March 19, 2015

Public Notice for Water Quality Certification and/or Waste Discharge Requirements (Dredge/Fill Projects) and Initial Study (IS) Environmental Checklist and Evaluation of Environmental Impact

Bureau of Reclamation – Trinity River Restoration Program Coarse Sediment Management Activities
WDID No. 1A09154WNTR

Trinity County

On November 21, 2014, the North Coast Regional Water Quality Control Board (Regional Water Board) received a letter from the Bureau of Reclamation – Trinity River Restoration Program, Robin Schrock (Applicant), requested reissuance of federal Clean Water Act, section 401, Water Quality Certification for activities associated with the Trinity River Restoration Program Coarse Sediment Management Activities Project (Project). On January 20, 2010, the Regional Water Board issued a Water Quality Certification for the proposed activities which expired January 20, 2015. The proposed Project will cause temporary disturbances to waters of the United States and the State associated with five sites within the Trinity River Hydrologic Unit No. 106.31. The Applicant conducted coarse sediment injection activities during the previous permit cycle. The proposed Project sites for high flow coarse sediment injection remain unchanged and are located between the Lewiston Dam and Grass Valley Creek at the Trinity River Fish Hatchery (40.72511° N/122.80017° W), Lewiston Upstream (Weir Hole)(40.72021° N/122.80322° W), Lewiston Downstream (40.71089° N/122.80664° W), Sawmill (40.71113° N/122.81824° W), and Lowden Ranch (Bucktail) (40.69475° N/122.85575° W) along the Trinity River, Trinity County. No permanent impacts to waters of the U.S. and the State are proposed. All impacts to waters, of the addition of clean native spawning river coarse sediment, are considered temporary.

The primary purpose of the Project is to restore aquatic habitat in the Trinity River by injecting coarse sediment (clean native gravel 3/8 to 5 inch diameter) to supplement coarse sediment removed from the system by the Lewiston Dam. The proposed Project would include introducing coarse sediment into the river primarily at high spring flows with heavy equipment or by using a conveyor system to carry the gravel to mid-channel locations. Coarse Sediment may also be directly placed in-channel with heavy equipment during summer low-flows conditions. The timing of gravel introduced is dependent on the water year and resulting allowable flows as prescribed in the Secretary of the Interior's 2000 Trinity River Record of Decision (ROD). The volume of coarse sediment to be added to the system is determined by the flow release schedule as well as sediment budget and transport computations. The proposed permit volume introduced may vary from a low of zero cubic yards (cy) in extremely dry years to a high of approximately 67,000 cy during extremely wet years as recommended in the ROD. The applicant anticipates placing up to

approximately 10,000 cy with an average of approximately 2,000 cy each year into the system.

Compensatory mitigation is not required for the proposed project activities. The Project has been designed to avoid and minimize adverse impacts and permanent impacts to waters of the US and State. Non-compensatory mitigation for the proposed Project includes best management practices for heavy equipment use in and near a waterway to prevent or reduce any discharges during and after construction. Additionally, Project impacts shall not increase turbidity levels at the point of compliance (500 linear feet downstream of the point impact) greater than 20% above naturally occurring background or 20 NTUs whichever is greater. Other appropriate mitigation measures identified in the Master Environmental Impact Report SCH#2008032110 finalized by the Regional Water Board on August 24, 2009 shall be incorporated into the order.

The Project is proposed to begin in 2015 through 2020 during annual river flow releases.

The Applicant has obtained authorization from the United States Army Corps of Engineers for a Clean Water Act, section 404 (File No. 2012-00369N) for these activities to be conducted under Nationwide Permit No. 27 and anticipates continued future permit coverage. The Applicant has determined that a Lake or Streambed Alteration Agreement is not required for this project.

The Regional Water Board, as lead agency under the California Environmental Quality Act (CEQA), submitted a Joint Environmental Document including a Draft Master Environmental Impact Report (MEIR) and Environmental Assessment/Draft EIR (EA/DEIR) (SCH# 2008032110) for the initial project to the State Clearinghouse on June 5, 2009 for a 45-day review and comment period. The Regional Water Board issued the Final MEIR/EIR on August 24, 2009, and filed a Notice of Determination on August 25, 2009. The proposed Project is identical to the initial project proposed and authorized in 2009. Pursuant to California Code of Regulations, title 14, section 15177, subd. (b)(2), the Regional Water Board prepared an Initial Study on the proposal and determined that the subsequent project was adequately described, analyzed and mitigated for and within the scope of the MEIR findings. Regional Water Board Staff have reviewed the MEIR findings and confirmed that applicable mitigation measures have been implemented and are up to date. Pursuant to California Code of Regulations, title 14, section 15179, subd. (b)(1), the Regional Water Board proposes a finding that no substantial changes have occurred with respect to the circumstances under which the MEIR was certified, or that there is no new available information which was not known and could not be known at the time of the MEIR was certified. Therefore, this MEIR may be used in accordance with this article to review such a subsequent project and is considered adequate by the Regional Water Board.

The information contained in this public notice is only a summary of the Applicant's proposed activities. The application for Water Quality Certification in the Regional Water Board's file contains additional details about the proposed Project including maps and photos. The application and Regional Water Board file are available for public review.

Regional Water Board staff are proposing to regulate this Project pursuant to section 401 of the Clean Water Act (33 USC 1341) and/or Porter-Cologne Water Quality Control Act authority. This notice was previously circulated to the public on December 12, 2014, without the attached Initial Study (IS). California Code of Regulations, title 14, section 15177 provides that an initial study is to be prepared to analyze whether the subsequent project was described in the Master EIR; however, it does not expressly require public circulation when it is not being used to support a decision to adopt a negative declaration or to prepare an EIR. (See e.g. Cal. Code Regs., tit. 14, § 15073 [public review of proposed negative declaration].) In this case the IS supports the determination that the initial project and subsequent project are nearly identical. One commenter requested review of the IS so this additional comment period is being provided to the public to provide any additional comments. Comments should be within the scope of the subject matter of the findings supported by the IS. Staff will consider comments submitted in writing and received at this office by mail during a 30-day comment period that begins on the first date of issuance of this letter and ends at 5:00 p.m. on the last day of the comment period. If you have any questions, please contact staff member Gil Falcone at (707) 576-2830 or Stephen Bargsten at (707) 576-2653 within 30 days of the posting of this notice.

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Trinity River Restoration Program
Long-Term Coarse Gravel Augmentation

Project Initial Study (IS)
Environmental Checklist and Evaluation of Environmental Impact

This IS checklist tiers to:

The Trinity River Mainstem Fishery Restoration Environmental Impact Statement

and

Channel Rehabilitation and Sediment Management Activities for Remaining Phase 1 and Phase 2 Sites, Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/Final Environmental Impact Report (State Clearinghouse # 2008032110)

January 2015

California Lead Agency for CEQA
North Coast Regional Water Quality Control Board

Project Proponent and Federal Lead Agency for NEPA
Trinity River Restoration Program
U. S. Department of the Interior
Bureau of Reclamation

Project Proponent's Consultant
North Wind Services, LLC

Trinity River Restoration Program
Long-Term Gravel Augmentation
Initial Study and Evaluation of Environmental Impact

Introduction

The United States Department of Interior (USDI) Bureau of Reclamation (Reclamation) proposes to conduct coarse sediment management activities at five sites on the mainstem Trinity River downstream of Lewiston Dam. The activities proposed are hereafter referred to as the "proposed project" or "project." Project work would be part of the ongoing Trinity River Restoration Program's (TRRP) work to restore the anadromous fishery of the Trinity River. The fundamental purpose of the TRRP is to restore historic river processes to the river via implementation of the 2000 Record of Decision (ROD) for the Trinity River Mainstem Fishery Restoration Final Environmental Impact Statement/Environmental Impact Report (Trinity River FEIS/EIR). The target reach for Trinity River restoration is the approximately 40-mile length of river downstream of Lewiston Dam to the confluence of the North Fork Trinity. In this reach, the ROD (USDI 2000) outlined six integral components for execution:

- Implementation of a variable annual flow regime according to recommendations provided in the Trinity River Flow Evaluation Report (1999);
- Mechanical channel rehabilitation;
- Fine and coarse sediment management;
- Watershed restoration;
- Infrastructure improvement; and
- Adaptive environmental assessment and management.

