



United States Department of the Interior



In Reply Refer to:
08ESMF00-
2017-I-0291-1

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
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Sacramento, California 95825-1846

NOV 13 2018

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Mr. Zachary Simmons
Senior Regulatory Project Manager
California Special Projects Unit
U.S. Army Corps of Engineers
1325 J Street, Room 1350
Sacramento, California 95814

Subject: Programmatic Informal Consultation on the Proposed Fisheries Restoration Grant Program Project, which includes portions of Shasta, Tehama, Glenn, Butte, Colusa, Yuba, Sutter, Nevada, Placer, Yolo, El Dorado, Sacramento, Amador, Calaveras, San Joaquin, Tuolumne, Stanislaus, Mariposa, Merced, Madera, Fresno, Tulare, and Kings Counties, California (Corps File Number SPK-2014-00534)

Dear Mr. Simmons:

This letter is in response to your October 19, 2018, letter requesting informal consultation for the proposed Fisheries Restoration Grant Program Project (FRGP) (proposed project), in portions of Shasta, Tehama, Glenn, Butte, Colusa, Yuba, Sutter, Nevada, Placer, Yolo, El Dorado, Sacramento, Amador, Calaveras, San Joaquin, Tuolumne, Stanislaus, Mariposa, Merced, Madera, Fresno, Tulare, and Kings Counties, California. The U.S. Fish and Wildlife Service (Service) received your letter and the enclosed information on October 19, 2018. This response is provided under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act), and in accordance with the implementing regulations pertaining to interagency cooperation (50 CFR 402).

The federal action on which we are consulting is the issuance of a Clean Water Act Section 404 Regional General Permit (RGP) to California Department of Fish and Wildlife (CDFW) for the Central Valley FRGP. Our primary concern and mandate is the protection of federally-listed species pursuant to the Act.

Pursuant to 50 CFR §402.12(j), you submitted the February 2, 2017, *Fisheries Habitat Restoration 2017 Proposal Solicitation Notice*, the undated, *Fisheries Restoration Grant Program's General Program Permit Minimization and Avoidance Measures and the FRGP species minimization and avoidance measures*, (collectively, biological documents) and requested concurrence with the findings presented therein. In your letter you concluded that the proposed project may affect, but is not likely to adversely affect the federally-listed as threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (beetle), the giant garter snake (*Thamnophis gigas*) (snake), the western distinct population segment (DPS) of the yellow-billed cuckoo (*Coccyzus americanus*) (cuckoo), and the endangered Least Bell's vireo (*Vireo bellii pusillus*) (vireo).

We have considered the following in our review of the proposed project: (1) your September 14, 2014, initial request for formal consultation; (2) your October 19, 2018, request for informal consultation; (3) the 2010 California Salmonid Stream Habitat Restoration Manual (Restoration Manual); (4) numerous emails between the Service, the Corps, and the CDFW; (5) numerous meetings with the Corps and CDFW to discuss implementation of the Program; and (6) other information available to the Service.

The proposed project includes the funding of program projects that will enhance and restore salmonid habitat with the goal of rebuilding fish populations. Program projects will be proposed annually for various watersheds throughout portions of Shasta, Tehama, Glenn, Butte, Colusa, Yuba, Sutter, Nevada, Placer, Yolo, El Dorado, Sacramento, Amador, Calaveras, San Joaquin, Tuolumne, Stanislaus, Mariposa, Merced, Madera, Fresno, Tulare, and Kings Counties. The RGP will have a term of 5 years from the date of authorization. Two RGP's have been previously authorized for FRGP projects along the northern and southern California coast by the Corps of the San Francisco District, which have been recently renewed. The FRGP is being expanded to include the Central Valley and Delta. This RGP will also include projects funded by the Service's Anadromous Fish Restoration Program. This programmatic informal consultation will apply only to Program projects that are located within the counties described above and that occur within the regulatory jurisdictional boundaries of the Sacramento Fish and Wildlife Office. In addition, this letter of concurrence provides a number of agreed upon conservation measures that apply only to the species described herein. The Corps will initiate consultation when appropriate on any program projects that reach the "may affect" threshold for any listed-species or critical habitat that are not considered in this letter. In addition, through consultation with the Service, additional species may be included in this informal programmatic if deemed appropriate. This consultation will be effective for the duration of the RGP and can be extended if deemed appropriate by both the Service and the Corps.

