



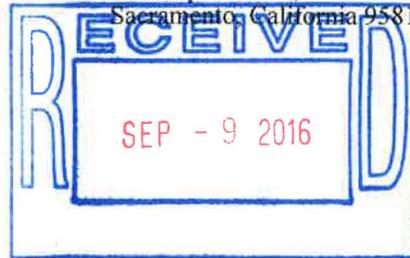
United States Department of the Interior



FISH AND WILDLIFE SERVICE
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In reply refer to:
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AUG 29 2016



Routing on back

Memorandum

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

From: Assistant Field Supervisor, Bay-Delta Fish and Wildlife Office, Sacramento, California
James A. Whitcomb

Subject: Programmatic Informal Consultation on the Lower American River Anadromous Fish Habitat Restoration Project, Sacramento County, California

This memorandum is in response to your July 8, 2016, electronic mail message sent to the U.S. Fish and Wildlife Service (Service), with an attached Programmatic Biological Assessment (PBA) of the Lower American River Anadromous Fish Habitat Restoration Project (LARAFHRP) (Program) describing potential impacts by the Program to federally-listed species.

At question are the possible effects of the Program on the federally-listed as threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (VELB) and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) (WYBC). The Program is not within any designated critical habitat for listed species, therefore critical habitat will be unaffected by the Program. 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 July 8, 2016, PBA; 2) the July 18, revised PBA; and 3) other information on file at the San Francisco Bay-Delta and Sacramento Fish and Wildlife Offices.

Background

The Central Valley Project Improvement Act (CVPIA), Section 3406 (b)(13) directs the Department of the Interior to develop and implement a continuing program for the purpose of restoring and replenishing, as needed, salmonid spawning gravel lost due to the construction and operation of Central Valley Project dams and other actions that have reduced the availability of spawning gravel and rearing habitat in the American River from Nimbus Dam to the confluence with the Sacramento River. This CVPIA program may include preventative measures, such as

the re-establishment of meander belts and limitations on future bank protection activities in order to avoid further losses of instream and riparian habitat.

The restoration and rehabilitation of spawning and rearing habitat for anadromous fish in the proposed Action Area is a high priority for federal and state resource agencies. The CVPIA 3406 (b)(13), the CALFED Bay-Delta Authority's Ecosystem Restoration Program, and other sources have authorized and directed funding for much of the stream channel, floodplain, and riparian restoration work completed to date in the lower American River (LAR).

The purpose of the Program is to increase and improve Chinook salmon and steelhead spawning and rearing habitat by replenishing spawning gravel and establishing additional side-channel habitat. The need for the action derives from the decline of 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.

Program Description

General Proposed Program Activities

Reclamation proposes to create new side channels, modify existing side channels, and place gravel and instream habitat structure in the LAR below Nimbus Dam. The Program encompasses 21 miles of the LAR and adjacent land between Nimbus Dam (RM 23) and the State Route 160 Bridge (RM 2), and may also include Mississippi Bar, above Nimbus Dam, as a gravel source. The LAR Fisheries and Instream Habitat Working Group (FISH Group) has identified 11 restoration sites (seven locations where future restoration activities and four previously restored locations where maintenance may be needed in the future) that are intended to maintain flexibility for providing salmonid spawning and rearing habitat enhancement through gravel placement and side channel and floodplain enhancement to meet the goals of the CVPIA Section 3406 (b)(13) Habitat Restoration Program.

Gravel will be placed instream to improve spawning at project locations and to replenish spawning gravel downstream that is not replaced by upstream sources. Side channel and floodplain work will be completed to improve juvenile rearing habitat. Instream work will be conducted at time periods to minimize effects on Chinook salmon and steelhead as specified in permits. Work mobilizing gravel and equipment to the sites may occur outside of fish timing windows, but all work in the water will be confined to timing windows and suitable flows.

Gravel Placement

Limitation of suitable spawning substrate has been identified as a limiting factor for anadromous fishes in the LAR (NMFS 2009). Natural spawning gravel recruitment to the Action Area is prevented due to upstream dams; therefore, ongoing gravel restoration is needed in several locations in or along the LAR. There are five specific gravel augmentation sites included in the Program with a combined total area of about 12 acres. In addition to specifically identified restoration sites, the Program includes potential implementation of similar gravel augmentation activities (i.e., similar types, size, and construction methods) at currently unspecified locations between Nimbus Dam and State Route 160 Bridge. Gravel augmentation will generally be

implemented once at each site, however, depending on evaluation of monitoring data and judgment of the FISH Group, some sites may not be implemented at all and some may need to be periodically replenished. In a given year, up to three project sites will be implemented with up to 12,000 cubic yards of gravel placed at any one location and will not exceed a total of 36,000 cubic yards annually.

