ATTACHMENT 1

CALIFORNIA ENVIRONMENTAL QUALITY ACT
FINDINGS OF FACT FOR THE
TRINITY RIVER RESTORATION PROGRAM
CHANNEL MODIFICATION AND SEDIMENT MANAGEMENT PROJECT

I. PROJECT SUMMARY

The comprehensive mechanical channel rehabilitation and sediment management program (Project) will modify the maintstem Trinity River at 29 sites along a 40-mile stretch of the Trinity River between Lewiston Dam and Helena, Trinity County, California. The Project is part of a larger effort by the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) Trinity River Restoration Program to restore the anadromous fishery of the Trinity River, as described in the Secretary of Interior's 2000 Trinity River Record of Decision (ROD). The Project is designed to benefit anadromous fish and their habitat by selectively removing fossilized berms and encroaching riparian vegetation; revegetating and/or reestablishing complex and diverse assemblages of native riparian vegetation; and recreating alternate point bars and complex fish habitat similar in form to those that existed prior to the construction of Lewiston and Trinity dams. Project activities focus on modifying existing grade control features, reconnecting the river's floodplain with the river, establishing or expanding side-channel habitat, and enhancing the bed and banks of the Trinity River. Activities to restore fluvial processes include rescaling the river channel and floodplain at the Project sites, and managing coarse and fine sediment at several Phase 1 sites. Collectively, these rehabilitation activities are expected to increase habitat suitability and availability for salmonids and other native fish and wildlife species during a wide range of river flow conditions.

The Project would occur in several phases that would be implemented over the span of 10 years. Phase 1 will modify the mainstem Trinity River channel at 6 of the 23 project sites located between Lewiston Dam and Douglas City (river mile 109.7 to 92.2). The Phase 1 sites include Sawmill, Upper Rush Creek, Lowden Ranch, Trinity House Gulch, Steel Bridge Day Use, and Reading Creek. Construction of the Phase 1 sites would begin in the spring of 2010 and is expected to continue through late 2011, while Phase 2 is expected to begin as early as 2012. Phase 1 sites are located in the communities of Lewiston and Douglas City. Site-specific sediment management activities and mechanical channel rehabilitation plans are developed for the Phase 1 sites, which cover approximately 610 acres. Phase 2 sites are located in the communities of Lewiston, Douglas City, and Junction City. Preliminary sediment management and mechanical channel rehabilitation design concepts have been developed for the Phase 2 sites, which would be implemented at a later stage of the program.

The Project has the potential to affect water quality in the Trinity River. Under the California Porter-Cologne Water Quality Act, discharges of waste to waters of the state require the issuance of waste discharge requirements (WDR) unless otherwise waived. WDRs prescribe requirements, such as limitations on temperature, toxicity, or pollutant levels, as to the nature of any discharge (Wat. Code, § 13260, subd. (a)). The Project also includes activities that will require a Clean Water Act section 404 permit from the Army Corps of Engineers (Corps). Under section 401 of the federal Clean Water

Act (33 U.S.C. §§ 1251-1387), every applicant for a federal license or permit which may result in a discharge into navigable waters to provide the licensing or permitting federal agency with certification that the project will be in compliance with specified provisions of the Clean Water Act, including water quality standards and implementation plans promulgated pursuant to section 303 of the Clean Water Act (33 U.S.C. § 1313). Clean Water Act section 401 directs the agency responsible for certification to prescribe effluent limitations and other limitations necessary to ensure compliance with the Clean Water Act and with any other appropriate requirement of state law. Section 401 further provides that state certification conditions shall become conditions of any federal license or permit for the project.

Until the Regional Water Board issues its general certification for the Project, Reclamation will prepare and submit to the North Coast Regional Water Quality Control Board (Regional Water Board) an application for section 401 Water Quality Certification and/or Waste Discharge Requirements (Dredge/Fill) to accompany its pre-construction notification sent to the Corps for Clean Water Act section 404 coverage for each component of the Project. Once the Regional Board issues water quality certification, discharges from the individual projects will also be regulated under State Water Resources Control Board Order No. 2003 - 0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of the general water quality certification. By winter of 2009, the Regional Water Board intends to develop and issue a general water quality certification for TRRP class of activities that contains enrollment procedures for individual TRRP projects. (Cal. Code of Regs., tit. 23, section 3861.)

The Trinity River Total Maximum Daily Load (TMDL) for sediment was established in 2001 by the United States Environmental Protection Agency (EPA) in accordance with section 303(d) of the Clean Water Act, because the State of California determined that the water quality standards for the Trinity River are exceeded due to excessive sediment. The primary adverse impacts associated with excessive sediment in the Trinity River pertain to anadromous salmonid fish habitat, which the TRRP was designed to correct. The EPA cites the 2000 ROD, including flow regime, mainstem/watershed restoration, and adaptive management, in its implementation recommendations. The Regional Water Board considers its proposed permitting action on TRRP measures TMDL implementation of the Trinity TMDL.

II. CEQA FINDINGS OF FACT

The Regional Water Board is the lead agency under the California Environmental Quality Act (CEQA), in connection with the proceeding to consider issuing water quality certification for the Project. (Pub. Resources Code, §§ 21000-21177.) CEQA requires that the lead agency make one or more of a set of three findings whenever an Environmental Impact Report (EIR) identifies a significant effect on the environment. These findings are set forth in § 21081 of the Public Resources Code:

(1) Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.

(2) Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report. (See also Cal. Code Regs., tit. 14, § 15091)

When significant effects are subject to a finding under paragraph (3) of subdivision (a), the public agency finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment (Pub. Resources Code, § 21081(b)).

A public agency shall provide that measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or, in the case of the adoption of a plan, policy, regulation, or other public project, by incorporating the mitigation measures into the plan, policy, regulation, or project design. (Pub. Resources Code, § 21081.6(b).)

A Master Environmental Impact Report (MEIR) was prepared to identify the potential significant effects of the Project absent project modifications or mitigation measures to reduce or eliminate those effects. In addition, an Environmental Impact Report (EIR) was prepared to identify the potential significant effects for implementation of the Phase 1 component of the project absent project modifications or mitigation measures to reduce or eliminate those effects. These two environmental review documents were combined into one publication (Parts 1 and 2). The project design and analysis relevant to the Phase 1 is discussed in detail in the comprehensive MEIR. In order to minimize redundancy, discussion and analysis in the Phase 1 EIR often refers back to the comprehensive MEIR.

All of the significant effects identified in the combined MEIR and Phase 1 EIR can be fully avoided or rendered less than significant by implementation of the identified mitigation measures(s) and the project design measures adopted for inclusion into the Project. These findings are made under Public Resources Code, section 21081, subdivision (a)(1). Mitigation measures will be incorporated as conditions of water quality certification issued by the Regional Water Board to Reclamation or incorporated into the Project description as certified to avoid the significant environmental effects. Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting.

Public Resources Code § 21081.6(a) requires that if a public agency makes changes or alterations in a project to mitigate or avoid the significant adverse environmental effects of the project, it must adopt a monitoring or reporting program to ensure compliance with the changes or alterations. To comply with this requirement, the Regional Water Board adopted a mitigation monitoring and reporting plan (MMRP) for the comprehensive Project. Due to the level of detail provided in this MMRP, the mitigation and reporting plan that was adopted for the comprehensive Project was also adopted for the Phase 1 project.

The MMRP prepared for the project and is contained in a separate document (Appendix A of the Final Master EIR/EIR). The MMRP provides a table that identifies each mitigation measure, the entity responsible for implementation and timing of implementation, the entities responsible for oversight

and monitoring, and what if any, plans or approvals are needed. The MMRP also provides a summary of the Project design elements and the Project construction criteria and methods.

In addition to the MMRP, Reclamation and its Partners have been collecting scientific monitoring data to comprehensively evaluate the effectiveness of all Trinity River rehabilitation projects implemented by the Trinity River Restoration Program. Information gained from this long-term monitoring program is incorporated into avoidance and mitigation measures of each Trinity River restoration project. Reclamation shall provide a report to the Regional Water Board annually, starting in 2010, that summarizes TRRP implementation activities to date, monitoring, findings, and recommendations based on their research.

The Regional Water Board adopts the following findings for the Trinity River Restoration Program Channel Modification and Sediment Management Project.

Land Use

Impact 1: Implementation of the project may affect the availability of a locally important mineral resource recovery site.

There are no locally important mineral recovery sites identified by the state located within the boundaries of any of the rehabilitation sites. However, Trinity County was historically a gold mining region, and several unpatented mining claims exist throughout the Project sites. Project construction activities that occur in the river could temporarily preclude individuals from accessing and actively working their mining claims. This could threaten their ability to maintain individual claims. This impact is considered significant.

Additionally, private land owners adjacent to the river could have mineral rights within the Project sites. Project construction activities that occur in the river could temporarily preclude individuals from accessing minerals to which they have a right. This impact would be significant.

Implementation of Mitigation Measure 1 will reduce this impact to a less-than-significant level.

Mitigation Measure 1: Public Notice

Reclamation shall provide notice of the project to landowners within the project sites and to individuals with mining claims within the project sites. Notice will be given prior to project implementation and will include a schedule of river access closure.

Geology, Fluvial Geomorphology, and Soils

Impact 2: Construction activities could result in increased erosion and short-term sedimentation of the Trinity River.

Construction of the Project would result in temporary soil disturbance, soil compaction within proposed access road and construction staging areas, disruption of soil cohesion and armoring, and increased soil exposure to energetic weather conditions, which would increase the short-term

potential for wind and water erosion. Increased wind and water erosion and associated downstream sedimentation within the Trinity River would more likely occur if soils were left exposed during high flow events or periods of high precipitation. This impact is considered significant.

Implementation of Mitigation Measures 2-3 will reduce this impact to a less-than-significant level.

Mitigation Measure 2: Establish Designated Work Areas

Reclamation will implement the following measures:

- Areas where ground disturbance would occur will be identified in advance of construction and limited to only those areas that have been approved by Reclamation.
- All vehicular construction traffic will be confined to the designated access routes and staging areas.
- Disturbance will be limited to the minimum necessary to complete all rehabilitation activities.
- All supervisory construction personnel will be informed of environmental concerns, permit conditions, and final project specifications.