The FRGP operates on an annual grant cycle, soliciting proposals in the spring. All restoration activities associated with the program are designed to follow the Restoration Manual. Each individual proposal is thoroughly reviewed by the Technical Review Team (TRT) (comprised of personnel from CDFW, National Oceanic Atmospheric Authority, and the California Coastal Salmonid Restoration Grants Peer Review Committee (PRC)). The TRT and PRC evaluate the benefits of proposals to the fisheries resources and target species, the project costs, and the impacts to the environment. Once a project is approved, a CDFW grant manager is assigned to a project to ensure that grantees comply with all of the general and species-specific avoidance and minimization measures that are proposed as part of the project. Additionally, grant managers ensure grantees adhere to CDFW polices to protect listed species. CDFW designated biologists inspect work sites before, during, and after completion of construction program projects. Through careful design, scheduling, and monitoring, effects to federally-listed species associated with construction of program projects will be avoided or minimized.

Proposed program applicants will choose from 18 project types which best describe their proposed restoration projects. Of the 18 project types, ten of them are considered construction projects as they allow for the implementation or removal of structures that are designed to enhance or restore salmonid habitat. The ten project types are described further below:

1) Fish Passage Improvement at Stream Road Crossings (FP) –

Fish passage improvement projects attempt to improve or restore salmonid access to spawning and rearing areas blocked by stream crossings such as culverts, bridges, and

fords. Volume II, Part IX of the Restoration Manual, entitled *Fish Passage Evaluation at Stream Crossings*, provides consistent methods for evaluating fish passage through culverts at stream crossings, and will aid in assessing fish passage through other types of stream crossings, such as bridges and paved or hardened fords. Fish Passage Improvement projects will result in new or retrofitted crossings where the crossing will be at least as wide as the active channel, will be designed to pass the 100-year storm flow, and will have the culvert invert or piling bottoms buried below the streambed. Projects may also contain downstream grade control or small fish ladders, if NMFS and CDFW engineers believe those features improve the stability and function of the crossing. Volume II, Part XII of the Restoration Manual describes methods and designs for improving fish passage at stream crossings. Projects that will be authorized through the RGP must be designed and implemented consistent with the CDFW *Culvert Criteria for Fish Passage* (Volume II, Part IX, Appendix IX-A, Restoration Manual) and NMFS Southwest Region *Guidelines for Salmonid Passage at Stream Crossings* (Volume II, Part IX, Appendix IXB, Restoration Manual). In addition, all future projects that are authorized through the RGP will require field review, design review, and design approval from a CDFW or NMFS fish passage specialist prior to project implementation.

2) Instream Barrier Modification for Fish Passage Improvement (HB) –

Instream barrier modification projects attempt to improve salmonid fish passage and increase access to currently inaccessible salmonid habitat. Techniques for improving fish passage are described in Volume I, Part VII of the Restoration Manual, entitled *Project Implementation*. These activities include modifying logjams (typically less than 10 cubic yards), beaver dams, natural waterfalls and chutes, and landslides, to improve salmonid fish passage. CDFW will only modify natural features such as these if there is a clear benefit to salmonids. This category also includes the removal and/or modification of flashboard dam structures. Flashboard dams are small hardened sills spanning the stream channel that impound small sections of stream through placing and removing wooden slats; the structures are most often associated with diversion headgates or pumps supplying an agricultural water supply. Flashboard dams are typically small, simple structures that trap little sediment upstream of the sill, the potential effects to salmonids from removing or modifying these structures will be in line with effects resulting from culvert removal or replacement projects (i.e., minor, short-term sediment impacts and potential harm from capturing and relocating fish during project construction. Implementing fish passage improvement projects may require heavy equipment use (i.e., self-propelled logging yarders, mechanical excavators, backhoes, etc.); however, hand labor will be used when possible. Although in some cases the Restoration Manual will recommend the use of small explosives to modify a fish passage barrier, this activity will not be analyzed in this letter due to additional effects associated with using explosives. Thus, projects that utilize explosives will not be authorized through the RGP.