Following an adaptive management approach, the FISH Group will select sites for a given year based on the results of ongoing monitoring within the LAR. The gravel placed will be uncrushed, rounded “natural river rock” with no sharp edges. It will be a reasonably well-graded mix, designed for spawning use by salmonids, made using an approximately ¼ inch screen on the bottom. The D50 (median diameter of sample) of the mix will be around 1 to 1 ½ inches. The gravel will be processed onsite or prior to delivery to the sites to remove excessive fine materials and minimize introduction of excessive fine sediments into the river. The gravel will be free of oils, clay, debris, and organic material. Materials excavated from side-channel work may be used for onsite gravel placement and sorted as needed to meet design criteria. The larger gravel and cobble resulting from sorting operations will be used as needed to enhance stability of habitat features. Gravel will be sized based on general criteria recommended in a letter to California Department of Fish and Wildlife (CDFW) and Department of Water Resources by the Anadromous Fish Restoration Program (USFWS 2006a).

Stockpile areas will be located within project site boundaries. Existing improved and unimproved roads will be used by transport trucks to deliver gravel to stockpile areas. Stockpile areas adjacent to the river will be about one half acre or less and will be placed in existing clearings where ground disturbance will be minimized by using existing dredger tailings or similar type of material.

Tandem transfer trucks (trucks pulling a trailer that can be telescoped into the truck bed) capable of carrying 24 tons per load will be used for transporting gravel to project sites. Single bed off road trucks capable of carrying 12 to 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. At some sites, the 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. A bulldozer will be used to distribute the materials in areas unworkable for loaders.

For the gravel placement, 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. This will allow the loaders to drive on the newly placed gravel, thereby avoiding driving in overly deep water and distributing fines from the existing substrate. Off-road dump trucks will haul the material into the river in areas where the travel distance to an onshore stockpile is excessively long for multiple loader trips. 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 four to six weeks at a location, dependent on project site. A tracked bulldozer or excavator will be used for grading the existing substrate prior to spawning gravel placement and larger placed rock as needed.

Floodplain and Side Channel Enhancements

Floodplain and side channel habitats serve as important refuge and rearing areas for salmonids, and these habitats likely contribute substantially to the productive capacity and life history diversity of Chinook salmon (Sellheim et al. 2015, Lindley et al. 2009, Yoshiyama et al. 1998; Martens and Connolly 2014). However, the number and quality of these habitats have been reduced in the LAR as a result of activities such as channel modifications and levee construction. There are eight specific floodplain and side channel enhancement sites included in the Program resulting in up to 43.1 acres of new or re-established floodplain and side channel habitat. In addition to specifically identified restoration sites, the Program includes potential implementation of similar habitat restoration activities (i.e., similar types, sizes, and construction methods) at currently unspecified locations between Nimbus Dam and State Route 160 Bridge.

Floodplain and side channel habitat enhancements may consist of new or reconnected side channels and floodplain modifications. Spawning habitat will be designed to function optimally under flows within the main channel of 1,750 cubic feet per second (cfs). Floodplain habitat will be designed to inundate incrementally at higher flows. Physical characteristics will be variable with average water velocities ranging between 1.0 foot per second (fps) to 5.0 fps, water depths averaging between one to three feet deep, and channel widths ranging between 12 to 50 feet wide for new channels and potentially larger for existing channels. Water velocities will be designed to be variable and range up to about 5 fps at design flows.

Floodplain and side channel habitats will be created, reconnected, or modified by excavation using heavy equipment (i.e., bulldozer, front end loader, excavator). Where the excavated material is of the appropriate size distribution, it will be sorted and placed into side channel or main channel areas to enhance habitat features. The fines will be distributed over the floodplain to assist in revegetating the area. Gravel placed into the main channel may facilitate flow into side channels. Low elevation gently sloping benches will be created along channels in opportune areas to provide juvenile rearing habitat through a range of flows.

Instream Habitat Structure

Large woody debris (LWD) (e. g., trees, trunks, rootwads, and willows) will be incorporated into the side channels to enhance habitat quality. The woody material will be held in place by partially burying it in the existing substrate or banks or keying into existing material to provide some stability under higher flows. LWD placement will consist of rootwads or logs partially placed in the channel with one end partially buried in the substrate. Woody material functions to provide rearing habitat by creating diverse cover for rearing juveniles. They are also used to scour the channel, creating or expanding pool habitat. Logs with rootwads intact will be positioned with the rootwads end extending down into the pool to create complexity for increasing rearing habitat and maximizing scour.

Due to a desire to create features more similar to naturally occurring woody material, woody material will not be secured to the banks using artificial materials such as steel cable. The woody material will be keyed into the bank or into placed gravels by partially burying the material in existing soil and rock. Woody material that Sacramento County Parks Department (County Parks) personnel identify as being a safety hazard will be removed or moved to a safe location by existing contractors utilized by County Parks for removing in-river hazards.

Work Windows

Due to the year-round presence of at least one freshwater life stage of listed steelhead in the action area, the use of zones and in-river work windows to entirely avoid and prevent injury or mortality to listed anadromous fish is not possible. However, the least mobile salmonid life stages (i.e., incubating eggs and pre-emergent fry) are the life stages most likely to experience direct injury and mortality from construction activities. Therefore, instream work will be restricted to July 1 through September 1, with consideration of the spatial and temporal distribution of spawning and incubating steelhead, as well as fall-run Chinook salmon. This in-river work window was selected to avoid potential impacts to spawning adults or incubating eggs. Construction may be conducted year round in areas such as floodplains and side channels when flowing water is absent due to separation from the main channel by gravel berms that are either naturally present or artificially created.

