



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
777 Sonoma Avenue, Room 325
Santa Rosa, California 95404-4731

April 8, 2024

Refer to NMFS No: WCRO-2023-03076

Christopher Stubbs
Forest Supervisor
Los Padres National Forest
1980 Old Mission Drive
Solvang, California 93463

Re: Endangered Species Act Section 7(a)(2) Biological Opinion for the Rose Valley Creek Restoration Project on the Ojai Ranger District

Dear Mr. Stubbs:

On November 21, 2023, NOAA's National Marine Fisheries Service (NMFS) received the Los Padres National Forest's (Los Padres) request for formal consultation under Section 7 of the U.S. Endangered Species Act (ESA) of 1973 (16 U.S.C. 1531 et seq.). That request concerns Los Padres' action to fund and collaborate with California Trout (CalTrout) on the proposed Rose Valley Creek Restoration Project, which aims to restore historical creek function, form and habitat and eliminate non-native species (proposed action). The proposed action is within range of the endangered Southern California (SC) Distinct Population Segment of steelhead (*Oncorhynchus mykiss*) and designated critical habitat for the species.

Your request qualified for our expedited review and analysis because it met our screening criteria and contained all required information on, and analysis of, your proposed action and its potential effects to listed species and designated critical habitat.

In formulating this biological opinion, we adopted the information and analyses you provided after our independent, science-based evaluation confirmed they meet our regulatory and scientific standards. In this regard, herein we adopt by reference section 5 of the Biological Assessment (BA), "Existing Environment" into the environmental baseline for this biological opinion, section 6 of the BA, "Species Accounts" into the status of the species for this biological opinion, and section 7 of the BA, "Effects of the Proposed Action" into the effects analysis for this biological opinion. The BA is available upon request from Los Padres (Dr. Kristie Klose, Forest Fisheries Biologist, kristie.klose@usda.gov).

On July 5, 2022, the U.S. District Court for the Northern District of California issued an order vacating the 2019 regulations, which were revised or added to 50 CFR part 402 in 2019 ("2019 Regulations," see 84 FR 44976, August 27, 2019) without making a finding on the merits. On September 21, 2022, the U.S. Court of Appeals for the Ninth Circuit granted a temporary stay of the district court's July 5 order. On November 14, 2022, the Northern District of California issued an order granting the government's request for voluntary remand without vacating the 2019 regulations. The District Court issued a slightly amended order two days later on



November 16, 2022. As a result, the 2019 regulations remain in effect, and we are applying the 2019 regulations here. For purposes of this consultation and in an abundance of caution, we considered whether the substantive analysis and conclusions articulated in the biological opinion and incidental take statement would be different under the pre-2019 regulations. We determined our analysis and conclusions would not be different.

NMFS and Los Padres coordinated early about the proposed action through technical assistance. On August 7, 2023, NMFS provided technical assistance to Dr. Klose, and subsequent field meetings occurred August 10-11, 2023, to gain a comprehensive understanding of the proposed action at both the local and watershed scale prior to receiving a consultation request from Los Padres.

Currently, Rose Valley Creek flows through three man-made lakes, which are the primary source of invasive species to Rose Valley, Howard and Sespe creeks. The proposed action is approximately seven miles north of the city of Ojai, Ventura County, California (Figure 1, Appendix A of the BA) and expected to take three seasons (mid-July to early December for each season). In collaboration with Los Padres, CalTrout designed passage components, which involve removing three man-made lakes, one culvert, one concrete-drop structure, and four hardened stream crossings along Rose Valley Creek below Rose Valley Campground to allow unimpeded movement of surface waters, substrata, large-woody debris, and all aquatic biota (*see* Section 4 of the BA, *Description of the Proposed Action*).

The proposed action includes dewatering more than 500-feet of contiguous stream (Northwest Hydraulic Consultants 2023¹). The north and south segments will be dewatered separately (Los Padres 2023²). The dewatering period is likely to be two months for each segment. The north maximum dewatered stream length is 2,250 feet, while the south maximum dewatered stream length is 2,370 feet. Under the proposed action, biological monitoring will be implemented where the biologist would have the authority to stop work to capture and relocate steelhead that may have been overlooked, missed, or in risk of becoming stranded due to the dewatering phase of instream activities. Observed steelhead would be relocated to adjacent and appropriate habitat not impacted by construction-related disturbance activities (within the BA, *see* section 4.4. *Environmental Protection Measures*; *see* section 4.4.6 *Diversion, Dewatering, and Fish Capture and Relocation*; and *see* Appendix F: Hydrology Report, pg. 12).

