Trinity River Restoration Program
Long-Term Fine Sediment Management

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)

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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

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Introduction

The United States Department of Interior (USDI) Bureau of Reclamation (Reclamation) proposes to conduct fine sediment management activities at the Hamilton Ponds site on Grass Valley Creek (GVC) approximately 200 yards upstream of the confluence with the Trinity River near Lewiston, California. 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 fine 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 (Final Master EIR – EA/Final 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 EIS/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.

[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/program-structure/foundational-documents/; a current list of constructed rehabilitation sites can be found at https://www.trrp.net/restoration/channel-rehab/sites/.

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 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, Bureau of Land Management (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. Surrounding 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, fine sediment augmentation activities would occur at the Hamilton Ponds (See Figure 1-2 in the Master EIR for project location). The Hamilton Ponds are sediment retention basins located on GVC approximately 200 yards upstream of the confluence with the Trinity River near Lewiston, California. These ponds were created on the California DWR property in 1988 and 1989 specifically to capture sediment from the GVC watershed before it enters the Trinity River drainage. In an effort to restore Trinity River fisheries, California DWR purchased land at the mouth of GVC, a major sediment contributor, to construct sediment control ponds and to store sediment removed from the ponds. The 90 acres of land that California DWR manages at this site contains the historic Lowden Ranch. The Hamilton Ranch Management Plan (1994) provides land use guidance for this 90-acre parcel at the mouth of GVC.

Project Description

The specific activities that would occur at the Hamilton Ponds 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 site consistent with the CEQA Guidelines (Section 15176 (a) and (c)). The Hamilton Ponds periodically fill with sediment from GVC where large sediment loads (e.g., decomposed granitic materials and fines) may be released from the watershed as a result of previous logging practices and the highly erosive geology common to the area. During extremely wet years within the GVC watershed, the Hamilton Ponds may largely fill with sediment, which washes into the ponds from the watershed. To ensure that the impact of these fines on the Trinity River is minimized, the TRRP has periodically dredged the ponds. Dredging has stopped collected sediment from entering the Trinity River and adversely impacting salmonid habitat, including spawning and rearing habitat for listed species. In recent years, the TMC, the managing Board of Directors for the TRRP, has directed the TRRP to ensure that maximum capacity is available each year for sediment capture. As long as the depth of the upper Hamilton Pond is maintained, most of GVC's sediment is trapped there. Only finer grained materials (e.g., silts and loams), which are suspended longer in the water column and which generally have less negative impacts on aquatic life, pass through to the lower pond. Sand is primarily deposited in the upper pond.

In order to complete excavation of the upper pond, GVC flow would be diverted behind an earthen barrier placed on the upstream pond entrance by an excavator and reinforced by tarp (as needed) at Point A (Figure 1). The lower end of the confined GVC would be forced to drop down the western spillway by placing another earthen or sand bag barrier at the earthen berm's downstream end at Point B (Figure 1). The vast majority of the creek's flow is thus diverted behind the earthen berm. The remaining GVC flow that does enter the upper pond is minimal and filtered by the sediment berm. After GVC has been directed behind the berm, water quality in the pond quickly begins to degrade. Pond temperature increases and dissolved oxygen levels decrease as GVC fresh water inflow is limited. Cold-water fishes, which seek refuge in relatively better water quality areas, are then found at upstream and downstream blockage points (Figure 1: Points A & B; Figure 2). Typically these blockage points include areas of subsurface flow into the pond which attract cold water fish species. When salmonids are found at these locations, they may survive in these relatively better water quality locations, or may be assisted by seining and moved to GVC release locations in the by-pass channel. Fish may be either transferred to buckets for movement or may be transported directly in seines. After two days of isolation, a turbidity curtain would be deployed around the upper pond area, from which sediment would be dredged, so that turbidity would be maintained within the work area (Figure 2). An excavator would then remove sand and fine sediment from the upper pond work area and place the dredged material into a dump truck for transport to one of the onsite spoils areas (primary or secondary locations depicted on Figure 1). During excavation, the work area would be continuously isolated from the ponds with a turbidity curtain. When dredging is complete, the downstream berm plug (Point B) that isolates the western spillway from the pond, would be removed. At this point, the upstream barrier (at Point A), which causes GVC to flow behind the berm and around upper Hamilton Pond, would also be removed. After turbidity has settled within the upper Hamilton Pond, the turbidity curtain would be removed and free flow through the upper Hamilton Pond would be reestablished. The described excavation of the upper Hamilton Pond would occur annually between August 20 and October 30, typically removing between 3,000 to approximately 10,000 cubic yards of sand and fines. In general, GVC is

isolated from the upper Hamilton Pond by sediment berms or sand bags for approximately seven days. Excavation of the upper pond is expected to take no more than five days.