Mitigation Measure 3: Implement Sediment and Erosion Control Plan

Reclamation will prepare an erosion and sedimentation control plan (Storm Water Pollution Prevention Plan [SWPPP]). Measures for erosion control will be prioritized based on proximity to the river. Reclamation will provide the SWPPP for review by associated agencies (e.g., Bureau of Land Management, the Regional Water Board, National Marine Fisheries Service, and California Department of Fish and Game) upon request. Reclamation's project manager will ensure the preparation and implementation of an erosion and sediment control plan prior to the start of construction. The following measures will be used as a guide to develop this plan:

- Restore disturbed areas to pre-construction contours to the fullest extent feasible.
- Salvage, store, and use the highest quality soil for revegetation.
- Discourage noxious weed competition and control noxious weeds.
- Clear or remove roots from steep slopes immediately prior to scheduled construction.
- Leave drainage gaps in topsoil and spoil piles to accommodate surface water runoff.
- To the fullest extent possible, cease excavation activities during significantly wet or windy weather.
- Use bales, wattles, and/or silt fencing to intercept sediment as appropriate.
- Before seeding disturbed soils, work the topsoil to reduce compaction caused by construction vehicle traffic.
- Rip feathered edges (and floodplain surfaces where appropriate) to approximately 18 inches deep. This furrowing of the river's edge will not only remove plant roots to allow mobilization of the bed, but will also intercept sediment before it reaches the waterway.
- Spoil sites will be located such that they do not drain directly into a surface water feature, if possible. If a spoil site would drain into a surface water feature, catch basins will be

constructed to intercept sediment before it reaches the feature. Spoil sites shall be graded and vegetated to reduce the potential for erosion.

- Sediment control measures shall be in place prior to the onset of the rainy season to ensure that surface water runoff does not occur. Project areas will be monitored and maintained in good working condition until disturbed areas have been revegetated. If work activities take place during the rainy season, erosion control structures must be in place and operational at the end of each construction day.

Impact 3: Implementation of the project could interfere with existing, proposed, or potential development of mineral resources.

Excavation and other construction activities could inhibit the development of mineral resources on mining claims or private lands. In addition, local increases in turbidity could impair suction dredge operations downstream. Overall, the Project could inhibit the development and extraction of mineral resources, including precious metals and aggregate resources within and in close proximity to rehabilitation sites. This is considered a significant impact.

Implementation of Mitigation Measures 2 – 4 will reduce impacts on mineral resources to a less-than-significant level.

Mitigation Measure 4: Avoid and Minimize Project Activities in Mineral Resource Areas

Reclamation will designate work areas and access areas, and will limit ground to the minimum area necessary by implementing the provisions required under Mitigation Measure 2. Reclamation will prepare an erosion and sediment control plan (SWPPP) to avoid mineral resources and minimize impacts on mineral resources (Mitigation Measure 3).

Reclamation will coordinate with private landowners and owners of active mining claims to develop site-specific measures that can be implemented to avoid or lessen project-related impacts on mineral resources associated with the Trinity River and its tributaries.

Water Quality

Impact 4: Construction of the project could result in short-term temporary increases in turbidity and total suspended solids levels during construction and following construction.

Implementing the proposed Project would increase turbidity and total suspended solids in the river and fluvial surfaces following construction. Following construction, increases in turbidity levels would occur when newly disturbed areas are exposed to elevated river stages during high river flows. Fine sediments may be suspended in the river for several hours following such exposure and erosion. The extent of downstream sedimentation would be a function of the rainfall intensity and/or instream flow velocity, as well as the particle size of exposed sediments. Lower intensity rainfalls would be unlikely to mobilize fine sediments because the precipitation would be absorbed. If fine sediments are mobilized by flow over newly disturbed areas, they could be carried several thousand feet downstream of the activity areas, while larger sized sediments, such as sands and gravels, would tend to drop out of the water column within several feet of the activity areas.

Post-construction exposure of sediments to rainfall and/or flows would result in short-term increases in turbidity and suspended solids concentrations in the water column that could potentially be in violation of the Basin Plan turbidity objective for the Trinity River. A short-term increase in turbidity and suspended solids levels following construction would be a significant impact.

Implementation of Mitigation Measures 3 (sediment and erosion control plan) and 5-8 will reduce impacts to a less-than-significant level.

Mitigation Measure 5: Implement Basin Plan Water Quality Objectives for Turbidity

The water quality objectives for turbidity levels in the Trinity River, as listed in the Basin Plan for the North Coast Region (North Coast Regional Water Quality Control Plan 2007), are listed below.

- Turbidity levels shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof.

- Due to the nature of the proposed restoration activities and the clarity of the Trinity River during low flow conditions, the Regional Water Board has determined that an allowable zone of turbidity dilution is appropriate and necessary in order for Trinity River restoration activities to be accomplished in a meaningful, timely, and cost-effective manner that fully protects beneficial uses without resulting in a violation of the water quality objective for turbidity.

- Project activities that occur in areas outside of the active river channel will not increase turbidity levels by more than 20 percent above naturally occurring background levels. During in-river construction activities and until the first extended period of post-construction high flow (i.e., flows of at least 6,000 cfs inundate the project areas and floodplain for a minimum of 7 days) a zone of turbidity dilution within which higher percentages would be tolerated will be defined in discharge permits as the full width of the river channel within 500 linear feet downstream of any project activity that increases naturally occurring background levels, provided that all other required controls and appropriate BMPs for sediment and turbidity control are in place and downstream beneficial uses are also fully protected. When naturally occurring background levels are less than or equal to 20 NTUs, turbidity levels immediately downstream of the zone of turbidity dilution shall not exceed 20 NTUs. If naturally occurring background levels are greater than 20 NTUs, turbidity levels immediately downstream of the 500 linear foot zone of dilution shall not be increased by more than 20 percent above the naturally occurring background level.

Mitigation Measure 6: Monitor Turbidity Levels

To ensure that turbidity levels do not exceed the thresholds described during in-river project construction activities, Reclamation shall monitor turbidity levels upstream within 50 feet of project activities (i.e., natural background) and 500 feet downstream of the in-river construction activities that could increase turbidity. At a minimum, field turbidity measurements shall be collected whenever a visible increase in turbidity is observed. Monitoring frequency shall be a minimum of every two hours

during in-river work periods and when activities commence that are likely to increase turbidity levels above any previously monitored levels.

- If grab sample results indicate that turbidity levels exceed 20 NTU at 500 feet downstream from construction activities, remedial actions will be implemented to reduce and maintain turbidity at or below 20 NTU immediately downstream of the 500 linear foot zone of dilution. Potential remedial actions include halting or slowing construction activities and implementation of additional BMPs until turbidity levels are at or below 20 NTU.

Following construction, turbidity increases associated with project activities will not exceed the water quality objectives for turbidity in the Trinity River basin (Mitigation Measure 5)

To ensure that turbidity levels do not exceed the threshold following construction, Reclamation will monitor turbidity and total suspended solids during and after representative rainfall events to determine the effect of the project on Trinity River water quality. At a minimum, field turbidity measurements will be collected whenever a visible increase in turbidity is observed.

- If increases in turbidity and total suspended solids are observed as a result of erosion from constructed features, field turbidity measurements will be collected 50 feet upstream of a point adjacent to the end of the feature and 500 feet downstream of the feature.

- If the grab sample indicates that turbidity levels exceed the established thresholds identified in the Basin Plan, the Regional Water Board will be notified. The need to implement erosion control measures for turbidity that is expected to result from overland river flows (versus surface run-off) will be evaluated with Regional Water Board staff to determine if remediation measures are needed.

Mitigation Measure 7: Implement Gravel Cleanliness Standards

Fill gravels used on the streambeds, stream banks, and river crossings will be composed of washed, spawning-sized gravels from a local Trinity River basin source. Gravel will be washed to remove any silts, sand, clay, and organic matter and will be free of contaminants such as petroleum products. Washed gravel will pass Caltrans cleanliness test #227 with a value of 85 or greater.

Mitigation Measure 8: Implement Erosion and Sediment Control Protocols to Protect Water Quality

Reclamation will prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) that describes BMPs for the project, including silt fences, sediment filters, and routine monitoring to verify effectiveness. The SWPPP shall incorporate the provision required under Mitigation Measure 3 to control sediment discharge during construction and other activities in the stream channel. Proper implementation of erosion and sediment controls will be adequate to minimize sediment inputs into the Trinity River until vegetation regrowth occurs. All required controls and BMPs, including sediment and erosion control devices, will be inspected daily during construction to ensure that the devices are properly functioning. Excavated and stored materials will be kept in upland activity areas with erosion control properly installed and maintained. Excavated and stored materials will be staged in stable

upland activity areas. All applicable erosion control standards will be required during stockpiling of materials.

To minimize the potential for increases in turbidity and suspended sediments entering the Trinity River as a result of access routes (e.g., roads), Reclamation will implement the following protocols:

- Keep bare soil to the minimum required by designs. Erosion control devices/measures will be applied to areas where vegetation has been removed to reduce short-term erosion prior to the start of the rainy season.

- Keep runoff from bare soil areas well dispersed. Dispersing runoff keeps sediment on-site and prevents sediment delivery to streams. Direct any concentrated runoff from bare soil areas into natural buffers of vegetation or areas with more gentle slopes where sediment can settle out.

- Disconnect and disperse flow paths, including roadside ditches, that might otherwise deliver fine sediment to stream channels.

- Decompact or rip floodplain areas so that surfaces are permeable and no surface water runoff occurs.

To reduce the potential for the access routes to continually contribute soil materials to the Trinity River following project construction, access routes will be stabilized or decommissioned upon completion of work in those areas consistent with the Project design elements and construction criteria and method requirements. Decommissioning is defined as removing those elements of a road that reroute hillslope drainage and present slope stability hazards.

Impact 5: Construction of the Project could cause contamination of the Trinity River from hazardous materials spills.

Construction staging activities could result in a spill of hazardous materials (e.g., oil, grease, gasoline, and solvents) into the Trinity River. In addition, operation of construction equipment within or adjacent to the river would increase the risk of a spill of hazardous materials into the river (e.g., leaking of fluids from construction equipment). Potential spills of hazardous materials into or adjacent to the Trinity River could degrade water quality within the Trinity River and have deleterious effects on aquatic organisms in close proximity to construction activities. This impact is considered significant.

Implementation of Mitigation Measure 9 will reduce potential hazardous material spill impacts to a less-than-significant level.

Mitigation Measure 9: Implement Spill Prevention and Contamination Plan

Reclamation will prepare and implement a spill prevention and containment plan in accordance with applicable federal and state requirements.

Reclamation will ensure that any construction equipment that would come in contact with the Trinity River be inspected daily for leaks prior to entering the flowing channel. External oil, grease, and mud will be removed from equipment using steam cleaning. Untreated wash and rinse water must be adequately treated prior to discharge if that is the desired disposal option.

Reclamation will ensure that hazardous materials, including fuels, oils, and solvents, not be stored or transferred within 150 feet of the active Trinity River channel. Areas for fuel storage, refueling, and servicing will be located at least 150 feet from the active river channel or within an adequate secondary fueling containment area. In addition, the construction contractor will be responsible for maintaining spill containment booms onsite at all times during construction operations and/or staging of equipment or fueling supplies. Fueling trucks will maintain a spill containment boom at all times.