Seven potential new restoration sites have been identified for floodplain and side channel enhancement and woody material placement. Five of these new sites may also include gravel augmentation. Additionally, there are four previously restored sites where further restoration may occur (i.e., Nimbus, Upper Sailor Bar, River Bend, and Sacramento Bar), as well as some other restoration sites that may be identified in the future, but the number of additional possible sites is low due to various constraints.

Floodplains and side channels will be created or modified by excavation with much of the work conducted in areas where fish do not have access (i.e., areas where flowing water is absent due to separation from the main channel by gravel berms that are either naturally present or artificially created), and instream work will be limited to inlet/outlet areas during the last stage of reconnection to the main channel.

Instream habitat structure may be placed as needed where juvenile rearing habitat is identified as limited. Placement of habitat structure in floodplains and side channels will occur in areas when fish will not have access, as described above.

Riffle supplementation includes using heavy equipment to perform instream work. Since juvenile steelhead may be present during the in-river work window, conservation measures will be implemented to reduce the potential for adverse effects on juvenile steelhead.

Additional work windows may be necessary for terrestrial species. To avoid impacts to nesting migratory birds, vegetation removal will not occur between March 1 and August 31 to the extent possible. Pre-construction surveys will be conducted before vegetation removal. If vegetation removal cannot be avoided during the time of potential presence of migratory birds, then the

Service will be contacted and any pre-construction surveys recommended will be conducted by a Service-approved biologist. The survey results will be documented and the appropriate avoidance measures will be implemented prior to vegetation removal.

Site Selection

Reclamation has identified the need to combine several restoration actions into one project that will allow for the flexibility to make minor modifications or reprioritize restoration actions based on monitoring results and environmental changes. Spawning and rearing habitat restoration efforts require the flexibility to adopt alternative approaches, as needed, to ensure the success of restoration efforts. This adaptive management approach will enable Reclamation to meet the goals and objectives established by the CVPIA. The focus of the Program will be to opportunistically design adaptive strategies to promote dynamic habitat.

The criteria used to evaluate site selection and design, along with possible constraints include:

- site suitability and access;
- engineering and design;
- environmental compliance and permitting;
- gravel availability and transportation; and
- cost-benefit.

Sites were selected throughout the entire Program area that could provide access and maintain flexibility for juvenile salmonid rearing habitat enhancement through long-term gravel replenishment, in-channel gravel placements, and engineered side-channels to meet the needs and goals of the CVPIA program. Additional sites may be selected using the considerations and criteria identified in the Environmental Assessment (EA) prepared by Reclamation for the Program.

The analysis in the EA was completed using criteria such as type, timing, duration, size and amount of work for up to three sites per year that fall into these criteria. As project designs are developed for each site, they will be compared with criteria used in the analysis. If they are within the criteria evaluated, then it will be determined that effects are consistent with those analyzed. If the project designs are outside of the criteria, or actions are added that are not described or analyzed in the EA or PBA, then Reclamation will need to prepare supplemental documents or change the design of the proposed project to fall within the criteria.

Prior to implementation of restoration activities at each site, Reclamation will ensure the appropriate level of design is developed through modeling, monitoring, and surveying. Reclamation and the FISH Group will guide implementation of an adaptive management program to monitor the physical and biological results to ensure the restoration program achieves the goals of CVPIA. Hydrologic models and biological surveys will be completed before formal design considerations.

Sites will be selected and designed to meet the above listed criteria. A site plan document will be developed that includes site specific designs, maps, and figures. The site plan will also include results of surveys and monitoring, and describe how the site meets the established criteria and avoids additional impacts to the resources. Detailed designs will be prepared for site specific work as funding becomes available to conduct the work, will be coordinated annually with the FISH Group, and submitted to the Service for concurrence.

Site 1, Upper Sunrise (RM 21.5) - This site includes a $\frac{3}{4}$ mile reach of the river between the upper Sunrise side channel and the 2012 gravel placement and side channel creation project and includes the adjacent floodplain along the south side of the river. Previous projects were implemented in this reach in 2010 – 2012. The past work included riffle and island creation midway through the reach, side channel reconnection at the downstream end of the reach and gravel placement and side channel creation at the upstream end of the reach. Woody material was placed in the main channel adjacent to the created islands and within the created side channel at the upstream end of the reach. The reach includes a low elevation area along the south side of the river where additional side channel and floodplain habitat could be created. Additional gravel could be placed at the 2010 – 2011 sites to enlarge the site to create a channel spanning riffle. If high flows disconnect the upper Sunrise side channel again, then additional work at the downstream end of the reach will be done to maintain the side channel connection. This side channel was the highest density steelhead spawning area in the river for many years.

Site 2, Sunrise (RM 20.4) - The site includes the reach of the river between the Sunrise Boulevard Bridge and the old Fair Oaks Bridge. The area consists of a riffle where heavy salmonid spawning occurs, pool habitat upstream of the riffle, and some low elevation floodplain on the south side of the river. However, a juvenile isolation area is currently within the floodplain. Work at this site would include side channel creation, floodplain modification, and woody material placement along the south side of the river. The isolation risk would be reduced by connecting the isolation area to the river so it remains connected at most flows. Gravel could be placed in the main channel upstream of the existing riffle to increase the amount of spawning and summer steelhead rearing habitat.

