U.S. BUREAU OF RECLAMATION MID-PACIFIC REGION NORTHERN CALIFORNIA AREA OFFICE TRINITY RIVER RESTORATION PROGRAM WEAVERVILLE, CALIFORNIA

BUREAU OF LAND MANAGEMENT REDDING FIELD OFFICE 6640 LOCKHEED DRIVE REDDING, CA 96002

FINDING OF NO SIGNIFICANT IMPACT

In accordance with the National Environmental Policy Act of 1969 (NEPA), as amended, and with the Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508), the Trinity River Restoration Program office of the U.S. Bureau of Reclamation and the Bureau of Land Management, Redding Field Office, have found that the Proposed Action, supported by the analysis disclosed in the final Environmental Assessment/Initial Study for the Trinity River Channel Rehabilitation Site: Chapman Ranch Phase A (River Mile 82.8-83.5) would result in no significant impacts on the human environment considering the context and intensity of impacts.

Supporting documentation in the EA portion of the EA/IS was prepared to meet the requirements of NEPA. For the purposes of NEPA, the EA is ticred to the *Trinity River Mainstem Fishery Restoration Program Environmental Impact Statement* and incorporates by reference the *Channel Rehabilitation and Sediment Management Activities for Remaining Phase 1 and Phase 2 Sites, Part 1: Final Master Environmental Impact Report.*

Recommended by:

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FINDING OF NO SIGNIFICANT IMPACT Trinity River Channel Rehabilitation Site Chapman Ranch Phase A (River Mile 82.8-83.5)

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BACKGROUND AND NEED

The Bureau of Reclamation (Reclamation) completed the Trinity River Division (TRD) of the Central Valley Project (CVP) in 1964, blocking passage of salmonids and lamprey to habitat upstream of Lewiston Dam and restricting anadromous fish to habitat downstream. The TRD also eliminated coarse sediment transport from over 700 square miles of the upper watershed. Trans-basin diversions from Lewiston Lake diminished annual flows by up to 90 percent and altered the hydrologic regime of the Trinity River for a 40-mile reach downstream. The consequences of diminished flows included encroachment of riparian vegetation, establishment of riparian berms, and changes in alluvial processes at various locations along the river as far downstream as the North Fork Trinity River. These geomorphic changes resulted in a decrease in the diversity of species and age classes of riparian vegetation along the river, impaired floodplain function, and adversely affected fish habitat.

In 1994, the U.S. Fish and Wildlife Service (USFWS) as the federal lead agency and Trinity County as the California Environmental Quality Act (CEQA) lead agency began the National Environmental Policy Act (NEPA) process for developing the Trinity River Mainstem Fishery Restoration Environmental Impact Statement (EIS)/Environmental Impact Report (EIR). The 2000 Record of Decision (ROD) for the Trinity River Mainstem Fishery Restoration Final Environmental Impact Statement/Environmental Impact Report (FEIS/EIR) (December 19, 2000; USDI 2000) directed Reclamation and the USFWS to implement the Flow Evaluation Alternative, coupled with additional watershed protection efforts

(described in the Mechanical Restoration Alternative), as the Preferred Alternative identified in the FEIS/EIR to restore the Trinity River's anadromous fishery. Through the Trinity River Restoration Program (TRRP), the ROD directed Reclamation to restore the Trinity River fishery by implementing a combination of higher releases from Lewiston Dam (up to 11,000 cubic feet per second [cfs]), floodplain infrastructure improvements, channel rehabilitation projects, fine and coarse sediment management, watershed restoration, and an Adaptive Environmental Assessment and Management Program. As a project-level NEPA document, the FEIS/EIR provides guidance for policy decisions associated with managing Trinity River flows, and as a programmatic NEPA document, it provides first-tier support of related mechanical restoration and sediment management actions. The 2009 Master EIR provides more specific analysis of non-flow elements of the TRRP and was incorporated by reference in the NEPA document for the Proposed Action to support NEPA decisions required by Reclamation and the Bureau of Land Management (BLM).

The TRRP, acting under the guidance of the Trinity Management Council (TMC), provides the overall program direction required to implement the 2000 ROD. TMC member agencies include Reclamation, USFWS, National Marine Fisheries Service (NMFS), U.S. Forest Service (USFS), the Hoopa Valley Tribe (HVT), the Yurok Tribe (YT), the California Natural Resources Agency represented by the California Department of Fish and Wildlife (CDFW) and the California Department of Water Resources (DWR), and Trinity County. In addition to providing technical expertise for the design and review of the rehabilitation sites, the TRRP provides technical and administrative support to the TMC related to both scientific evaluation of restoration progress and management implementation.

The TRRP is responsible for the overall implementation of the ROD, which identified the Chapman Ranch Phase A site as a Phase 2 site. The Trinity River Channel Rehabilitation Site: Chapman Ranch Phase A (River Mile [RM] 82.8-83.5) project (Proposed Action) includes reducing riparian encroachment, placement of large woody debris (LWD), physical alteration of alluvial features (e.g., floodplains and side channels), construction of hydraulic structures (wood and log features), and removal/replacement of riparian vegetation at strategic locations. Extensive revegetation of native riparian vegetation areas (woody and wetland species) and management of upland mixed conifer habitats to mimic historic conditions is included in the Proposed Action. These rehabilitation activities would increase habitat suitability and availability for salmonids and other native fish and wildlife species during a wide range of river flow conditions.

The Proposed Action includes work at the Chapman Ranch Phase A site, located in part on public lands managed by the BLM Redding Field Office. Construction activities at the site are anticipated to begin in summer 2019 and continue through 2020 Construction activities near residential areas will be scheduled between 7:00 a.m. and 7:00 p.m., Monday through Saturday. No construction activities will be scheduled for Sundays

The project area encompasses approximately 103 acres, including 80 acres of BLM-managed land and 23 acres of private land. The site is in Section 19 and 20 of Township 33 North, Range 10 West on the *Junction City, California* 7.5-minute U.S. Geological Survey (USGS) quadrangle, Mount Diablo Base and Meridian. The river elevation at the site is approximately 1,520 feet above mean sea level (msl).

