

## CEQA Findings of Fact

The Canyon Creek Suite of Rehabilitation Sites: Trinity River Mile 73 to 78 (Project) is a mechanical rehabilitation project that will modify the banks of the Trinity River at four specific sites between Junction City and Helena in the Canyon Creek area of the Trinity River, Trinity County, California. The Project is one part of a larger effort by the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) to restore the anadromous fishery of the Trinity River, as described in the Secretary of the Interior's 2000 Trinity River Record of Decision (ROD). The Project is specifically designed to benefit anadromous fish and their habitat by developing a properly functioning, diverse floodplain and main river channel habitat. Reclamation plans to selectively remove fossilized riparian berms that developed as a result of the loss of scour associated with peak flows after the Trinity River Diversion (TRD) was completed. In addition, Reclamation proposes to physically alter other alluvial features (i.e., floodplains) and remove riparian vegetation at strategic locations to promote the alluvial processes necessary for the restoration and maintenance of alternate bar riverine habitats. The four rehabilitation sites are associated with alluvial features along a five-mile reach of the Trinity River upstream of the North Fork Trinity River and downstream of the community of Junction City. These activities will require a Clean Water Act section 404 permit from the U.S. Army Corps of Engineers (Corps), and water quality certification from the Regional Water Quality Control Board, North Coast Region (Regional Water Board) under section 401 of the Clean Water Act.

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 section 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, subd. (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, subd. (b).)

The Environmental Assessment – Finding of No Significant Impact/Final Environmental Impact Report (EIR) prepared for the Canyon Creek Suite of Rehabilitation Sites: Trinity River Mile 73 to 78, addresses the environmental effects associated with Project. The EIR identified a number of potentially significant environmental impacts that the Project will cause. All of these significant effects can be fully avoided or rendered less than significant by implementation of the mitigation measures. Mitigation measures have been incorporated as conditions of water quality certification issued by the Regional Water Board (mitigation measures 1-21, 24) or incorporated into the Project description as certified (mitigation measures 22-23, 25-32) to avoid the significant environmental effects. Reclamation is responsible for carrying out these mitigation measures as well as monitoring and reporting.

Public Resources Code section 21081.6, subdivision (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. A Mitigation Monitoring and Reporting Program (MMRP) was prepared for the project and is contained in a separate document. The Regional Water Board will use the MMRP to track compliance with project mitigation measures. The MMRP will remain available for public review. In the findings below, mitigation measures are described in detail under the first applicable impact. For each impact that follows where the mitigation measure is again applicable, the mitigation measure is referenced by its number.

In accordance with Public Resources Code section 121081, the Regional Water Board finds as follows:

**Impact 1: 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 1-4 will reduce this impact to a less than significant level.

**Mitigation Measure 1:** Reclamation shall implement the following measures:

- Areas where ground disturbance would occur shall be identified in advance of construction and limited to only those areas.
- All construction vehicular traffic shall be confined to the designated access routes and staging areas.

- Disturbance shall be limited to the minimum necessary to complete all rehabilitation activities.
- All supervisory construction personnel shall be informed of environmental concerns, permit conditions, and final project specifications.

**Mitigation Measure 2:** Reclamation shall prepare and implement a water quality control plan that includes a Storm Water Pollution Prevention Plan [SWPPP] subject to approval by the Executive Officer of the Regional Board prior to the start of construction. The SWPPP shall include Best Management Practices (BMPs) which may include but not be limited to silt fences, sediment filters, dewatering activities, and routine monitoring to verify effectiveness. Proper implementation of erosion and sediment controls shall be adequate to minimize sediment inputs into the Trinity River until vegetation re-growth occurs. Reclamation shall inspect all BMPs and sediment and erosion control devices daily during the construction period to ensure that the devices are properly functioning. Excavated and stored materials shall be kept in upland sites with erosion control properly installed and maintained. Excavated and stored materials will be staged in stable upland sites. The following measures shall 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 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 depth. 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 shall be located such that they do not drain directly into a surface water feature, if possible. If a spoil site drains into a surface water feature, catch basins shall 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 and will be monitored and maintained in good working condition until river levels rise and inundate the floodplain. 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.

**Mitigation Measure 3:** Turbidity increases associated with Project activities shall not exceed the water quality objectives for turbidity in the Trinity River basin. Turbidity levels are defined in Nephelometric Turbidity Units (NTUs). The current threshold for turbidity levels in the Trinity River, as listed in the Basin Plan for the North Coast Region (2001), is summarized below.

- Turbidity shall not be increased by 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.

**Mitigation Measure 4:** To ensure that turbidity levels do not exceed the Basin Plan objective during river's edge construction activities, Reclamation shall monitor turbidity levels 50 feet upstream and 500 feet downstream of the point of river's edge construction activities. At a minimum, field turbidity measurements shall be collected on a daily basis during river's edge construction activity and whenever a visible increase in turbidity is observed. Monitoring frequency shall be a minimum of every two hours during periods of increased turbidity.

**Impact 2: Construction of the Project could result in short-term temporary increases in turbidity and total suspended solids levels during and after construction.**

During river's edge construction activities, potential increases in turbidity levels could occur as a result of excavation of riparian sediments and elevated floodplain materials, removal of riparian plant root systems, and re-shaping of the contours of the riverbanks. Fine sediments may be suspended in the river for several hours following construction 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 can be carried several thousand feet downstream of construction zones, while larger-sized sediments like sands and gravels would tend to drop out of the water column within several feet of the construction zone.