The coarse sediment management component identified in the ROD is the subject of this document.

Project History and Background

Completion of Trinity Dam and Lewiston Dam in 1964 blocked anadromous fish access to habitat upstream of Lewiston Dam restricting them to habitat below the dam. The location of the Trinity River relative to other components of the Central Valley Project (CVP) is shown on Figure 1-1 in the Channel Rehabilitation and Sediment Management Activities for Remaining Phase 1 and Phase 2 Sites, Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/Final Environmental Impact Report (Master EIR – EA/EIR, hereinafter referred to in its entirety as Master EIR; Regional Water Board and Reclamation 2009). Trans-basin diversions from Lewiston Lake to the Sacramento River Basin altered the hydrologic regime of the Trinity River, diminishing annual flows by up to 90 percent. Consequences of diminished flows included encroachment of riparian vegetation, establishment of riparian berms, and fossilization of point bars at various locations along the river, as far downstream as the North Fork Trinity River. These geomorphic changes reduced the diversity of riparian age classes and riparian vegetation species, impaired floodplain access, and adversely affected fish habitat.

In 1981, in response to declines in salmon and steelhead populations, the Secretary of the Interior directed the U.S. Fish and Wildlife Service (USFWS) to initiate a 12-year flow study to determine the effectiveness of flow restoration and other mitigation measures for impacts of the Trinity River Division (TRD) of the CVP. Then, in 1984, Congress enacted the Trinity River Fish and Wildlife Program to further promote and support management and fishery restoration actions in the Trinity River Basin. Under this program, nine pilot bank rehabilitation projects between Lewiston Dam and the North Fork Trinity River were implemented between 1991 and

1993, in addition to other actions. In 1992, Congress enacted the Central Valley Project Improvement Act (CVPIA). One purpose of the CVPIA (Section 3406(b)(23)) was to protect, restore, and enhance fish, wildlife, and associated habitats in the Trinity River Basin. The Act also directed the Secretary of the Interior to finish the 12-year Trinity River Flow Evaluation Report and to develop recommendations "regarding permanent instream fishery flow requirements, TRD operating criteria, and procedures for the restoration and maintenance of the Trinity River fishery." The Trinity River Flow Evaluation Final Report was ultimately published in 1999 by the USFWS and the Hoopa Valley Tribe, providing a framework for restoration activities below Lewiston Dam as well as the basis for the preferred alternative in the concurrent programmatic environmental analysis.

In 1994, the USFWS as the National Environmental Policy Act (NEPA) lead agency and Trinity County as the California Environmental Quality Act (CEQA) lead agency began the public process for developing the Trinity River FEIS/EIR. The ROD for the Trinity River FEIS/EIR (December 19, 2000; USDI 2000) directed USDI agencies to implement the Flow Evaluation Alternative, which was identified as the Preferred Alternative in the Trinity River FEIS/EIR (USFWS et al. 2000). The ROD set forth prescribed Trinity River flows for five water-year types: extremely wet (815,200 acre-feet annually [afa]), wet (701,000 afa), normal (646,900 afa), dry (452,600 afa), and critically dry (368,600 afa). The flows prescribed by the 2000 ROD are deemed to constitute the "existing [hydrological] environment" for CEQA purposes, and are considered the basis for the environmental analysis under both NEPA and CEQA.

The Master EIR (Regional Water Board and Reclamation 2009) includes a brief chronology summarizing the most pertinent management actions that have occurred relevant to the Trinity River Basin between 1938 and 2008 (Section 1.4.4, page 1-8). Additional details concerning the legislative and management history can be found in the Trinity River FEIS/EIR (USFWS et al. 2000) and the EA/Final EIRs for TRRP projects constructed between 2005 and 2008[1]. These documents are on file at the TRRP office in Weaverville, California, available on the TRRP website (www.trrp.net), and at the Weaverville public library. The Master EIR (Section 1.4.5, pages 1-10 through 1-15) also contains a summary of the various restoration activities that have been undertaken since the signing of the ROD, as well as brief discussions of other watershed restoration programs and activities occurring within the basin; additional information is available on the TRRP website[2].

The TRRP acts under guidance of the Trinity Management Council (TMC), a collaborative board of natural resource managing agencies, tribes, and local government. TMC member agencies include Reclamation, USFWS, National Marine Fisheries Service (NMFS), United States Forest Service (USFS), Hoopa Valley Tribe, Yurok Tribe, Trinity County, and the California Natural Resources Agency represented by the California Department of Fish and Wildlife (CDFW) and the California Department of Water Resources (DWR). Technical experts associated with each of these entities participate in the design and review of concepts in TRRP projects.

Environmental Setting and Project Location

The Trinity River originates in the rugged Salmon-Trinity Mountains of northern California in the northeast corner of Trinity County. The Trinity River Basin encompasses the majority of Trinity County and the easternmost portion of Humboldt County. The mainstem Trinity River flows a total of 170 miles from its headwaters to its confluence with the Klamath River at

[1] Hocker Flat (Reclamation and California Department of Water Resources 2004), the Canyon Creek Suite (Reclamation and Regional Board 2006), Indian Creek (Reclamation and Trinity County 2007), and Lewiston-Dark Gulch (Reclamation and Trinity County Resource Conservation District 2008).
[2] On the TRRP website go to http://www.trrp.net/?page_id=409

Weitchpec, on the Yurok Indian Reservation. The Trinity River passes through Trinity County, Humboldt County, the Hoopa Valley Indian Reservation, and the Yurok Indian Reservation. Much of the basin is composed of federal lands managed by the USFS, BLM, and, to a lesser extent, Reclamation. Ownership along the Trinity River corridor is a mixture of public, tribal, and private lands.

The Trinity River flows generally southward until impounded by Trinity Dam and Lewiston Dam. The river drains a watershed of approximately 2,965 square miles; about one-quarter of this area is above Lewiston Dam. From Lewiston Dam, the river flows westward for 112 miles until it enters the Klamath River near the town of Weitchpec, 43.5 miles upstream from the Pacific Ocean. The Klamath River flows northwesterly for approximately 40 miles from its confluence with the Trinity River before entering the Pacific Ocean.

Topography of the Trinity River Basin is predominantly mountainous with a heavily forested basin. Elevations in the watershed range from 8,888 feet above msl at Sawtooth Mountain in the Trinity Alps to 300 feet above msl at the confluence of the Trinity and Klamath rivers. Land use within the Trinity River Basin is greatly influenced by the large amount of public, tribal, and private lands, much of which is used for timber production and other natural resource-related uses. Two scenic byways, SR-3 and SR-299, cross the county. SR-299 is the primary travel corridor through Trinity County, connecting the Central Valley with the coastal communities of Humboldt County. The area's numerous lakes and rivers provide many recreational opportunities, including fishing and boating. Private uses along the Trinity River are generally limited to scattered residential and commercial development.