Site 3, El Manto (RM 17.9) - The site includes low elevation floodplain habitat along the left bank (all banks relative to facing downstream) of the river and the main channel of the river upstream and downstream of San Juan Rapids. Spawning occurs on the riffles through this reach. The habitat in the center of the channel is armored with material too large for spawning. Side channel creation and floodplain modification will occur along the left bank of the river. An isolation area is near the downstream end of the site and may be permanently connected to the river channel to provide backwater rearing habitat during the cooler parts of the year. Gravel from the floodplain may be sorted and placed in the river channel to improve the spawning habitat. The riffle downstream of San Juan Rapids includes good depths and velocities for spawning but is all armored so that no spawning can occur. The armor layer will be pushed into deeper water and replaced with a layer of spawning sized material. Woody material will be included in the side channel habitat areas.

Site 4, Ancil Hoffman (RM 15.8) - The site includes floodplain area along the right bank of the river. The main channel includes riffle habitat where spawning occurs, mostly along the left bank and adjacent to the island at the upstream end of the site. The proposed project will include side channel creation and floodplain modification along the right bank and gravel placement in the main river channel. The short side channel at the upstream end of the site includes good depths and velocities for spawning but the substrate is mostly too large. The oversized material will be pushed to deeper water or onto the island and replaced with spawning sized material from the floodplain area. The finished side channel will be slightly deeper than the existing channel which is dry at low flows. Woody material will be added to the side channel areas.

Site 5, Upper River Bend (RM 14.5) - The site includes a one mile reach of the river between the upstream part of River Bend Park and the downstream end of Ancil Hoffman golf course. The reach includes floodplain area along both sides of the channel. The riffles in this area include low density spawning. Much of the existing habitat is armored with material too large for spawning. Side channel habitat will be created and floodplain habitat modified in the low elevation areas on both sides of the river. Cordova Creek, a tributary entering along the south side of the reach, is the site of another restoration project. Work near the Cordova Creek confluence will be integrated in with the Cordova Creek work. Gravel may be added to the river channel to improve the size distribution of the spawning habitat. Woody material will be included in the side channel habitat.

Site 6, Howe Avenue (RM 8.5) - The site includes the low elevation area along the south side of the river between the Watt and Howe boat ramps. It includes existing side channel and backwater habitat that becomes disconnected from the river at lower flow levels. Work at this site will increase the connectivity between the backwater habitat and the river channel so that juvenile rearing can occur at most flows. Isolation areas will be modified to remain connected to the channel or drain to reduce the chance of isolation or stranding of fish. Woody material will be included in the side channel habitat.

Site 7, Paradise Beach (RM 5) - The site includes a large floodplain area along the left bank of the river upstream of Paradise Beach. Side channel habitat will be created and the floodplain habitat modified so that it becomes inundated over a range of flows. Woody material will be included in the side channel habitat. Isolation ponds are present on the floodplain. These ponds frequently isolate juvenile salmonids. The isolation risk will be reduced by connecting the isolation area to the river so it remains connected at most flows.

Unspecified Sites – Four sites that had been previously restored and may need maintenance include Nimbus, Upper Sailor Bar, River Bend, and Sacramento Bar (USBR 2008).

(See Appendix A of the PBA for aerial maps and pictures of the sites listed above, including a project overview map).

Proposed Conservation Measures

Conservation measures are measures or practices adopted to reduce or avoid adverse effects that could result from implementation of the Program.

Valley Elderberry Longhorn Beetle

The Program may affect VELB during mobilization of equipment within each project area due to the generation of dust. The effects will be minimal because construction activities will normally occur outside of the VELB's spring emergent period. Although vehicles and construction activities will occur within 100 feet of elderberry shrubs, it is anticipated that activities will not come in contact with any elderberry shrubs and no elderberry shrubs will be removed or trimmed under the Program. Site specific designs will be altered as much as possible to avoid any potential impacts from project activities on elderberry shrubs during construction activities. No ground breaking activities within 20 feet of the dripline of any elderberry shrub will occur under this memorandum.

In addition, the Service Guidelines for VELB (USFWS 1999) will be implemented prior to, and during, all stages of the Program to avoid any potential adverse impacts to the species. If a project site will not allow the following measures to be implemented due to the landscape and/or safety concerns, then the Service will be contacted to determine if additional conservation measures are necessary to avoid adverse impacts. If impacts cannot be avoided, then Reclamation will initiate formal consultation with the Service under section 7 of the Act.

- 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 will be clearly readable from a distance of 20 feet, and be maintained for the duration of construction.
- 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.
- 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 Program 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. When vegetation removal cannot be avoided during the time that WYBC may be utilizing the area then the Service will be contacted and any pre-construction surveys recommended will be conducted by a Service-approved biologist, results documented, and the appropriate conservation measures implemented prior to any vegetation removal.
- Additionally, prior to any construction activities, Service approved surveys will be completed for the presence of nesting birds from February 1 through September 1. If WYBC are found, Reclamation will consult with USFWS on how to proceed.