The Project is designed to stage river's edge construction activities to minimize potential turbidity effects. Following construction activities, potential increases in turbidity levels could occur when excavated areas are exposed to rainsplash erosion and runoff, or erosion by elevated river stages if flows increase in the river. Fine sediments may be suspended in the river for several hours following such exposure and erosion. This meets an important Project objective to restore the riverine process of scour and deposition. Activities could result in short-term increases in turbidity and suspended solids concentrations in the water column that could potentially violate the Basin Plan objectives for turbidity in the Trinity River. This impact is considered significant.

Implementation of mitigation measures 1-5 will reduce this impact to a less than significant level.

**Mitigation Measure 5:** After construction, Reclamation shall monitor turbidity levels above and below the entire Project to evaluate compliance with the turbidity objective. Turbidity monitoring shall be conducted at least one time within twenty-four hours after the first rainfall event that generates runoff from disturbed areas into the Trinity River. Turbidity monitoring shall also be conducted at least one time within twenty-four hours after increased flows results in inundation of any areas along the rivers edge that were disturbed by previous construction activities. During the first spring following construction of the Project, Reclamation shall

monitor turbidity levels above and below the project when peak flows are released based on the water year type for the previous water year. Reclamation shall report all turbidity monitoring results to the Regional Water Board. If monitoring shows that turbidity levels below the Project are more than 20 percent above the naturally occurring background levels measured above the Project, Reclamation shall report those results to the Regional Water Board within twenty-four hours. Reclamation shall attempt to identify the reason for increased turbidity downstream of the Project and shall take appropriate action to reduce controllable sources of turbidity. Reclamation may conduct additional turbidity monitoring as necessary to support its long-term adaptive management plan and to demonstrate that turbidity levels following Project construction are not adversely affecting beneficial uses and are compatible with the objective to preserve, enhance, and restore cold water fisheries in the Trinity River. Reclamation should coordinate this monitoring requirement with its Integrated Monitoring and Evaluation Program for its long-term adaptive management plan for the TRRP.

**Impact 3: 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 measures 6-8 will reduce this impact to a less than significant level.

**Mitigation Measure 6:** Reclamation shall prepare and implement site-specific BMPs, emergency spill control measures (i.e., a spill prevention and containment plan), and the requirements in mitigation measures 7 and 8 below as part of the water quality control plan required by Mitigation Measure 2, subject to Regional Water Board approval prior to construction.

**Mitigation Measure 7:** Any construction equipment that would come in contact with the Trinity River shall be inspected daily for leaks prior to entering the flowing channel. External oil, grease, and mud shall be removed from equipment using steam cleaning prior to mobilization to the site. Following mobilization to the site, these materials shall be removed with thorough hand scrubbing. Untreated wash and rinse water must be contained and shall be adequately treated prior to discharge if that is the desired disposal option. Vehicles and equipment used during construction shall receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling shall be conducted in an area at least 150 feet away from the Trinity River.

**Mitigation Measure 8:** Equipment and materials shall be stored away from wetland and surface water features. Hazardous materials, including fuels, oils, and solvents, shall 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 and fueling will always be conducted within a proper detention berm with an impermeable liner and other adequate containment measures. In addition, Reclamation shall 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.

**Impact 4: Increased erosion and sedimentation levels could adversely affect fishes, including federally listed coho salmon.**

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 (Alabaster and Lloyd 1980). 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 (Berg and Northcote 1985). 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.

Implementation of mitigation measures 1-5, and 9 will reduce this impact to a less-than-significant level.

**Mitigation Measure 9:** Reclamation shall conduct river's edge construction activities during low flow periods only (August through October 15, or later if river flow is less than 2000 cfs).

**Impact 5: 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.

Implementation of mitigation measures 6-8 will reduce this impact to a less-than-significant level.

**Impact 6: Construction activities could result in the stranding and mortality of rearing fishes, including federally listed coho salmon.**

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 (Sommer 2001), the constructed features may increase this process to varying degrees. This impact is considered significant.

Implementation of mitigation measures 10 and 11 will reduce this impact to a less-than-significant level.

**Mitigation Measure 10:** To avoid or minimize potential injury and mortality of fish during excavation (berm removal) on the river banks, equipment shall be operated slowly and deliberately to alert and scare adult and juvenile salmonids away from the work area.

**Mitigation Measure 11:** Reclamation shall monitor the rehabilitated floodplain sites for salmon fry stranding by a qualified fishery biologist immediately after recession of floodflow events designated as a 1.5- year or less frequent event (i.e., flow rate ( $Q$ )  $\geq 6,600$  cfs) for a period of 3 years following construction. Such fry stranding surveys shall be performed during the months of January through June. If stranding is observed, Reclamation shall transport stranded fish to suitable habitat, and modify floodplain topography as necessary to reduce the likelihood of future occurrences of fry stranding.

**Impact 7: Implementation of the Project would result in the permanent and temporary loss of shaded riverine aquatic habitat (SRA) 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 12 and 13 will reduce this impact to a less-than-significant level.

**Mitigation Measure 12:** To maintain overall SRA and riparian habitat values (including montane riparian habitat) within the project reach, the Project shall be designed to preserve riparian vegetation and increase the diversity of native vegetation types and age classes available post-project, and to facilitate natural vegetation of constructed surfaces that is appropriate for fish and wildlife species except where necessary to re-connect the river to the floodplain. Reclamation shall install boundary markers along all riparian areas outside of delineated rehabilitation areas to stop construction access.