Land ownership and the project boundary are shown on Figure 2-1 of the EA/IS. TRRP staff, with interdisciplinary review from the BLM and its TRRP partners, developed the site boundaries to incorporate the rehabilitation activities described in Chapter 2 of the EA/IS.

Access to the Chapman Ranch Phase A site is via (1) a dirt road south and west of Sky Ranch Road, which intersects State Route 299 southeast of Junction City and (2) a dirt road west of the site accessed from Dutch Creek Road. The location of this project in relation to other TRRP sites is illustrated on Figure 1-1 of the EA/IS.

During the design process, the boundaries of upland activity areas were revised to avoid affecting adjacent tailings deposits, existing mining claims, and other sensitive features (e.g., riparian vegetation). Although some mature riparian vegetation occurs on alluvial features throughout the project areas, much of the upland vegetation in the project area is characterized as scattered stands of mixed conifer/hardwood forest with an understory of shrubs and grasses.

Rehabilitation activities directed by the ROD and further described in the EA/IS, in conjunction with annual ROD flow releases, are expected to contribute to the restoration of the Trinity River mainstem fishery. Implementing channel rehabilitation work at the Chapman Ranch Phase A would continue implementation of the ROD and would contribute to the restoration of aquatic habitat in the mainstem Trinity River through the development of properly functioning channel conditions.

The EA/IS for the project considered two alternatives: the No Action Alternative and the Proposed Action. After consideration of the environmental commitments and project design features listed in Chapter 2 and Appendix B of the EA/IS, impacts from the Proposed Action would be less than significant pursuant to NEPA. Details concerning these alternatives and other alternatives considered but not carried forward for evaluation are included in Chapter 2 of the EA/IS.

An interdisciplinary team of the TRRP identified discrete activity areas within the boundaries of Chapman Ranch Phase A site. Each activity area was established to meet a suite of specific objectives in conformance with the overall goals and objectives outlined for the TRRP. Activity areas are labeled using an alpha-numeric system based on the type of activity that would occur in a specific place. Riverine activities are labeled with an R followed by the construction site number (e.g., R-1, R-2); upland activities are labeled with a U followed by the construction site number; in-channel work areas are identified with an IC; and construction staging/use areas are identified with a C followed by the construction site number.

The TRRP has developed programmatic objectives for channel rehabilitation projects that are described in Chapter 2 of the EA/IS. Ultimately, the goals of the channel rehabilitation efforts are to provide functional aquatic habitat for all life stages of anadromous salmonids over a range of flow conditions; to provide suitable salmonid rearing habitat, presently believed to be a limiting factor in the system; and to reestablish healthy alluvial river geomorphic processes that will maintain high-quality salmonid habitat at a dynamic equilibrium.

Chapman Ranch Phase A Rehabilitation Activities

The activities proposed at the Chapman Ranch Phase A site are briefly described below; additional details are provided in Chapter 2 and Appendix B of the EA/IS.

Proposed Action

The project area for the Chapman Ranch Phase A project begins approximately 3 miles upstream of the Dutch Creek Road Bridge in Junction City. Habitat for salmonids and other aquatic and

riparian species is currently impaired throughout this reach by a legacy of dredger mining within and adjacent to the project area in conjunction with the changes in the flow regime associated with the construction and operation of the Trinity River Division of Reclamation's Central Valley Project (TRD). The Proposed Action has been developed to strike a balance between hard and soft methods for restoring aquatic and riparian habitat, while providing the river opportunities to express the dynamic processes that existed before the construction and operation of the TRD, but on a smaller scale.

The Proposed Action consists of a number of rehabilitation activities at the Chapman Ranch Phase A site. These activities are based on those described and analyzed in Section 2.3.2 of the Master EIR.

The proposed rehabilitation activities are briefly described below. Appendix B to the EA/IS provides a more in-depth description of the design objectives and discusses each activity area in detail. With the exception of recontouring and vegetation removal, each activity type and area has been assigned a unique alphabetic and numeric identification and descriptive label that corresponds to the type and location of the activity area illustrated on Figure 2-1 of the EA/IS.

Recontouring and Vegetation Removal

Under the recontouring and vegetation removal activities, the ground surface would be modified to reduce riparian encroachment and the risk of stranding juvenile salmonids. To varying degrees, vegetation would be cleared and removed at all activity areas that would be subject to rehabilitation activities with the exception of crossings. Where recontouring is part of the Proposed Action (e.g., floodplain lowering), the entire site would be subject to vegetation removal. Where possible, riparian vegetation (e.g., willows) would be salvaged for use in on-site revegetation efforts.

Grading would be required to construct or enhance topographic features that could develop into functional riparian habitat; excavation and the placement of fill would be balanced. In addition to the vegetation removed from activity areas, individual trees in other activity areas could be removed to enhance safety and operability of the work area. As shown on Figure 2-1, upland and contractor use areas (e.g., U-4, C-3) include discrete locations where removal of vegetation is anticipated based on consultation with, and authorization by, BLM and landowners.

Vegetation removed from activity areas, including contract use areas, would be used for in-river placement as large wood or would be chipped or masticated for use as part of revegetation efforts to increase nutrients in depositional areas and enhance the water holding capability of these deposits. There are a limited number of mature trees at the site but, as available, they may be used in the construction of habitat and flow modification features. Activities would be accomplished using a variety of methods, including hand tools and heavy equipment such as excavators, bulldozers, scrapers, and dump trucks. Where feasible existing riparian vegetation will be maintained to facilitate future recruitment.

Riverine Construction (R) - Lowered Floodplains, Collection Channel

Two types of inundated surfaces (e.g., floodplains, collection channel) would be constructed to inundate and function at flows ranging from 350 to more than 6,000 cubic feet per second (cfs). Construction of these surfaces would also enhance the type and degree of connection to the

mainstem at various flows as portions of the existing mainstem channel (e.g., at R-7 and R-9) would maintain water and aquatic habitat during all flows. These activities are intended to expand the surface area of the channel that could be inundated by reoccurring flows below the ordinary high-water mark (i.e., 6,000 cfs). Vegetation would be cleared as necessary, and earth would be excavated to meet design elevations for periodic inundation.