General

- A Service-approved biologist will conduct environmental awareness training for all individuals working on the project before work begins. The education program will cover the valley elderberry longhorn beetle, western yellow-billed cuckoo, and any of their habitats that may be encountered during project implementation. The training will also include information on federal and state protections. Environmental awareness training will cover all restrictions and guidelines that must be followed by crews to avoid and minimize impacts to threatened and endangered species and their habitat. Upon completion of training, crews will sign a form stating that they attended the training and understand all conservation measures. If new personal are added to the project, the new personal shall receive the training prior to starting work.
- 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 is prohibited.

Action Area

The term "Action Area" is defined as "all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action" (50 Code of Federal Regulations [CFR] 402.02). It encompasses the geographic extent of environmental changes (i.e., the physical, chemical, and biotic effects) that would result directly and indirectly from the

action. The action area is typically larger than the area directly affected by implementation of the proposed action.

With in-river construction projects, the Action Area is defined downstream by any area that may be affected by elevated turbidity or sediment deposition. The Action Area encompasses about a 21-mile reach of the LAR and adjacent land between Nimbus Dam (RM 23) and the State Route 160 Bridge (RM 2). The Action Area includes Upper Sunrise (River Mile [RM] 21.5), Sunrise (RM 20.4), El Manto (RM 17.9), Ancil Hoffman (RM 15.8), Upper River Bend (RM 14.5), Howe Avenue (RM 8.5), Paradise Beach (RM 5.0) and other unspecified locations. The Action Area may also include Mississippi Bar, above Nimbus Dam, as a gravel source.

Species Information

Valley Elderberry Longhorn Beetle

Distribution of VELB is typically based on the occurrence of elderberry shrubs (*Sambucus* spp.), an obligate host plant, which are known to occur along riparian corridors on the Sacramento River. Much of the typical floodplain habitat has been developed or converted through the construction of dams and levees. The greatest historical threat to VELB has been the elimination, loss, or modification of its habitat by urban, agricultural, or industrial development and other activities that reduce or eliminate its host plants. Invasive insects have been identified as potential threats to VELB through predation and competition. Invasive plant species may have significant indirect impacts by affecting elderberry shrub vigor and recruitment, impairing elderberry germination or establishment, or elevating fire risk (USFWS 2006b).

Site designs will be altered to avoid known elderberry shrubs to the greatest extent possible.

Western Yellow-billed Cuckoo

The WYBC requires habitat with a large dense canopy of willow and cottonwoods for nesting and rarely nests at sites less than 50 acres (Laymon and Halterman 1989). The optimal size for nesting habitat is greater than 200 acres, and willow-cottonwood habitat less than 37 acres is considered unsuitable (Laymon and Halterman 1989). Stopover and foraging sites are found in small groves or strips of trees sometimes less than 10 acres and may lack understory. Adults typically arrive in California around June and depart the breeding grounds by mid-September. The young have one of the shortest nesting cycles of any bird species, fledging in as little as 17 days from the time the eggs are laid.

Threats to WYBC include habitat destruction and modification from the alteration of hydrology, channelization, levee formation and other bank stabilization that encroaches on the floodplain (79 FR 48547). The increased occurrence of nonnative plant species due to fragmentation is also a major threat to WYBC.

Riparian habitat in the Program area is fragmented by residential, commercial, and industrial development. The Program area lacks dense cover and large contiguous segments of land suitable for breeding habitat. The Program area may provide stopover foraging habitat for WYBC.

Effects of the Proposed Action***Valley Elderberry Longhorn Beetle***

Elderberry shrubs, the host plant for the VELB, were found during initial surveys of the Program area; however, site specific designs were altered to avoid elderberry shrubs. The Service guidelines for VELB require complete avoidance within 20 feet around elderberry plants containing stems measuring 1.0 inch or greater in diameter at ground level (USFWS 1999).

Gravel trucks generate dust which may harm elderberry plants. Dust is listed in the species recovery plan as a threat to VELB. Construction activities will typically occur outside of the VELB's spring emergent period. Although vehicles and construction activities will occur within 100 feet of elderberry shrubs, the Service does not anticipate that contact with any elderberry shrubs will occur. The Service does not anticipate that ground breaking activities will occur within 20 feet of the dripline of any elderberry shrubs or that any elderberry shrubs will be disturbed by associated activities.

Western Yellow-billed Cuckoo

The Program may affect the WYBC through vegetation removal necessary for access and side channel development. However, side channel development may provide long-term benefits through improved riparian habitat and decreased channelization. Construction noise has the potential to affect reproduction by masking vocal signals (Bowles 1995), although, currently no suitable breeding habitat exists within the action area of the proposed action.

The Service does not anticipate that take will occur as a result of the implementation of the Program based on the conservation measures proposed by Reclamation and described in the *Program Description* section above. The implementation of those conservation measures, as described, will result in effects on listed species that would be discountable and insignificant.