3) Instream Habitat Improvements (HI) –

Instream habitat structures and improvements are intended to provide escape from predators and resting cover, increase spawning habitat, improve upstream and downstream migration corridors, improve pool to riffle ratios, or add habitat complexity and diversity. These types of projects may require the use of heavy

equipment (i.e., self-propelled logging yarders, mechanical excavators, backhoes, etc.); however, hand labor will be used when possible. Specific techniques for instream habitat improvements are described in Volume I, Part VII of the Restoration Manual, entitled Project Implementation, and may include: placement of cover structures (divide logs; digger logs; spider logs; and log, root wad, and boulder combinations), boulder structures (boulder weirs, vortex boulder weirs, boulder clusters, and single and opposing log wing-deflectors), log structures (log weirs, upsurge weirs, single and opposing log wing-deflectors, and Hewitt ramps), or placement of imported spawning gravel. Large woody debris (LWD) may also be used to enhance pool formation and improve habitat. Selected logs will have a minimum diameter of 12 inches and a minimum length 1.5 times the mean bankfull width of the stream channel reach type at the deployment site. Root wads will have a minimum root bole diameter of five feet, a minimum bole length of 15 feet, and span at least half the channel type bankfull width.

4) Riparian Habitat Restoration (HR) -

The goal of riparian restoration is to improve salmonid habitat through increased stream shading that will lower stream temperatures, and increase future LWD recruitment, bank stability and invertebrate production. Riparian habitat restoration projects will also restore riparian habitat by increasing plant numbers and plant groupings. Volume II, Part XI of the Restoration Manual describes riparian restoration methods and design, including guidance on natural regeneration, livestock exclusionary fencing, bioengineering, and revegetation projects.

5) Stream Bank Stabilization (HS) -

Reducing sediment delivery to the stream environment will improve fish habitat and fish survival by increasing fish embryo and alevin survival in spawning gravels, reducing juvenile salmonid injury from high concentrations of suspended sediment, and minimizing pool loss from excess sediment deposition. The proposed activities will attempt to reduce sediment from bank erosion by stabilizing stream banks with appropriate site-specific techniques, including: boulder stabilization structures, log stabilization structures, tree revetment, native plant material revetment, willow wall revetment, willow siltation baffles, brush mattresses, check dams, brush check dams, water bars, and exclusionary fencing. Guidelines for stream bank stabilization techniques are described in Volume I, Part VII of the Restoration Manual, entitled *Project Implementation*. Implementing these types of projects may require the use of heavy equipment (e.g., self-propelled logging yarders, mechanical excavators, backhoes); however, hand labor will be used when possible.

6) Upslope Watershed Restoration (HU) -

Upslope watershed restoration projects attempt to reduce excessive sediment delivery to anadromous salmonid streams. Volume II, Part X of the Restoration Manual, entitled *Upslope Assessment and Restoration Practices*, describes methods for identifying and assessing erosion problems, evaluating appropriate treatments, and implementing erosion control treatments in salmonid watersheds. Road related upslope watershed restoration projects will include: road decommissioning, upgrading, and storm proofing. The specific project elements may include road

ripping or decompacting; installing or maintaining rolling dips (critical dips); installing or maintaining waterbars and crossroad drains; removing, replacing, maintaining or cleaning culverts; outsloping roadbeds; revegetating work sites; and excavating stream crossings with spoils stored on site or end-hauled. Only sites that are expected to erode and deliver sediment to the stream are proposed for restoration work.