Newly inundated surfaces would provide important rearing and slow-water habitat for juvenile salmonids and other native anadromous fish and wildlife. They would also increase the likelihood of channel migration resulting in enhanced sinuosity, thereby providing the habitat variability that was historically present and is required to support rapid growth of native fishes.

These treatment areas would rely on a combination of natural recruitment of native riparian vegetation and riparian planting to establish a more diverse assemblage of native vegetation. Revegetation efforts would be consistent with requirements and commitments outlined in the TRRP's Draft Riparian Mitigation and Monitoring Plan. This plan requires supplemental efforts (e.g., in-planting, weed control, irrigation) as necessary to establish riparian vegetation to meet the standard of no net loss in riparian vegetation from pre-project levels.

In-Channel Construction (IC)

In-channel construction (IC) includes those activities that would occur in the river under base flow conditions (e.g., 450 cfs) during the in-channel construction window (July 15 to September 15) authorized by the California Department of Fish and Wildlife. The construction of various types and sizes of grade control structures, including construction or excavation of alluvial features (e.g., bars, riffles, and pools), would increase channel complexity through promotion of channel migration, increased sinuosity, reduced fine sediment storage, increased coarse sediment transport, and restoration of depositional features available for spawning and rearing habitat. Riffles are the shallower, faster moving sections of a river. Gravel bars and islands provide habitat complexity as well as other ecological functions.

During construction of in-channel activity areas, earthen berms and turbidity curtains would isolate constructed features to ensure that water quality standards are met. These berms would be removed at the end of construction if the water within these contained areas is of appropriate quality for discharge to the river or they may be left in place for removal by subsequent high flows. Alternatively, water in the constructed features may be pumped to uplands or slowly metered into the mainstem river post-construction. These techniques would ultimately reduce the amount of turbid water that would reach the Trinity River and would ensure that water quality permit requirements are met (e.g., no more than 20 nephelometric turbidity units (NTU) at 500 feet downstream of construction).

Meander Channel Complex (Bars, Riffles and Pools)

A meander channel complex that includes activity areas IC-5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, and 16 is intended to create a meander sequence with a bar-pool-riffle morphology that functions under the current TRRP flow regime. Construction of this complex would increase channel length, complexity, sinuosity, and reduces slope in this section of the channel.

Collectively, the construction of these activity areas would provide a diversity of water depths and velocities across a wider range of flows than the existing mainstem channel configuration.

Activity areas IC-5, 8, 12, 13 and 16 are riffles that would link the bars together and separate the pools. The general location of the pools is associated with IC 7, 10 and 15 as shown on Figure 2-1.

Upland (U)

Excavated materials (e.g., fill) that would not be used for instream construction would be placed in upland environments as fill on terraces formerly subjected to a variety of placer mining activities. However, as shown on Figure 2-1, an area along the A-12 access road has been identified as an interpretative site with signage for the tailings viewshed; this area would be excluded from the use of fill. Six activity areas (U-2, 4, 5, 6, 7, and 8) have been located to ensure that their placement would not increase the elevation of the 100-year flood, consistent with requirements of Trinity County's Floodplain Ordinance. Several of these areas (e.g., U-6) may be used for processing alluvial material (e.g., fish rock) necessary for the construction of inchannel and riverine activity areas.

These activity areas would be used to place excess material excavated in the construction of riverine and in-channel activity areas. Within these activity areas, the depth of fill would range from about foot near their edges to as much as 20 feet, depending on the size and location of the activity area. Fill materials would be spread in uniform layers that would blend in with the natural terrain and provide stable slopes for revegetation. Activity areas U-4 and 5 would be used for placement of material excavated from activity areas on river left. Activity areas U-2, 6, 7 and 8 would be used for placement of material excavated from activity areas on river right.

Detailed Master EIR Activities Described to Provide Additional Clarity Beyond That in Table 2-1 of Master EIR

Impacts associated with the use of organic (e.g., large wood, slash) and inorganic (e.g., boulders) materials were covered in the Master EIR under Sediment Management activities along with other activities that would facilitate channel construction and maintenance (e.g., excavation and placement of alluvial material in in-channel and riverine areas). The TRRP would use appropriate materials to cause and enhance changes in the river channel to improve aquatic and wildlife habitat. The addition of large rock (>6 inches) as ballast for rock/wood structures (e.g., structured log jams (SLJs)) would ensure that these structures would remain in place and confine the river, thereby increasing the power of the river to scour and maintain adult salmonid holding habitat.

As appropriate, large wood and accompanying slash removed as part of vegetation clearing activities would be retained and used for construction of SLJ and wood placement (WP) during riverine and in-channel activities to provide additional hydraulic and habitat complexity and temporary erosion control measures. This activity could include large wood placement of individual pieces, small accumulations, and large habitat structures. Construction of SLJs and WP would develop topographical and hydraulic complexity and increase bank length to provide additional salmonid rearing habitat over a wide range of flows. The use of wood would also improve spawning, holding and rearing habitat for anadromous salmonids.

Woody material is a natural part of healthy rivers. It provides important habitat for aquatic species by providing cover from high flows and predators. The low-velocity areas collect

suitable spawning materials, and woody organic materials are a food source for aquatic insects. It can help create and maintain beneficial habitat features such as pools, islands, and gravel bars.

Processed alluvial material would be created on-site, obtained and imported from off-site gravel processing areas, or purchased from local vendors for delivery. Unprocessed material or "pit-run" dirt and gravel from onsite excavation may not be placed directly in-river but may be used in construction of features and for habitat enhancement when using methods that would be continuously monitored for compliance with turbidity standards during work in or near the river.

All large wood features would be designed so that local velocities would be safe for navigation during relatively low river flows (less than approximately 2,000 cfs). Natural wood material would be placed in a manner to reduce the chances of hazardous contact with swimmers and boaters at flows less than about 2,000 cfs.

Because of uncertainties about the availability, types, shapes, and sizes of the wood and the planned construction methods, the exact amounts and locations of wood placement are not known at this time. Trees, tree tops, and branches for use in constructing large wood structures would be obtained on-site and/or opportunistically from other lawful sources (e.g., public or private lands where vegetation management activities have occurred) and delivered to the project area. Final WP locations and dimensions of SLJs would be determined in the field based on direction from Reclamation's field engineer.