Figure 1. Hamilton Ponds, Sediment Control on Grass Valley Creek.

Figure 2. East Hamilton Pond spillway, closed during dredging.

Figure 3. Upper Hamilton Pond dredge area, isolated from pond by turbidity curtain.

Throughout the work, measures to control sedimentation and delivery of turbid water to the ponds would be utilized (e.g., vegetation mats, straw, or other mulching material would be placed over the spoils) as necessary to prevent materials from degrading GVC and the mainstem Trinity River.

Due to the temporary, short-term nature of this activity and the benefits to the system which accrue from removal of fine sediments and sand, the advantages of the activity are believed to outweigh the environmental impacts. Furthermore, the described techniques are believed to minimize impacts to threatened coho salmon (*Oncorhynchus kisutch*). It is believed that dredging accomplishes the following: 1) it protects the Trinity River from GVC watershed fine sediment additions, and 2) ensures that a maximum capacity is available to capture fines during the next season of winter storms. Without the Hamilton Ponds and annual dredging, the potential for undesirable sediments to enter the Trinity River would be increased.

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 fine 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 fine 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 rehabilitation and sediment management activities, including work at the Hamilton Ponds. From a programmatic perspective, it 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 proposed activities. 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. The EA/EIR has been prepared to comply with NEPA (42 USC, Section 4321 et seq.) and CEQA (California PRC, Section 21000 et seq.).

The Regional Water Board acted as lead agency for the Master EIR (State Clearinghouse number 2008032110). 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. Fine sediment management activities at the Hamilton Ponds were covered in the Master EIR. The combined NEPA/CEQA document evaluates the environmental impacts of the proposed sediment management activities for the proposed project.

CEQA guidelines (Section 15177) state that 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 fine sediment management activities, which the Regional Water Board will consider in making its determination and approval decision.

Excerpts from the Master EIR that are applicable to the project are included below.

> 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 1-14)
>
> Fine sediment management activities focus on those actions required to maintain the sediment retention basins known as the Hamilton Ponds located near the mouth of Grass Valley Creek. These activities focus on the removal of sand that has settled out in the Hamilton Ponds and transporting it to a stable location away from the Trinity River. (Page 1-1)
>
> Fine sediment management control activities are ongoing at the confluence of Grass Valley Creek in conjunction with the maintenance of the Hamilton Ponds. (Page 1-8)
>
> Over time, restoration activities in the Grass Valley Creek watershed, including construction of two sediment retention ponds at the mouth of Grass Valley Creek (see Figure 1-2), have reduced the overall contribution of fine sediment to the mainstem Trinity River. These ponds—Upper and Lower Hamilton ponds—require periodic maintenance (i.e., dredging) to restore their storage capacity. The need to dredge Upper Hamilton pond is based on: 1) the water year and 2) the amount of accumulated fine sediment retained during the water year. Typically, in wet and extremely wet years, the ponds retain more fine sediment than during dry years. For purposes of this document, Upper Hamilton pond may require dredging on an annual basis for the next 5-10 years. (Page 2-14)

Grass Valley Creek watershed is almost entirely underlain by deeply weathered Shasta Bally granitics. Historically high rates of sediment production in the Grass Valley Creek watershed led to the construction of the Buckhorn Debris Dam in the upper part of the watershed and on-going annual dredging of Hamilton ponds at the creek's confluence with the Trinity River. Based on need, these ponds may be dredged on an annual basis. (Page 9)

Fluvial geomorphology was fundamental in the evaluation and selection of the preferred alternative in the Trinity River Mainstem Fishery Restoration EIS. Addressing the relationships between flow, sediment, and vegetation formed the basis for the Implementation Plan for the TRRP (Appendix C of the Trinity River Mainstem Fishery Restoration FEIS (USFWS et al. 2000)). This plan identified a number of actions and conditions concerning flow and sediment that would be implemented. These included the following:

- instream water release volumes and schedules to the Trinity River from Lewiston dam;
- mechanical channel rehabilitation (including riverine, high flow, and in-channel projects);
- sediment management (i.e., coarse sediment augmentation and fine sediment control);
- infrastructure modifications, such as bridge and structure relocation to pass ROD flows (e.g., new bridge construction and moving of wells, decks, and pumphouses);
- watershed protection program; and
- adaptive environmental assessment and management. (Page 4.3-2)