The contractor will develop and implement site-specific BMPs and an emergency spill control plan. The contractor will be responsible for immediate containment and removal of any toxins released.

Impact 6: Degrade beneficial uses of Trinity River

Construction and maintenance of the project could result in the degradation of Trinity River beneficial uses identified in the Basin Plan. Project activities associated with the placement and deconstruction of the low-flow channel crossings combined with the construction of new road access to the activity areas could effect the beneficial uses of the Trinity River by effecting water quality. The following categories of water quality objectives listed in the Basin Plan could be effected: sediment, toxicity, turbidity, settleable material, suspended material, chemical constituents. This impact is considered significant.

Reclamation will protect beneficial uses of the Trinity River by implementing several mitigation measures that protect water quality. Reclamation will implement the water quality objectives for turbidity levels in the Trinity River, as listed in the Basin Plan for the North Coast Region (Mitigation Measures 5 and 8). Reclamation will monitor turbidity levels in the Trinity River to ensure that levels do not exceed the Basin Plan thresholds (Mitigation Measure 6). Reclamation will follow Caltrans cleanliness standards for gravel to ensure that gravels added to the Trinity River do not impair beneficial uses of the Trinity River (Mitigation Measure 7). Reclamation will implement a spill prevention and containment plan in accordance with Mitigation Measure 9.

Implementation of Mitigation Measures 5-9 will reduce this impact to a less-than-significant level.

Fishery Resources

Impact 7: Implementation of the project could result in effects on potential spawning and rearing habitat for anadromous fishes, including the federally and state listed coho salmon.

Adverse effects on spawning habitat associated with the proposed Project are expected to be limited to short-term, localized sedimentation caused by construction activities in and immediately adjacent to the active Trinity River channel. coho salmon, chinook salmon, steelhead, or lamprey redds (i.e., nests) on or near the existing in-channel activity areas could be destroyed or disturbed by these construction activities. Silt suspended by these activities may be dispersed and re-settle on

downstream suitable spawning areas near these construction areas. However, in-channel activities would be conducted during late-summer (July 15–September 15) low-flow conditions, as authorized by the National Marine Fisheries Service (NMFS) and California Department of Fish and Game (CDFG), to avoid impacts to spawning anadromous salmonids. This impact is considered significant.

The addition of coarse sediment at various in-channel activity areas would sometimes occur in conjunction with bar construction activities and could affect spawning anadromous fish (including coho salmon). If in-stream work was allowed outside the current in-channel late-summer work period, this activity could result in percussive impacts to incubating embryos and mortality through compression (crushing) of salmon and steelhead embryos and alevins1. This impact is considered significant.

Suitable rearing habitat for juvenile coho salmon, chinook salmon, steelhead, and pacific lamprey occurs within the Project boundaries, primarily along the river margins. Some temporary adverse effects on the quality of juvenile salmonid and lamprey rearing habitat will occur through removal of riparian vegetation that contributes to shaded riverine aquatic habitat at various sites throughout the 40-mile reach below Lewiston Dam. Temporary adverse effects to the quality of juvenile salmonid and lamprey rearing habitat will occur during upland construction activities adjacent to the river channel (e.g., removal of shaded riverine aquatic habitat) and in-channel construction activities (e.g., coarse sediment addition, temporary crossings, and grade control removal). 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 shaded riverine aquatic habitat. This impact is considered significant.

Implementation of Mitigation Measures 7 (clean gravel standards) and 10 will reduce this impact to a less-than-significant level.

Mitigation Measure 10: Implement Construction Timeframes and Protocols to Avoid Salmonids and Lampreys

The proposed construction schedule avoids in-channel work during the time period that could affect spawning spring- and fall-run Chinook salmon, coho salmon, steelhead, and lamprey, or their embryos once in the gravel. As directed by the 2000 Biological Opinion, Reclamation will ensure that all in-channel construction activities are conducted during late-summer, low-flow conditions (e.g., July15-September 15).

Alluvial material used for coarse sediment additions will be composed of washed, spawning-sized gravel (3/8- to 5-inches in diameter) from a local Trinity River basin source. Gravel will be washed to remove any silts, sand, clay, and organic matter and will be free of contaminants as specified in Mitigation Measure 7.

Impact 8: Increased erosion and sedimentation levels could adversely affect fishes, including federally listed coho salmon.

[1] A salmon fry whose yolk-sac is depleted.

Suspended solids and turbidity generally do not acutely affect aquatic organisms unless they reach extremely high levels (i.e., levels of suspended solids reaching 25 milligrams/liter [mg/l]). At these high levels, suspended solids can adversely affect the physiology and behavior of aquatic organisms and may suppress photosynthetic activity at the base of food webs, affecting aquatic organisms either directly or indirectly. Erosion and deposition of fine sediments associated with Project implementation are localized and temporary. Some fine-textured materials may be deposited in downstream reaches that provide spawning habitats, but these materials are not expected to impair spawning activities.

The majority of grading activities are to be performed during dry and low flow periods and thus would avoid effects on adult coho migration and spawning, and smolt emigration. Any juvenile coho salmon rearing in the area during this timeframe could be temporarily displaced or their social behavior could be temporarily disrupted by an increase in turbidity. Behavioral disruption, even temporarily, could result in some increased vulnerability to competitive interactions or predation for juvenile coho salmon. This impact is considered significant.

Potential impacts to Upper Klamath-Trinity Rivers Evolutionarily Significant Unit (ESU) Chinook salmon would be similar. Displacement of fine-textured sediment, potential erosion runoff, and elevated turbidity for short distances downstream could occur during the migration and rearing seasons. Spring - and fall-run Chinook salmon are known to spawn in suitable habitats encompassed by the rehabilitation sites, and some construction activities may occur during their spawning periods; however, juveniles are expected to rear throughout the year within the boundaries of all restoration sites. Summer, fall, and winter runs of KMP ESU steelhead are known to migrate, stage (as adults), and rear (as juveniles) within the project boundaries, throughout the proposed construction season. All three runs generally spawn during the winter. This impact is considered significant.

Adult Pacific lampreys migrate upstream to spawn from spring through early summer and again in the fall. Larval lampreys inhabit the river year-round. Siltation of nests that may be built in suitable habitats (i.e., low-gradient riffles) could occur. Filter feeding by larval lampreys could be disrupted by an increase in suspended sediments caused by construction-related erosion. This impact is considered significant.

Reclamation will implement the water quality objectives for turbidity levels in the Trinity River, as listed in the Basin Plan for the North Coast Region (Mitigation Measure 5) to prevent sediment and erosion from adversely effecting fishes, including the federally and state listed coho salmon. Reclamation will monitor turbidity levels in the Trinity River to ensure that levels do not exceed the Basin Plan thresholds (Mitigation Measure 6). Reclamation will follow Caltrans cleanliness standards for gravel to ensure that gravels added to the Trinity River do not impair beneficial uses of the Trinity River (Mitigation Measure 7). Reclamation will implement a SWPPP in accordance with Mitigation Measure 3 and other construction protocol measures to avoid sediment and erosion control impacts from access routes (Mitigation Measure 8).

Implementation of Mitigation Measures 3 (sediment and erosion control plan) and 5-8 (water quality mitigation) will reduce erosion and sediment impacts on fishery resources to a less-than-significant level.

Impact 9: Construction activities could result in the accidental spill of hazardous materials that could adversely affect fishes, including federally listed coho salmon.

Oils, fuels, and other contaminants could have deleterious effects on all salmonid and pacific lamprey life stages within close proximity to construction activities. This impact is considered significant.

Reclamation will implement a SWPPP and a hazardous material spill prevention plan in accordance with Mitigation Measures 3 and 9.

Implementation of Mitigation Measures 3 (sediment and erosion control plan), 9 (hazardous material spill prevention plan), and 11 will reduce this impact to a less-than-significant level.

Mitigation Measure 11: Implement Construction Specifications to Prevent Hazardous Material Spills

Construction specifications will incorporate the provisions required under Mitigation Measure 9 to prevent hazardous materials from entering fish habitat. Construction specifications will include the following measures to reduce potential impacts associated with accidental spills of pollutants (fuel, oil, grease, etc.) on vegetation and aquatic habitat resources within the project boundary:

- Equipment and materials will be stored away from wetland and surface water features.
- Vehicles and equipment used during construction will receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling will be conducted in an area at least 150 feet away from waters of the Trinity River or within an appropriate secondary fueling containment area.
- The contractor will develop and implement site-specific BMPs (Mitigation Measure 3), a water pollution control plan (Mitigation Measure 3), and emergency spill control plan (Mitigation Measure 9). The contractor will be responsible for immediate containment and removal of any toxins released.

Impact 10: Mortality of fishes due to construction activities, including coho salmon

Direct injury to, or mortality of, coho salmon, chinook salmon, steelhead, or lamprey could occur during in-channel construction activities (e.g., excavation of existing grade control structures, coarse sediment addition including grading, and use of temporary river crossings). A small, temporary, but uncertain level of stranding of salmonid fry and lamprey may occur on the newly excavated floodplains and side channels during rapidly receding flood-flow periods during the winter and early spring when fry are emerging. Construction of side channel features may result in stranding conditions as flows recede, particularly if the downstream end fills with fine sediments, potentially stranding fry. Although stranding of fry under such receding flood conditions occurs on naturally shallow floodplains and in flood bypasses, the constructed features may increase this process to varying degrees. This impact is considered significant.

Implementation of Mitigation Measures 12 and 13 will reduce this impact to a less-than-significant level.

Mitigation Measure 12: Implement Construction Operation Criteria and Timeframes to Protect Rearing Fishes

To avoid impacts to spawning and incubating salmonids, instream work will only occur between July 15 and September 15.

To avoid or minimize potential injury and mortality of fish during riverine activities (e.g. removal of grade control structures, channel crossings, and addition and grading of coarse sediment), equipment will be operated slowly and deliberately to alert and scare adult and juvenile salmonids away from the work area.

Reclamation will minimize potential injury and mortality of fish during the use of low-flow channel crossings. This will be accomplished by minimizing vehicle traffic and by operating equipment and vehicles slowly and deliberately to alert and scare adult and juvenile salmonids away from the crossing area, or by having a person wade ahead of equipment to scare fish away from the crossing area.