Restoration Projects Considered Under this Memorandum

This memorandum does not provide exemption from Section 9(a)(1) of the Act and Federal regulations pursuant to section 4(d) of the Act that prohibit the take of endangered and threatened fish and wildlife species without special exemption. This memorandum does not provide for incidental take under the provisions of section 7(b)(4) and section 7(o)(2) of the Act. This memorandum provides a number of agreed upon conservation measures for actions that will be a part of the overall Program that can be adhered to by Reclamation and so facilitate the concurrence by the Service with a determination by Reclamation of may affect, not likely to adversely affect, listed species for each project as part of the overall Program.

Reclamation will provide the following information for projects that will be considered under this memorandum:

1. A complete project description, including final design to the extent possible and an aerial photograph with over lay diagrams of project specific features of the restoration project to be considered by the Service;

2. Required survey results for the restoration site being considered; and
3. A request for concurrence under this programmatic informal consultation memorandum acknowledging Reclamation's intent to adhere to the conservation measures described and agreed to herein.

The above may be provided to the Service either by written memorandum or through electronic mail, or both, at least 15 working days before construction activities are scheduled to begin. If the Service concurs with the determination that the described restoration project meets the criteria set under this memorandum, then the Service will provide a concurrence via electronic mail to Reclamation. If the final design of a restoration project associated with the proposed action is determined to have an adverse effect on a listed species, or the described conservation measures cannot be fully implemented, then Reclamation will contact the Service for review to determine if additional conservation measures are necessary to avoid adverse impacts, or whether initiation of formal consultation under section 7 of the Act is required.

cc:

John Hannon, Fisheries Biologist, USBOR, Sacramento, CA

Carolyn Bragg, Natural Resource Specialist, USBOR, Sacramento, CA

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CODE	INITIAL	ACTION	DUE DATE	
BDD-150	JH			JH
BDD-400				CB
BDD-400				JP
BDD-150				JAI
BDD-100				DM
BDD-100				MB
BDD-101		File		AB



United States Department of the Interior



In Reply Refer to:
08FBDT00-
2016-I-0198-
R001

FISH AND WILDLIFE SERVICE
Bay-Delta Fish and Wildlife Office
650 Capitol Mall, 8th Floor, 8-300
Sacramento, California 95814

Memorandum

To: Janice Pinero, Bureau of Reclamation, Sacramento, California

From: Deputy Field Supervisor, Bay-Delta Fish and Wildlife Office, Sacramento, California

Subject: Informal Endangered Species Act Consultation on the Lower American River Anadromous Fish Habitat Restoration Program, Sacramento County, California

This is in response to your June 22, 2020, memorandum to the U.S. Fish and Wildlife Service (Service) notifying us of changes to the project description of the subject project since our August 29, 2016, Programmatic Informal Consultation memorandum (Programmatic). The Programmatic described agreed upon conservation measures that would facilitate our concurrence with a determination of not likely to adversely affect the federally-listed as threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (beetle) and western yellow-billed cuckoo (*Coccyzus americanus*) (cuckoo). The Programmatic also described a process for Reclamation to provide information associated with a project specific request for concurrence that would meet the criteria set under the Programmatic.

Your memorandum was received on July 6, 2020. Included in your memorandum are proposed changes, or updates, to the project description in the Programmatic, including but not limited to site number, location, and name, gravel quantity, woody material placement specification, and site selection process, as well as an additional table and figure. Because these changes include specific reference to proposed changes to the Programmatic, and can potentially change the extent of effect on listed species, we are treating your communication as a reinitiation of that consultation. This response is based on review of the 2016 Programmatic, your proposed changes, and discussion with Luke Davis of your staff on July 1, 2020.

The changes and updates proposed in your June 22, 2020 memorandum are as follows (page numbers reference our August 29, 2016, Programmatic):

Update 2016 Concurrence – Pages 2 through 5: “Program Description” to include the following:

The Fisheries and Instream Habitat Working Group (FISH Group), guided by the Restoration Team (both groups facilitated by Water Forum) evaluates topographic, sediment, and biological monitoring data to decide which program site is to be restored each year, based on an adaptive management approach. Additionally, data analysis and hydraulic modeling for the proposed action is ongoing, as part of FISH Group activities¹.

For the purposes of analysis, conceptual restoration designs (10%) were prepared for all 10 LAR sites as part of past project planning. Any combination of restoration actions (gravel augmentation, floodplain/side channel enhancement, and/or woody habitat placement) may occur at any restoration site. Each site design is refined annually, based on ongoing monitoring and FISH Group recommendations, and final designs are generally not available until spring of each implementation year. Therefore, in order to allow the restoration program maximum flexibility in developing the refined final design for each site, slight changes to the description of proposed restoration activities are described below.

Gravel Augmentation

Gravel augmentation would generally occur via methods described in the 2016 concurrence, except that under the current action, gravel augmentation may now occur at any of the 10 program sites, as detailed in Table 1 and Figure 1, where appropriate and as informed by adaptive management. Additionally, the maximum annual spawning gravel placement would be 30,000 cy. This change was made to reflect the results of sediment transport modeling conducted specifically for the project, in support of the Corps 408 Permission process². Exact gravel placement and volume will be decided annually, based on the recommendations of the FISH Group. Designs for gravel augmentation would ensure that restoration and enhancement activities do not impede navigation within the main channel and a navigable area at least 2 feet deep and up to 30 feet wide would be present at all restoration sites.