We examined the status of each species that would be adversely affected by the proposed action to inform the description of the species' "reproduction, numbers, or distribution" as described in 50 CFR 402.02. We examined the condition of critical habitat throughout the designated area and discuss the function of the physical or biological features essential to the conservation of the species that create the conservation value of that habitat. As stated above, although we adopt section 6 of the BA, "Species Accounts" into the status of the species for this biological opinion, below we offer additional insight on consequences to the status of the species given climate

¹ Northwest Hydraulic Consultants Ltd. 2023. *Rose Valley Creek Restoration Basis of Design Report*. Prepared for California Trout, Inc. on behalf of U.S. Forest Service Los Padres National Forest. 82pp.

² Los Padres National Forest. 2023. *Inquiry re Rose Valley Creek Proposed Action*. Electronic communication to NOAA Fisheries. December 11.

change projections. We also consider climate projections and related implications for the action area. Based on the best available science, we expect endangered SC steelhead will have reduced range and probability of occurrence in future years due to climate change (Taylor et al. 2019³). Individual populations have been more adversely affected by the extended drought through loss of over-summering habitat and the effects of specific wildfires on habitat quality and availability (NMFS 2023⁴). Overall, future habitat suitability is anticipated to be lower for the species, and climate models predict an increased number of large storms over the next several decades (Taylor et al. 2019).

“Action area” means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR 402.02). We adopted section 4.2 of the BA, which describes the extent of the action area.

The “environmental baseline” refers to the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultations, and the impact of State or private actions which are contemporaneous with the consultation in process. The consequences to listed species or designated critical habitat from ongoing agency activities or existing agency facilities that are not within the agency’s discretion to modify are part of the environmental baseline (50 CFR 402.02). We adopt section 5 (*Existing Environment*) and 6.5 (*Southern California Steelhead in the Action Area and Vicinity*) of the BA, which describe the Environmental Baseline.

As stated above, although we adopt section 5 and 6.5 of the BA, below we offer additional insight on the current conditions in the action area and the Sespe Creek steelhead subpopulation. Prior to building complete fish-passage barriers in the action area and converting the natural channel to Rose Valley Lakes for recreational fishing, Rose Valley Creek tributary supported spawning and rearing of the Sespe Creek steelhead subpopulation, which in turn contributed to the survival of the Santa Clara River population - a Core 1 population focus for recovery (Table 7-1 in NMFS’ 2012 Recovery Plan for Endangered Southern California Steelhead⁵). Sespe Creek maintains a high abundance of wild steelhead; considering the extent of access for the species in the action area is limited to only the 1,500-foot segment of Rose Valley Creek downstream of the lower lake outlet (Figure 1 of the BA), the number of individuals encountered is low. These observed individuals represent a small fraction of steelhead within Sespe Creek and surrounding tributaries.

³ Taylor, J. B., E. D. Stein, M. Beck, K. Flint, and A. Kinoshita. 2019. Vulnerability of stream biological communities in Los Angeles and Ventura counties to climate change induced alterations of flow and temperature. Southern California Coastal Water Research Project. August. Technical Report 1084. 104pp.

⁴ National Marine Fisheries Service (NMFS). 2023. Five-Year Review: Summary & Evaluation of Southern California Steelhead. National Marine Fisheries Service. West Coast Region. 226 pp

⁵ National Marine Fisheries Service (NMFS). 2012. Southern California Steelhead Recovery Plan. Southwest Regional Office, National Marine Fisheries Service. Long Beach, California. January. 563pp

In the context of designated critical habitat, the Sespe Creek watershed is critical to maintaining the steelhead population and has great potential for steelhead recovery owing to its 198 km of undammed habitat, cold perennial flows, and suitable spawning and rearing habitat (*see* Section 6.5 of the BA, *Southern California Steelhead in the Action Area and Vicinity*). However, in the action area, habitat fragmentation and drought created migration barriers preventing adults from accessing the higher reaches of the watershed where historical spawning and nursery habitats exist. For climate projections within the action area, we refer the reader to the previous discussion on status of the species.

Under the ESA, “effects of the action” are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (*see* 50 CFR 402.17). In our analysis, which describes the effects of the proposed action, we considered 50 CFR 402.17(a) and (b).