To avoid or minimize potential injury and mortality of fish during excavation and placement of fill materials in the active low-flow channel, equipment will be operated slowly and deliberately to alert and scare adult and juvenile salmonids away from the work area. Reclamation will ensure that before submerging an excavator bucket or laying gravel below the water surface, the excavator bucket will be operated to "tap" the surface of the water, or a person will wade ahead of fill placement equipment to scare fish away from the work area. To avoid impacts to mobile life stages of salmonids that may be present in the water column, the first layers of clean gravel that are being placed into the wetted channel will be added slowly and deliberately to allow fish to move from the work area.

To avoid impacts to juvenile salmonids during high flow gravel injections, gravel will only be injected in select locations where water velocities are too high and juvenile salmonids would not be expected to be holding.

Mitigation Measure 13: Monitor Project Area for Salmon Fry

Monitoring of the constructed inundation surfaces for salmon fry stranding will be performed by a qualified fishery biologist immediately after recession of flood flow events designated as a 1.5- year or less frequent event (i.e., Q >6,000 cfs) for a period of 3 years following construction. These flows, and associated fry stranding surveys, would typically occur between January and May. If substantial stranding is observed, Reclamation will take appropriate measures to return stranded fishes to river habitats and to subsequently modify the constructed surfaces prior to the next managed flow release to reduce the likelihood of future occurrences of fry stranding.

Impact 11: Implementation of the Project would result in the permanent and temporary loss of shaded riverine aquatic habitat for anadromous salmonids.

Removal of montane riparian wetland vegetation along the banks of the Trinity River could adversely affect the quality of rearing habitats used by salmonids and Pacific lamprey populations. Riparian areas provide shade and temperature benefits, sediment, nutrient and chemical regulation, stream bank stability, and inputs of large woody debris and organic matter to the channel. Removal of the riparian berm and re-connection of adjacent floodplains within riverine rehabilitation areas would allow for natural revegetation of most of the riparian habitat (mixture of willows, alders, and cottonwoods) estimated to be lost as a result of berm removal and floodplain contouring. In addition, riparian habitat removed under the Project would be reestablished as part of the project and via natural regeneration. Because of the importance of riparian vegetation to the maintenance of healthy fish habitat, this impact is considered significant.

Implementation of Mitigation Measures 14 and 15 will reduce this impact to a less-than-significant level.

Mitigation Measure 14: Avoid and Minimize Project Construction in Shaded Riparian Aquatic Habitat

Prior to the start of construction activities, Reclamation will retain a qualified biologist to identify potential construction access routes necessary for the project to ensure that these features avoid and/or minimize to the fullest extent impacts to riparian habitats, and wetland waters. Reclamation will clearly identify, and flag in the field, biologically sensitive areas (e.g., jurisdictional waters and riparian habitat) to be protected, and will provide the contractor with specific instructions to avoid any construction activity within these features. Reclamation will inspect and maintain flagged areas on a regular basis throughout the construction phase.

Mitigation Measure 15: Continue Implementation of Trinity River Restoration Program Riparian Revegetation and Monitoring Plan

Reclamation will continue to implement the Riparian Revegetation and Monitoring Plan during the proposed Project implementation. The plan acknowledges that the ultimate goals of the Trinity River Restoration Program include enhancement and maintenance of functional riparian habitat and no net-loss of riparian habitat and jurisdictional wetlands within channel rehabilitation site boundaries and generally throughout the 40-mile reach of the Trinity River below the Trinity River Dam.

Reclamation will initiate a 10-year mitigation monitoring program after the first growing season following project implementation. After a period of 3 years, the need for additional riparian habitat and wetland enhancement will be evaluated. At that time, Reclamation, in consultation with the U.S. Army Corps of Engineers (USACE), Regional Water Board, and CDFG, will determine whether there is a need to further enhance or create additional areas of riparian habitat or jurisdictional wetlands within the project boundary so that there will be no net loss of riparian habitat after a 10-year monitoring period.

In addition, wetlands will be redelineated 5 years post-project implementation to ensure no net loss of wetland habitat. Riparian habitat reporting 3 years after project implementation and wetland delineation 5 years after implementation will provide Reclamation with needed data in a timely fashion

to take additional pro-active measures towards meeting the goals of no net loss of riparian and jurisdictional wetland habitat within Project site boundaries after 10 years.

Impact 12: Implementation of the project would result in fish passage being temporarily impaired during the in-stream construction phase.

Construction activities associated with the Project may require temporary placement of low-flow channel crossings, which consist of gravel fill materials or temporary bridges. The crossings will be constructed to maintain adequate water depths and velocities for fish passage. The low water crossings would be used to move heavy equipment across the low-flow channels to access activity areas on opposite banks of the Trinity River or its tributaries. Construction activities could require service vehicles to cross up to several times per week; otherwise, vehicle crossing traffic would be kept to a minimum. Temporary gravel fill work ramps and low-flow channel crossings would be constructed to extend across the width of the low-flow channel and are expected to be in-place long enough to complete work in these activity areas. Construction involving in-channel activities will be completed only between July 15 and September 15. However, construction at the edge of the active low-flow channel may occur during both summer and autumn months (between July and December). Access in and out of the sites could be required during other low-flow times as well. Construction of the crossings on the mainstem Trinity River would only be conducted during late-summer, low-flow conditions (e.g., July 15–September 15). However, crossings of the river or tributaries at low-flow conditions during other months (e.g., October–December) may occur via a bridge.

Consequently, it is likely that some work adjacent to the channel would occur during the coho salmon spawning period. Use of river crossings could occur during the onset of the fall coho smolt emigration, depending on seasonal conditions (flow, temperatures, etc.) and would occur during the coho adult migration and spawning period. While the effect of the low-water crossings on fish passage is expected to be temporary and minimal, due to project design criteria, the temporary impacts on fish passage are considered significant because the construction period could extend into the smolt emigration and coho salmon spawning season.

Potential impacts to Upper Klamath-Trinity Rivers ESU chinook salmon populations, the KMP ESU steelhead populations, and Pacific lamprey populations in the Trinity River would be similar to those previously described for coho salmon. This impact is considered significant.

Implementation of Mitigation Measures 2 (designated work area), 5 (water quality objectives), 7 (clean gravel standards), and 16 will reduce this impact to a less-than-significant level.

Mitigation Measure 16: Implement Construction Specifications, Timeframes, and Project Design Criteria to Provide Fish Passage

Low water crossings will only be constructed and used between July 15 and September 15 consistent with Mitigation Measure 2, which requires that construction sites be kept to the minimum area necessary.

Fill gravels used on the low-water crossings, streambeds, and stream banks will be composed of washed, spawning-sized gravels from a local Trinity Basin source. Gravel washing will be done in

accordance with Caltrans specifications provided in Mitigation Measure 7 and consistent with water quality objectives provided in Mitigation Measure 5. Abutment and embankment materials used for bridges will be native alluvium obtained from within the boundaries of the Project sites.

Reclamation will construct the low-flow channel crossings to allow adequate depths and velocities for adult and juvenile salmonids to pass safely. Flows associated with storm events are not considered critical because the width and hydrologic conditions associated with low-flow channel crossings in the Trinity River are not considered to limit fish passage at elevated flows and would be comparable to hydrologic conditions in local riffle-and-run features. For Trinity River low-flow channel crossings at base flows, velocities will not exceed 2 feet per second to allow for juvenile fish passage and water depths will not be less than 12 inches in two-thirds of the river channel to provide adequate depth for adult salmon and steelhead passage.

The number of vehicle and equipment crossings of the Trinity River will be minimized consistent with Mitigation Measures 2.

Reclamation will not impede the physical features or hydraulic process of the Trinity River in a fashion that would be inconsistent with the 2000 Biological Opinion (National Marine Fisheries Service 2000), or result in a temporary impairment to fish passage related to a bridge.

Vegetation, Wildlife, and Wetlands

Impact 13: Construction activities could result in the loss of jurisdictional waters, including wetlands and riparian habitat.

Construction activities associated with the Project would result in impacts to jurisdictional wetland features. Project construction associated with Phase 1 of the Project would result in a short-term loss of 57.74 acres of jurisdictional waters consisting of wetland and riparian habitat. Phase 2 construction would result in similar temporary impacts. This impact is considered significant.

Implementation of the Mitigation Measures 2 (designated work areas), 14 (avoid and minimize work in shaded riparian aquatic habitat), 15 (riparian revegetation and monitoring plan), and 17 will reduce this impact to a less-than-significant level.

Mitigation Measure 17: Avoid and Minimize Impacts to Jurisdictional Waters

In order to avoid and minimize impacts to jurisdictional waters, Reclamation will implement the following:

- Prior to the start of construction activities, Reclamation will retain a qualified biologist to identify potential construction access routes to ensure that these features avoid and/or minimize to the fullest extent impacts to jurisdictional waters consistent with Mitigation Measure 2. In addition, Reclamation will clearly identify, and flag in the field, biologically sensitive areas (e.g., jurisdictional waters and riparian habitat) to be protected, and will provide the contractor with specific instructions to avoid any construction activity within these features (Mitigation Measure

14). Reclamation will inspect and maintain marked areas on a regular basis throughout the construction phase.

- Reclamation will continue to implement the Riparian Revegetation and Monitoring Plan during Proposed Project implementation in accordance with Mitigation Measure 15. The plan acknowledges that the ultimate goals of the TRRP include enhancement and maintenance of functional riparian habitat and no net loss of riparian habitat and jurisdictional wetlands both within channel rehabilitation site boundaries and generally throughout the 40-mile reach of the Trinity River below the Trinity River Dam. Reclamation will initiate a 10-year mitigation monitoring program after the first growing season following project implementation as required by Mitigation Measure 15.

Impact 14: Construction of the project could result in the loss of individuals of a special-status plant species.

No federal or state listed plant species are expected to occur at the project sites. However, implementation of the Project could result in the removal of individuals or habitat for other special-status plant species. One special-status plant, fox sedge, is known to occur at the Reading Creek site and additional occurrences of this or other special-status species may occur in the unsurveyed portions of the project sites. Because certain plant species are considered special-status pursuant to CEQA, removal of individuals or habitat for these species is considered potentially significant.

Implementation of Mitigation Measure 18 will reduce this impact to a less-than-significant level.

Mitigation Measure 18: Avoid and Minimize Project Activity near Special Status Plant Species

The following measures will be implemented to avoid or minimize project-related impacts to special-status plant species:

- A qualified botanist will conduct a minimum of two pre-construction surveys to determine if special-status plant species occur within the project site. Surveys shall be conducted during the blooming periods of the plants potentially occurring at the site to determine (1) if the species occur and (2) the quality, location, and extent of any populations. If a special-status plants species is found within 250 feet of any proposed disturbance, the following measures will be implemented.

- Prior to the start of disturbance, exclusionary fencing will be erected around the known occurrences. If necessary, a qualified botanist shall be present to assist with locating these special-status plant populations. The exclusionary fencing will be periodically inspected throughout each period of construction and be repaired as necessary.