Floodplain and Side Channel Enhancements

Floodplain and/or side channel enhancement would generally occur as described in the 2016 concurrence, except that these enhancements may now be implemented at any of the 10 program sites, as detailed in updated Table 1 and Figure 1 (above), where appropriate, as informed by adaptive management. Additionally, the exact dimension and configuration of any floodplain and side channel enhancements are not limited and will be decided on an annual basis, during development of final designs for each restoration site. The most appropriate configuration would be implemented to achieve the maximum habitat value at each restoration site, as approved by the FISH Group. The flow at which rearing habitat would inundate will depend on site-specific conditions and would be graded appropriately to avoid fish stranding as flows recede.

Placement of Woody Material

Woody habitat material placement would generally occur as described in the 2016 concurrence, except that these enhancements may now be implemented at any of the 10 program sites, where appropriate, as informed by adaptive management. Additionally, the exact number of wood

¹ Cbec. 2019. Lower American River Anadromous Fish Habitat Restoration Project: Future Sites Flood Modeling. May 30, 2019.

² Northwest Hydraulic Consultants. Inc. 2019. Lower American River Anadromous Fish Habitat Restoration Project: Numerical Sediment Modeling: Final Report. June 5, 2019.

pieces, areal extent, and configuration of any woody habitat structures or riparian plantings will be decided on an annual basis, during development of final designs for each restoration site. The most appropriate configuration would be implemented to achieve the maximum habitat value at each restoration site, as approved by the FISH Group. However, based on recent modeling conducted in support of a pending 408 Permission, the number of log structures to be placed along the entire program reach is approximately 1 piece per 20 feet of stream, along banks, and 20-40 pieces per acre along floodplain restoration areas.

Update 2016 Concurrence – Page 6: “Site Selection” to include the following information:

Spawning gravel augmentation and other habitat enhancements may be implemented only once, or multiple times at each potential restoration site. Additionally, depending on evaluation of topographic, sediment, and biological monitoring data by the FISH Group, some restoration sites may not receive enhancements at all; some types of enhancement may be moved to new sites in order to ensure ease of maintenance access and avoid effects to other agencies goals (like County Parks); and some sites may need periodic re-treatment to maintain quality spawning and rearing habitats.

As mentioned above, following an adaptive management approach, the Restoration Team selects specific restoration sites for a given year based on the results of ongoing monitoring directed by Reclamation, in partnership with the Water Forum, within the LAR. To accommodate site selection by adaptive management, the footprint of each restoration site has been expanded slightly to allow maximum flexibility for implementation of the various covered restoration activities, as needed. The site boundaries are shown on Figure 1.

Update 2016 Concurrence – Page 8: Description of “Unspecified Sites” to include the following information:

To ensure consistency in the naming of LAR restoration sites across various regulatory permits and consultations, the restoration site names are updated as shown in Table 1.

Additionally, the description of “unspecified sites” referenced on Page 8 of the 2016 Concurrence, is updated to include the following details:

Nimbus Basin (RM 22.75-23) - The site extends across the LAR channel from just downstream of Nimbus Dam to just upstream of the Hazel Avenue bridge.

Upper Sailor Bar (RM 22.5-22.75) - The site extends across the LAR channel from approximately 0.05 mile downstream of the Nimbus Fish Hatchery weir to just upstream of the north side boat ramp, accessible from Illinois Avenue.

Lower Sunrise (RM 19.25-19.75) - The site extends across the LAR channel from approximately 0.2 mile downstream of the Jim Jones Bridge (AKA Sunrise Boulevard foot bridge) to just downstream of the Lower Sunrise parking/access area.

River Bend (RM 13.25-13.75) - The site extends across the LAR channel for approximately 0.5 mile beginning just upstream of the Harold Richey Bicycle Bridge and extending past Arden Rapids.

Sacramento Bar (RM 18.5-19) - The site extends across the LAR channel for approximately 0.5

mile beginning just upstream of the Sacramento Bar fishing pond and extending downstream to just upstream of the boat launch and nature study area, located on the north side of the river.

Update 2016 Concurrence - Pages 10 through 11: “Action Area” to include the following information:

Due to regulatory issues involving acquiring timely review and 408 Permission for work on certain (leveed) reaches of the LAR, the project has removed two sites from the proposed action: Site 6: Howe Avenue (River Mile [RM] 8.5) and Site 7: Paradise Beach (RM 5). Therefore, the Proposed Action is now located at ten sites on the LAR below Lake Natoma, from approximately RM 23 to RM 13 (Table 1). All project sites are now located upstream of the leveed portion of the river.

Your request also included a new Table 1 and Figure 1 as shown on pages 5 and 6 of this memorandum.