The general setting for the TRRP is within the 40-mile reach of the mainstem Trinity River between Lewiston Dam and the confluence of the North Fork Trinity. The entire stretch is designated under the National and California State Wild and Scenic River Systems to preserve its Outstandingly Remarkable Values, which include the river's free flowing condition, anadromous and resident fisheries, outstanding geologic resource values, scenic values, recreational values, cultural and historic values, and the values associated with water quality. The segment of the Trinity River encompassed by the Proposed Project is classified and managed as a "Recreational" reach by the BLM and the Shasta-Trinity National Forest (STNF). Lands under BLM administration are managed in accordance with BLM's Redding Resource Management Plan (RMP) and lands under USFS administration are managed in accordance with the Shasta-Trinity Land and Resource Management Plan (LRMP).

Under the Proposed Project, the following locations have been identified for future long-term coarse sediment augmentation activities. They are, from upstream to downstream, the Hatchery, the Diversion Pool, Cableway, Sawmill, and Lowden Ranch (See Figure 1-2 in the Master EIR for project location). Located downstream of Lewiston Dam, these sites were selected by the TRRP in consultation with the TMC in order to ensure that introduced material is transported downstream to replenish the alluvial material that is remobilized over time. Some of these locations are suitable for injection of gravel during high flow events, while others are more suited for mechanical placement in the channel during periods of lower flow.

The sediment management sites are located on lands with a variety of ownership/management, including the following: BLM, USFS, CDFW, and private. Formal realty agreements would be made between Reclamation and the land managers and private landowners whose property would be affected. These agreements would clarify the terms and conditions under which contractor(s) would work on private property. For those portions of the sites that are managed by BLM, a BLM Right-of-Grant (a.k.a., Right-of Way), would be issued to Reclamation, pursuant to Title V or the Federal Land Policy and Management Act (43 U.S.C. 1761, et. seq.).

Dependent on the potential for processing of on-site river alluvium to obtain coarse sediment (gravel, cobbles, and boulders) for use in the project, BLM would also provide Reclamation with a Free Use Permit for use of river alluvium and tailings. Mitigation measures and best management practices developed through the Master EIR would be considered for incorporation into all BLM project authorizations.

Descriptions of the proposed coarse sediment management locations are provided below as part of the project description.

Project Description

The Proposed Project includes specific activities within the five coarse sediment management sites identified above. The specific activities that would occur at the sites are described in the Master EIR and summarized here. The information contained in Chapter 2 of the Master EIR describes the timing, type, size, intensity, and location of the activities associated with the sites consistent with the CEQA Guidelines (Section 15176 (a) and (c)).

Proposed coarse sediment management activities would primarily include augmentation of coarse sediment (e.g., spawning gravel) at identified locations (illustrated in Figure 1-2 of the Master EIR). Located downstream of Lewiston Dam, these sites were selected by the TRRP in consultation with the TMC in order to ensure that introduced material is transported downstream to replenish the alluvial material that is remobilized over time. The activities included in the proposed project are intended to create, restore, and enhance aquatic habitat for anadromous fish, including salmon and steelhead, under a range of flow conditions. Gravel augmentation would be implemented for geomorphic purposes, with the intent of supplying gravel at a rate and with a particle size distribution that will support the geomorphic processes that maintain channel complexity, substrate quality, and physical habitat integrity.

Sediment management activities could include:

- Placement of select sediment at in-channel, riverine, and upland activity areas in conjunction with mechanical channel activities to meet aquatic and terrestrial wildlife habitat objectives; and
- Long-term injection of select sediment at strategic locations upstream of Weaver Creek during high-flow events.

Long-term, large-scale coarse sediment augmentation sites would be established at select locations to encourage channel migration and the development of alternate bars. Augmentation activities also include efforts required to provide a long-term supply of coarse sediment and ensure that the TRRP has the administrative access necessary to implement these activities at specific locations. Augmentation methods may vary by site, and could be subject to change based on flows. Methods could include injection by positioning the material along the channel margin for distribution by the river at high spring flows, or by delivering the material to the mid-channel via mechanized equipment. Coarse sediment would be introduced via mechanized equipment (e.g., conveyor, mechanical placement below the ordinary high water mark [OHWM]) into the river channel under various high-flow conditions in a manner that facilitates the river's ability to route the coarse sediment downstream during high-flow periods. Injection of coarse sediment during peak ROD spring flows would not require in-channel placement with equipment; however, in-channel placement during summer project construction would require equipment placement during low-summer flow conditions. Selected vegetation may be removed to facilitate the introduction of this coarse sediment along the channel margin.

Augmentation at the proposed sites is expected to occur primarily during high spring flows when coarse sediment, currently blocked by the dams, would have been mobilized under natural

conditions. The amount of gravel needed, based on analysis of current water year conditions, may be introduced to the river mechanically by the TRRP and immediately transported downstream. In addition, coarse sediment placed at the long-term introduction sites may also be directly placed in-channel with heavy equipment during summer low-flow conditions (within the July 15 through September 15 work window). The TRRP, along with TMC representatives, would use ongoing monitoring in conjunction with water year projections to determine the precise location and extent of these activities on a yearly basis. The TRRP flow release schedule would also be a factor in determining the volume of material used for augmentation during high-flow periods. In general, the amount actually added to the river would likely be less than actually permitted, unless future analyses indicate otherwise.

Processing and storage of coarse sediment could occur at several of the sites. Some of these sites would require temporary stream crossings, including mainstem crossings. The type and actual location of the crossings could be adjusted, based on site-specific conditions during the final design and subject to permitted conditions.

The Hatchery

The Hatchery location refers to a reach of river approximately 0.4 miles in length immediately downstream from Lewiston Dam and adjacent to the Lewiston Fish Hatchery. Several constructed spawning riffles were placed in the reach in 2006 and 2007, and planning was initiated to revisit the site in 2015. Initial design concepts favor coupling one-time mechanical modifications with ongoing gravel augmentations that will increase local channel complexity as well as supply gravel to downstream reaches over the long term. However, some of the fisheries scientists representing TRRP partner agencies are concerned that creating additional physical habitat near the hatchery could contribute to unwanted interactions between hatchery fish and wild stock. As a result, work on the hatchery design has been deferred to such time as TRRP partners can come to an agreement on what constitutes desirable conditions in the hatchery reach. Re-design of the Hatchery site could result in developing it for either high-flow injection or low-flow placement.

The Diversion Pool (Weir Hole)

The Diversion Pool site has been the mainstay of TRRP's gravel augmentation program since high-flow gravel injections were initiated in 2008. The site is located in the Sven Olbertson site analyzed in the Lewiston Dark Gulch EA/EIR (Reclamation and Trinity County Resource Conservation District 2008). A concrete weir spans nearly the entire valley floor and constricts flow into a narrow rapid on river right that drops into a deeply-scoured pool. A level surface above flood stage on river right is suitable for stockpiling coarse sediment and operating heavy equipment that can inject gravel directly into the main flow during flood events. Flood flows at the injection point are characterized by large standing waves and strong turbulence that immediately entrains the injected sediment. Past experience at the site shows that the ROD dry-year hydrograph with a peak flow of 4,500 cfs will clear at least 670 CY of coarse sediment from the pool, and the ROD normal-year hydrograph (peak flow = 600 cfs) will clear at least 1,670 CY. An injection totaling 3,270 CY cleared from the pool when peak flows exceeded 12,000 cfs during the 2011 release, suggesting that similar quantities can be injected in extremely wet years. Much of the material injected in recent years has been temporarily stored in a lateral bar that developed along the right margin of a rapid several hundred feet downstream (Gaeuman 2011; Gaeuman and Krause 2013). It is likely that, once deposited at that location, the sediment is metered out to downstream reaches at a relatively natural rate. The Diversion Pool would be best utilized for a high-flow injection site.