- If a population cannot be fully avoided, Reclamation will retain a qualified botanist to (1) determine appropriate salvage and relocation measures and (2) implement appropriate measures in coordination with CDFG staff.

Impact 15: Construction activities could result in impacts to the state-listed little willow flycatcher.

Suitable montane riparian habitat for the little willow flycatcher may be present at the Proposed Project sites, and the species has previously been detected in the region (Wilson 1995; Miller, Ralph, and Herrera 2003; Herrera 2006). Though no nesting individuals have been observed in or near the project area, there is the potential for new nesting territories to become established within the sites in subsequent nesting seasons, prior to the start of construction.

The Project would result in a small, temporary reduction of foraging habitat for this species. Implementation of Mitigation Measures 15 (riparian revegetation and monitoring plan) will ensure that there is no net loss of riparian habitat and a long-term increase in riparian habitat diversity. The removal of riparian vegetation and the noise associated with construction activities could disturb individuals nesting on or adjacent to the sites. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Loss of fertile eggs or nesting little willow flycatchers or any activities resulting in nest abandonment is considered a significant impact.

Mitigation Measures 2-3, 5-6, and 8-9 that address erosion and sedimentation, water quality, and accidental spills will be fully implemented to mitigate for potential indirect impacts to dispersal habitat for the yellow-legged frog due to sedimentation and accidental spills. Mitigation Measures 14 and 15 that avoid and minimize disturbance to riparian habitat will be fully implemented.

Implementation of Mitigation Measures 2-3, 5-6, 8-9 (water quality mitigation), 14 -15 (riparian mitigation), and 19 will reduce this impact to a less-than-significant level.

Mitigation Measure 19: Avoid and Minimize Activities in Little-Willow Flycatcher Habitat

The following mitigation measures will be implemented to avoid or minimize potential impacts to the little willow flycatcher:

- Prior to the start of construction, a qualified biologist will conduct a survey of the project site(s) to determine whether suitable nesting habitat for the little willow flycatcher is present.

- If suitable habitat is present, grading and other construction activities will be scheduled to avoid the nesting season to the extent possible. The nesting season for this species in Trinity County extends from June 1 through July 31. If construction occurs outside of the breeding season, no further mitigation is necessary.

- If the breeding season cannot be completely avoided, a qualified biologist will conduct a minimum of one pre-construction survey for the little willow flycatcher within the project sites and a 250-foot buffer around the sites. The survey will be conducted no more than 15 days prior to the initiation of construction in any given area. The pre-construction survey will be used to ensure that no nests of this species within or immediately adjacent to the project sites) would be disturbed during project implementation. If an active nest is found, CDFG will be contacted prior to the start of construction to determine the appropriate mitigation measures. If

vegetation is to be removed by the project and all necessary approvals have been obtained, potential nesting substrate (e.g., shrubs and trees) that will be removed by the project will be removed before the onset of the nesting season, if feasible. This will help preclude nesting and substantially decrease the likelihood of direct impacts.

Impact 16: Construction activities could result in impacts to the foothill yellow-legged frog.

The foothill yellow-legged frog is known to occur in the Trinity River from the Lewiston Dam to the North Fork Trinity River (California Department of Fish and Game 2003). Thus, construction activities associated with the Proposed Project may affect foothill yellow-legged frogs directly and indirectly. Potential direct effects include mortality of individuals due to equipment and vehicle traffic, disturbance of boulders or cobbles that support egg masses, and the loss of riparian vegetation cover. The species may also be indirectly affected if construction activities result in degradation of aquatic habitat and water quality due to erosion and sedimentation, accidental fuel leaks, and spills. These impacts are considered significant.

Mitigation Measures 2-3, 5-6, and 8-9 that address erosion and sedimentation, water quality, and accidental spills will be fully implemented to mitigate for potential indirect impacts to dispersal habitat for the yellow-legged frog due to sedimentation and accidental spills. Mitigation Measures 14 and 15 that avoid and minimize disturbance to riparian habitat will be fully implemented.

Implementation of Mitigation Measures 2-3, 5-6, 8-9 (water quality), 14-15 (riparian mitigation), and 20 will reduce this impact to a less-than-significant level.

Mitigation Measure 20: Avoid and Minimize Activities in Yellow-Legged Frog Habitat

If any construction in the Trinity River channel will occur prior to August 1 of any construction season, a pre-construction survey for yellow-legged frog larvae and/or eggs will be conducted by a qualified biologist. This survey will be conducted within the construction boundary no more than 2 weeks prior to the start of in-stream construction activities. If larvae or eggs are detected, the biologist will relocate them to a suitable location outside of the construction boundary.

In the event that a yellow-legged frog is observed within the construction boundary, the contractor will temporarily halt in-stream construction activities until the frog has been moved to a safe location with suitable habitat outside of the construction limits.

Impact 17: Construction activities could result in impacts to the northwestern pond turtle.

Riverine and riparian habitats along the Trinity River provide suitable habitat for the western pond turtle. Thus, construction activities associated with the Proposed Project and Alternative 1 could affect pond turtles directly and indirectly. Potential direct effects include mortality of individuals due to equipment and vehicle traffic, disturbance to nests in upland areas, and the loss of riparian cover. The species may also be indirectly affected if construction activities result in degradation of aquatic habitat and water quality due to erosion and sedimentation, accidental fuel leaks, and spills. These impacts are considered significant.

Mitigation Measures 2-3, 5-6, and 8-9 that address erosion and sedimentation, water quality, and accidental spills will be fully implemented to mitigate for potential indirect impacts on western pond turtle dispersal due to sedimentation and accidental spills. Mitigation Measures 14 and 15 that avoid and minimize disturbance to riparian habitat will be fully implemented.

Implementation of mitigation measures 2-3, 5-6, 8-9 (water quality mitigation), 14-15 (riparian mitigation), and 21 will reduce this impact to a less-than-significant level.

Mitigation Measure 21: Avoid and Minimize Activities in Western Pond Turtle Frog Habitat

Reclamation will implement the following measures:

- A minimum of one survey for pond turtle nests will be conducted during the nesting season (generally late June-July) prior to construction. A qualified biologist will be retained by Reclamation to conduct the survey. If a pond turtle nest is found, the biologist will flag the site and determine whether construction activities can avoid affecting the nest. If the nest cannot be avoided, the nest will be excavated by the biologist and reburied at a suitable location outside of the construction limits.

- Prior to construction in open water habitat, a qualified biologist will trap and move turtles out of the construction area to nearby suitable habitats.

- During construction, in the event that a pond turtle is observed within the construction limits, the contractor will temporarily halt construction activities until the turtle has been moved to a safe location within suitable habitat outside of the construction limits.

Impact 18: Construction activities could result in impacts on nesting California yellow warblers, yellow-breasted chats, and Vaux's swifts.

The riparian community commonly found along the Trinity River in the project region provides suitable nesting and foraging habitat for the California yellow warbler and yellow-breasted chat. The conifer habitat in the region also provides habitat for the Vaux's swift. Consequently, project activities may result in impacts to these California Species of Special Concern.
The removal of vegetation and the noise associated with construction activities could disturb individuals nesting on or adjacent to the sites. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Loss of fertile eggs or nesting individuals or any activities resulting in nest abandonment is considered a significant impact.

Mitigation Measures 14 and 15 that avoid and minimize disturbance to riparian habitat will be fully implemented.

Implementation of Mitigation Measures 14-15 (riparian mitigation) and 22 will reduce this impact to a less-than-significant level.

Mitigation Measure 22: Avoid and Minimize Activities in California Yellow Warbler, Yellow-Breasted Chat, and Vaux's Swift Habitat

Reclamation will implement the following measures:

- Prior to the start of construction, a qualified biologist will conduct a survey of the project site(s) to determine whether suitable nesting habitat for the species is present. If suitable habitat is present, grading and other construction activities will be scheduled to avoid the nesting season for these species to the extent possible. The nesting season for these species in Trinity County extends from March 15 through August.

- If construction occurs outside the breeding season, no further mitigation is necessary. If construction during the breeding season cannot be completely avoided, a qualified biologist will conduct a minimum of one preconstruction survey for these species within the project site(s) and a 250-foot buffer around the site. The survey will be conducted no more than 15 days prior to the initiation of construction in any given area. The preconstruction survey will be used to ensure that no nests of these species within or immediately adjacent to the project site(s) will be disturbed during project implementation. If an active nest is found, a qualified biologist will determine the extent of a construction-free buffer zone to be established around the nest.

- If vegetation is to be removed by the project and all necessary approvals have been obtained, potential nesting habitat (e.g., shrubs and trees) that will be removed by the project will be removed before the onset of the nesting season, if feasible. This will help preclude nesting and substantially decrease the likelihood of direct impacts.

Impact 19: Construction activities could disrupt nesting by special-status raptors.

The hardwood and conifer communities commonly found along the Trinity River in the project region provide suitable nesting and foraging habitat for the bald eagle, designated by the State of California as endangered, and the northern goshawk, designated as a California Species of Special Concern. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Loss of fertile eggs or nesting bald eagles or goshawks, or any activities resulting in nest abandonment, is considered a significant impact.

Implementation of Mitigation Measure 23 will reduce this impact to a less-than-significant level.

Mitigation Measure 23: Avoid and Minimize Activities in Bald Eagle and Goshawk Nesting Habitat

Reclamation will implement the following measures:

- Prior to the start of construction, a qualified biologist will conduct a survey of the project site(s) to determine whether suitable nesting habitat for the species is present. If suitable habitat is present, construction will be scheduled to avoid the nesting season for bald eagles and northern goshawks to the extent feasible. The nesting season for most raptors in Trinity

County extends from February 15 through July 31. Thus, if construction can be scheduled to occur between August 1 and February 14, the nesting season will be avoided and no impacts to nesting bald eagles and northern goshawks would be expected. If it is not possible to schedule construction during this time, the following mitigation measures will be implemented.

- Pre-construction surveys for nesting northern goshawks will be conducted by a qualified biologist to ensure that no nests will be disturbed during project implementation. These surveys will be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the biologist will inspect all trees immediately adjacent to the impact areas for bald eagle and northern goshawk nests. If an active nest is found within 500 feet of the construction area to be disturbed by these activities, the biologist, in consultation with the CDFG, will determine the extent of a construction-free buffer zone to be established around the nest.

- If vegetation is to be removed as part of the project and all necessary approvals have been obtained, potential nesting habitat (i.e., trees) that will be removed by the project will be removed before the onset of the nesting season, if feasible. This will help preclude nesting and substantially decrease the likelihood of direct impacts.