**Mitigation Measure 13:** To compensate for loss of riparian vegetation within project boundaries, Reclamation shall implement the following measures:

- a. Prior to the start of construction activities, Reclamation shall 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 habitat. In addition, Reclamation shall clearly identify and flag biologically sensitive areas (e.g., jurisdictional waters and riparian habitat) to be protected in the field and provide specific instructions to avoid any construction activity within these features. Each jurisdictional riparian feature to be avoided will be flagged, staked, or otherwise marked to ensure that construction activities do not encroach upon them. Reclamation shall inspect and maintain marked areas on a regular basis throughout the construction phase.
- b. Reclamation shall develop a Riparian Revegetation and Monitoring Plan (Plan), subject to approval by the Corps, Regional Water Board and DFG, prior to implementing the Project. The Plan shall include measures that insure that all riparian vegetation removed by the TRRP projects within the 40 mile corridor of the Trinity River downstream of Lewiston Dam will be replaced by natural recruitment, replanting, or any combination thereof at an areal ratio of 1:1 within a five year time-frame. The Plan should include measures that support the TRRP objective to replace homogeneous vegetation with a diverse assemblage of riparian vegetation, including provisions for incorporation of native species that can resist invasion by noxious plant species. The Plan shall include available control methods known for a weed species consistent with those adopted by the Trinity County Weed Management Cooperative. Because the present Trinity River channel is encroached (up to 300 percent) with riparian vegetation that is homogenous in nature, the Plan need not require strict replacement based on original stem counts and species.
- c. Reclamation shall initiate a five-year mitigation monitoring program after the first growing season following project implementation. After a period of three years, Reclamation, in consultation with the Corps, Regional Water Board and DFG will be determine the need (if any) for additional plantings and will assess and/or remedy any loss of riparian habitat, including jurisdictional wetlands within the site boundaries (as defined in the EIR) in order to ensure that there will be no-net loss of wetlands and riparian habitat at the end of the five-year monitoring period. Determining the response of riparian habitat to the channel rehabilitation project after three years of monitoring will provide a two year period for Reclamation to take additional pro-active measures towards meeting the goal of no net-loss of riparian habitat within the Project boundaries.

- d. Reclamation shall complete a post-project wetland delineation and vegetation habitat evaluation five years after project construction as a basis for comparing pre and post-project conditions and submit the results to the Corps, Regional Water Board and DFG. In the event that this delineation identifies a net loss in riparian habitat, Reclamation shall enhance or reestablish riparian vegetation that will function as SRA habitat within the boundaries of the rehabilitation sites. Potential options to accomplish this objective include increasing the density and diversity of riparian vegetation to supplement natural recruitment, and introducing riparian plants in locations to expand riparian habitat. In the event the conditions within the boundaries of the Project preclude the ability to adequately mitigate onsite, Reclamation may consider alternate locations for riparian vegetation mitigation within the local Trinity River corridor, subject to approval by the Corp, the Regional Water Board and CDFG.

**Impact 8: Construction activities could result in the loss of jurisdictional wetlands and riparian habitat.**

Construction activities associated with the Project would result in impacts to jurisdictional wetland features. Project construction associated with the Project would result in the loss of 6.23 acres of riparian wetland and 7.86 acres of riverine habitat. Construction access routes and staging areas would also temporarily disturb 0.01 acre of riparian wetland habitat. This impact is considered significant.

Implementation of the mitigation measures 14 and 15 will reduce this impact to a less than significant level.

**Mitigation Measure 14:** Prior to the start of construction activities, Reclamation shall 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 jurisdictional waters. In addition, Reclamation shall 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 specific instructions to avoid any construction activity within these features. Reclamation shall inspect and maintain marked areas on a regular basis throughout the construction phase.

**Mitigation Measure 15:** To compensate for loss of wetlands within project boundaries, Reclamation shall implement the following measures:

- a. Reclamation shall develop a Riparian Revegetation and Monitoring Plan (Plan) (see also Mitigation Measure 14), subject to approval by the Corps, Regional Water Board and DFG, prior to implementing the proposed project. The Plan shall include measures that insure that all riparian vegetation (a key parameter of a jurisdictional wetlands) removed by the TRRP projects within the 40 mile corridor of the Trinity River downstream of Lewiston Dam is replaced by natural recruitment, replanting, or any combination thereof at an areal ratio of 1:1 within a five year time-frame. Because the present Trinity River channel is encroached (up to 300 percent) with riparian vegetation that is homogenous in nature, this Plan need not require strict replacement based on original stem counts and species. The Plan shall acknowledge that the ultimate goals of the TRRP include functional riparian habitat and no net-loss of jurisdictional wetlands throughout the 40-mile reach of the Trinity River below the TRD. Because riparian habitat and

jurisdictional wetlands will respond to river restoration with some degree of spatial and temporal variability, areal habitat coverages within a river reach will remain relatively consistent while habitat changes at specific locations may be measurable.