Reductions in the supply of bed material sediments downstream from dams commonly result in an increase in the sizes of bed material sediments on the bed surface accompanied by reduced bed mobility (Williams and Wolman 1984). Concurrently, decreases in stream flows often result in the deposition of fine sediments on and within the gravel substrate, channel narrowing and the establishment of riparian vegetation in areas formerly occupied by active channel bed (Graf 1978; Friedman et al. 1996; Allred and Schmidt 1999; Gaeuman et al. 2005). All of these processes quickly occurred in the Trinity River in the first few decades following dam closure. Flow reductions and the loss of the coarse sediment supply allowed riparian vegetation to encroach into the pre-dam channel and large berms to deposit along the channel margin by about 1970 (Pelzman 1973), ultimately fossilizing formerly active gravel bars and clogging gravel substrates with sand and silt (USFWS and Hoopa Valley Tribe 1999). These changes have substantially reduced the complexity and diversity of riparian and riverine habitats in the Trinity River. (Page 9)

The 1944 photographs clearly show that the pre-dam channel was larger than the modern channel, with minimal valley bottom riparian vegetation evident. With continued inputs of large quantities of fine sediments from tributaries downstream from Lewiston Dam, operation of the TRD allowed fine sediments to accumulate along the channel margins and riparian vegetation to colonize those new deposits. In some locations, the result was the development of a narrower, morphologically simple channel confined between tailings terraces. (Page 9)

Figure 4.3-5 illustrates deposition of fine-sediments along the channel margin (edge) that have resulted in the formation of riparian berms (large densely-vegetated natural levees). These berms, referred to as *fossilized*, confine stream flows in a deep, narrow channel with

little habitat value and disconnect flows in the main channel from adjacent valley bottoms that are otherwise low enough to function as a post-dam floodplain. (Page 10)

Soils derived from granitic or ultramafic rocks are typically fine-grained and often referred to as decomposed granite. While these soils occur in isolated locations, they are recognized as a leading contributor of fine sediments (sand) to the Trinity River. Grass Valley Creek, originating in the headwaters of the Shasta Bally Batholith, has been the subject of ongoing sediment reduction efforts by Reclamation, BLM, and private land managers for more than 20 years. (Page 10)

In order to alleviate the adverse impacts associated with excessive sediment in the Trinity River, a number of projects have been implemented to control and reduce input of excessive fine sediments into the Trinity River from tributary streams, including Grass Valley Creek, Rush Creek, and Deadwood Creek. The DWR constructed the upper and lower Hamilton Ponds on DWR property at the mouth of Grass Valley Creek in 1988 and 1989. Reclamation constructed the Buckhorn Sediment Dam in 1990 on BLM managed lands in the upper Grass Valley Creek watershed. In combination, these sediment-retention structures minimize fine sediment output from Grass Valley Creek. The Hamilton Ponds are located immediately downstream of two Remaining Phase 1 sites, LR and THG, near the confluence of Grass Valley Creek. Since the construction of the sediment-retention structures, other measures, including revegetation, bioengineering, grade stabilization, and sediment capture, have been implemented in the Grass Valley Creek watershed to further reduce the amount of soil erosion and transport of sediment. Recent efforts to reduce sediment input into the Trinity River include sediment reduction projects in the Deadwood Creek watershed and periodic excavation and removal of fine sediments from the Hamilton Ponds. (Page 10)

In 1992, the EPA added the Trinity River to its list of impaired rivers under the provisions of Section 303(d) of the CWA in response to a determination by the State of California that the water quality standards for the river were exceeded due to excessive sediment. In 2001, the EPA established a TMDL for sediment in the river. The Regional Water Board has continued to identify the Trinity River as impaired in subsequent listing cycles. The primary adverse impacts associated with excessive sediment in the Trinity River pertain to degradation of habitat for anadromous salmonids. (Page 4.5-5)

The restriction of streamflows downstream of the TRD has greatly contributed to the impairment of the Trinity River below Lewiston Dam (U.S. Environmental Protection Agency 2001). The reduction in available coarse sediment upstream of Rush Creek and the significant contribution of fine sediment from Grass Valley Creek have combined to severely affect the sediment flux and particle size distribution in the river. These effects are observable downstream at both the Remaining Phase 1 and the Phase 2 sites throughout the 40-mile reach. (Page 4.5-6)

Construction and operation of the TRD, combined with watershed erosion, large-scale gold dredging, and other human-caused disturbances, have resulted in major changes in habitat conditions in the Trinity River. Factors that have resulted in adverse effects on fish habitat include

- obstruction to river reaches upstream of the TRD (Lewiston Dam),
- changes to quantity and timing of flows,
- changes in channel geomorphology,

- changes in substrate composition caused by the addition of fine sediments and restriction of gravel recruitment, and
- changes in water temperature.(Page 11)