7) Fish Screens (SC) -

Screens are utilized to prevent juvenile salmonid entrainment within water diverted for agriculture, power generation, or domestic use. Screens are needed on both gravity flow and pump diversion systems. Current fish screen design standards specify the following screening criteria: 1) perforated metal plate, or mesh material, with openings sized to prevent entrainment of juvenile salmonids; 2) debris cleaning devices, typically brushes, water jets, or compressed air, to prevent plugging; and 3) bypass routes return fish to the stream channel. Normally, a flow measuring device and head gate are also required to monitor and control diversion flows. This section also includes maintenance, cleaning and repair of associated fish screens funded and constructed through the Grant Program. Screen designs are complex and site specific, and many require professional engineering; therefore, specific screen designs are not included within the Restoration Manual. However, Appendix S in the Restoration Manual provides guidelines and criteria for designing functional downstream-migrant fish passage facilities at water withdrawal projects, including guidance on structure placement, approach velocity, sweeping velocity, screen openings, and screen construction. Projects that are authorized through the Grant Program must be designed and implemented consistent with the most current versions of the CDFW *Fish Screen Criteria* and the NMFS Southwest Region *Fish Screening Criteria for Salmonids*, as discussed and referenced in Volume I, Appendix S in the Restoration Manual.

8) Water Conservation Measures (WC) -

Eligible water conservation projects are those that provide more efficient use of water extracted from stream systems, enabling reduced water diversion requirements. Ditch lining, piping, stockwater systems, and tail-water recovery/management systems are included in this category. Water saved by these projects must be dedicated to the stream for anadromous salmonid benefits. CDFW will not pay for water conservation measures without an instream dedication of the water saved.

9) Water Measuring Devices (Instream and Water Diversion) (WD) -

Eligible water measuring device projects are those that will install, test and maintain instream and water diversion measuring devices. These devices enable diversions from the stream to be controlled so excess withdrawals can be avoided. The instream gauges must be installed so they do not impede fish passage in anadromous streams.

10) Cooperative Rearing (RE) -

Eligible cooperative fish rearing projects are for artificial propagation programs designed to restore depleted stocks of salmonids that comply with the directives of

the joint CDFW and NMFS Hatchery Operations Review Committee. CDFW only provides grants to projects supporting federal and State conservation hatchery programs and the CDFW's Chinook Salmon fisheries enhancement program. These projects must meet all of the legal and policy requirements of the Fish and Game Code Section 1200-1206. Proposals for new rearing projects must include detailed justification for estimated production costs. New and existing programs must follow the guidelines outlined in Appendix H of the Recovery Strategy for California Coho Salmon. (<https://www.wildlife.ca.gov/Conservation/Fishes/Coho-Salmon>) These proposals must also include a proposed five year management plan that follow guidelines in "Cooperative Fish Production in California" (found in the *California Salmonid Stream Habitat Restoration Manual*, Volume I, Part I, Appendix B). Proposals for established programs must have an approved five year management plan. Proposals for continued operation of established programs must contain summaries of production costs for the past five years or for the life of the project if it has operated for less than five years. The FRGP will only fund the management and operation of fish rearing projects and will not fund design or construction of rearing facilities or purchase of equipment. Proposed marking must be in accordance with CDFW and Pacific Fisheries Management Council (PFMC) standards. Proposals which do not conform to CDFW and PFMS standards are ineligible for consideration.

Based on the information provided, and the measures that will be implemented as part of the proposed project, the Service concurs with your determination that the proposed project may affect, but is not likely to adversely affect the following species based on the following factors:

Beetle

1. All elderberry shrubs (*Sambucus Sp.*) the sole host plant of the beetle will be avoided.
2. All program projects will adhere to the minimization and avoidance measures described in the *May 2017, Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle*.
3. Restoration projects implemented under the proposed project will likely improve the quality of beetle habitat in project areas by increasing the amount of riparian habitat the beetles can utilize.