- b. Floodplain values and functions will be enhanced by the Project as well as by increased flows. Consequently, substantial new areas beyond those identified in pre-Project plant community delineations are expected to convert to riparian habitats (in some cases, jurisdictional wetlands), both seasonal and perennial, within a 3–5 year post-Project window. Reclamation will take advantage of opportunities during, or after project construction to enhance on-site wetland functions within the project boundaries to enhance or create conditions required for functional jurisdictional wetlands (i.e., hydrology, vegetation and hydric soils) in such a way that these conditions are maintained over time. For example, excavation of areas upslope (beyond the 6,000 cfs OHW line) to a depth coincident with low-flow (450 cfs) conditions may provide opportunities to establish the hydrologic conditions necessary for establishing functional jurisdictional wetlands.
- c. Reclamation shall initiate a five-year mitigation monitoring program after the first growing season following project implementation. After a period of three years, the need will be evaluated (if any) for additional wetland enhancement. At that time, Reclamation, in consultation with the Corps, Regional Water Board and DFG, will determine the need to further enhance or create additional areas of jurisdictional wetlands within the project boundaries defined in the EIR so that there will be no-net loss of wetlands at the end of the five-year monitoring period. Determining the need to further enhance or create additional wetland areas after three years of monitoring will provide a two-year period for Reclamation to take additional pro-active measures towards meeting the goal of no net-loss of jurisdictional wetland habitat within the Project boundaries.
- d. Reclamation shall conduct post-project wetland delineations five years after project construction for comparison to the pre-construction wetland delineations. In the event that post-project wetland delineations identify a net loss of jurisdictional wetlands within the Project area, Reclamation, in consultation with the Corps, the Regional Water Board, and DFG, will implement additional mitigation measures to further enhance or create additional jurisdictional wetlands within the Project. In the event the conditions within the Project boundaries preclude the ability to adequately mitigate onsite, Reclamation may consider alternate locations for jurisdictional wetland mitigation within the local Trinity River corridor, subject to approval by the Corp, the Regional Water Board and DFG.

**Impact 9: Construction could result in the loss of individuals of a special-status plant species.**

Floristic (vegetation) inventories and special-status plant surveys were conducted over the entirety of the Elkhorn and Pear Tree Gulch sites and the majority of the Conner Creek and Valdor Gulch sites. No special-status plant species were detected at any of the sites. A habitat analysis of those portions of the Conner Creek and Valdor Gulch sites that were not surveyed indicates that, due to a lack of suitable habitat, no federally listed plant species are likely to occur. However, there is a low probability that two special-status plant species—Canyon Creek

stonecrop and Heckner's lewisia, both California Native Plant Society (CNPS) List 1B—may occur in these areas. This impact is considered significant.

Implementation of mitigation measure 16 will reduce this impact to a less-than-significant level.

**Mitigation Measure 16:** Reclamation shall implement the following measures at the Conner Creek and Valdor Gulch sites to avoid or minimize project-related impacts to Canyon Creek stonecrop and Hecner's lewisia:

- a. A qualified botanist will visit the unsurveyed portions of the Conner Creek and Valdor Gulch sites to determine habitat suitability at those locations for Canyon Creek stonecrop and/or Heckner's lewisia. If suitable habitat is determined to be available, surveys shall be conducted during the blooming periods for these species (i.e., May–July) to determine (1) if the species occur and (2) the quality, location, and extent of any populations. If either of these species is found within 250 feet of any proposed disturbance, the following measures shall be implemented.
- b. Prior to the start of disturbance, exclusionary fencing shall be erected around any known occurrences. If necessary, a qualified botanist should be present to assist with locating these special-status plant populations. The exclusionary fencing shall be periodically inspected throughout each period of construction and be repaired as necessary.
- c. If a population cannot be fully avoided, Reclamation shall retain a qualified botanist and implement salvage and relocation action, in consultation with DFG.

**Impact 10: Construction activities could result in impacts to the federally listed Trinity bristle snail.**

Potential direct effects would include mortality of individuals due to equipment and vehicle traffic and the loss of riparian vegetation cover. Potential indirect effects would include degradation of riparian habitat due to accidental spills and/or sedimentation. Construction activities associated with the Project have only a small potential to affect Trinity bristle snails, either directly or indirectly. The sites provide limited suitable habitat for the Trinity bristle snail, and the species was not detected during surveys in 2002. Because this species is federally listed, this impact is considered significant.

Implementation of the following mitigation measure 1-5, 12-13, and 17 will reduce this impact to a less than significant level.

**Mitigation Measure 17:** If identified potential bristle snail habitat is to be disturbed during construction, Reclamation shall conduct a minimum of one survey for Trinity bristle snails in this area(s) a maximum of one week prior to construction by a qualified biologist. If a Trinity bristle snail is detected, the biologist shall relocate it to a suitable location outside of the construction limits.

**Impact 11: Construction activities could result in impacts to the state-listed little willow flycatcher.**

Suitable montane riparian habitat for the little willow flycatcher is present at all four sites, and willow flycatchers were detected at the Valdor Gulch site during a 2003 survey (Miller, Ralph, and Herrera 2003). 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 measure 12 and 13 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.

Implementation of mitigation measure 12-3, and 18 will reduce this impact to a less-than-significant level.

**Mitigation Measure 18:** The following mitigation measures shall be implemented to avoid or minimize potential impacts to the little willow flycatcher:

- a. Grading and other construction activities shall be scheduled to avoid the nesting season to the extent possible. The nesting season for this species in Trinity County extends from June 15 through July 31. If construction occurs outside of the breeding season, no further mitigation is necessary. If the breeding season cannot be completely avoided, Reclamation shall implement mitigations 18b and c.
- b. Reclamation shall conduct a minimum of one pre-construction survey for the little willow flycatcher by a qualified biologist within the project sites and a 250-foot buffer around the area where construction will occur. The survey shall be conducted no more than 15 days prior to the initiation of construction in any given area. No nests of this species within or immediately adjacent to the project sites shall be disturbed during project implementation.
- c. If construction during the nesting season cannot be avoided and all necessary approvals have been obtained (e.g., site specific surveys and CDFG coordination), potential nesting substrate (e.g., shrubs and trees) in the Project area may be removed in compliance with Mitigation Measure 18b.