Impact 20: Construction activities could result in impacts on four special-status bats and the ring-tailed cats.

The Trinity River riparian corridor provides suitable roosting and/or foraging habitat for four bat species: the long-eared myotis, pallid bat, Yuma myotis, and Townsend's western big-eared bat. Two of these bat species (long-eared myotis bat and pallid bat) may roost in trees (e.g., spaces under tree bark or in cavities) as well as caves and buildings, while the other two species (Townsend's western big-eared bat and Yuma myotis) prefer to nest in structures such as buildings, bridges, caves, and mines. For the long-eared myotis and pallid bat (species that roost in trees), habitat preference is typically woodland and forest habitat. It is unlikely that these bats would roost in the willows and alders typically found immediately along the Trinity River. However, they may roost in habitats more likely to contain large trees with cavities or loose bark, such as montane hardwood and foothill pine. In addition, suitable roosting habitat for the Townsend's western big-eared bat and Yuma myotis may be present at project sites encompassing or adjacent to bridges or mines.

Noise and visual disturbances associated with construction activities may disrupt bats roosting within and directly adjacent to the project area. Removing large trees with cavities could result in the direct loss of colonies. This is considered a significant impact.

The Trinity River riparian corridor also provides habitat for the ring-tailed cat. The willows and alders typically found immediately along the river are unlikely to provide suitable denning habitat for this species due to the small size of the trees and lack of large cavities or snags. However, other habitats in the project area, such as montane hardwood and montane hardwood conifer habitats, may provide suitable denning sites. Thus, removal of large trees with cavities or snags could result in the loss of ring-tailed cats. This is considered a significant impact.

Implementation of Mitigation Measure 24 will reduce this impact to a less-than-significant level.

Mitigation Measure 24: Avoid and Minimize Activities in Special Status Bat and Ring- Tailed Cat Habitat

In order to avoid and/or minimize impacts to roosting special-status bats and the ring-tailed cat, Reclamation will implement the following measures:

- A pre-construction survey for roosting bats and ring-tailed cats will be conducted prior to the start of construction activities. The survey will be conducted by a qualified biologist. No activities that would result in disturbance to active roosts of special-status bats or dens of ring-tailed cats will proceed prior to completion of the surveys. If no active roosts or dens are found, no further action is needed. Because bats are known to abandon young when disturbed, if a maternity roost is located, a qualified bat biologist will determine the extent of a construction-free zone to be implemented around the roost. CDFG will also be notified of any active bat nurseries within the disturbance zones.

- If an active maternity roost or hibernaculum is found, the project will be redesigned to avoid the loss of the tree or structure occupied by the roost, if feasible. If the project cannot be redesigned to avoid removal of the structure, demolition of that structure will commence before bat maternity colonies form (i.e., prior to March 1) or after young are volant (flying) (i.e., after July 31). The disturbance-free buffer zones described above will be observed during the bat maternity roost season (March 1–July 31). If a non-breeding bat hibernaculum is found in a tree or structure to be razed, the individuals will be safely evicted under the direction of a qualified bat biologist, by opening the roosting area to allow air to flow through the cavity. Demolition will then follow no sooner than the following day (i.e., there will be no less than one night between initial disturbance for air flow and the demolition). This action will allow bats to leave during dark hours, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight. Trees with roosts that need to be removed will first be disturbed at dusk, just prior to removal that same evening, to allow bats to escape during the darker hours.

- If an active ring-tailed cat nest is found, the project will be redesigned to avoid the loss of the tree occupied by the nest if feasible. If the project cannot be redesigned to avoid removal of the occupied tree, demolition of that tree will commence outside of the breeding season (February 1 to August 30). If a non-breeding den is found in a tree scheduled to be removed, the individuals will be safely evicted under the direction of a qualified biologist. Trees with dens that need to be removed will first be disturbed at dusk, just prior to removal that same evening, to allow ring-tailed cats to escape during the darker hours.

Impact 21: Construction activities associated with the Project could result in impacts on Bureau of Land Management and U.S. Forest Service sensitive species

Several of the special-status wildlife species with potential to occur at the sites are designated as Bureau of Land Management (BLM) or U.S. Forest Service (USFS) sensitive species: foothill yellow-legged frog, western pond turtle, northern goshawk, little willow flycatcher, Pacific fisher, long-eared myotis bat, pallid bat, Townsend's western big-eared bat, and Yuma myotis bat. With the exception

of the Pacific fisher, potential impacts to these species are discussed as separate impacts above and are considered significant. The Pacific fisher may use the Trinity River as a travel corridor; however, suitable denning habitat is not present at the sites. Therefore, the impact to the Pacific fisher is considered less than significant.

Implementation of Mitigation Measure 19-24 that avoid and minimize project activities in sensitive species habitat will reduce this impact to a less-than-significant level.

Impact 22: Implementation of the proposed project could result in the spread of non-native and invasive plant species.

Implementation of the proposed project could result in the spread of non-native and invasive plant species (e.g., dalmatian toadflax, tree of heaven, yellow star-thistle, Himalayan blackberry, and Klamathweed) during ground-disturbing activities. This is considered a significant impact.

Implementation of Mitigation Measure 25 will reduce this impact to a less-than-significant level.

Mitigation Measure 25: Avoid and Minimize the Introduction of Noxious Weeds

In order to avoid and/or minimize the potential introduction and/or spread of noxious weeds, Reclamation shall implement the following measures:

- When using imported erosion control materials (as opposed to rock and dirt berms), use only certified weed-free materials, mulch, and seed.
- Preclude the use of rice straw in riparian areas.
- Limit any import or export of fill to materials to those that are known to be weed free.
- Ensure all construction equipment is thoroughly washed prior to entering the worksite. Equipment will be inspected to ensure that it is free of plant parts as well as soils, mud, or other debris that may carry weed seeds.
- Use a mix of native grasses, forbs, and non-persistent non-native species for seeding disturbed areas that are subject to infestation by non-native and invasive plant species. Where appropriate, a heavy application of mulch will be used to discourage introduction of these species. Use of planting plugs of native grass species may also be used to accelerate occupation of disturbed sites and increase the likelihood of reestablishing a self-sustaining population of native plant species.
- Within the first 3 to 5 years post-project, if it is determined that the project has caused non-native invasive vegetation to out-compete desired planted or native colonizing riparian vegetation, opportunities to control these non-native species will be considered. When implementing weed control techniques, the approach will consider using all available control methods known for a weed species.

Recreation

Impact 23: Construction associated with the project could disrupt recreation activities, such as boating, fishing, and swimming, in the Trinity River.

The Trinity River supports instream recreational uses, primarily whitewater recreation and fishing. Various instream recreational activities occur throughout the year, but are most prevalent between the months of April and February. Access to the Trinity River is available from both public and private lands.

During implementation of the Project, there would be construction equipment and activity within the active river channel, the floodplain, and adjacent upland areas in close proximity to the Trinity River. Project activities at a majority of the rehabilitation sites would include vegetation removal and grading. Overall, treatments proposed within the activity areas described in Chapter 2 of the Draft MEIR-EA/Draft EIR could result in temporary interruptions of public access and use in the immediate vicinity of the activity areas. This temporary impact is considered significant.

Implementation of Mitigation Measure 26 will reduce this impact to a less-than-significant level

Mitigation Measure 26: Notify Recreational Users

Reclamation shall provide precautionary signage to warn recreational users of the potential safety hazards associated with project construction activities. Signs and/or buoys shall be placed within and directly adjacent to the project boundaries along the Trinity River in accordance with the requirements specified in Title 14, Article 6 of the California Code of Regulations. Notification signs shall be posted at public river access areas located within the project area managed by Bureau of Land Management, U.S. Forest Service, and California Department of Fish and Game (e.g., Bucktail River Access, Steel Bridge Campground, Douglas City Campground, Indian Creek River Access, and Junction City Campground). Additionally, public notification of proposed project construction activities and associated safety hazards shall be circulated in the local Trinity Journal newspaper prior to the onset of project construction.

Reclamation will repair and/or replace any facilities associated with the Phase 1 or Phase 2 sites that are impacted by project activities. This measure would include installation of interpretive signage consistent with the requirements of the U.S. Forest Service - Shasta-Trinity Forest and Bureau of Land Management. Preconstruction meetings between Reclamation and landowners/land managers will identify the amount of vegetative screening to be retained at each recreation site within the project area.

Impact 24: Construction of the project could result in an increased safety risk to recreational users or resource damage to recreational lands within the project boundaries.

During Project construction, there would be heavy equipment activity and construction vehicle traffic operating within, and immediately adjacent to, the low-flow (450 cfs) channel of the Trinity River. Although temporary, construction activities associated with the Project could pose a significant hazard to recreational users of the river and cause resource damage to recreational lands within the project

boundary. Potential hazards to recreationists include the operation of construction equipment and vehicles in and around project sites, changes in the river's subsurface movement as a result of the in-channel addition or removal of gravel, the addition of large woody debris into the channel, and an increased potential for a hazardous materials spill (e.g., diesel and hydraulic fluid) presented by construction equipment and vehicles operating in and adjacent to the river. Potential hazards to resources on recreational lands within the project boundaries include an increased potential for hazardous materials spills and unstable riverbanks and/or uplands resulting from excavation, material addition, road creation, and vegetation removal. This impact is considered significant.

Implementation of Mitigation Measure 26, which requires precautionary signage and requires the repair and/or replacement of damaged facilities, will reduce this impact to a less-than-significant level

Impact 25: Construction activities associated with the project could lower the Trinity River's aesthetic values for recreationists by increasing its turbidity levels.

Implementation of the proposed Project could increase turbidity in the Trinity River during construction activities for some distance downstream. The Project involves in-channel work, particularly the excavation of floodplain features and the requirement for numerous in-channel crossings. Fine sediments could be suspended in the river for several hours following in-channel activities. The extent of downstream sedimentation would be a function of the instream flow velocity and particle size. For example, fine-grained sediments like silts and clays could be carried several thousand feet downstream of the activity area, while larger-sized sediments like sands and gravels would tend to drop out of the water column within several feet of the construction limit. Increased turbidity and suspended solids levels would adversely affect water quality and could adversely affect anadromous fish species that are known to occur in the Trinity River, and could have a noticeable affect on the river's aesthetics. This is considered a significant impact.

Trinity River Basin Plan objectives for turbidity will be implemented through Mitigation Measures 5-8. These mitigation measures require turbidity standards to be enforces, clean gravel standards for project materials, sediment and erosion control measures to protect water quality, and monitoring. A SWPPP will be prepared in accordance with Mitigation Measure 3 to avoid and minimize erosion and sedimentation from project activities.