In section 7 of the BA (*Effects of the Proposed Action*), there is a detailed discussion and comprehensive assessment of the effects of the proposed action. After our independent, science-based evaluation, we determined it meets our regulatory and scientific standards. Therefore, we adopted section 7 of the BA here.

As described in more detail in the BA, endangered steelhead are expected to be affected by the proposed action. The effects of construction (loss of habitat quality via dewatering) are anticipated to be temporary and not impact more than 30 juvenile individuals of the endangered SC steelhead population for the total duration of the proposed action. This anticipated number of individuals is informed by NMFS understanding of the trends in individual SC steelhead in the action area. Because the proposed action will consist of yearly work seasons (one work season per year), we anticipate 10 individual steelhead would be affected each season. The temporary loss of habitat quality is expected to be confined and localized. We anticipate one steelhead individual would be injured (i.e., non-lethal take) during the following activities: dewatering of the work area (stranding), capture (handling) to relocate steelhead in the dewatered area, or during transport to the relocation site (3 steelhead total over three years). We anticipate one juvenile individual steelhead would experience mortality each year (3 steelhead total over three years) as a result of dewatering.

Our summary below on the effects to designated critical habitat is based on the information in the BA which we are incorporating by reference. During construction, there would be temporary impacts to designated critical habitat, including increased sedimentation, erosion, and turbidity and the potential for spills of hazardous materials (e.g., heavy equipment hydraulic fluid). Potential impacts to water quality would be avoided through proposed design criteria including adherence to a Water Pollution Control Plan, Hazardous Substance Pollution Contingency Plan, Soil Management Plan, and an Erosion Control Plan (*see* Section 4.4 of the BA). Erosion and sediment control measures are expected to prevent erosion or siltation both on and off-site and prevent associated degradation of water quality (*see* section 7.4.1.1 *Release and Exposure of Suspended Sediments* in the BA and Appendix F: Hydrology Report, pg. 14-16).

Impacts to riparian vegetation will be primarily through implementing the Revegetation Plan, which includes grading outside the stream corridor to restore pre-disturbance topography and upland vegetation areas. No adverse effects are anticipated as placement of large wood, rock, and vegetation are expected to maintain the constructed stream profile and prevent channel re-incision under variable sediment loads and flows (*see* Table 1, pg. 11 in the BA). Also, native woody riparian vegetation will not be cut or removed and existing vegetation will be maintained to provide adequate shade (*see* section 4.4 *Environmental Protection Measures* in the BA). Overall, the proposed extensive revegetation is expected to restore historic riparian habitat and designed to provide habitat connectivity and modulate stream temperatures.

“Cumulative effects” are those effects of future state or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation (50 CFR 402.02 and 402.17(a)). Future Federal actions, which are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the ESA. Section 7.6 (*Cumulative Effects*) of the BA, which is being adopted here, describes cumulative effects. Los Padres described potential activities, but none of the activities are reasonably certain to occur within the action area.

Some continuing non-Federal activities are reasonably certain to contribute to climate effects within the action area. However, it is difficult if not impossible to distinguish between the action area’s future environmental conditions caused by global climate change that are properly part of the environmental baseline vs. cumulative effects. Therefore, all relevant future climate-related environmental conditions in the action area are referenced earlier in the discussion of environmental baseline and described in the status of the species discussion above.

The Integration and Synthesis section is the final step in our assessment of the risk posed to species and critical habitat as a result of implementing the proposed action. In this section, we add the effects of the action to the environmental baseline and the cumulative effects, taking into account the status of the species and critical habitat, to formulate the agency’s biological opinion as to whether the proposed action is likely to: (1) reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing its numbers, reproduction, or distribution; or (2) appreciably diminish the value of designated or proposed critical habitat as a whole for the conservation of the species.

Section 6.4.3 *General Southern California Steelhead Species Status* of the BA, which is being adopted here, describes the status of the species. Although Sespe Creek maintains a high abundance of wild steelhead and extensive spawning and rearing habitats (*see* section 6.5 of the BA, *Southern California Steelhead in the Action Area and Vicinity*), as explained in NMFS 2023, the risk of permanently losing the anadromous phenotype for endangered SC steelhead over the long term may be very high and likely increasing due to the lack of unobstructed migration corridors between upstream drought refugia and the Pacific Ocean. Overall, the endangered DPS of SC steelhead continues to have low viability and is at a high risk of becoming extinct in the foreseeable future.

Because juvenile steelhead are expected to be present in the action area during the proposed action, individual steelhead are subject to effects from capture and relocation prior to dewatering designated critical habitat, and water quality alterations.