Contractor Use Areas (C)

There are 12 activity areas that would be available as staging and contractor use areas and, in some instances, processing of alluvial material. Five of these (C-6, 7, 9, 10, and 11) would be limited to vehicular access and parking through existing open areas. Minimal clearing or grading would occur at these areas. Five of these areas (C-2, 3, 5, 8, and 13) would be directly associated with the construction and revegetation of riverine and in-channel activity areas (including in-channel wood features). These areas would be necessary for the temporary storage of equipment and materials (e.g., gravel, large wood, slash). Typically, these activity areas are subject to clearing and/or grading to varying degrees to ensure safe and efficient temporary work areas. Collectively, all C areas serve as transportation corridors for moving equipment and materials from one activity area to an adjacent one. Water would be applied to these areas for dust abatement as directed by the Contracting Officer.

Access Routes (A)

There are 10 routes identified as discrete activity areas; two of these have multiple segments (e.g., 7a). Only one of these is associated with an existing road open to the public; A-11 begins at the intersection of Sky Ranch Road and follows the alignment of a BLM route that accesses the Deep Gulch Channel Rehabilitation site to a point where it intersects with A-12. Route A-11 currently provides access to an active mining claim and following project construction, this route would be restricted to administrative access as approved by BLM. Any changes in the alignment of temporary routes required during construction would be approved by the appropriate landowners/managers prior to proceeding. Activity areas A-8 and A-9 provide access through private lands to that portion of the project area on river left. Following authorized use of these routes, rehabilitation measures (e.g., erosion control, revegetation) would occur at the conclusion

of the project. In addition to these measures, Activity Areas A-10 and A-11 would be reduced to a nominal width of 10 feet; necessary for a high clearance passenger vehicle.

These routes would primarily be used by a wide array of heavy equipment and other vehicles, often requiring pull-outs (which would be placed at appropriate locations in the field) for twoway traffic. The site-specific design and use of these routes would consider factors like topography, soils, existing vegetation, and the need for future vehicle access, e.g. for revegetation maintenance. Best management practices would be used to reduce the impacts of road-related sediment on the riparian and aquatic environments.

Temporary Crossings (X)

Two temporary river crossings (X-1, X-2) would be required. These would be fords constructed using imported clean gravel and native alluvial materials excavated from the bed and bank of the Trinity River or adjacent sources (i.e., fish rock). All temporary crossings would be designed and constructed to meet the requirements for heavy equipment such as trucks and excavators. Material used in the construction of these crossings would be primarily extracted from authorized activity areas. The number of vehicle trips using the river crossings would be minimized to the extent possible and these fords would not be used to transport excavated materials across the river. All extracted material would be placed on the same side of the river from which it was taken.

Due to requirements to retain passage for fish, aquatic organisms, and boats, at least one-third of each river crossing would be submerged to a minimum depth of 1 foot under base flow conditions. The construction of these temporary crossings would likely require some vegetation removal on either side of the crossing within an approved activity area adjacent to the crossing (e.g., IC-8).

Revegetation

Impacts to vegetation are anticipated in most activity areas. The site-specific revegetation design is described in Appendix B; revegetation of riparian and upland areas would rely on a combination of planting and natural recruitment of native species consistent with TRRP's Draft Riparian Mitigation and Monitoring Plan and the needs of the BLM. Native willows from the impact areas would be replanted as clumps during construction to speed recovery of vegetation. Replanting of affected native vegetation (e.g., willows and cottonwoods) would be completed after construction in accordance with a site-specific plan. This activity may include watering during the first 3 years post-planting.

In general, the TRRP objective is to ensure that riparian vegetation is minimally affected by TRRP activities and is replaced at a 1:1 ratio (no net loss of riparian habitat) within the Trinity River corridor. Revegetation would provide aquatic refugia at high flows, improve terrestrial habitat for birds and other wildlife, provide future wood recruitment, and provide future terrestrial nutrient input to the river. Additional planting, seeding, mulching, and irrigation in the upland areas would occur using native seed and rooted stock available to Reclamation. In order to restore native plant communities, Reclamation would opportunistically remove noxious and invasive plants such as tree-of-heaven (*Ailanthus altissima*) and scotch broom (*Cytisus scoparius*) from activity areas. About 16 acres would be planted with riparian plants, and about 1

acre planted with upland plants. In addition, 28 acres (much of it overlapping planted areas) would be seeded with native grasses and mulched.

FINDINGS

Both the No Action and Proposed Action alternatives were evaluated in the EA/IS with respect to their impacts in the following issue areas: land use, geomorphic environment, water resources, water quality, fishery resources, vegetation, wildlife, wetlands, recreation, socioeconomics, cultural resources, air quality, visual resources, hazards and hazardous materials, noise, public services and utilities/energy, transportation/traffic circulation, environmental justice, and tribal trust.

Based on the following summary of the implementation effects of the Proposed Action (as discussed fully in the EA/IS), there would be no significant impacts to the quality of the human environment; therefore, an environmental impact statement or a supplement to the existing environmental impact statement is not necessary and will not be prepared.

Land Use

The Proposed Action is located in Trinity County, California, and would be consistent with Trinity County's General Plan and Zoning Ordinance, which provides development standards for land in Trinity County, including areas located within the Trinity River floodplain. Short-term land use impacts resulting from the Proposed Action would be minimal because of project design criteria that require maintenance of public and private access to the Trinity River, adjacent residents, and businesses. Additionally, project implementation would not prevent existing land uses from continuing or impede future land uses. Therefore, impacts on land use would be less than significant.

Geology, Fluvial Geomorphology, and Soils

Implementation of the Proposed Action, including the environmental commitments and project design features listed in Chapter 2 and Appendix B of the EA/IS, would be consistent with the 10 healthy river attributes described in the Trinity River Flow Evaluation Study, the basis for the TRRP efforts to restore and enhance native fish and wildlife populations. It is also consistent with the Aquatic Conservation Strategy, as described in Appendix C of the EA/IS. Project construction activities and disturbance would increase the potential for short-term wind and water erosion. However, project implementation would include project design features such as sediment and erosion control measures to reduce and avoid potential short-term construction impacts on soils. Therefore, impacts on these resources would be less than significant.