Table 1. Updated Site Naming Convention and Approximate (Conceptual) Restoration Activities

Site Number in USFWS Concurrence(s)	Approximate River Mile	Site Name in USFWS Concurrences(s)	Site Name in 2019 EA (current)	Restored Spawning Gravel Area (approx.) (acre)	Side Channel Restoration Length (approx.) (feet)	Woody Habitat Material	Status
Site 1	20.75-22	Upper Sunrise	Lower Sailor Bar	6.5	1,450	Included	Restored 2009, 2010, 2011
Site 2	19.75-20.5	Sunrise	Sunrise	4	1,700	Included	Future restoration site.
N/A	19.25-19.75	N/A	Lower Sunrise	2.5	1,200	Included	Future restoration site.
Site 3	18-18.5	El Manto	El Manto	7.5	1,150	Included	Future restoration site.
Site 4	16-16.75	Ancil Hoffman	Ancil Hoffman	7	1,850	Included	Planned for 2020
Site 5	14.5-15.5	Upper River Bend	Upper River Bend	14	5,000	Included	Future restoration site.
Unspecified Location	22.75-23	Unspecified	Nimbus Basin	3.5	1,350	Included	Restored 2014
Unspecified Location	22.5-22.75	Upper Sailor Bar	Upper Sailor Bar	6	1,450	Included	Restored 2008, 2009, 2019
Unspecified Location	18.5-19	Sacramento Bar	Sacramento Bar	13	1,750	Included	Restored 2016
Unspecified Location	13.25-13.75	River Bend	River Bend	4.5	1,450	Included	Restored 2012
Site 6	8.5-9.2	Howe Avenue	n/a	n/a	n/a	n/a	Removed from Proposed Action
Site 7	5	Paradise Beach	n/a	n/a	n/a	n/a	Removed from Proposed Action

Note: All site activities are conceptual and may be refined during annual final design development for each site.

Figure 1 Lower American River – Program Restoration Reaches



Based on our review of the proposed changes to the project description, the extent and nature of the restoration activities could result in modest changes in effect, but not to the extent which requires modification to the criteria or process described in the Programmatic. Accordingly, the proposed changes are considered adopted without modification.

Finally, we note that the Programmatic included a footer stating "Draft Subject to Change." This footer is hereby withdrawn.

This concludes informal consultation on the Lower American River Anadromous Fish Habitat Restoration Program. As provided in 50 CFR 402.16:

(a) Reinitiation of consultation is required and shall be requested by the Federal agency or by the USFWS, where discretionary Federal involvement or control over the action has been retained or is authorized by law and: (1) If the amount or extent of taking specified in the incidental take statement is exceeded; (2) If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion or written concurrence; or (4) If a new species is listed or critical habitat designated that may be affected by the identified action.

(b) An agency shall not be required to reinitiate consultation after the approval of a land management plan prepared pursuant to 43 U.S.C. 1712 or 16 U.S.C. 1604 upon listing of a new species or designation of new critical habitat if the land management plan has been adopted by the agency as of the date of listing or designation, provided that any authorized actions that may affect the newly listed species or designated critical habitat will be addressed through a separate action-specific consultation. This exception to reinitiation of consultation shall not apply to those land management plans prepared pursuant to 16 U.S.C. 1604 if: (1) Fifteen years have passed since the date the agency adopted the land management plan prepared pursuant to 16 U.S.C. 1604; and (2) Five years have passed since the enactment of Public Law 115-141 [March 23, 2018] or the date of the listing of a species or the designation of critical habitat, whichever is later.

If you have any questions regarding this project, please contact Steven Schoenberg, Senior Staff Biologist, at (916) 930-5672 or at Steven_Schoenberg@fws.gov.

Re: LAR Fish Habitat Restoration Project - Ancil Hoffman site updates, confirmation of compliance

Schoenberg, Steven <steven_schoenberg@fws.gov>

Tue 2/23/2021 5:13 PM

To: Davis, Luke O <ldavis@usbr.gov>

Cc: Welsh, Daniel <daniel_welsh@fws.gov>

 1 attachments (516 KB)

LAR Gravel_USFWS Concur Memo_20210222-Ancil.docx;

Luke:

I reviewed the letter attached to your 2/23/21 email and find it is consistent with our 2016 and 2020 letters of concurrence. Specifically, the project description in the 2020 letter of concurrence already recognized the potential for adjustments in final design pertaining to gravel placement, side channel restoration, and woody material placement, such as identified in the updated Table 1 of your email. I have added an event in our TAILS tracking system for consultations under the most recent 2020 consultation reinitiation (08FBDT00-2016-I-0198-R001), acknowledging receipt of your email, uploading the updated Table 1, and indicating this reply was made. No further action is necessary.

Sincerely,

Steve (Steven Schoenberg, Senior Biologist, cell phone during telework: 916-494-2904)

From: Davis, Luke O <ldavis@usbr.gov>

Sent: Tuesday, February 23, 2021 4:00 PM

To: Schoenberg, Steven <steven_schoenberg@fws.gov>

Subject: LAR Fish Habitat Restoration Project - Ancil Hoffman site updates, confirmation of compliance

Hi Steve,

I'm following up on our phone conversation from the other day. As I had mentioned, Reclamation has further refined some modeling and designs for the Lower American River Anadromous Fish Habitat Restoration project. Our current updates are only specific to the Ancil Hoffman site at this time (see attachment). Reclamation is requesting an email confirmation that these updates are in compliance with the USFWS 2016 and 2020 Letters of Concurrence (08FBDT00-2016-I-0198).

If there are any questions or a need for additional information, please let me know.

Thanks,
Luke