In regard to effects due to the dewatering activities, we anticipate injury or mortality during the process of capture and relocation, but general precautions are in place to minimize, if not eliminate, the risk of injury and mortality, and adjacent instream habitats are expected to suitably harbor the relocated steelhead. Because the habitat alteration due to the dewatering is short lived and localized, the proposed action is not expected to result in adverse modification to designated critical habitat.

Regarding effects due to water-quality alterations, construction activities in the stream channel and lakes could disturb sediments and soils in the action area, leading to erosion, increased sedimentation, and increased turbidity. To minimize these potential effects, the proposed action includes implementation of resource-protection measures. Thus, the expected increases in sedimentation and turbidity, potential release and exposure of contaminants, and level of soil and sediment disturbance associated with barrier removals in the action area are not expected to result in adverse effects to individual listed steelhead or physical or biological features of designed critical habitat.

NMFS concludes no more than 30 juvenile steelhead will be captured and relocated throughout the duration of the proposed action (i.e., 3 years) as a result of dewatering within the action area. We anticipate 10 individuals will be captured and relocated in each of the three work seasons. In each work season, we anticipate death of no more than 1 juvenile steelhead, and injury of no more than 1 juvenile steelhead. Injury and death will likely occur during the following activities: de-watering process (stranding), capture (handling), or during the transport to the relocation site; this represents a small fraction of steelhead within Sespe Creek and surrounding tributaries (*see* section 6.5 of the BA, *Southern California Steelhead in the Action Area and Vicinity*). These steelhead would be injured or killed at a low frequency (only 6 fish throughout the duration of the proposed action) and represent a small fraction of the entire SC steelhead DPS. Therefore, it is unlikely the low-level of injury and mortality of steelhead NMFS anticipates will have a significant impact on SC steelhead survival and recovery.

Further, the proposed action is anticipated to result in long-term benefits to steelhead in the form of restored access to historical spawning and rearing habitats in Rose Valley Creek up to the terminus at Rose Valley Falls. Accessibility to the action area under restored conditions (functional, suitable spawning and rearing habitat) is important to steelhead survival and recovery because the proposed action is designed to proportionately reduce climate change effects on endangered SC steelhead and critical habitat in an area that, without restoration actions, is expected to become less suitable in the future (*see* Table 16 in Taylor et al. 2019). As Rose Valley Creek is a tributary to Sespe Creek and Sespe Creek a tributary to Santa Clara River, the proposed action is expected to support long-term growth and survival of the Santa Clara River population of endangered steelhead. The change in habitat distribution should support juvenile growth prior to ocean entry, thus increasing the likelihood for long-term survival of a Core 1 population and recovery of the DPS as a whole.

After reviewing and analyzing the current status of the listed species and critical habitat, the environmental baseline within the action area, the effects of the proposed action, the effects of other activities caused by the proposed action, and cumulative effects, it is NMFS' biological opinion the proposed action is not likely to jeopardize the continued existence of the endangered SC steelhead or destroy or adversely modify its designated critical habitat.

INCIDENTAL TAKE STATEMENT

Section 9 of the ESA and Federal regulations pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without a special exemption. "Take" is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. "Harm" is further defined by regulation to include significant habitat modification or degradation that actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding, or sheltering (50 CFR 222.102). "Harass" is further defined by interim guidance as to "create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering." "Incidental take" is defined by regulation as takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or applicant (50 CFR 402.02). Section 7(b)(4) and section 7(o)(2) provide that taking that is incidental to an otherwise lawful agency action is not considered to be prohibited taking under the ESA if that action is performed in compliance with the terms and conditions of this ITS.

Amount or Extent of Take

In the biological opinion, NMFS determined incidental take is reasonably certain to occur as follows:

For every in-channel work season (three seasons total), 10 juvenile steelhead will be captured and relocated to suitable instream habitat outside of the de-watered area (30 total over three in-channel work seasons). One of these captured individuals will be injured during the following activities: de-watering process (stranding), capture (handling), or during the transport to the relocation site (3 total over three in-channel work seasons). One individual within the action area will be killed as a result of the listed activities above (3 total over three in-channel work seasons). The accompanying biological opinion does not anticipate other forms of take incidental to the proposed action.

Effect of the Take

In the biological opinion, NMFS determined the amount or extent of anticipated take, coupled with other effects of the proposed action, is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

Reasonable and Prudent Measures

“Reasonable and prudent measures” are measures that are necessary or appropriate to minimize the impact of the amount or extent of incidental take (50 CFR 402.02).