Water Resources

Based on the U.S. Army Corps of Engineers' (Corps) Hydraulic Engineering Center River Analysis System (HEC-RAS) model used by Trinity County to assess compliance with Trinity County's General Plan and Zoning Ordinance, implementation of the Proposed Action, including excavation or placement of alluvial materials in the 100-year floodplain and low-flow channel, would not increase the base flood elevation of the Trinity River. Additionally, project implementation would not result in significant risk of injury, death, or loss involving flooding or erosional processes. The proposed activities are expected to have minimal, if any, effects on groundwater elevations or groundwater quality. Therefore, impacts on water resources would be less than significant.

Water Quality

Implementation of the Proposed Action, including construction activities in and adjacent to the low-flow channel, could temporarily increase turbidity and total suspended solids in the water column. It could also result in a spill of hazardous materials (e.g., grease, solvents) into the Trinity River. Construction activities would be staged and timed to minimize potential water quality effects, and appropriate project design features, such as placing clean rock berms around work areas and isolating them from the river, would be implemented to avoid and reduce water quality impacts. Therefore, impacts on water quality would be less than significant.

Fisheries Resources

To comply with Section 7 of the Endangered Species Act (ESA), Reclamation initiated informal consultation with the National Marine Fisheries Service (NMFS) concerning project effects on the federally and state-listed (threatened) Southern Oregon/Northern California Coast (SONCC) evolutionarily significant unit (ESU) of coho salmon. NMFS affirmed that certain non-flow measures, including the mechanical rehabilitation and sediment management projects identified in the ROD, were considered in its 2000 Biological Opinion issued in response to the FEIS/EIR. In that Biological Opinion, NMFS identified implementation of mechanical rehabilitation projects as reasonable and prudent measures to minimize TRD effects on SONCC ESU coho salmon. Subsequent to the ROD, NMFS provided the TRRP with documentation necessary to ensure that the 2000 Biological Opinion did in fact consider the types of activities associated with the Proposed Action.

Reclamation continues to engage in informal technical consultation with NMFS in order to update the 2000 Biological Opinion. In support of a formal re-consultation under Section 7 of the ESA and to obtain an updated Biological Opinion, Reclamation is currently preparing a new Biological Assessment that focuses on advances in and changes to actions associated with the TRRP Implementation Program since 2000 (i.e., the rationale for the continuing adaptation of techniques for channel rehabilitation and fine and coarse sediment management since program inception) that will be used by the NMFS as the information basis for writing a new Biological Opinion. While the reinitiated Section 7 consultation is underway, the 2000 Biological Opinion remains in effect for the Proposed Action. Reclamation will continue to coordinate with NMFS as it implements the terms and conditions of the 2000 Biological Opinion.

Temporary construction impacts on fish-rearing habitat would be minimized through implementation of environmental commitments and project design features. In the long term, changes to physical rearing habitat associated with project implementation are expected to be beneficial. Collective improvements in fluvial channel dynamics contributed by the Proposed Action, in conjunction with future channel rehabilitation projects throughout the Trinity River between Lewiston Dam and the North Fork Trinity River, are ultimately expected to improve spawning and rearing habitat for all life stages of anadromous salmonids. Because effects would generally be localized and because the Proposed Action includes commitments and project design features to avoid and minimize adverse impacts on fish, effects to fisheries resources would be less than significant.

Vegetation, Wildlife, and Wetlands

Construction activities associated with the Proposed Action would result in a temporary loss of riparian vegetation and waters of the U.S. However, in the long term, floodplain function and riverine processes would be restored by revegetation of alluvial features, particularly floodplains. Upland features (i.e., terraces) would also be restored, primarily by converting old dredge tailing deposits into productive wildlife habitat. Overall, the Proposed Action would increase structural and species diversity, and would speed reestablishment of native riparian and upland vegetation. Long-term changes in river inundation periods are expected to increase both seasonal and perennial riparian habitats as well as offset impacts to wetlands and other waters. Construction activities associated with the Proposed Action would result in the loss of waters of the U.S., including wetlands. The project is designed to enhance the functions and services of the aquatic system, including wetlands and other waters.

The Proposed Action was planned to directly benefit riparian and upland habitat and function and has the potential to affect wildlife, including special-status wildlife species (designated BLM sensitive species and/or federally and state listed threatened and endangered species). Specific environmental commitments and project design features are included in the Proposed Action to ensure that activities occur in a manner that addresses potential impacts to special-status species, including avian and amphibian species.

No wildlife species listed under the ESA as threatened, endangered, or candidates for listing as threatened or endangered have been observed in the project area during field surveys. During development of the Master EIR/EA/IS, Reclamation conducted informal consultation with the USFWS concerning effects to the ESA-listed northern spotted owl. Based on the consultation, known lack of suitable habitat and nests in the area, and Trinity River bird distribution data, Reclamation determined that there would be no effect on the northern spotted owl (*Strix occidentalis caurina*). The project area was specifically evaluated for northern spotted owl habitat and was considered unsuitable. The project area does not encompass or occur within designated critical habitat for the northern spotted owl; therefore, there would be no effect to northern spotted owl or its designated critical habitat.

The Proposed Action, including the environmental commitments and project design features listed in Chapter 2 and Appendix B of the EA/IS, combined with riparian revegetation measures, would ensure that the Proposed Action will not result in significant impacts to vegetation, wildlife, and wetlands.

Recreation

The Secretary of the Interior designated the Trinity River as a National Wild and Scenic River in 1981. Implementation of the Proposed Action would result in a long-term benefit to the form and function of the Trinity River relative to the values that existed on the date of designation, thereby enhancing the Outstandingly Remarkable Values for which it was designated as a Wild and Scenic River, including its anadromous fishery. Implementation of the Proposed Action would alter the riverine environment; however, construction activities would not permanently affect the scenic or recreational values of the Trinity River for which it was designated.