Cableway

The Cableway reach is located between the New Lewiston Bridge and the Old Lewiston Bridge in the center of the town of Lewiston. It is a relatively straight, narrow stretch of channel about 0.6 miles in length that is bisected by a suspended cable historically used by the U.S. Geological Survey to measure streamflow. Due to its simple morphology, gravel placed in the channel during low-flow periods in this location is likely to be entrained and transported downstream. The first gravel augmentation at the Cableway site was implemented in 2003, when 2,000 CY of gravel was spread over a stretch of the channel a few hundred feet long immediately under the cable. Bedload transport data show that about 10,840 tons of gravel – more than five times the placed volume – had been transported out of the reach by the end of 2006 (Gaeuman 2013a). Another 7,500 yards of gravel and cobble, 5,400 yards of which were considered mobile gravel, were placed in the area in 2008 as part of channel rehabilitation projects in which a sequence of five lateral bars spanning the reach was constructed as part of the Cableway rehabilitation design and the smaller Deadwood Creek design at the upstream end of the reach. The remaining 2,100 yards of placed bed material was considered "oversize," and was intended to resist mobilization. A volume of gravel approximately equal to the total amount of mobile material placed in 2008 was transported out of the reach during the 2011 spring flow release alone, during which an estimated 6,460 yards of gravel passed under the Old Lewiston Bridge (Graham Matthews and Associates 2013).

One consequence of the 2008 coarse sediment placement in the Cableway reach was that the constructed hydraulic controls raised water surface elevations at moderate discharges, thereby increasing the frequency and duration of inundation on a low post-dam floodplain bench adjacent to the channel. That surface is heavily vegetated, and offers abundant cover for fry and juvenile rearing habitat when inundated. Consequently, the 2008 coarse sediment placement in the Cableway area increased rearing habitat availability in the reach over a wide range of flows (Alvarez et al. 2012), at least for the first year or two following bar construction. This result suggests that periodic replenishment of gravel at this location could have habitat benefits as well as supply downstream reaches with mobile bed material.

It is recommended that the Cableway site be retained as a potential low-flow gravel placement location, as it is a relatively narrow reach with an above average potential to entrain placed gravel. Gravel placement at the Cableway site also has the potential to improve local rearing habitat by promoting inundation of a vegetated post-dam floodplain at moderate flow levels.

Sawmill

Sawmill refers to a channel rehabilitation site as well as a high flow gravel augmentation location. The Sawmill rehabilitation project, constructed in 2009, spans about 0.7 miles of river between river mile (RM) 108.9 and 109.7, and includes two locations where constructed lateral bars have been or could potentially be revisited for gravel augmentation purposes. The area surrounding the upstream bar and bend was found to be geomorphically inactive, with very little topographic change occurring on either the bar surface or in the constructed thalweg (Gaeuman 2011). Consequently, more gravel was added to the bar in the summer of 2013, presumably to help steer flow into the constructed meander. The more downstream bar and bend complex was constructed at a location that had been identified as a suitable location for long term annual gravel augmentations as early as 2006. The local channel slope is relatively steep, such that gravel placed in the channel can be mobilized by high flows and distributed downstream. It is recommended that the Sawmill site remain on the list of possible long-term gravel augmentation points, but only if that area will be mechanically altered to locally reduce overbank flood conveyance.

Lowden Ranch

The Lowden Ranch site is located between RM 104.0 and 105.4. High-flow gravel injections have been performed at the site. About 2,050 CY of gravel were injected at the upstream Lowden Ranch site (forced meander location) during the 2011 release. The injection was designed to dynamically construct a mid-channel bar in the reach downstream as a follow up to mechanical rehabilitation implemented in 2010 (Gaeuman 2013b). This site is considered suitable for future high-flow injections in wet and extremely wet years when release magnitudes are sufficient to distribute the injected material downstream. About 1,530 CY of gravel was injected into the river there during the 2010 normal-year flow release when peak discharges reached 7,480 cfs. The forced meander at the Lowden Ranch site would be best utilized for a high-flow injection site and is recommended for use in the foreseeable future.

Recommendations

Past experience implementing gravel augmentations at the above locations serves as a guide for how best to utilize them in the future. No augmentation is recommended in critically dry years. The primary sites recommended for future annual gravel augmentation are the Hatchery, the Diversion Pool, and the Lowden Ranch site. The two later sites are best utilized for high-flow injection, whereas re-design of the Hatchery site could result in developing it for either high-flow injection or low-flow placement. It is emphasized that these recommendations are based on current information, and are subject to revision in keeping with future observations.

Overview of Project Analyses

Channel Rehabilitation and Sediment Management Activities for Remaining Phase 1 and Phase 2 Sites, Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/Final Environmental Impact Report

The Master EIR (Regional Water Board and Reclamation 2009) was completed by Reclamation, as the federal lead agency, and the North Coast Regional Water Quality Control Board (Regional Water Board), as the California state lead agency, to analyze the potential impacts of the proposed activities according to NEPA and CEQA guidelines. The analysis in that document is incorporated by reference into this Initial Study (IS) Checklist. This IS Checklist provides details about the environmental impact analyses for coarse sediment management and has been prepared to comply with CEQA (California Public Resources Code [PRC], Section 21000 et seq.).

The Master EIR is a programmatic CEQA document developed to analyze the impacts of river restoration activities including coarse sediment management. The Master EIR (Regional Water Board and Reclamation 2009) is divided into two parts. Part 1 evaluates the environmental impacts of the proposed channel rehabilitation and sediment management activities along the river and at the Remaining Phase 1 and Phase 2 sites. Part 2 of the Master EIR is an EA/EIR. The EA/EIR is an integrated NEPA/CEQA document that evaluates the environmental impacts of the proposed channel rehabilitation activities at a project-specific level for the Remaining Phase 1 sites. Those sites had sufficiently developed mechanical channel rehabilitation plans to allow for detailed analysis. Activities at 23 other planned restoration locations, called the “Phase 2” sites, were included in the Master EIR but sufficient information was not available for detailed analysis at that time; that is, they were included in the document as conceptual and thus were analyzed at a programmatic level.

The Regional Water Board acted as lead agency for the Master EIR (State Clearinghouse number 2008032110) and site specific environmental assessment/environmental impact reports (EA/EIRs). The Master EIR provides a discussion of the existing conditions, environmental

impacts, and mitigation measures required to comply with CEQA (California PRC, Section 21000 et seq.). In addition to addressing direct and indirect impacts associated with the Proposed Project and alternatives, the Master EIR addresses cumulative and growth-inducing impacts that could be associated with restoration activities. The Regional Water Board certified the Master EIR on August 25, 2009. The Master EIR meets the elements required for a Program EIR pursuant to California Code of Regulations, Title 14 (Natural Resources), Section 15168. Under California Code of Regulations, Title 14, Section 15177, after a Master EIR has been prepared and certified, subsequent projects, which the lead agency determines as being within the scope of the Master EIR, will be subject to only limited environmental review. Gravel augmentation activities were covered in the Master EIR. The combined NEPA/CEQA document evaluates the environmental impacts of the proposed sediment management activities at the project-specific level for the proposed project.

The preparation of a new environmental document and new written findings will not be required if, based on a review of the IS prepared for the subsequent project, the lead agency determines, on the basis of written findings, that no additional significant environmental effect will result from the proposal, no new additional mitigation measures or alternatives are required, and that the project is within the scope of the Master EIR. Whether a subsequent project is within the scope of the Master EIR is a question of fact to be determined by the lead agency based upon a review of the IS to determine whether there are additional significant effects or new additional mitigation measures or alternatives required for the subsequent project that are not already discussed in the Master EIR. If the Regional Water Board requires additional analysis, site-specific CEQA environmental documentation is required. This IS contains a project description and other information required to apply for Clean Water Act Section 401 Water Quality Certification for Trinity River coarse sediment management activities, which the Regional Water Board will consider in making its determination and approval decision.