**Impact 12: Construction activities could result in impacts to the foothill yellow-legged frog.**

All four sites provide suitable habitat for the foothill yellow-legged frog, and this species was observed at all the sites during herpetofauna surveys conducted in 2003 (Lind, Welsh Jr., and Wilson 1996). Evidence of reproduction (egg masses) was also found at three sites. Construction activities associated with the 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.

Implementation of mitigation measure 1-5, 12-13, and 19 will reduce this impact to a less-than-significant level.

**Mitigation Measure 19:** Reclamation shall implement the following measures:

- a. If any construction in the Trinity River channel will occur prior to August 1 of any construction season, Reclamation shall conduct a pre-construction survey for yellow-legged frog larvae and/or eggs by a qualified biologist. This survey must take place within the construction boundaries no more than two weeks prior to the start of in-stream construction activities. If larvae or eggs are detected, the biologist shall relocate them to a suitable location outside of the construction boundaries.
- b. In the event that a yellow-legged frog is observed within the construction boundaries, Reclamation shall temporarily halt construction activities until the frog is moved to a safe location with suitable habitat outside of the construction limits.

**Impact 13: Construction activities could result in impacts to the northwestern pond turtle.**

All four sites provide suitable habitat for the northwestern pond turtle, and this species was observed during the 2003 herpetofauna surveys in, or near, the Conner Creek, Valdor Gulch, and Pear Tree Gulch sites (Lind, Welsh Jr., and Wilson 1996). Construction activities associated with the Project 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. Thus, these impacts are considered significant.

Implementation of mitigation measures 1-5, 12-13 and 20 will reduce this impact to a less-than-significant level.

**Mitigation Measure 20:** Reclamation shall implement the following measures:

- a. A minimum of one survey for pond turtle nests shall be conducted a maximum of one week prior to construction. A qualified biologist shall be retained by Reclamation to conduct the survey. If a pond turtle nest is found, the biologist shall flag the site and determine whether construction activities can avoid affecting the nest. If the nest cannot be avoided, the nest should be excavated by the biologist and reburied at a suitable location outside of the construction limits.
- b. In the event that a pond turtle is observed within the construction limits, the contractor shall temporarily halt construction activities until the turtle has been moved by a qualified biologist to a safe location within suitable habitat outside of the construction limits.

**Impact 14: Construction activities could result in impacts to nesting California yellow warblers and yellow-breasted chats.**

The riparian habitat associated with the Trinity River corridor at all four sites provides suitable nesting and foraging habitat for the California yellow warbler and yellow-breasted chat. Both of

these species are designated as species of special concern by the DFG. Even though no recorded nest sites for the yellow warbler or yellow-breasted chat were identified by the DFG (California Department of Fish and Game 2005) in the general vicinity of the Project and no nests were observed during surveys conducted in 2003, there is the potential for the two species to nest at the sites. Both species were observed at the Conner Creek, Valdor Gulch, Elkhorn, and Pear Tree Gulch sites during point count surveys in 2003 (Miller, Ralph, and Herrera 2003).

The Project would result in a small, temporary reduction of foraging and/or roosting habitat for these species. Implementation of mitigation measures 12 and 13 will ensure that there is no net loss of riparian habitat, and the Project would result in a long-term increase in riparian habitat diversity, increasing the quality of the habitat for these species. Thus, due to the small and temporary nature of the impacts and the regional abundance of similar habitats, the Project is not expected to have a significant impact on habitat for the California yellow warbler and yellow-breasted chat. However, 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 California yellow warblers or yellow-breasted chats or any activities resulting in nest abandonment is considered a significant impact to the species.

Implementation of mitigation measures 12-13 and 21 will reduce this impact to a less-than-significant level.

**Mitigation Measure 21:** Reclamation shall implement the following measures:

- a. Grading and other construction activities shall be scheduled to avoid the nesting season to the extent possible. The nesting season for these species in Trinity County extends from March through July 31. If construction occurs outside of the breeding season, no further mitigation is necessary. If the breeding season cannot be completely avoided, measures 21b and c should be implemented.
- b. A qualified biologist shall conduct a minimum of one pre-construction survey for yellow warblers and yellow-breasted chats within the project sites and a 250-foot buffer around the sites. The survey shall be conducted no more than 15 days prior to the initiation of construction in any given area. The pre-construction survey shall be used to ensure that no nests of these species within or immediately adjacent to the project sites would 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.
- c. If construction during the nesting season cannot be avoided, and all necessary approvals have been obtained (e.g., site specific surveys and CDFG coordination), potential nesting substrate (e.g., shrubs and trees) within the Project area may be removed in compliance with Mitigation Measure 21b.

**Impact 15: Construction activities could disrupt nesting by special-status raptors.**

Suitable nesting habitat for the northern goshawk, osprey, Cooper's hawk, and sharp-shinned hawk, which are designated as California species of special concern, occurs at all four 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 raptors, or any activities resulting in raptor nest abandonment, is considered a significant impact.

Implementation of mitigation measure 22 will reduce this impact to a less-than-significant level.