Construction activities could result in temporary disruptions to public access from Sky Ranch Road on river right and access to private lands on river left. However, river access and recreational opportunities would continue to be available at other locations along the river upstream (Evans Bar) and downstream (Sky Ranch). Potential disruptions to recreational activities within the project area would be temporary and minimal. Because construction of the Proposed Action could affect the safety of recreational users, signage would be employed to notify river users to be cautious of heavy equipment in the river corridor. Construction activities associated with the Proposed Action could lower the Trinity River's aesthetic values for recreationists by increasing its turbidity; however, increases in turbidity are expected to be localized and of short duration.

Socioeconomics, Population, and Housing

The Proposed Action could directly generate short-term income growth through the payment of wages and salaries, but would result in little long-term increased economic activity. Because of the limited size and duration of the project, impacts on socioeconomic conditions, population, or housing would be negligible.

Cultural Resources

Implementing the Proposed Action would result in no adverse effect on historic properties pursuant to Section 106 of the National Historic Preservation Act (NHPA), as implemented through the TRRP Programmatic Agreement [PA; Section 106 alternative program pursuant to 36 CFR § 800.14(b)]: *Programmatic Agreement Among the U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, U.S. Bureau of Land Management, Hoopa Valley Tribe, California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Implementation of the Trinity River Mainstem Fishery Restoration,* executed on August 31, 2000, and in effect until August 31, 2020. All known cultural resources have been recorded and documented, as described in Chapter 3 of the EA/IS.

The cultural resources investigation for the Proposed Action identified two historical placer mines and two loci of historical dredge tailings in the project area. One of the identified placer mine sites was recommended as eligible for listing to the National Register of Historic Places (NRHP) and would therefore qualify as a Historic Property; this site will be avoided for the purposes of this project. The second placer mine site was recommended as ineligible for listing to the NRHP as an individual or contributing resource and therefore requires no further consideration. The historical dredge tailings were recommended as not individually eligible but are thought to be a potential contributor to a larger district eligible for NRHP listing; the historical dredge tailings will be avoided for the purposes of this project.

The avoidance of these sites, in conjunction with the inclusion of environmental commitments described in Table 2-2 of the EA/IS, would ensure that implementation of the Proposed Action would have no significant effect to cultural resources.

Air Quality

Construction activities would generate short-term and localized fugitive dust, gas and diesel emissions, and smoke that could affect air quality. Reclamation would implement project design features, including requiring provisions in construction documents that minimize construction-related impacts on air quality in order to minimize impacts to air quality.

Visual Resources

Potential impacts of project activities on visual resources would include changes brought about by the removal of vegetation, construction of inundated surfaces, creation of access roads, and the presence of equipment in the project area. These activities could result in temporary degradation and/or obstruction of a scenic view from key observation areas. Over the long-term, implementation of the Proposed Action is expected to complement the visual resources and aesthetic values of the project area by restoring the function and form typical of an alluvial river. The design of the Proposed Action incorporates the diversity of the landscape and vegetation types in the project vicinity into the character of the rehabilitated riverine and upland areas. Retention of existing topographic features as well as natural revegetation and manual planting would lessen the degree of visual impacts and improve the aesthetic quality of the affected reach of the Trinity River.

Hazardous Materials

Activities associated with the Proposed Action would use potentially hazardous materials (e.g., oil and fuels) associated with the operation of vehicles and construction equipment during implementation. Implementation of best management practices would minimize the potential for any project-related hazardous materials to become a public hazard. These practices would ensure that impacts with respect to hazardous materials would be less than significant.

Noise

During the construction phase of the Proposed Action, noise from construction activities would temporarily dominate the noise environment in the project area. Based on comments received on the Draft EA/IS, the size and location of several activity areas were adjusted to increase the distance between these areas and adjacent private parcels. Construction noise would be temporary and expected to occur primarily between the months of July and December. To minimize potential noise impacts, construction activities would be scheduled between 7:00 a.m. and 7:00 p.m. Monday through Saturday. During working hours, Reclamation would ensure that the contractor operates all equipment to minimize noise impacts to nearby sensitive receptors (residences adjacent to the project area, etc.). Noise impacts resulting from implementation of the Proposed Action would be temporary and minimal.

Public Services and Utilities/Energy

The Proposed Action would not disrupt electrical or telephone service within or adjacent to the project area. Implementation of the Proposed Action could result in disruption to emergency services, school bus routes, or student travel routes during construction activities; primarily along Sky Ranch Road. A project-specific traffic control plan, including traffic control associated with project activities, would be implemented. The Proposed Action is not expected to cause more than minimal disruptions to public services, if any. Access for mobilization and demobilization of heavy equipment, however, may require a higher level of traffic control for local roadways and may disrupt traffic flow and circulation before, during, and after construction. Disruptions resulting from mobilization and demobilization of heavy equipment are expected to be minimal and of short duration.

Transportation/Traffic Circulation

Construction activities associated with the Proposed Action would increase truck and worker vehicle trips leading to and from the project area, primarily along Sky Ranch Road and, to a lesser degree, Dutch Creek Road and the private roads leading to that portion of the project area on river left. Throughout the construction periods, the amount of daily construction equipment traffic would be limited by staging the construction equipment and vehicles in the project area boundary for the duration of work. Impacts related to short-term increases in vehicle trips would be minimal. Use of area roads by project-related trucks and heavy equipment would increase wear and tear on the local roadways. Traffic safety hazards could arise for motorists, bicyclists, pedestrians, and equestrians in the vicinity of the construction access routes as a result of the movement of project-related trucks and heavy construction to maximize public safety and maintain traffic flow. Impacts to transportation and traffic circulation would be minimal to moderate, but temporary and insignificant.