Excerpts from the Master EIR are included below:

> The intent of the Master EIR is to provide CEQA compliance for activities at both the Remaining Phase 1 and Phase 2 sites… (Page 2-2)
>
> The ROD acknowledged the need for coarse sediment augmentation downstream of the Lewiston Dam for the life of the TRD. (Page 2-4)
>
> Located downstream of Lewiston Dam, these sites were selected by the TRRP in consultation with the TMC in order to ensure that introduced material is transported downstream to replenish the alluvial material that is remobilized over time. (Page 2-13)
>
> In addition to the activities listed in Table 2-1, the Proposed Project includes activities intended to implement the TRRP's Sediment Management Plan. These sediment management activities would occur primarily upstream of Weaver Creek, but could be included as design elements (e.g., placement of coarse sediment as point bars) within Phase 2 site boundaries as required to increase aquatic habitat complexity (Figure 1-2). (Page 2-36)
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> The approach and methods incorporated into the Proposed Project used information gained from constructing the Hocker Flat, Canyon Creek, Indian Creek, and Lewiston–Dark Gulch rehabilitation projects. On-going monitoring at these project sites will continue to be incorporated into the AEAM Program for future restoration and rehabilitation efforts. (Page 2-36)
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> Implementation of the Proposed Action (Proposed Project) at the Sawmill site, expected in 2009, would be the fifth in a sequence of channel rehabilitation projects (Hocker Flat

constructed in 2005, the Canyon Creek Suite in 2006, Indian Creek in 2007, and Lewiston-Dark Gulch in 2008) to implement the ROD's mechanical channel rehabilitation components, and to rework the Trinity River floodplain based on pre-dam channel morphology characteristics. In addition to ongoing annual sediment management at the Hamilton Ponds and coarse sediment augmentation during high flows, activities at the Sawmill site constitute the third TRRP channel rehabilitation project to implement portions of the ROD's coarse sediment management activities. (FONSI, page 2)

In addition to the 13 mechanical channel sites identified in the ROD where construction has been done (e.g., Hocker Flat, Valdor Gulch), side channel and coarse sediment augmentation efforts have been implemented at various locations (i.e., Indian Creek and Dark Gulch side channel sites and the Lewiston Hatchery coarse sediment augmentation site)." (Page 1-8)

The Master EIR also meets the elements required for a Program EIR pursuant to California Code of Regulations, title 14, section 15168. A Master EIR and Program EIR serve similar functions in providing programmatic level review from which site-specific projects may tier. For subsequent site-specific projects proposed more than five years from certification of the Master EIR, the lead agency may rely on this document as a Program EIR, or in the alternative, make the findings under California Code of Regulations, title 14, section 15179. (Page 1-15)

In addition to site-specific placement and/or removal of coarse sediment at the Remaining Phase 1 and Phase 2 sites described in this document, the Proposed Project includes long-term coarse sediment augmentation at the five sites illustrated in Figure 1-2. (Page 2-13)

The State Water Board and the nine Regional Water Quality Control Boards have primary responsibility for the protection and enhancement of water quality in California. The Regional Water Boards adopt and implement water quality control plans (Basin Plans), which recognize the unique characteristics of each region with regard to natural water quality; past, present, and reasonably foreseeable beneficial uses; and water quality problems. The North Coast Basin Plan is designed to preserve and enhance water quality and protect beneficial uses of all regional waters. Specifically, the Basin Plan (i) designates beneficial uses for surface and ground waters, (ii) sets narrative and numerical objectives that must be attained or maintained to protect beneficial uses, and (iii) defines implementation programs that include specific prohibitions, action plans, and policies to achieve the water quality objectives. Water quality Mitigation Measures 4.5-1a-e, 4.5-2a-c, and 4.5-3a-c provide measures to protect the beneficial uses of the Trinity River. (Page E-12)

The Regional Water Board has participated by issuing permits for TRRP channel rehabilitation and coarse sediment augmentation projects and by serving as the CEQA lead agency for the Canyon Creek Suite of Mechanical Channel Rehabilitation Projects and for this Master EIR. (Page 5-3)

…the TRRP has been augmenting coarse sediment in the mainstem Trinity River to enhance alluvial processes and provide juvenile and spawning habitat for anadromous salmonids. Since the summer of 2003, the TRRP has placed nearly 18,000 cubic yards of coarse sediment into the river in conjunction with construction of the initial Phase 1 sites. Since 2008, more than 2,300 cubic yards of coarse sediment has been introduced during spring high flows. High-flow augmentation has occurred at the Sven Olbertson and SM sites using techniques similar to those shown on Figure 2.3j. (Page 5-3)

> A fundamental element of the TRRP is restoration of the sediment regime in a manner that enhances the alluvial character of the 40-mile reach of the Trinity River downstream of Lewiston Dam. This project would ensure that the coarse sediment fraction of the sediment regime will be replenished on an ongoing basis consistent with the timing, volume, and rates appropriate for the scaled down channel. The project also incorporates elements of the larger coarse sediment supplementation plan prepared for the 40-mile reach of the Trinity River. While there may be a change in the timing or volume of sediment input, overall the project is intended to assist BLM and the STNF in attainment of this Aquatic Conservation Strategy (ACS) objective. (Page A-6)
>
> Collectively these activities are intended to generate geomorphic responses downstream that will further the overall habitat enhancement objectives by reestablishing the alluvial processes that were impaired by the construction and operation of the TRD. The activities that are proposed on federal lands subject to the ACS are an integral part of the larger project and are intended to assist BLM and the STNF in attaining this ACS objective. (Page A-8)
>
> Based on this evaluation, we (BLM & STNF) find that the project described in the NEPA decision document has been designed and would be constructed in a manner that does not prevent future attainment of the Aquatic Conservation Strategy objectives. The management actions incorporated into the preferred alternative will maintain the existing condition or lead to improved conditions in the long term, consistent with the intent of the Aquatic Conservation Strategy. (Page A-8)
>
> Pages 2-8, 2-13, and 2-14 discuss coarse sediment management (e.g., gravel augmentation), including how specific sites are selected, the types of methods that may be used, and the timing. Table 2-2 provides a detailed list of activity areas considered for coarse sediment addition within the Remaining Phase 1 sites, and Section 2.4.2 provides a narrative discussion of the Phase 2 sites that may be candidates for coarse sediment management. In addition to the coarse sediment management incorporated into site-specific designs for Remaining Phase 1 and Phase 2 sites, the locations of five discrete long-term, high-flow sediment augmentation sites are illustrated on Figure 1-2. Reclamation and the U.S. Forest Service have used some of these sites for the past several years. These sites are associated with areas commonly referred to as the Lewiston Hatchery, Diversion Pool (or New Lewiston Bridge), Cableway (upstream of Old Lewiston Bridge), Sawmill (downstream from Cemetery Hole), and Lowden Ranch. (Final, 3-40)

As shown by these excerpts from the Master EIR, sediment management activities have been occurring as a part of a number of projects besides those discussed in the Master EIR and the impacts of those activities have been disclosed. Previous EIRs have presented environmental analyses and disclosure of potential impacts of project-specific coarse sediment augmentation that are discussed in the Master EIR. In addition to the previous EIRs that evaluated effects on two channel rehabilitation sites/coarse sediment augmentation sites, significance factors were also assessed in the Trinity River Coarse Sediment Injection and Rehabilitation Project EA for the Lewiston Hatchery, a Trinity River project site located immediately below the Lewiston Dam and entirely on National Forest Service land, as discussed in the Master EIR. Similar to the Master EIR these other analyses found that effects of the projects that were permitted would be avoided, minimized or mitigated to the level of less-than-significant. Analyses from these earlier coarse sediment augmentation sites are incorporated into the Master EIR.