**Mitigation Measure 22:** Reclamation shall implement the following measures:

- a. Construction shall be scheduled to avoid the nesting season 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 would be avoided and no impacts to nesting raptors would be expected. If it is not possible to schedule construction during this time, Reclamation shall implement mitigation measures 22b and c.
- b. Pre-construction surveys for nesting raptors shall be conducted by a qualified biologist to ensure that no nests will be disturbed during project implementation. These surveys shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the biologist shall inspect all trees immediately adjacent to the impact areas for raptor nests. If an active raptor nest is found close enough (i.e., within 500 feet) to the construction area to be disturbed by these activities, the biologist, in consultation with the DFG, shall determine the extent of a construction-free buffer zone to be established around the nest.
- c. If construction during the nesting season cannot be avoided and all necessary approvals have been obtained (e.g., site specific surveys and CDFG coordination), potential nesting substrate (e.g., shrubs and trees) in the Project area may be removed in compliance with Mitigation Measure 22b.

**Impact 16: Construction activities could result in impacts to special-status bats and the ring-tailed cat.**

The Trinity River riparian corridor, including the sites for the Project, 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. Species-specific surveys for bats were not conducted at the sites; therefore, their presence is assumed. 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, caves, and mines. The project area does not provide suitable roosting habitat for the Townsend's western big-eared bat or the Yuma myotis. 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. Impacts to habitat containing potential roost trees will occur at all four sites. Noise and visual disturbances associated with construction activities may disrupt bats roosting within and directly adjacent to the project area. Further, removing large trees with cavities could result in the direct loss of colonies and may be considered a significant impact.

Each of these bat species has the potential to forage at the four project sites. Foraging habitat typically consists of forested habitats in close association with water. Construction activities

associated with the Proposed Project could temporarily alter the foraging patterns of these species; however, this would be considered a less-than-significant impact based on the abundance of suitable foraging habitat in the vicinity of the Project. No long-term impediments to foraging habitat associated with the Project are anticipated.

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 their small size and lack of large cavities/snags. However, other habitats in the project area, such as montane hardwood and montane hardwood conifer, may provide suitable denning sites. Thus, removal of large trees with cavities or snags could result in the loss of ring-tailed cats, which is considered a significant impact. Construction activities would also result in short-term reduction in foraging habitat for this species. However, the project would ultimately result in an increase in habitat and an increase in habitat quality for this species. Thus, due to the abundance of similar habitat in the area, the temporary loss of foraging habitat would be a less-than-significant impact.

**Mitigation Measure 23:** In order to avoid and/or minimize impacts to roosting special-status bats and the ring-tailed cat, Reclamation shall implement the following measures:

- a. Reclamation shall conduct a pre-construction survey for roosting bats and ring-tailed cats by a qualified biologist prior to any removal of trees  $\geq 12$  inches in diameter at 4.5 feet above grade. No activities that would result in disturbance to active roosts of special-status bats or dens of ring-tailed cats shall proceed prior to completion of the surveys. If no active roosts or dens are found, no further action is required. 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. If a bat maternity roost or hibernacula or a ring-tailed cat den is present, Reclamation shall implement measures 11b or 11c shall be implemented. CDFG shall also be notified of any active bat nurseries within the disturbance zones.
- b. If an active maternity roost or hibernacula is found, Reclamation shall redesign the Project to avoid the loss of the tree occupied by the roost, if feasible. If the project cannot be redesigned to avoid removal of the occupied tree, demolition of that tree should 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 should be observed during the bat maternity roost season (March 1–July 31). If a non-breeding bat hibernacula is found in a tree scheduled to be razed, the individuals shall be safely evicted, under the direction of a qualified bat biologist (as determined by a Memorandum of Understanding with DFG), by opening the roosting area to allow air flow through the cavity. Demolition shall then follow no less 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 should 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 shall first be disturbed at dusk, just prior to removal that same evening, to allow bats to escape during the darker hours.
- c. If an active ring-tailed cat nest is found, Reclamation shall redesign the Project 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 should commence outside of the breeding season (February 1 to August 30). If a non-breeding den is found in a tree scheduled to be razed, the individuals shall be safely evicted under the direction of a qualified biologist. Trees with dens that need to be removed shall first be disturbed at dusk, just prior to removal that same evening, to allow ring-tailed cats to escape during the darker hours.

**Impact 17: Implementation of the 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, Bermuda grass, and Klamathweed) during ground-disturbing activities. This is considered a significant impact.

Implementation of mitigation measure 24 will reduce this impact to a less-than-significant level.

**Mitigation Measure 24:** In order to avoid and/or minimize the potential introduction and/or spread of noxious weeds, Reclamation shall implement the following measures:

- a. When using imported erosion control materials (as opposed to rock and dirt berms), use only certified weed-free erosion control materials, mulch, and seed.
- b. Preclude the use of rice straw in riparian areas.
- c. Limit any import or export of fill to material that is known to be weed free.
- d. Require the construction contractor to thoroughly wash all equipment at a commercial wash facility prior to entering the county.
- e. Use a mix of native grasses, forbs, and sterile non-native species (e.g., cereal grains to hold soils while native species establish on the site). Develop seed mix in cooperation with members of the Trinity County Weed Management Cooperative (TCWMC) for disturbed areas that are subject to infestation by non-native and invasive plant species. Use native grass plugs to speed native plant establishment in these areas. Where appropriate, use a heavy application of mulch (e.g., 2-4 inches of straw) to discourage introduction of these species.
- f. Within the first 3 to 5 years post-project, if the Project has caused non-native invasive vegetation to out-compete desired native colonizing riparian vegetation, implement measures to control these non-native species identified in the Riparian Revegetation Management Plan. When implementing weed control techniques, the approach will consider using all available control methods known for a weed species. Control methods will be consistent with those adopted by the TCWMC.