Tribal Trust

TRRP's overarching goals of restoring, enhancing, and conserving the natural production of anadromous fisheries, native plant communities, associated wildlife resources, and overall health of the Trinity River basin are consistent with federal Tribal Trust responsibilities. The primary TRRP goals originate partly from the federal government's trust responsibility to protect fishing rights for ceremonial, subsistence, and commercial purposes of the region's Indian tribes. Under the Proposed Action, the Trinity River would continue to support tribal trust assets. Several short-term impacts would occur that would affect Tribal Trust assets, including geology, fluvial geomorphology, and soils; water quality; fishery resources; and vegetation, wildlife, and wetlands. These impacts are generally associated with construction activities that would temporarily affect resources in the project area. Potential impacts on Tribal Trust assets. The impacts that would occur to Tribal Trust assets would be less than significant.

Environmental Justice

There is no evidence to suggest that the Proposed Action would cause a disproportionately high adverse human health or environmental effect on minority and low-income populations compared to other area residents. No disproportionate or specific health risks or other impacts to low-income or minority groups would be associated with the Proposed Action.

SUMMARY

Implementation of the Proposed Action is expected to contribute to the long-term environmental quality and sustainability of the Trinity River ecosystem with no significant adverse impacts to the environment.

FINDING OF NO SIGNIFICANT IMPACT IN ACCORDANCE WITH 40 CFR 1508.27

After considering the environmental effects described for the Proposed Action in the Trinity River Channel Rehabilitation Site: Chapman Ranch Phase A (RM 82.8-83.5) EA/IS, it has been determined that implementation of the Proposed Action will not have significant environmental impacts beyond those already addressed in the EA, is in conformance with the BLM's Resource Management Plan (RMP), and will not have a significant effect on the quality of the human environment considering the context and intensity of impacts. Therefore, an EIS is not needed and will not be prepared.

This finding is based on my consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR '1508.27), both with regard to the context and to the intensity of the impacts described in the EA or as articulated in the letters of comment.

I have considered the potential intensity/severity of the impacts anticipated from the project decision relative to each of the ten areas suggested for consideration by the CEQ. With regard to each:

- 1) *Impacts that may be both beneficial and adverse.* There will be no significant effects, beneficial or adverse, resulting from implementation of this project. The finding is not biased by the beneficial effects of the action. The construction of the Proposed Action at the Chapman Ranch Phase A site is expected to provide localized improvements in aquatic and riparian habitats currently present at the site. The Proposed Action will assist in meeting long-term needs to enhance fish habitat and provide properly functioning river conditions. Viewed within the context of a healthy Trinity River, and against implementing the larger river restoration program required under the ROD, this project will not result in any significant impacts.
- 2) The degree to which the Proposed Action affects public health and safety. Public health and safety are not significantly affected by the project. Due to the limited duration of the Proposed Action and implementation of public safeguards, public safety will not be at risk. Standard Reclamation practices for notifying the public of heavy equipment activities will be implemented during construction activities.
- 3) Unique characteristics of the geographic area such as proximity of historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. There will be no significant adverse effects on prime farmlands, park lands, floodplains, wetlands, historic or cultural resources, scenic rivers, ecologically critical areas, civil rights, women, or minority groups. Although there will be no significant adverse effects in these areas, the Proposed Action will result in a minor amount of disturbance to river attributes while enhancing the outstandingly remarkable value—the anadromous fishery—for which the river was designated in the Wild and Scenic River system. The Proposed Action is programmatically tiered to the Trinity River Mainstem Fishery Restoration Program EIS, which recommended implementation of the six components of the ROD. The Proposed Action, which involves implementation of a subset of channel rehabilitation actions from the ROD, has no significant impacts within the context of the entire array of ROD restoration components.
- 4) *The degree to which the effects on the quality of the human environment are likely to be highly controversial.* Based on public participation and the involvement of resource specialists, effects of the Proposed Action on the quality of the human environment are not expected to be highly controversial.

The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks. Consistent with Reclamation and BLM's NEPA

requirements, the public review of this EA/IS began when the agencies posted the document to their official websites on November 20, 2018. The official public review period began on that date and continued through December 21, 2018. At the onset of the review period, notices informing the public of the availability of this EA/IS for review were posted on the TRRP website, at the rehabilitation site, at the TRRP Weaverville and BLM Redding Field offices, and in the Trinity Journal and Redding Record Searchlight newspapers; the public notices were also mailed to local landowners and emailed to interest groups. An open house to describe the proposed action and receive public input was held on November 28, 2018, at the North Fork Grange Hall on Dutch Creek Road in Junction City, California.

One comment submittal was received on the Draft EA/IS during the public comment period. The federal and state lead agencies have responded to the comments in this submittal. The comment letter and responses from the lead agencies are included as Appendix E of the EA/IS. In addition to updating the EA/IS based on public involvement activities that have occurred since the Draft EA/IS was released for public comment and adding the public comments and responses in Appendix E, minor edits and updates were made to the EA/IS. Key changes to the Draft EA/IS included adjustments to the size and location of several activity areas to reduce potential impacts and clarification of the implementation schedule, including staging of equipment and processing of materials, for the Proposed Action.

The project area illustrated on Figure 2-1 of the EA/IS includes both BLM and private lands. All activity areas were developed to minimize impacts to residential properties, although access routes do cross several parcels within the project area. While public access to BLM lands within the project area is limited, access via the river corridor is available for various recreational activities (e.g., fishing). Representatives of the TRRP and the Trinity Management Council (e.g., Yurok Tribe, Hoopa Valley Tribe) have been working closely with the residents along Sky Ranch Road and Dutch Creek Road and other interested parties (e.g., Trinity County) since the initial planning/design process began in 2015. Since that time, TRRP staff and design team representatives have met numerous times with individual landowners as well as with other interested parties (e.g., local fishing guides) to describe the proposed activities, exchange ideas on how to make the Proposed Action more acceptable to the local community, and adjust project boundaries to reduce impacts to landowners and other users.

With this history in mind, the temporary implementation activities associated with the Proposed Action are expected to have minimal effects on area residents. The public comments were addressed with input from technical staff from the lead, cooperating, and responsible agencies (see Appendix E of the EA/IS). No highly controversial environmental effects were identified.

There are no known effects on the human environment that are highly uncertain or involve unique or unknown risks. The effects of the Proposed Action have been clearly evaluated in the EA/IS. Similar activities have been completed at past channel rehabilitation sites both upstream (Deep Gulch-Sheridan Creek in 2016) and downstream (Upper Junction City in 2012), and collected data and analyses have determined that no unique or unknown impacts to the human environment have resulted.

