards) will be spread on an open area that was previously mined for gravel on City of Redding property. The material will be trucked to that area on an existing road.

The Kapusta Open Space site was also visited by CDFW personnel on November 17, 2015. A cluster of elderberry shrubs is located near the proposed access road.

Proposed Conservation Measures

Environmental commitments are measures or practices adopted to reduce or avoid adverse effects that could result from implementation of the proposed project.

Valley Elderberry Longhorn Beetle

Service Guidelines for VELB (Service 1999) will be implemented prior to and during all stages of the proposed project to avoid any potential adverse impacts to the species. The proposed project will adhere to the following conservation measures:

- All elderberry shrubs within 100 feet of the project area will be flagged. A 20 foot avoidance buffer will be established from the dripline of all elderberry shrubs within 50 feet of construction activity, using high visibility construction fencing. The construction fencing and flagging will be removed after the completion of construction activities.
- Signs with the following information will be erected along the high visibility construction fencing: “This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by ESA, as amended. Violators are subject to prosecution, fines, and imprisonment.” The signs should be clearly readable from a distance of 20 feet and must be maintained for the duration of construction.
- The Cypress Avenue Bridge North site will require specific measures to protect elderberry #15. Elderberry #15 is up-slope of where construction activities will occur. Reclamation will place rocks upstream of the bank to prevent erosion and install high

visibility fencing as close to the edge of construction as practical establishing a buffer of not less than 10 feet. Elderberry #15 will be monitored for not less than three years to ascertain whether any damage occurred as a result of construction activities. If adverse effects are detected in the future, Reclamation will contact the Service to determine if additional conservation measures will be required.

- Temporary stockpiling of excavated or imported material will occur only in approved construction staging areas and greater than 20 feet outside of the established driplines of elderberry shrubs. Excess excavated soil will be used on site or disposed of at a regional landfill or other appropriate facility.
- The contractor will ensure that dust control measures (e.g., watering) are implemented in the vicinity of any elderberry shrub within 100 feet of construction activities. To avoid affecting VELB, dirt roads will be watered at least twice each day when being used by gravel trucks and other project-related vehicles.

Western Yellow-billed Cuckoo

The proposed project action area currently does not provide suitable WYBC breeding habitat. However, WYBC may utilize the area as stopover foraging habitat. Due to the timing of WYBC presence in the action area (June through mid-September) it is unlikely the species would be present during construction activities. The proposed action will adhere to the following conservation measure:

- Vegetation removal will not occur between March 1 and August 31. Additionally, prior to any construction activities, Service approved surveys will be completed for the presence of nesting birds from February 15 through September 30. If WYBC are detected, Reclamation will consult with the Service on how to proceed.

California Red-legged Frog

Several selected sites include ponds created by former side-channels that could provide potential CRLF habitat. However, high fluctuations in flows and temperature have resulted in reduced suitable habitat for CRLF along many Central Valley rivers. The proposed action will adhere to the following conservation measures:

- A Service approved biologist will complete a habitat assessment to determine if CRLF habitat occurs within the proposed project sites. If potential habitat is determined to exist then surveys for CRLF following Service guidelines (Service 2005) will be conducted.

General

- A Service approved biologist will conduct environmental awareness training to instruct construction personnel crews about the identification and status of listed species, including the identification of elderberry shrubs, the status of VELB and the need to protect its elderberry host plant. The training and supporting materials will include identification of special status species and instruction on required practices before the start of construction, general measures that are being implemented to conserve these species as they relate to the proposed project, and penalties for noncompliance. Upon completion of training, construction personnel will sign a form stating that they have attended the training and understand all the conservation measures. Training will be

conducted in English and other languages, as appropriate. Proof of this instruction will be kept on file with the contractor. Reclamation will provide the Service with a copy of the training materials and copies of the signed forms.

- Standard precautions will be employed by the construction contractor to prevent the accidental release of fuel, oil, lubricant, or other hazardous materials.
- A litter control program will be instituted. The contractor will provide closed garbage containers for the disposal of all food-related trash items. All garbage will be removed daily.
- No pets of any kind will be permitted on the construction site.
- No firearms (except for Federal, State, or local law enforcement officers and security personnel) of any kind will be permitted on the construction site.
- Use of rodenticides and herbicides in the project site are prohibited.

Due to the nearly year-round presence of at least one freshwater life stage of one or more listed fish species in the action area, the use of zones and in-river work windows to entirely avoid and prevent injury or mortality to listed anadromous salmonids is not possible. The construction activities for the proposed projects will only occur at these sites between October 1 and April 31.