**Impact 18: Construction activities could temporarily lower the Trinity River's aesthetic values for recreationists by increasing turbidity levels in the Trinity River.**

Implementing the Project has the potential to increase turbidity and total suspended solids during construction activities. Although no in-river construction will occur, some bank sloughing may occur during these activities, resulting in some degree of turbidity within and downstream of the

project boundary. Fine sediments may be suspended in the river for several hours following excavation activities. The flows typically attributed to good fishing tend to be clear; nominal increases in turbidity may affect the recreational experience of anglers. A certain increase in these levels may result in potentially significant aesthetic impacts to certain user groups. This is considered a significant impact.

Implementation of mitigation measures 1-5 will reduce this impact to a less-than-significant level.

**Impact 19: Implementation of the Project could potentially result in disturbance of undiscovered prehistoric or historic resources.**

Each of the four proposed rehabilitation sites was surveyed for the presence of cultural resources that would be eligible for listing in the National Register. Based on the results of this survey, no sites eligible for listing were discovered. Buried archaeological resources that have not been previously recorded may be uncovered during construction. 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 25 will reduce this impact to a less-than-significant level.

**Mitigation Measure 25:** Reclamation shall implement the following measures:

- a. Prior to initiation of construction or ground-disturbing activities, Reclamation shall ensure that all construction workers are alerted to the possibility of buried cultural remains. This would include prehistoric and/or historic resources. Personnel shall be instructed that upon discovery of buried cultural materials, work within 50 feet of the find shall be halted and Reclamation's designated archaeologist consulted. Once the find has been identified, Reclamation shall make the necessary plans for treatment of the finds(s) and for the evaluation and mitigation of impacts if the find(s) are found to be significant.
- b. If buried human remains are encountered on non-federal lands during construction, work in that area shall be halted, and Reclamation shall immediately contact the Trinity County Coroner's Office. If the remains are determined to be of Native American origin, then Reclamation shall notify the Native American Heritage Commission (NAHC) within 24 hours of determination, as required by Public Resources Code, section 5097. For the discovery of Native American human remains and associated items on federal lands, Reclamation shall adhere to the provision of the Native American Graves Protection Act (25 U.S.C. 3001) and its implementing regulations (43 C.F.R. Part 10).
- c. 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 historical or unique archaeological resource mitigation takes place.

**Impact 20: Construction activities could result in an increase in fugitive dust and associated particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) levels.**

Construction requires the use of equipment that would temporarily contribute to air pollution within the Trinity River basin. Construction excavation and grading are sources of fugitive dust emissions (PM<sub>10</sub>) that could have a temporary impact on local air quality. Dust emissions would primarily be associated with removal of vegetation, excavation and disposal of earthen materials, and equipment travel on unpaved road surfaces.

The Project is located within the North Coast Air Basin (NCAB), where PM<sub>10</sub> levels are in non-attainment. The generation of fugitive dust during construction is considered a temporary and short-term significant impact due to the non-attainment status of the air basin.

Implementation of mitigation measure 26 will reduce this impact to a less-than-significant level.

**Mitigation Measure 26:** Reclamation shall include provisions in the construction bid documents specifying that the contractor shall implement a dust control program to limit fugitive dust and particulate matter emissions. The dust control program may include, but will not be limited, to 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 shall be covered or should 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 shall be conducted in phases to reduce the amount of bare soil exposed at any one time. Mulching with weed free materials may be used to minimize soil erosion, as described in Sections 3.3 and 3.5 of the EA/DEIR.
- Watering with either equipment and/or manually shall 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 shall be swept (with water sweepers) at each construction site.
- Roads will be swept (with water sweepers) if visible soil material is carried onto adjacent public roads.
- All ground-disturbing activities with the potential to generate dust shall be suspended when winds exceed 20 miles per hour.
- Reclamation shall 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 21: 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. This impact is considered significant. 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 (approximately 3 to 6 weeks at each site) will require the contractor to comply with NCUAQMD *Rule 104 (3.0) Particulate Matter* or use portable internal combustion engines registered and certified under the state portable equipment regulation.

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

**Mitigation Measure 27:** Reclamation shall include provisions in the construction bid documents specifying that the contractors shall comply with NCUAQMD *Rule 104 (3.0) Particulate Matter*. This compliance could occur through the use of portable internal combustion engines registered and certified under the state portable equipment regulation (Health & Safety Code, §§ 41750-55).

**Impact 22: Temporary air pollution from burning removed vegetative materials.**

Construction of the project would remove vegetation from the construction areas, which may be buried, piled to create wildlife habitat, chipped, or burned. Piling and burning is a quick and economical way to eliminate flammable biomass and reduce concentrations of wildland fuels. Piles would be conserved until after construction and prepared/burned by a by an authorized agent of Reclamation during wet weather conditions. In the event that piles are burned, smoke would temporarily contribute to air pollution in the Trinity River basin. This impact is considered significant.

Implementation of mitigation measure 28 will reduce this impact to a less-than-significant level.

**Mitigation Measure 28:** To ensure that any vegetation burning does not cause a significant impact to air quality, Reclamation shall implement the following measures:

- a. Piles 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.
- b. Reclamation shall meet all requirements of a NCUAQMD “NON-Standard” burn permit. Burn management planning shall include but not be limited to:
  - Ensure that burning occurs only on approved burn days as defined by the NCUAQMD (determined via 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 miles per hour (mph)), and temperature will be low (< 80° F).