Additional Analyses

As stated above, a number of other documents have analyzed the impacts of TRRP's ongoing sediment management activities in addition to the analysis in the Master EIR. Relevant excerpts from some of those documents are included below. These excerpts serve to further show that sediment management projects on the Trinity River are part of ongoing efforts to improve fishery habitat on the river, and that the impacts of these projects have been analyzed and mitigated to levels that are less than significant.

Trinity River Coarse Sediment Injection and Rehabilitation Project Environmental Assessment, Shasta-Trinity National Forest (2006)

> The FEIS, published in 2000, functions as a project-level NEPA document for policy decisions associated with managing Trinity River flows. It is also intended to serve as a programmatic NEPA document providing first-tier review for "… spawning gravel placement… and other site-specific activities" (FEIS[3] page 1-3) including the Proposed Action in this EA. (Page 1)
>
> The USDA-Forest Service (USFS), Shasta-Trinity National Forest has reviewed the Record of Decision (ROD) for the FEIS dated December 19, 2000. The ROD addresses the need for the proposed action: "This decision recognizes that restoration and perpetual maintenance of the Trinity River's fishery resources require rehabilitating the river itself, restoring the attributes that produce a healthy, functioning alluvial river system. Therefore, the components of the selected course of action include…(S)ediment management, including the supplementation of spawning gravels below the TRD…". The USFS proposes in this EA to undertake a restoration activity at a location specifically described in the FEIS that is integral to restoring the Trinity River. (Page 1)
>
> A more comprehensive analysis is included in the Hydrology and Fisheries Reports located in the Trinity River Coarse Sediment Injection and Rehabilitation Project EA project file at the Shasta Trinity National Forest Supervisors Office. A thorough analysis is also included in the biological assessment (U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation 2000) and the consequent biological opinion (National Marine Fisheries Service 2000) addressing foreseeable Trinity River Restoration Program activities. (Page 21)
>
> …(Any) adverse effects were concluded to be minor and short-lived, dwarfed by the long-term beneficial outcome via implementing the proposed action. This displacement of juvenile coho salmon "…is not expected to result in lethal take of these fish" (NMFS 2000). (Page 23)

Lewiston–Dark Gulch Rehabilitation Project: Trinity River Mile 105.4–111.7, Finding of No Significant Impact, Environmental Assessment/Final Environmental Impact Report (February 2008)

> The Proposed Action includes a number of in-channel activities at both the Lewiston and Dark Gulch sites as well as several river crossings within the boundary of the Dark Gulch site. The in-channel activities would include the placement of up to 52,430 cubic yards of coarse sediment into the Trinity River: 37,130 cubic yards at the Lewiston site and 15,300 cubic yards at the Dark Gulch site. (FONSI—Final EA/EIR, page 1-4)

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[3] Placement of spawning gravel at various locations in the Trinity River was assumed to continue as on ongoing activity even under the No Action alternative of the FEIS (page 2-8; 'Fish Habitat Management').

The EA/ EIR was written to represent the maximum volume of coarse sediment that could be available or physically added to the river in this reach. The TRRP does not have 52,000 cubic yards of coarse sediment available for this project in 2008; furthermore, the best available information (Dave Gaeuman, TRRP fluvial geomorphologist, pers. comm.) now indicates that the appropriate amount of coarse sediment to add to the Trinity River each year is approximately 7,000–10,000 cubic yards. Consequently, the TRRP now plans to place an average of 7,000–10,000 cubic yards of coarse sediment into the Trinity River annually at locations within the site boundaries, or at other locations that have been evaluated, and as recommended by the best available science (see page 2-12 of the EA/ EIR).

In the Final FONSI, Response to Comment 4-e states: "If coarse sediment placement is extended over multiple years, the environmental impacts that would potentially result from concurrent placements would be reduced. Thus, analysis of timing beyond that already analyzed in the EA/ EIR is not required." (FONSI—Final EA/EIR, Page 2-24)

As the co-lead agency for the EA, the STNF has the legal responsibility to ensure that activities authorized within the NRA are consistent with the STNF Land and Resource Management Plan (LRMP) and other regulatory requirements. (FONSI—Final EA/EIR, Page 3)

While the volume of material introduced to the channel may vary by water year type, the timing would be based on the transport capacity of these flows. (Page 3.6-37)

Planned placement of coarse sediment during peak ROD flows, starting approximately May 1, is late enough to virtually eliminate detrimental effects on fish in the gravel. High flow placement is not expected to have additional adverse effects on redds or juvenile salmonids beyond those that already would have occurred from scour and sediment transport of gravels already in the mainstem Trinity River. (FONSI—Final EA/EIR, Page3-4)

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance

Summary of Mitigation Measures

Refer to the *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Appendix E: Mitigation Monitoring and Reporting Program. These mitigations are similar to those developed for prior projects (see previous section, Additional Analyses, for a list of other documents to find similar analyses and mitigation measures).

Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION, will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project (mitigation measures) have been made by or agreed to by the project proponent.

☐ I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☒ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Under California Code of Regulations, title 14, section 15177, after a Master EIR[4] has been prepared and certified, subsequent projects which the lead agency determines as being within the scope of the Master EIR will be subject to only limited environmental review. Mitigation measures from the Master EIR will be implemented.

_____ _____

Signature Date

[4] North Coast Regional Water Quality Control Board and U.S. Bureau of Reclamation. 2009. Channel rehabilitation and sediment management for remaining Phase 1 and Phase 2 sites. Master environmental impact report, environmental assessment/ environmental impact report. Trinity River Restoration Program. August 2009. SCH#2008032110

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify: a) the significance criteria or threshold, if any, used to evaluate each question; and b) the mitigation measure identified, if any, to reduce the impact to less than significance.

Environmental Checklist and Explanatory Notes

I. AESTHETICS Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Have an adverse effect on a scenic vista?	☐	☐	☒	☐
b) Damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Degrade the existing visual character or quality of the site and its surroundings?	☐	☒	☐	☐
d) Create a new source of light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Section 4.12. Section 4.12 of the Master EIR specifically mentions impacts from sediment management activities in the effects analysis. Mitigation measures identified to address these impacts include: mitigation measures 4.8-3a through 3f, as described in section 4.8 (Recreation) to address visual impacts related to water quality (e.g., the potential for increased turbidity to adversely impact the aesthetic quality of the river) and mitigation measures 4.7-1a through 1c, as described in section 4.7 (Vegetation, Wildlife, and Wetlands).

II. AGRICULTURE RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program in the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for timber production (TPZ)?	☐	☐	☒	☐
d) Involve other changes in the existing environment that, due to their location or nature, could individually or cumulatively result in loss of Farmland, to non-agricultural use?	☐	☐	☒	☐

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Section 4.2. Section 4.2 of the Master EIR states that some agricultural development occurs along the Trinity River and some land zoned as Timber Harvest, Ag Forest, and Agriculture is located in and adjacent to project boundaries; however, there are no timber production or

agricultural activities that extend into the project sites, nor are there any lands designated as Prime Farmland, Unique Farmland, or Farmlands of Statewide Importance.