Implementation of Mitigation Measures 3 (sediment and erosion control plan) and 5-8 (water quality mitigation) will reduce this impact to a less-than-significant level.

Cultural Resources

Impact 26: Implementation of the Project could result in disturbance of undiscovered prehistoric or historic resources.

Given the prehistory and history of the Trinity Basin, TRRP rehabilitation activities have the potential to affect unknown cultural resources that may be present in any one of the project sites. Due to the proximity to the Trinity River, unrecorded prehistoric cultural resources associated with habitation by Native Americans may be present. Ground-disturbing activities associated with construction could

disrupt or adversely affect unknown subsurface archaeological resources. This impact is considered significant.

Implementation of Mitigation Measure 27 will reduce this impact to a less-than-significant level.

Mitigation Measure 27: Avoid and Minimize Impacts on Cultural Resources

Reclamation shall implement the following measures:

- Prior to initiation of construction or ground-disturbing activities, all construction workers shall be alerted to the possibility of discovering cultural resources. This includes prehistoric and/or historic resources. Personnel shall be instructed that upon discovery of buried cultural resources, work within 50 feet of the find shall be halted and Reclamation's designated archaeologist shall be consulted. Once the find has been identified, Reclamation shall be responsible for developing a treatment plan for the cultural resource including an assessment of its historic properties and methods for avoiding any adverse effects, pursuant to the Programmatic Agreement and in compliance with the National Historic Preservation Act.

- If human remains are encountered during construction on non-federal lands, work in that area will be halted and the Trinity County Coroner's Office shall be immediately contacted. If the remains are determined to be of Native American origin, the Native American Heritage Commission shall be notified within 24 hours of determination, as required by Public Resources Code, Section 5097. The Native American Heritage Commission shall notify designated "Most Likely Descendants", who will provide recommendations for the treatment of the remains within 24 hours; and will mediate any disputes regarding treatment of remains. If Native American human remains and associated items are discovered on federal lands, they will be treated according to provisions set forth in the Native American Protection and Repatriation Act (25 U.S.C. 3001) as well as Reclamation's Directives and Standards LND 02-01.

- If the find is determined to be a historical resource or a unique archaeological resource, as defined by CEQA, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or other appropriate mitigation shall be made available. Work may continue on other parts of the project while mitigation for historical or unique archaeological resources takes place.

Air Quality

Impact 27: Construction activities could result in an increase in fugitive dust and associated particulate matter (PM_{10} and $PM_{2.5}$) levels.

The Project would require excavation, grading, disposal of earthen materials, and the use of heavy equipment and travel on unpaved roads, which would temporarily contribute fugitive dust in the project area. Fugitive dust emissions would also result from activities associated with vegetation removal and gravel injection. These sources of fugitive dust are associated with PM_{10}, a criteria pollutant. The Project is located within the North Coast Air Basin (NCAB), where PM_{10} levels are in

non-attainment. The generation of fugitive dust during construction is considered a temporary and short-term significant impact.

Implementation of mitigation measure 27 will reduce this impact to a less-than-significant level.

Mitigation Measure 27: Implement Dust Control Program

Reclamation will implement a dust control program to limit fugitive dust and particulate matter emissions. The dust control program will include the following elements as appropriate:

- Inactive construction areas will be watered as needed to ensure dust control.
- Pursuant to the California Vehicle Code (Section 23114), all trucks hauling soil or other loose material to and from the construction site will be covered or will maintain adequate freeboard to ensure retention of materials within the truck's bed (e.g., ensure 1–2 feet vertical distance between top of load and the trailer).
- Excavation activities and other soil-disturbing activities will be conducted in phases to reduce the amount of bare soil exposed at any one time. Mulching with weed-free materials will be used to minimize soil erosion, as required by Mitigation Measures 3 and 8.
- Watering (using equipment and/or manually) will be conducted on all stockpiles, dirt/gravel roads, and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.
- All paved access roads, parking areas, and staging areas will be swept (with water sweepers), as required by Reclamation.
- Paved roads will be swept (with water sweepers) if visible soil material is carried onto adjacent private and public roads, as required by Reclamation.
- All ground-disturbing activities with the potential to generate dust will be suspended when winds exceed 20 mph, as directed by the North Coast Unified Air Quality Management District.
- Reclamation or its contractor will designate a person to monitor dust control and to order increased watering as necessary to prevent transport of dust offsite. This person will also respond to citizen complaints.

Impact 28: Construction activities could result in an increase in construction vehicle exhaust emissions.

Construction requires the use of equipment that would temporarily contribute to air pollution in the Trinity River basin. Exhaust emissions from heavy equipment during construction may contribute to air pollution. Project construction activities would generate emissions from diesel- and gasoline-powered equipment and vehicles. Diesel particulate is an identified Hazardous Air Pollutant (HAP) and Toxic Air Contaminant (TAC), emissions of which should be minimized. In this regard, the length of the construction will require the contractor to comply with North Coast Unified Air Quality

Management District Rule 104 (3.0) Particulate Matter or use portable internal combustion engines registered and certified under the state portable equipment regulation. This impact is considered significant.

Implementation of Mitigation Measure 28 will reduce this impact to a less-than-significant level.

Mitigation Measure 28: Comply with Air Quality Particulate Matter Rule

Reclamation will comply with North Coast Unified Air Quality Management District North Coast Unified Air Quality Management District Rule 104 (3.0) Particulate Matter. This compliance could occur by using portable internal combustion engines registered and certified under the state portable equipment regulation (Health & Safety Code 41750 through 41755).

Impact 29: Implementation the Project would include vegetation removal resulting in vegetative material that would be buried, piled to create wildlife habitat, chipped, or burned.

In the event that piles are burned, smoke would temporarily contribute to air pollution in the Trinity River basin. Burning vegetation would contribute particulate matter to the air, a criteria pollutant for which the North Coast Air Basin in is non-attainment. Therefore, this impact is considered significant.

Implementation of Mitigation Measure 29 will reduce this impact to a less-than-significant level.

Mitigation Measure 29: Implement Best Management Practices for Burning Vegetation and Notify Public

Vegetative piles to be burned will consist only of dried vegetative materials. Burn piles will be no larger than 10 feet in diameter. Field personnel will be on site during all hours of burning, and materials necessary to extinguish fires will be available at all times.

In general, all requirements of a North Coast Unified Air Quality Management District "NON-Standard" burn permit will be met for burning. Burn management planning will include but not be limited to the following:

- Ensure that burning occurs only on approved burn days as defined by the NCUAQMD (determined by calling 1-866-BURN-DAY).
- Burning will only occur during suitable conditions to ensure control of ignited fires. For instance, water to wet the litter and duff layer and penetrate the mineral soil layer to 1/4 inch or more will be present, wind speeds will be low (<10 mph), and temperature will be low (<80 °F).
- Piles will be covered with a 5-foot x 5-foot sheet of 4-mil polyethylene plastic to promote drying of the slash. At least 3/4 of each pile surface will be covered and the plastic anchored to preserve a dry ignition point. Dry fuel conditions will minimize smoke emissions.
- Slash piles will not be constructed on logs, stumps, or talus slopes within 25 feet of wildlife trees with nest structures, in roadways, or in drainage ditches. Piles will not be placed within 10 feet of trees intended to be saved (reserved trees) or within 25 feet of a unit boundary.

Reclamation will notify the public each day that burning is to occur. Signs or personnel will notify residents and traffic on nearby access routes.

Impact 30: Generate fugitive dust, gas and diesel emissions, and smoke near schools and residences.

Construction activity associated with the Project would generate fugitive dust, gas, and diesel emissions and the project could generate smoke from vegetation burn piles. Construction activities that generate these emissions could expose a substantial number of adjacent residents and three nearby elementary schools to air pollutants. Schools and residences are considered sensitive receptors. Therefore, this is considered a significant impact.

Implementation of Mitigation Measure 30 will reduce this impact to a less-than-significant level.

Mitigation Measure 30: Avoid and Minimize Impacts from Air Pollutants

Construction activity occurring within 300 feet of the Lewiston or Douglas City elementary schools will be limited to the period when school is not in session.

Construction activity occurring within 300 feet of residences will be limited to Monday through Saturday, from the hours of 9 a.m. to 5 p.m.

Reclamation will notify residences within 300 feet of Remaining Phase 1 and Phase 2 and project activity and the Lewiston, Douglas City, and Junction City elementary schools will be notified of construction activity located near the schools prior to site construction activities.

Reclamation will ensure that a notice is posted at/adjacent to the rehabilitation sites, which contains a phone number for the public to contact for concerns related to air quality.

Aesthetics

Impact 31: Project implementation could result in the degradation and/or obstruction of a scenic view from key observation areas.

The Project is located along the Trinity River corridor between Lewiston and the North Fork Trinity River, near Helena California. Adverse effects to the scenic views include changes brought about by the removal of vegetation, construction of inundated surfaces, new access roads, the creation of staging and gravel processing areas, and sediment management activities. While these impacts are expected to be temporary in nature and the long-term outcome should improve the visual diversity of the corridor, the short-term impacts will persist for some period. Therefore, this impact is considered significant.

In order to minimize impacts to visual resources resulting from the removal of vegetation in the project area, construction in shaded riparian habitat will be avoided and minimized, and a Riparian Revegetation and Monitoring Plan will be implemented (Mitigation Measures 14 and 15). Visual impacts related to water quality (e.g., the potential for increased turbidity to adversely impact the

aesthetic quality of the river) will be mitigated through the implementation of Mitigation Measures 3 and 5-8. These mitigation measures require implementation of water quality standards for turbidity, implementation of clean gravel standards for project materials, implementation of sediment and erosion control measures to protect water quality, and water quality monitoring.

Implementation of Mitigation Measures 3, 5-8 (water quality mitigation), and 14-15 (riparian mitigation) will reduce this impact to a less-than-significant level.

Noise

Impact 32: Noise impacts on nearby sensitive receptors

During the construction phase of the project, noise from construction activities would temporarily dominate the noise environment in the immediate area. Construction activities would generate maximum noise levels ranging from 65 to 84 dBA at a distance of 50 feet, although intervening terrain and vegetation could reduce these noise levels. Noise generating activities would be short-lived at each site and would occur periodically. Construction noise is expected to occur over 5–10 years, primarily between the months of July and December. However, coarse sediment management activities may occur as early as February.

Several sensitive receptors are located in the immediate vicinity of the Project sites. Residences and commercial enterprises are scattered along both sides of the river throughout the river corridor and would be subjected to varying degrees of construction noise. Three schools are located adjacent to or near the Project sites. this impact is considered significant.

Implementation of mitigation measure 31 will reduce this impact to a less-than-significant level.