Reclamation has determined that the proposed project is not likely to adversely affect VELB, WYBC, and CLRF. After reviewing the information provided and the proposed conservation measures, we concur with your determination that the proposed projects, as described, are not likely to adversely affect the federally listed VELB, WYBC and CRLF. This concurrence is provided specific to this action area and for the proposed projects only as described within the request and information provided by Reclamation.

This concludes our review of your proposed projects and no further coordination with us under the Act is necessary at this time. Please note, however, that this letter does not authorize take of listed species. Section 9 of the Act prohibits the “take” (e.g., harm, harass, pursue, injure, kill) of federally-listed wildlife species. Therefore, unless new information reveals effects of the proposed projects that may affect listed species in a manner or to an extent not considered, or a new species or critical habitat is designated that may be affected by the proposed projects, no further action pursuant to the Act is necessary.

If you have any questions regarding this response, please contact Rocky Montgomery, Senior Biologist, Watershed Planning Branch at the letterhead address or (916) 930-5603.

cc: John Hannon, BOR, Sacramento, CA

Reference:

Service 1999. *Conservation Guidelines for the Valley Elderberry Longhorn Beetle*; 9 July, 1999.

Service 2005. *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog*; August 2005.

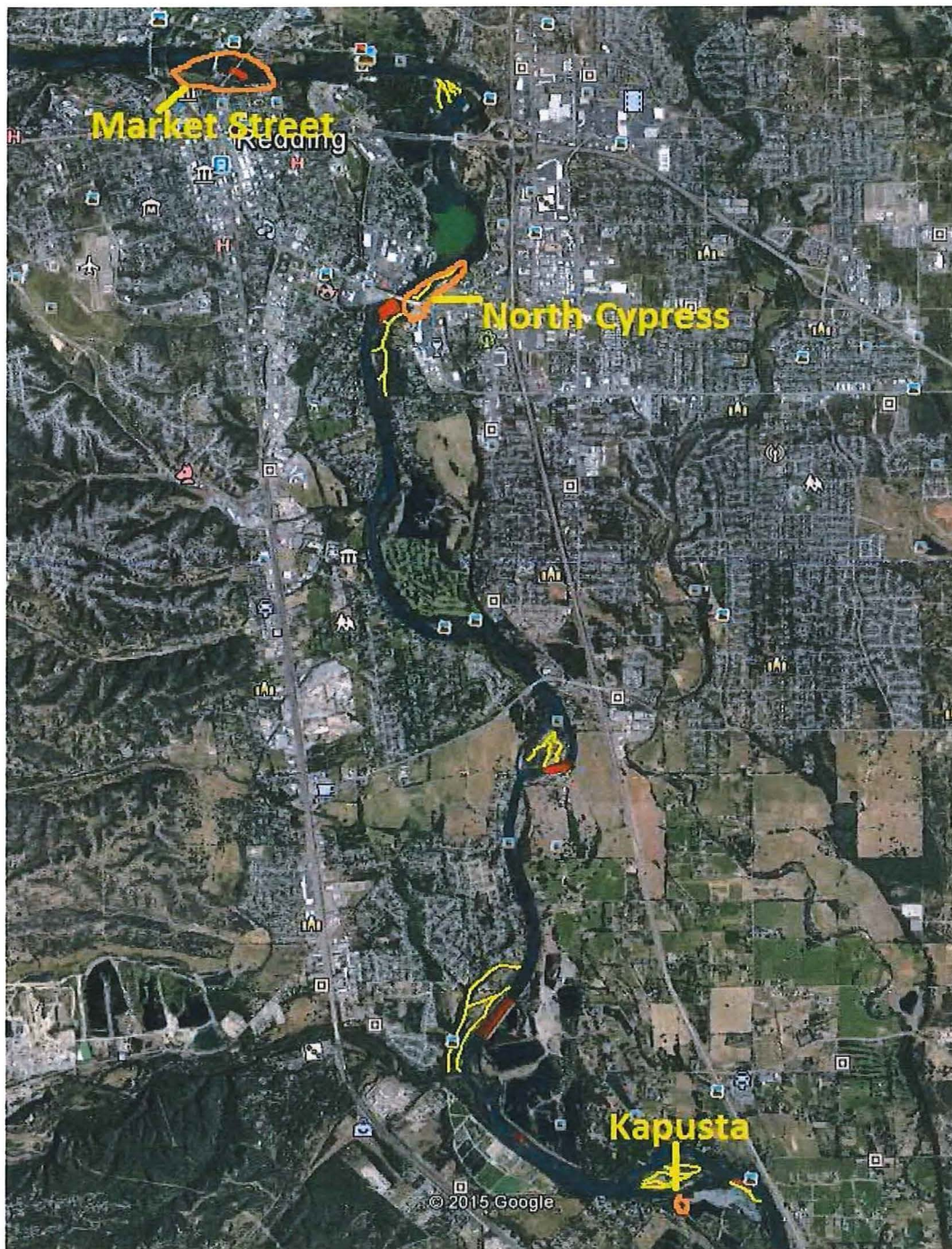


Figure 1. Proposed Project Sites

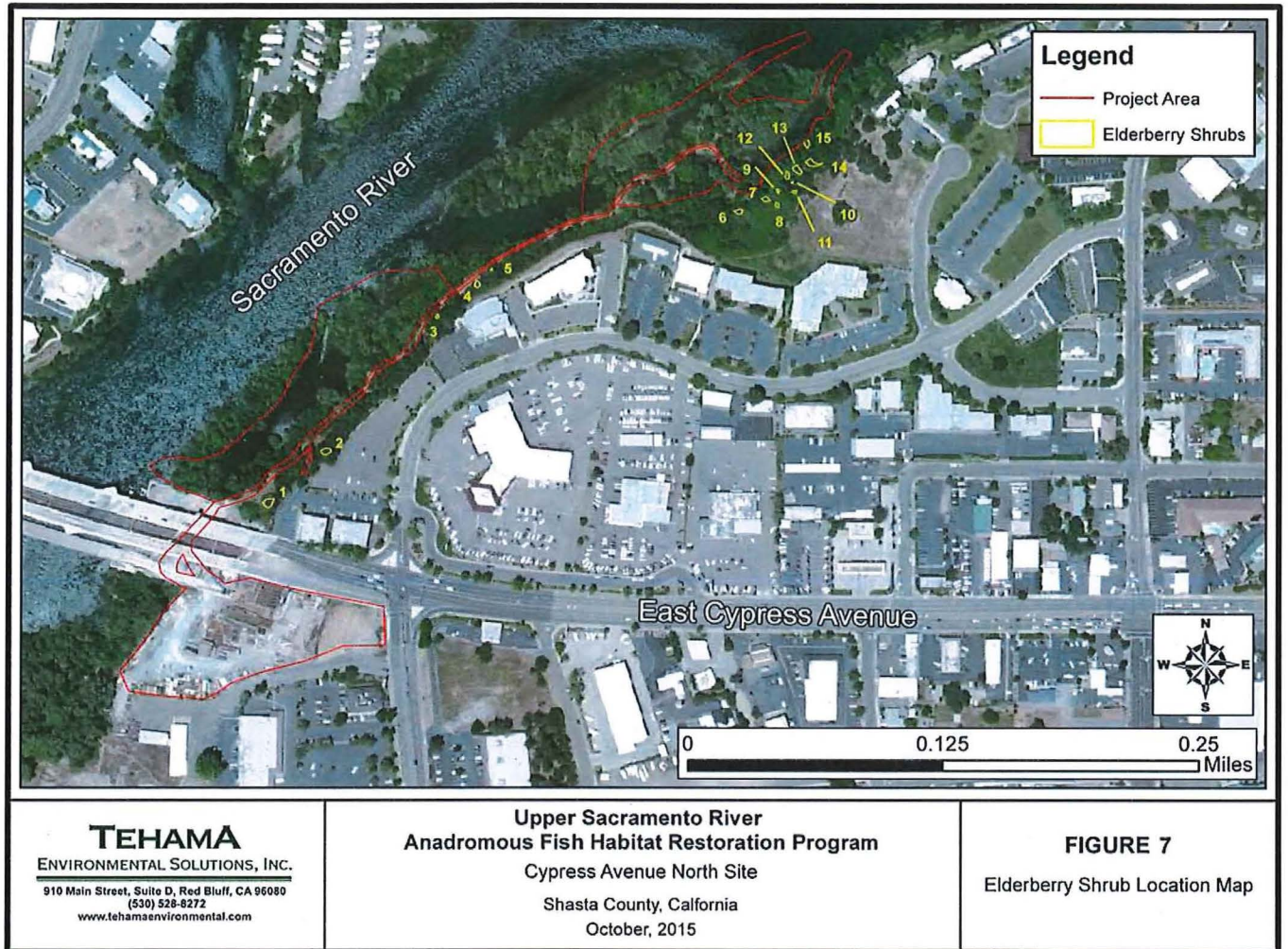


Figure 2. Cypress Ave. North Site



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