- 5) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration. These actions do not set a precedent for other projects that may be implemented to meet the goals and objectives of the TRRP. The Trinity River Flow Evaluation Report and, subsequently, the Trinity River Mainstem Fishery Restoration EIS and 2000 ROD collectively evaluated and recommended channel rehabilitation projects on the Trinity River below Lewiston Dam. The environmental effects of future projects will be analyzed based on need dictated by the ROD, but the need will be balanced by any new information collected during implementation of the Proposed Action and other recently implemented projects.
- 6) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. There are no known significant cumulative effects from this Proposed Action and other projects implemented or planned on areas separated from the affected area of this Project beyond those assessed. Cumulative impacts are analyzed in Chapter 4 of the EA/IS. While some short-term adverse direct and indirect effects may result from the project, these effects have been analyzed in the EA/IS, and will not lead to significant cumulative effects. Potentially significant long-term project effects from implementation of the ROD were evaluated in the Trinity River Mainstem Fishery Restoration EIS, later supplemented by the 2009 Master EIR and updated in the EA/IS for the Chapman Ranch Phase A site. When considered in the context of cumulative watershed effects, the Proposed Action is intended to improve the alluvial processes and function of the mainstem Trinity River and at the same time improve the ability of the Trinity River to mobilize and transport sediment. Cumulative short-term impacts such as soil disturbance and turbidity would occur in response to the Proposed Action, but not to an extent that would cause significant impacts to downstream water quality.
- 7) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources. Based on surveys accomplished prior to this decision, this action will not adversely affect sites or structures eligible for the National Register of Historic Places, or cause loss or destruction of significant scientific, cultural, or historic resources. Reclamation and the BLM work closely with the Hoopa Valley Tribe and the Yurok Tribe as both sit on the TMC, which oversees the TRRP, and both tribes participated in the design of these projects. The Hoopa Valley Tribe is also a signatory to the TRRP PA. Pursuant to the TRRP PA (Stipulation IV), Reclamation has consulted with Indian tribes, Native American organizations, and individuals regarding implementation of the PA and its stipulations to protect tribal interests. Based on environmental commitments and project design features listed in Chapter 2 and Appendix B of the EA/IS, the decision maker has determined that the Proposed Action will not result in the destruction of scientific, cultural, tribal, or historic resources.
- 8) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973. The Proposed Action would not adversely affect an endangered or threatened species or its habitat that

has been determined to be critical under the ESA. A biological opinion for the Trinity River Mainstem Fishery Restoration EIS and its effects on Southern Oregon/Northern California Coast coho salmon, Sacramento River winter-run chinook salmon, central valley spring-run chinook salmon, and central valley steelhead (NMFS 2000) addressing foreseeable TRRP activities was written in response to a biological assessment that reflected the findings in the Trinity River Mainstem Fishery FEIS/EIR. The opinion was written because Trinity River coho salmon are federally listed as threatened and because the action may affect, and is likely to adversely affect, coho salmon. The opinion describes adverse effects that could result from the channel rehabilitation measures that are included in the preferred alternative described in the EIS. Such adverse effects were determined to be minor and short-lived and less than significant.

During development of the Master EIR, Reclamation, in coordination with BLM, conducted informal consultation with the USFWS concerning effects to the ESA-listed northern spotted owl. Based on the consultation, known lack of suitable habitat and spotted owl nests in the area, and Trinity River bird distribution data, Reclamation determined that there would be no effect on the northern spotted owl. The Chapman Ranch Phase A site was specifically evaluated by a BLM biologist for northern spotted owl habitat and was considered unsuitable. The project area does not encompass or occur within designated critical habitat for the northern spotted owl; therefore, there would be no effect to northern spotted owl or its designated critical habitat. Reclamation and the BLM determined that a biological assessment was not required since the Proposed Action would have no effect on the northern spotted owl or its critical habitat.

No federally or state-listed threatened or endangered plant species occur within or adjacent to the site boundaries defined for the Proposed Action.

9) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment. Implementation of the Proposed Action does not threaten a violation of federal, state, or local law or requirements imposed for the protection of the environment. Implementation of the Proposed Action does not threaten violation of any laws. Its implementation meets requirements under the ROD, the ESA, the Clean Water Act, the Federal Land Protection and Management Act (FLPMA), NEPA, the Clean Air Act, the Wild and Scenic Rivers Act, the National Historic Preservation Act, the Northwest Forest Plan, and BLM's RMP, as amended, for the Redding Field Office.

The Proposed Action described in this finding is fully consistent with BLM's RMP, the FLPMA, and CEQA. The following permits are required to authorize the project:

- Section 404, Clean Water Act, Nationwide Permit 27 (San Francisco District, Corps);
- Section 401, Clean Water Act Water Quality Certification (Regional Water Quality Control Board, North Coast Region);
- Section 10, Endangered Species Act, Incidental Take Permit (NMFS);
- Encroachment Permits (Trinity County or California Department of Transportation); and
- Floodplain Development Permit (Trinity County).

FINDINGS REQUIRED BY OTHER LAWS AND REGULATIONS

The Proposed Action to implement the rehabilitation activities, including those specifically under the jurisdiction of BLM, is consistent with the intent of the RMP for the Redding Field Office with respect to resource management conditions. The Proposed Action is also consistent with the direction provided in the BLM's Trinity River Recreation Area Management Plan.

IMPLEMENTATION DATE

The Proposed Action is expected to be constructed beginning in summer 2019 pending environmental clearances, and all construction activities are expected to be complete by 2020. In any year, all inchannel rehabilitation work must be performed between July 15 and September 15. Revegetation willtake place during construction and in fall and winter months following construction. Irrigation and vegetation maintenance may take place for 3 to 5 years post construction or through fall 2024.

CONTACT

For additional information concerning the Proposed Action, contact Brandt Gutermuth, Project Manager, Trinity River Restoration Program, P.O. Box 1300, and 1313 Main Street, Weaverville California, 96093. Phone: (530) 623-1800.