Mitigation Measure 31: Implement Construction Criteria to Avoid and Minimize Noise

Construction activities near residential areas would be scheduled between 7:00 a.m. and 7:00 p.m., Monday through Saturday. No construction activities will be scheduled for Sundays or other hours and days established by the local jurisdiction (i.e., Trinity County). The contractor may submit a request for variances in construction activity hours, as needed.

Reclamation will require that all construction equipment be equipped with manufacturer's specified noise muffling devices.

Reclamation will require placement of all stationary noise-generating equipment as far away as feasibly possible from sensitive noise receptors or in an orientation minimizing noise impacts (e.g., behind existing barriers, storage piles, unused equipment).

Public Services and Utilities/Energy

Impact 33: Implementation of the Project may result in disruption to emergency services or disruption to school bus routes or student travel routes during construction.

Activities associated with either the Project would be confined to the Project site boundaries. Traffic control associated with project activities would be minimal and would cause only brief short-tem disruptions. In addition, construction personnel and service vehicles would use designated routes to and from the Project sites. However, access for mobilization and demobilization of heavy equipment may require temporary traffic control for local roadways before, during, and after site construction. This is considered a significant impact.

No road/bridge closures are planned; however, in the event that it becomes necessary to temporarily close a road or bridge as a result of project activities, the road/bridge closures would be implemented during non-peak hours to avoid traffic circulation impacts associated with emergency services and school bus services. A closure, even during non-peak hours (11:00 p.m. to 6:00 a.m.) could have the potential to increase significantly response time for law enforcement, fire protection, and other emergency services. This is considered a significant impact.

In the event that road closures would be required during the school year (mid-August through mid-June) the closures could delay students. While the impact would be temporary, it could interfere with student access to bus services and school attendance. This impact is considered significant.

Implementation of Mitigation Measure 32 will reduce this impact to a less-than-significant level.

Mitigation Measure 32: Avoid and Minimize Public Service Interruptions

Reclamation will require that staging and construction work, including temporary road or bridge closures occur in a manner that allows for access by emergency service providers.

Reclamation will provide 72-hour notice to the local emergency providers and affected users prior to the start of temporary closures.

Reclamation will coordinate road closures occurring during the school year (mid-August through mid-June) with the appropriate school districts to avoid disruption of school attendance and student access to bus service.

Transportation/Traffic Circulation

Impact 34: Construction activities would generate short-term increases in vehicle trips.

Construction activities associated with rehabilitation activities would require a number of truck and worker vehicle trips on area roads leading to and from the rehabilitation sites. Local roads that could be affected in the general vicinity of Lewiston include Goose Ranch Road, Lewiston Road, Old Lewiston Road, Rush Creek, and Trinity Dam Boulevard. Local roads that could be affected in the general vicinity of Douglas City include Union Hill Road, Browns Mountain Road, Steel Bridge Road, and Steiner Flat Road. Local roads that could be affected in the general vicinity of Junction City include Dutch Creek Road, Red Hill Road, Evan's Bar Road, Sky Ranch Road, and Hocker Flat Road. Project implementation would also result in vehicle traffic on SR 299, and possibly SR 3. A number of private roads adjacent to the river could also be affected by project generated vehicle traffic with the express permission of the land owners.

Construction equipment (e.g., large trucks, excavators, and back-hoes) would be mobilized to the rehabilitation sites prior to construction and removed upon completion of construction at each site. Post-construction activities (i.e., revegetation, maintenance, and monitoring) would require intermittent access for 3 to 5 years, depending on the success of natural revegetation. The transport of materials within and between rehabilitation sites could occur during project construction activities. In some instances, materials may need to be transported to off-site locations in the event that on-site storage/use is not feasible or is cost prohibitive. If necessary, this activity would occur between August 1 and October 15. These activities could generate the equivalent of up to 36 truck loads of material per day from an individual site. This impact is considered potentially significant.

Post-construction sediment management activities (e.g., gravel injection, fine sediment removal) associated with the Project could occur at a number of rehabilitation sites, primarily upstream of Indian Creek. These activities could generate a significant amount of short-term vehicle trips. It is difficult to determine precisely the amount of gravel that would be needed for gravel injection purposes because the need for gravel injection is based on factors that are unknown at this time (such as future water-year type and resulting Trinity River flows). However, TRRP estimates that up to 15,000 tons of gravel could be hauled to these rehabilitation sites on a yearly basis. This could amount to approximately 600 truck loads and would equal 1,200 truck trips when accounting for travel to and from the sites. Gravels excavated within rehabilitation sites would be used for gravel injection purposes where available, thereby minimizing the amount of trips needed for hauling gravel. While the use of on-site gravels for these activities would minimize the number of truck trips, the amount of trips that could be generated by post construction sediment management activities (such as gravel injection activities) would still be potentially significant, particularly in the general vicinity of Lewiston and Douglas City. This impact is considered potentially significant.

Implementation of Mitigation Measure 35 will reduce this impact to a less-than-significant level.

Mitigation Measure 33: Implement Project Operating Criteria

Reclamation will post signs during gravel haul activities notifying travelers of trucks entering the roadway. Reclamation will ensure that the gravel trucks maintain a speed limit of 15 mph on residential roads and private roads and operate only between the hours of 7 a.m. and 7 p.m., Monday through Saturday.

Impact 35: Project construction could obstruct access to adjacent land uses.

Implementation of the project could obstruct access to adjacent land uses. Access to adjacent public and private lands may be restricted if traffic control measures are being used. This is considered a significant impact.

Implementation of Mitigation Measure 34 will reduce this impact to a less-than-significant level.

Mitigation Measure 34: Implement Project Operating Criteria

Reclamation will maintain access throughout the construction period for all private residences adjacent to the project boundary and access roads adjacent to the Trinity River.

During the construction phase of the project, Reclamation will limit the amount of daily construction equipment traffic by staging construction equipment and vehicles within the project boundary throughout the work period.

Impact 36: Construction activities would increase wear and tear on local roadways.

The local roads over which the construction equipment must pass are built to withstand occasional use by heavy equipment and may not be constructed and maintained to support substantial volumes of truck traffic. Numerous local roadways would provide access for construction related activities at the Project sites, including roads owned and maintained by Trinity County, state and federal agencies, and roads under private ownership. Use of these roads to move construction material to and from the work sites or to supply fuel for equipment left on-site could increase wear and tear on the local roadways, and could result in adverse affects on the road conditions. The degree to which this impact would occur depends on the design (pavement type and thickness) and the existing condition of the road.

Construction equipment would be staged on-site during construction. Truck travel on local and private roads would be required when excavated material is used to replenish river gravel supplies for fisheries purposes. Project planning to use on-site coarse sediment would minimize heavy equipment use on local roads, which are needed to access the majority of the sites. Additionally, trucks carrying heavy equipment or coarse sediment (i.e., gravel) would operate within the legal weight limits as determined by the state. The number and types of activities could require some level of reconstruction at select sites prior to, or upon completion of, the Proposed Project. The level of construction traffic could also require additional maintenance for some road segments in conjunction with various activities. This impact is considered significant.

Implementation of Mitigation Measure 35 will reduce this impact to a less-than-significant level.

Mitigation Measure 35: Implement Pre- and Post-Construction Surveys and Landowner Agreements

Reclamation will perform a pre-construction survey of local federal, state, and private roads to determine the existing roadway conditions of the construction access routes, and will consult with the relevant agencies/private parties about road conditions prior to construction activity and post construction activity. An agreement would be entered into prior to construction that would detail the pre-construction conditions and post-construction requirements for potential roadway rehabilitation.

Impact 37: Construction activities could pose a safety hazard to motorists, bicyclists, pedestrians, or equestrians.

Traffic safety hazards could arise in the vicinity of the construction access routes when heavy construction equipment is entering or leaving a rehabilitation site. Access to the Trinity River through each of the Project sites would be limited to identified routes during construction activities to minimize

public exposure to construction traffic. Trucks entering and exiting access roads off State Route 299 and State Route 3 may pose a temporary hazard to motorists and cyclists using the roadway. Bike lanes exist on Red Hill Road, and pedestrians and equestrians use many of the local roads adjacent to the Trinity River for recreation and exercise. Trucks traveling on these routes would pose a safety hazard to these users. This impact would be limited to brief and intermittent periods. This impact is considered significant.

Implementation of Mitigation Measure 36 will reduce this impact to a less-than-significant level.

Mitigation Measure 36: Prepare and Implement Traffic Control Plan

Reclamation will prepare and implement a traffic control plan that includes a provision and maintenance of temporary access through the construction zone, reduction in speed limits though the construction zone, signage and appropriate traffic control devices, illumination during hours of darkness or limited visibility, use of safety clothing/vests to ensure visibility of construction workers by motorists, and fencing as appropriate to separate bicyclists, pedestrians, and equestrians from construction activities.

III. RECORD OF PROCEEDINGS

The record of proceedings consists of the following documents, at a minimum:

- The Notice of Preparation (NOP), including related comments from agencies, organizations and individuals and all other public notices issued by the Regional Water Board in conjunction with the project;

- The Draft MEIR – EA/DEIR for the Trinity River Restoration Program Channel Rehabilitation and Sediment Management Project, Remaining Phase 1 and Phase 2 (June 2009), and all documents cited or referred to therein;

- All comments submitted by agencies or members of the public during the 45-day comment period on the Draft MEIR – EA/DEIR;

- All comments and correspondence submitted to the Regional Water Board with respect to the project, in addition to timely comments on the Draft MEIR – EA/Draft EIR;

- The mitigation monitoring and reporting plan for the project;

- All findings and resolutions adopted by the Regional Water Board in connection with the proposed Project, and all documents cited or referred to therein;

- All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the project prepared by the Regional Water Board, consultants to the Regional Water Board, or responsible or trustee agencies with respect to the Regional Water Board's compliance with the requirements of the CEQA and with respect to the Regional Water Boards action on the Trinity River channel rehabilitation and sediment management project;

- All documents submitted to Regional Water Board by other public agencies or members of the public in connection with the Proposed Project, up through the close of the Draft MEIR – EA/Draft EIR comment period on July 28, 2009,

- Any minutes and/or verbatim transcripts of all information sessions, public meetings, and public hearings held by Regional Water Board in connection with the proposed Project;

- Any documentary or other evidence submitted to Regional Water Board at such information sessions, public meetings, and public hearings;

- Matters of common knowledge to Regional Water Board, including, but not limited to federal, state, and local laws and regulations;

- Any documents expressly cited in these findings, in addition to those cited above; and

- Any other materials required for the record of proceedings by Public Resources Code section 21167.6, subdivision (e).

The official custodian of the record is the Regional Water Board, North Coast Region, located at 5550 Skyline Blvd, Suite A, Santa Rosa, California, 95403.

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