Snake

1. Snakes utilize slow moving or static water with mud substrates and the absence of continuous canopy of riparian vegetation. The majority of program projects will occur within or near streams and rivers that contain riparian corridors. These habitat characteristics do not provide suitable habitat for the snake.
2. Program projects that occur within suitable habitat for the snake, will adhere to the following proposed snake minimization and avoidance measures:
 - a. Construction and ground-disturbing activities in suitable habitat for the snake will occur during the snake's active season (May 1 to October 1) when snakes are expected to actively move and avoid danger.

- b. Twenty-four-hours prior to the commencement of construction activities, the project area will be surveyed for giant garter snakes by a Service-approved biologist. The biologist will provide the Service with a written report that adequately documents the monitoring efforts within 24-hours of commencement of construction activities. The project area will be re-inspected by the monitoring biologist whenever a lapse in construction activity of two weeks or greater has occurred.
- c. Aquatic habitat for the snake will be dewatered, and then remain dry and absent of aquatic prey for 15 days prior to the initiation of construction activities. If complete dewatering is not possible, the Service will be contacted to determine what additional measures may be necessary to minimize effects to the snake.
- d. Prior to October 1st and after aquatic habitat has been dewatered, high visibility fencing will be erected around the habitats of the snake to identify and protect these areas from encroachment of personnel and equipment. These areas will be avoided by all construction personnel. The fencing will be inspected by the Contractor before the start of each work day and maintained by the Contractor until completion of the project. Fencing will be established in the uplands immediately adjacent to aquatic snake habitat and extending up to 200 feet from construction activities. Snake exclusionary fencing will be buried at least six inches below the ground to prevent snakes from attempting to burrow or move under the fence.

Cuckoo

1. Program activities that occur in suitable breeding habitat (contiguous riparian habitat covering 50 acres or more) will not be conducted from June 1 to August 31.
2. Project activities will not remove or degrade suitable habitat for the cuckoo.
3. Restoration projects implemented under the proposed project will likely improve the quality of cuckoo habitat in project areas by increasing the amount of suitable riparian habitat the cuckoos can utilize.

Vireo

1. According to the California Natural Diversity Database (CNDDB), there are known occurrences of the vireo that occur within portions of Yolo, Sacramento, San Joaquin, and Stanislaus Counties. However, the majority of known occurrences for this species are located primarily down in Southern California (CNDDB 2018). Program projects that occur within suitable habitat and are located in Sacramento County or any counties to the south of Sacramento County will adhere to the following minimization and avoidance measures (Measures 2-4):
2. Protocol surveys for the vireo will be conducted at the proposed project sites by a qualified biologist knowledgeable in vireo identification and biology;
3. Project activities will not begin within 0.25 mile of any site with known or potential vireo habitat until after September 15; and

4. Harvest of willow branches at any site with potential habitat for the vireo will not occur between March 1 and September 15.

No further action pursuant to the Act is necessary unless new information reveals effects of the proposed action that may affect listed species or designated critical in a manner or to an extent not considered; the action is subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in this determination; or a new species or critical habitat is designated that may be affected by the proposed action. Should any of these things occur, our concurrence with your “not likely to adversely affect” determination must be re-evaluated. In such a case, the Corps must consult with the Service, either formally or informally, to ensure compliance with the Act.

If you have any questions regarding the proposed Fisheries Restoration Grant Program Project, please contact Jason Hanni, Fish and Wildlife Biologist, or myself (kellie_berry@fws.gov) at (916) 414-6631.

Sincerely,

A handwritten signature in cursive script that reads "Kellie J. Berry".

Kellie J. Berry
Chief, Sacramento Valley Division

cc:

Dylan Inskeep, California Department of Fish and Wildlife, Sacramento, California

LITERATURE CITED

California Natural Diversity Database (CNDDDB). 2018. Biogeographic Data Branch,
Department of Fish and Wildlife. Sacramento, California. Accessed October 23, 2018.