III. AIR QUALITY Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐
f) Otherwise degrade the atmospheric environment?	☐	☐	☒	☐
g) Substantially alter air movement, moisture, temperature or other aspects of climate?	☐	☐	☒	☐

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Section 4.11. Section 4.11 of the Master EIR specifically mentions impacts from sediment management activities in the effects analysis. Fugitive dust emissions would result from activities associated with gravel injection. Fugitive dust is associated with PM_{10}, a criteria pollutant, for which the air basin is in non-attainment. As described in Chapter 2, the project incorporates measures required by the North Coast Unified Air Quality Management District to minimize fugitive dust in and adjacent to project sites. These measures are summarized in section 2.6 (Description of Construction Criteria and Methods) of the Master EIR. While the project design minimizes fugitive dust, project generated fugitive dust would be considered a significant impact because the air basin is in non-attainment status for particulate matter. Mitigation measure 4.11-1a would be implemented to reduce impacts to less than significant. Construction would require the use of equipment that would temporarily contribute to air pollution in the Trinity River basin. Exhaust emissions from heavy equipment during construction could contribute to air pollution, which could result in a significant impact on air quality. Mitigation measure 4.11-2a would be implemented to reduce impacts to less than significant.

IV. BIOLOGICAL RESOURCES Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Have an adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have an adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
c) Have an adverse effect on Corps of Engineers jurisdictional wetlands either individually or in combination with the known or probable effects of other activities through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere with the movement of any resident or migratory fish or wildlife species or with	☐	☒	☐	☐

established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	☐	☒	☐	☐
g) Otherwise degrade the biotic environment?	☐	☒	☐	☐

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Section 4.6 and 4.7. Section 4.6 of the Master EIR specifically mentions impacts from sediment management activities in the effects analysis. The addition of coarse sediment (including spawning sized gravels) to the Trinity River at select coarse sediment activity areas would immediately provide suitably sized spawning gravels to coho and other salmonids. The addition of coarse sediment would sometimes occur in conjunction with bar construction activities and could affect spawning anadromous fish (including coho salmon). The addition of coarse sediment at various in-channel activity areas would also occur during the channel maintenance flows released from the TRD during the spring. Planned placement of coarse sediment during peak ROD flows, starting approximately May 1, is late enough to eliminate detrimental effects on fish in the gravel because fry will have already emerged. In addition, extreme water velocities at the high flow injection sites would make these locations unsuitable for juvenile salmonids; therefore, eliminating the chance for them to be impacted by the gravel injections. High-flow placement of coarse sediment is not expected to have additional adverse effects on redds or juvenile salmonids beyond those that already would have occurred from scour and sediment transport of gravels already in the mainstem Trinity River. Temporary adverse effects to the quality of juvenile salmonid rearing habitat will occur during in-channel construction activities (e.g., coarse sediment addition). The principal adverse effects on fish include displacement of rearing salmonid fishes from their habitat and an increased predation risk or reduced feeding efficiency through the loss of the cover function provided by the SRA habitat. Mitigation measures 4.6-1a and 4.6-1b will be implemented to reduce impacts to less than significant. In-channel construction activities, such as coarse sediment addition, would occur during low-flow conditions between July 15 and September 15, minimizing the potential for adverse effects on all life stages of coho salmon. Mitigation measure 4.6-2a through 4.6-2e would reduce impacts to less than significant. Minor fuel and oil spills could occur, creating a risk along the river. Mitigation measure 4.6-3a will be implemented to reduce impacts to less than significant. During spring flow events direct impacts to juvenile coho salmon could occur during the annual, long-term augmentation of coarse sediment. Augmentation during high-flows is not expected to have additional adverse effects on redds or juvenile salmonids because the areas chosen for coarse sediment augmentation are high velocity sites where juvenile fish will not be holding and high concentrations of redds would not be expected. Scour and sediment transport in the Trinity River associated with high flow events would likely impact any existing redds at gravel augmentation sites prior to gravel augmentation. Mitigation measures 4.6-4a through 4.6-4f will be implemented to reduce impacts to less than significant. Construction activities associated with the Proposed Project may require temporary placement of low-flow channel crossings, which consist of gravel fill materials. Mitigation measures 4.6-6a through 4.6-6d will be implemented to reduce impacts from this activity to less than significant.

Section 4.7 of the Master EIR addresses impacts to wildlife, vegetation, and wetlands. A number of impacts could occur to these resources. The Proposed Project could result in the temporary disturbance of upland plant communities, but the impacts would not be significant. Temporary access routes and staging areas would be restored to their original condition upon completion of work. Implementation of the Proposed Project could disturb habitat for special-status plant species. The following mitigation measures will be implemented to avoid or minimize project-related impacts to special-status plant species: 4.7-3a through 4.7-3c. In order to avoid and minimize impacts to jurisdictional waters, including wetlands, the following mitigation measures will be implemented: 4.7-1a through 4.7-1c.

Mitigation measures 4.7-4a through 4.7-4d will reduce impacts to the little willow flycatcher to a less-than-significant level. Mitigation measures 4.7-5a through 4.7-5d will reduce the impacts to the foothill yellow-legged frog to a less-than-significant level. Mitigation measures 4.7-6a through 4.7-6e will reduce the impacts to the western pond turtle to a less-than-significant level. Mitigation measures 4.7-8a through 4.7-8d will reduce the impacts to nesting bald eagles and northern goshawk to a less-than-significant level. Mitigation measures 4.7-9a through 4.7-9c will reduce the impacts to special-status bat species to a less-than-significant level. In order to avoid and/or minimize impacts to nesting California yellow warblers, yellow-breasted chats, and Vaux's swifts, the following mitigation measures will be implemented: 4.7-7a through 4.7-7d. In order to avoid and/or minimize the potential introduction and/or spread of noxious weeds, the following measures will be implemented: 4.7-13a through 4.7-13f.

V. CULTURAL RESOURCES Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Cause an adverse change in the significance of a historical resource, as defined in Section 15064.5?	☐	☐	☒	☐
b) Cause an adverse change in the significance of an archaeological resource, pursuant to Section 15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Section 4.10. The Master EIR states that overall TRRP rehabilitation activities have the potential to affect unknown cultural resources that may be present. Mitigation measures 4.10-2a and 4.10-2b will be implemented to reduce impacts to less than significant.

VI. GEOLOGY AND SOILS Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☒	☐
b) Result in soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Section 4.3. Section 4.3 of the Master EIR states that the Proposed Project would result in temporary sediment mobilization associated with in-channel activities. Mitigation measures 4.3-2a and 4.3-2b will be implemented to reduce impacts to less than significant.

VII. GREENHOUSE GAS EMISSIONS Would the project:	**Potentially Significant**	**Less Than Significant With Mitigation**	**Less Than Significant**	**No Impact**
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Section 4.11. Transportation and construction activity associated with project implementation would generate greenhouse gas emissions from diesel- and gasoline-powered vehicles and equipment. A number of measures identified in Chapter 2 are intended to reduce the impacts relative to climate and greenhouse gases and are incorporated into the Proposed Project. Additional measures will be used to enhance the awareness of global warming as described in Section 4.11. The Master EIR states that the amount of greenhouse gas emissions generated by the Proposed Project would not be significant.

VIII. HAZARDS AND HAZARDOUS MATERIALS Would the project:	**Potentially Significant**	**Less Than Significant With Mitigation**	**Less Than Significant**	**No Impact**
a) Create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Have hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and consequently result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) Be located within the vicinity of a private airstrip, and consequently result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h) Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Section 4.13. The analysis in the Master EIR Section 4.13 states that impacts related to hazards and hazardous materials would be less than significant. Activities associated with the Proposed Project would utilize potentially hazardous materials (e.g., oil and fuels) associated with the operation of vehicles and construction equipment during project construction. These materials are similar to those routinely used for other types of construction projects throughout Trinity County. Construction activities associated with the project may interfere with emergency response and evacuation plans by temporarily slowing traffic flow. Construction traffic would include the mobilization and demobilization of construction equipment (e.g., scrapers, excavators, and bulldozers) to and from the sites. Once the equipment is on the site, construction traffic would be limited to daily trips for personnel and routine service and supply vehicles. Construction activities would be managed to ensure that emergency response and evacuation plans are not impeded. The impacts would be less than significant. The Proposed Project would have a less-than-significant impact on wildland fire potential and behavior.