Changes in substrate composition occur in conjunction with upland and riverine processes. The construction and operation of the TRD have modified the sediment regime of the mainstem Trinity River, particularly the 40-mile reach below Lewiston Dam. Fine sediment fills open spaces between gravels and cobbles, which impedes water percolation through the river substrates, degrading and reducing available spawning habitats. Sedimentation of spawning areas can impede intragravel flow (which is important for delivering oxygen and carrying away metabolic waste products) to incubating embryos, as well as create an impenetrable barrier that prevents the emergence of salmon sac-fry from their gravel nest. Accumulation of fine sediments can also decrease the amount of space between gravel and cobble, thereby decreasing the amount of available habitat for over wintering juvenile coho salmon and steelhead that "burrow" into the substrate. Sedimentation may also decrease aquatic invertebrate production and diversity, thereby limiting a primary food source for juvenile salmonids. (Page 11)

Since the early 1980s, the Trinity River Basin Fish and Wildlife Restoration Program has conducted a variety of restoration activities in the mainstem Trinity River and its tributaries. These activities include watershed rehabilitation and habitat enhancement work within the tributaries, and dam construction and channel dredging in Grass Valley Creek to decrease the amount of fine sediment entering the mainstem Trinity River. Restoration activities in the mainstem Trinity River have included coarse sediment (spawning gravel) supplementation, pool dredging to remove fine sediment and restore valuable holding habitat and construction of several channel rehabilitation projects (side channels and bank rehabilitation of point bars). (Page 11)

As shown by these excerpts from the Master EIR, fine sediment management activities were included as part of the proposed project. Sediment management projects on the Trinity River, such as the fine sediment management activities at the Hamilton Ponds, are part of ongoing efforts to improve fishery habitat on the river, and the impacts of these actions have been analyzed. The analysis in the Master EIR found that effects of the overall project as permitted would be avoided, minimized, or mitigated to a level that is less-than-significant.

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, for a list of mitigation measures that would be implemented to reduce impacts of the project to less than significant.

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[3] 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

[3] 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: Master Environmental Impact Report and Part 2: Environmental Assessment/ Environmental Impact Report*, Section 4.12. Mitigation measures identified to address potential impacts include: mitigation measures 4.8-3a through 4.8-3f, 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 4.7-1c, as described in section 4.7 (Vegetation, Wildlife, and Wetlands). These measures will be implemented where applicable.

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 and some land zoned as Timber Harvest, Ag Forest, and Agriculture occurs along the Trinity River; however, there are no timber production or agricultural activities that extend into the project site, 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. 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 site. (Fugitive dust is associated with PM_{10}, a criteria pollutant, for which the air basin is in non-attainment.) 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 addressed impacts to fisheries. A number of mitigation measures will be implemented to reduce potential impacts to fisheries to less than significant. These include: 4.6-1a and 4.6-1b; 4.6-2a through 4.6-2e; 4.6-3a; 4.6-4a through 4.6-4f; and 4.6-6a through 4.6-6d; as well as those described in this document. Section 4.7 of the Master EIR addresses impacts to wildlife, vegetation, and wetlands. A number of mitigation measures will be implemented to reduce potential impacts to wildlife, vegetation, and wetlands to less than significant. These include: 4.7-3a through 4.7-3c; 4.7-1a through 4.7-1c; 4.7-4a through 4.7-4d; 4.7-5a through 4.7-5d; 4.7-6a through 4.7-6e; 4.7-8a through 4.7-8d; 4.7-9a through 4.7-9c; 4.7-7a through 4.7-7d; and 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 could result in temporary sediment mobilization associated with project 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 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?	☐	☐	☐	☒

VIII. HAZARDS AND HAZARDOUS MATERIALS Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
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.

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. 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. 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 project 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 GVC would increase the risk of a spill of hazardous materials into the water (e.g., from leaking of fluids from construction equipment). Mitigation measures 4.5-3a through 4.5-3c will be implemented to reduce impacts to less than significant.

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 site 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. Section 4.2 of the Master EIR states that there are no locally important mineral recovery sites identified by the state located within the project boundaries. Impacts would be 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?	☐	☒	☐	☐

XII. NOISE Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
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 3.15. Access for mobilization and demobilization of heavy

equipment may require temporary traffic control for local roadways before, during, and after project implementation. This could result in potential impacts to 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 will be implemented to reduce impacts to less than significant.

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. 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 4.16. 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, project activities could result in short-term increases in vehicle trips that would be 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. Mitigation measures 4.16-2a and 4.16-5a 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 result in impacts to wastewater treatment or result in the construction of new facilities or expansion of existing facilities. Any solid waste generated as part of the project would either be disposed of at one of the local transfer stations or transported by truck to a landfill located in Anderson, California. The Anderson landfill currently has sufficient capacity and the necessary permits to accommodate non-hazardous construction waste.

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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