1. Undertake measures to avoid or minimize injury to steelhead resulting from capture, and reconcile conditions that could harm or injure steelhead during the dewatering, transport, and relocation processes.
2. Report activities to NMFS associated with minimizing and monitoring the proposed action’s effects on steelhead.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the ESA, the Federal action agency must comply (or must ensure that any applicant complies) with the following terms and conditions. Los Padres or any applicant has a continuing duty to monitor the impacts of incidental take and must report the progress of the action and its impact on the species as specified in this ITS (50 CFR 402.14). If the entity to whom a term and condition is directed does not comply with the following terms and conditions, then protective coverage for the proposed action would likely lapse.

1. The following terms and conditions implement reasonable and prudent measure 1:
 - A. The lead fisheries biologist shall continuously monitor the placement and removal of the water diversion (coffer dam and pipe) to ensure all steelhead are removed from the respective affected areas to be dewatered. This biologist shall capture steelhead stranded in residual wetted areas as a result of streamflow diversion and workspace dewatering, and relocate steelhead to a suitable instream location immediately upstream or downstream of the workspace. One or more of the following NMFS approved methods shall be used to capture steelhead: dip net, seine, throw net, minnow trap, or by hand. It is likely the lead fisheries biologist will require one or more people (who also have experience with fish handling) to assist with these activities. The seine mesh shall be adequately sized to ensure fish are not “gilled” during capture and handling activities. If a steelhead becomes entangled in the nets, then this shall be reported on the day of entanglement to NMFS biologist Brittany Struck (909-235-9905) for the purpose of developing a plan to further minimize injury to steelhead.
 - B. The lead fisheries biologist for the proposed action shall contact NMFS (Brittany Struck, (909) 235-9905 and Brittany.Struck@noaa.gov) immediately if one or more steelhead are found dead or injured. The purposes of the contact shall be to review the activities resulting in take, to determine if additional protective measures are required, and to discuss handling procedures for injured or dead steelhead. Steelhead shall be handled with extreme care and kept in water to the maximum extent possible once detected. All captured steelhead shall be kept in cool, shaded, aerated water and protected from excessive noise or jostling during the transport to the relocation site.

C. If a steelhead mortality does occur, the lead fisheries biologist for the proposed action shall coordinate with NMFS (Brittany Struck, (909) 235-9905 and Brittany.Struck@noaa.gov) to ship the carcass as soon as possible on dry ice through overnight, express mail to NMFS (Attn: Brittany Struck, 501 West Ocean Boulevard, Suite 4200, Long Beach, California 90802).

2. The following terms and conditions implement reasonable and prudent measure 2:

Los Padres shall provide a written monitoring report to NMFS (Brittany Struck, Brittany.Struck@noaa.gov) within 30 days following completion of the proposed action. The report shall include the number of steelhead killed or injured during the proposed action and biological monitoring; the number and size of steelhead removed and relocated; latitude and longitude coordinates of the action area; the length of the stream that was dewatered; the area of the creek reach that was dewatered; and the restored habitat type(s) created as a result of the proposed action and estimated percent of each (i.e., % pool, % riffle, % run, % glide, % side channel, etc.).

Conservation Recommendations

Section 7(a)(1) of the ESA directs Federal agencies to use their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of the threatened and endangered species. Specifically, conservation recommendations are suggestions regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat or regarding the development of information (50 CFR 402.02). NMFS has no conservation recommendations to minimize or avoid adverse effects on endangered SC steelhead anticipated as a result of the proposed action.

Reinitiation of Consultation

Under 50 CFR 402.16(a): “Reinitiation of consultation is required and shall be requested by the Federal agency or by the Service where discretionary Federal agency 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 agency 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.”

This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). The biological opinion will be available through NOAA Institutional Repository [<https://repository.library.noaa.gov/>]. A complete record of this consultation is on file at NMFS’ Long Beach Office.

Please direct questions regarding this letter to Brittany Struck at (909) 235-9905 or at Brittany.Struck@noaa.gov.

Sincerely,



Alecia Van Atta
Assistant Regional Administrator
California Coastal Office

cc: Dr. Kristie Klose, Forest Fisheries Biologist, kristie.klose@usda.gov
Russell Marlow, Senior Project Manager, South Coast Region CalTrout,
rmarlow@caltrout.org
Admin file/federal record: 151422WCR2024CC00073