IX. HYDROLOGY AND WATER QUALITY Would the project:	**Potentially Significant**	**Less Than Significant With Mitigation**	**Less Than Significant**	**No Impact**
a) Violate any applicable water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide additional sources of polluted runoff?	☐	☒	☐	☐
f) Place housing within a 100-year floodplain, as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
g) Place within a 100-year floodplain structures that would impede or redirect flood flows?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury, or death involving: 1) flooding, including flooding as a result of the failure of a levee or dam, or 2) inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐
i) Otherwise degrade water quality?	☐	☒	☐	☐
j) Change the amount of surface water in a water body?	☐	☐	☐	☒
k) Change currents or the course or direction of water movements?	☐	☒	☐	☐

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Sections 4.4 and 4.5. The project would be consistent with the overall project objectives and design criteria established by the TRRP and the Regional Water Board. No long-term impacts on water table elevations would occur. The project would avoid exposing people or structures to a significant risk of injury, death, or loss involving flooding. Therefore, this impact would be less than significant. The Project could result in short-term increases in turbidity and suspended solids concentrations in the water column that could potentially violate the Basin Plan objectives for turbidity in the Trinity River. Short-term increases in turbidity and suspended solids levels during construction would be a significant impact. Mitigation measures 4.5-1a through 4.5-1e would be implemented to reduce impacts to less than significant. A short-term increase in turbidity and suspended solids levels could occur following gravel augmentation activities. Mitigation measures 4.5-2a through 4.5-2c will be implemented to reduce impacts to less than significant. Operation of construction equipment in or adjacent to the river would increase the risk of a spill of hazardous materials into the river (e.g., from leaking of fluids from construction equipment). Spills of hazardous materials into or adjacent to the Trinity River could degrade water quality and have deleterious effects on salmonids of any life stage that are in close proximity to construction activities. Mitigation measures 4.5-3a through 4.5-3c will be implemented to reduce impacts to less than significant. The TRRP in cooperation with Trinity County has implemented the Trinity River Potable Water and Sewage Disposal System Assistance Program (Assistance Program) to allow qualifying landowners to relocate, replace, modify, or otherwise improve their potable water and sewage systems to better resist damage from ROD flows intended to benefit fisheries. The Assistance Program is a one-time only opportunity to receive financial assistance from the TRRP to ensure that ROD flows do not have negative effects on existing infrastructure and site improvements (e.g., water sources and wastewater disposal systems).

X. LAND USE AND PLANNING Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural communities' conservation plan?	☐	☐	☒	☐

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Section 4.2. Section 4.2 of the Master EIR states that impacts related to land use and planning as stated in the table above would be less than significant. Implementation of the project would not disrupt existing land uses adjacent to the project sites nor would it be inconsistent with the goals, policies, and objectives of applicable plans.

XI. MINERAL AND ENERGY RESOURCES Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Result in the loss of availability of a known mineral that would be of value to the region and the residents of the state?	☐	☐	☒	☐
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☒	☐
c) Result in the use of energy or non-renewable resources in a wasteful or inefficient manner?	☐	☐	☐	☒

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Section 4.2. There are no locally important mineral recovery sites identified by the state located within the boundaries of any of the sites. However, activities associated with the project that occur in the river could temporarily preclude individuals from accessing and actively working their mining claims. Mitigation measure 4.2-3a will be implemented to reduce impacts to less than significant.

XII. NOISE Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Generate or expose persons to noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generate or expose persons to excessive ground-borne vibration or ground-borne noise levels?	☐	☒	☐	☐
c) Result in a permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and consequently expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) Be within the vicinity of a private airstrip, and consequently expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Section 4.14. The Master EIR states that during the project, noise would temporarily increase in the immediate area. Mitigation measures 4.14-1a through 4.14-1c would be implemented to reduce impacts to less than significant.

XIII. POPULATION AND HOUSING Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Section 4.9. The Master EIR states that impacts related to population and housing would be less than significant.

XIV. PUBLIC SERVICES Would the project result in 1) adverse physical impacts associated with the provision of new or physically altered governmental facilities, or 2) the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	**Potentially Significant**	**Less Than Significant With Mitigation**	**Less Than Significant**	**No Impact**
a) Fire protection?	☐	☐	☐	☒
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Roads?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report,* Section 4.15. The project would not result in adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services.

XV. RECREATION	**Potentially Significant**	**Less Than Significant With Mitigation**	**Less Than Significant**	**No Impact**
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report,* Section 4.8. During implementation of the Proposed Project, there would be construction equipment and activity within the active river channel and the floodplain in close proximity to the Trinity River, which could result in temporary interruptions of public access and use in the immediate vicinity of the project. Although potential disruptions to recreational activities within the project boundaries would be temporary, this impact would be significant. Mitigation measures 4.8-1a and 4.8-1b would be implemented to reduce impacts to less than significant. There would be no increase in use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. The project does not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

XVI. TRANSPORTATION/TRAFFIC Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☒	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Result in inadequate parking capacity?	☐	☐	☒	☐
g) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒
h) Adversely affect rail, waterborne, or airborne transportation?	☐	☐	☒	☐

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Section 4.15 and 4.16. Sediment management activities would generate short-term vehicle trips. While the potential increase in traffic generated from construction and post-construction activities would be localized and minimized through project design criteria, off-site gravel hauling and gravel injection activities could result in short-term increases in vehicle trips that would be significant. Mitigation measure 4.16-2a would be implemented to reduce impacts to less than significant. Access to adjacent public and private lands may be restricted if traffic control measures are being used, which would constitute a significant impact. Recreational access to the Trinity River could be restricted to varying degrees within and adjacent to the sites during gravel augmentation activities. However, several public access points would be available throughout the reach during the project implementation period. Mitigation measures 4.16-3a and 4.16-3b would be implemented to reduce impacts to less than significant. Additional truck travel on local and private roads would be required when excavated material is used to replenish river gravel supplies for fisheries purposes. The level of construction traffic could also require additional maintenance for some road segments in conjunction with various activities. This impact would be significant. Mitigation measure 4.16-4a would be implemented to reduce impacts to less than significant. Traffic safety hazards could arise for motorists, bicyclists, pedestrians, and equestrians in the vicinity of the project access routes when heavy construction equipment is entering or leaving a site. This impact would be limited to brief and intermittent periods. Nevertheless, it is considered significant because it poses a safety hazard to motorists, bicyclists, and pedestrians. Mitigation measure 4.16-5a would reduce impacts to less than significant. Access for mobilization and demobilization of heavy equipment may require temporary traffic control for local roadways before, during, and after site construction, which would be a significant impact because it could have the potential to increase response time for law enforcement, fire protection, and other emergency services as well as interfering with student access to bus services and school attendance. Mitigation measures 4.15-3a through 4.15-3c would be implemented to reduce impacts to less than significant.

XVII. UTILITIES AND SERVICE SYSTEMS Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, for any of the following utilities?				
i) Water treatment or distribution facilities?	☐	☐	☒	☐
ii) Wastewater collection, treatment, or disposal facilities?	☐	☐	☐	☒
iii) Storm water drainage facilities?	☐	☐	☐	☒
iv) Electric power or natural gas?	☐	☐	☐	☒
v) Communications systems?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Refer to *Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Part 1: Final Master Environmental Impact Report and Part 2: Environmental Assessment/ Final Environmental Impact Report*, Section 4.15. None of the activities associated with the project would occur to disrupt electrical or telephone service within or adjacent to the sites.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects, as defined in Section 15130.)	☐	☒	☐	☐
d) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

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