- Piles may 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 would be covered and the plastic anchored to preserve a dry ignition point. Dry fuel conditions will minimize smoke emissions.
  - Slash piles would not be constructed on logs, stumps, on talus slopes, within 25 feet of wildlife trees with nest structures, in roadways or in drainage ditches. Piles would not be placed within 10 feet of trees intended to be saved (reserved trees), or within 25 feet of a unit boundary.
- c. Notification of the public and the NCUAQMD will occur each day. Depending on wind direction and proximity to roads, signs or personnel will notify residents and traffic on nearby access routes.

**Impact 23: Construction activities would result in noise impacts to nearby sensitive receptors.**

During the construction phase of the project, noise from construction activities would dominate the noise environment in the immediate area. Construction activities would generate noise levels ranging from 70 to 90 “A-weighted” decibel scale (dBA) at a distance of 50 feet, although intervening terrain and vegetation could reduce these noise levels. Construction noise would be temporary and is expected to last for 3 to 6 weeks at each site. Ten sensitive receptors are located in the immediate vicinity of the four rehabilitation sites (Figures 3.16-1 through 3.16-4, Noise Section of the EA/DEIR). Each sensitive receptor is located at least 100 feet from the nearest proposed activity. This impact is considered significant.

Implementation of mitigation measure 29 will reduce this impact to a less-than-significant level.

**Mitigation Measure 29:**

- a. Reclamation shall schedule construction activities near residential areas would be scheduled between 7:00 AM and 7:00 PM, Monday through Saturday. No construction activities shall occur on Sundays or other hours and days established by the local jurisdiction (i.e., Trinity County).
- b. Reclamation shall require in construction specifications that the contractor maintain all construction equipment with manufacturer’s specified noise muffling devices.
- c. Reclamation shall require that the contractor place all stationary noise-generating equipment as far away as feasibly possible from sensitive noise receptors or in an orientation minimizing noise impacts (i.e., behind existing barriers, storage piles, unused equipment).

**Impact 24: Implementation of the Project may result in disruption to emergency services or disruption to school bus routes or student travel routes during the construction phase.**

Access for mobilization and demobilization of heavy equipment may require traffic control on Dutch Creek and Red Hill Roads as well as Wintu Pass Road; however, the need for such traffic control would be minimal. In addition, construction personnel and service vehicles would use

designated routes during throughout the construction phase. A closure, even during non-peak hours (i.e., 11:00 p.m. to 6:00 a.m.) could have the potential to significantly decrease response time for police service, fire protection, and other emergency services. This impact is considered significant.

Implementation of mitigation measure 30 will reduce this impact to a less-than-significant level.

**Mitigation Measure 30:**

- a. Reclamation shall stage construction work and temporary closures in a manner that will allow for access by emergency service providers.
- b. Reclamation shall provide 72-hour notice to the local emergency providers (i.e., Trinity County Sheriff's Department (TCSD), California Department of Forestry and Fire Protection (CDF) Junction City Fire Department, and Trinity Life Support Ambulance) prior to the start of temporary closures.
- c. Reclamation shall implement any potential road/bridge closures during non-peak hours to avoid traffic circulation impacts.

**Impact 25: Implementation of the project would affect access to adjacent land uses.**

Land uses adjacent to the four rehabilitation sites consist mainly of residential areas and recreational river access. Access to adjacent lands at the Valdor Gulch and Elkhorn sites may be restricted if traffic control measures are being used. This impact is considered significant.

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

**Mitigation Measure 31:**

- a. Reclamation shall maintain access throughout the construction period for all private residences adjacent to the project site boundaries and access roads on the left side of Trinity River.
- b. During the construction phase of the project, Reclamation shall limit the amount of daily construction equipment traffic by staging most construction equipment and vehicles on the project site throughout work at each site.

**Impact 26: Construction activities could pose a safety hazard to motorists, bicyclists, and pedestrians.**

Traffic safety hazards could arise for motorists, pedestrians, and bicyclists 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 four rehabilitation sites may be limited to identified routes during construction activities to minimize public exposure to construction traffic. Trucks entering and exiting the access road off SR 299 may pose a temporary hazard to cyclists and motorists using the roadway. Bike lanes exist on Dutch Creek Road and Red Hill Road, and trucks traveling on these routes would pose a safety hazard to pedestrians and bicyclists. Although these impacts would be limited to brief and intermittent time periods, they are considered significant.

Implementation of mitigation measure 32 will reduce this impact to a less-than-significant level.

**Mitigation Measure 32:** Reclamation shall require the construction contractor to prepare and implement a traffic control plan that would include provisions for maintenance of temporary access through the construction zone, reduction in speed limits through 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 pedestrians and bicyclists from construction activities.

## **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 EA/DEIR for the Canyon Creek Suite of Rehabilitation Sites: Trinity River Mile 73 to 78, Volumes 1–3 (February 2006), 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 EA/DEIR;
- All comments and correspondence submitted to the Regional Water Board with respect to the project, in addition to timely comments on the EA/DEIR;
- 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 CEQA and with respect to the Regional Water Board's action on the Canyon Creek rehabilitation 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 EA/DEIR comment period on March 27, 2006,
- 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 Skylane Blvd, Suite A, Santa Rosa, California, 95403.

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