

5. Regulatory Framework for Biological Resources

This section describes the federal, state, and local regulation of special-status species, waters of the United States, and other sensitive biological resources.

5.1 Federal Endangered Species Act

Section 9 of the federal ESA of 1973 prohibits acts of disturbance that result in the “take” of threatened or endangered species. As defined by the federal ESA, “endangered” refers to any species that is in danger of extinction throughout all or a significant portion of its current range. The term “threatened” is applied to any species likely to become endangered within the foreseeable future throughout all or a significant portion of its current range. Take is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” Violation of this section can result in penalties of up to \$50,000 and up to one year of imprisonment. Sections 7 and 10 of the federal ESA provide methods for permitting an action that may result in “incidental take” of a federally listed species. Incidental take refers to take of a listed species that is incidental to, but not the primary purpose of, an otherwise lawful activity. Incidental take is permitted under Section 7 for projects on federal land or involving a federal action, while Section 10 provides a method for permitting incidental take resulting from a state or private action.

5.2 Section 404 of the Clean Water Act

The regulations and policies of various federal agencies (e.g., Corps, Environmental Protection Agency, and USFWS) mandate that the placement of dredge or fill materials within a jurisdictional water should be avoided unless it can be demonstrated that no practical alternatives exist. The Corps has primary federal responsibility for administering regulations that concern jurisdictional wetlands and other waters of the United States in the study area. The Corps acts under two statutory authorities, the River and Harbors Act of 1899 (Sections 9 and 10), which governs specified activities in “navigable waters,” and the Clean Water Act (CWA)(Section 404), which governs jurisdictional wetlands and other waters of the United States. The Corps requires that a permit be obtained if a project proposes placement of structures in, under, or over navigable waters of the United States or proposes the placement of dredged or fill material into jurisdictional wetlands or other waters of the United States. If the project would result in impacts on waters of the United States, a Corps-issued CWA Section 404 permit would be required.

5.3 Section 401 Water Quality Certification

The California RWQCB, North Coast Region, is responsible for enforcing water quality criteria and protecting water resources in the study area. The RWQCB is responsible for controlling discharges to surface waters of the state by issuing waste discharge requirements.

Section 401 of the CWA requires that a project proponent obtain a water quality certification or a waiver for projects requiring a federal permit to allow for discharges of dredged or fill material (i.e.,

Corps Section 404 permits). If the project would result in impacts on waters of the United States or waters of the state, a Section 401 Water Quality Certification would be required.

5.4 Streambed Alteration Agreement (Sections 1600-1616 of the California Fish and Game Code)

Any entity proposing an activity that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the CDFW may require a discretionary Streambed Alteration Agreement from the CDFW (Region 1). As a general rule, this requirement applies to any work undertaken within the 100-year floodplain of a stream or river containing fish or wildlife resources. A Streambed Alteration Agreement would need to be prepared for project activities that occur within the bed and/or bank of the perennial or intermittent streams in the study area.

5.5 Bald and Golden Eagle Protection Act

The bald eagle and golden eagle (*Aquila chrysaetos*) are federally protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c). It is illegal to take, possess, sell, purchase, barter, offer to sell or purchase or barter, transport, export or import a bald or golden eagle, alive or dead, or any part, nest or egg of these eagles unless authorized by the Secretary of the Interior. Violators are subject to fines and/or imprisonment for up to one year. Active nest sites are also protected from disturbance during the breeding season.

5.6 Federal Migratory Bird Treaty Act

Migratory birds are protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21).

Most breeding birds that are likely to be found in the study area are protected under the MBTA. Thus, project construction has the potential to directly take nests, eggs, young, or individuals of protected species. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to the abandonment of nests, which would be a violation of the MBTA.

5.7 Executive Order 13112 (Invasive Species)

Executive Order 13112 directs federal agencies to use relevant programs and authorities to

- prevent the introduction of invasive species;
- detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner;
- monitor invasive species populations accurately and reliably;
- provide for restoration of native species and habitat conditions in ecosystems that have been invaded;

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- conduct research on invasive species and develop technologies to prevent introduction and provide for environmentally sound control of invasive species;
- promote public education on invasive species and the means to address them; and
- not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless, pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions.
- Invasive weeds in the study area may be subject to Executive Order 13112.

5.8 California Endangered Species Act

Under the CESA, CDFW maintains a list of threatened and endangered species (California Fish and Game Code 2070). Additionally, CDFW maintains a list of candidate species, which are species that CDFW has formally recognized as being under review for inclusion on the state's list of endangered or threatened species. CDFW also maintains lists of species of special concern, which serve as watch lists. Pursuant to the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the study area and determine whether the project will have a potentially significant impact on such species. CDFW encourages informal consultation on any proposed project that may impact a candidate species. Project-related impacts on species on the CESA endangered or threatened list would be considered significant and would require avoidance. State-listed species are fully protected under the mandates of CESA. Take of protected species including incidental or otherwise lawful management activities may be authorized under Section 2081 of the Fish and Game Code of California.

5.9 Birds of Prey and Migratory Birds

Under Section 3503.5 of the California Fish and Game Code, it is unlawful to take, possess, or destroy any birds in the orders of Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird, except as otherwise provided by this code or any regulation adopted pursuant thereto.

Migratory birds are also protected in California. The State Fish and Game Code Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA. Under Code Section 3513, the CDFW may consider impacts similar to those described above under the MBTA a significant impact.

5.10 Fully Protected Species

California statutes also accord fully protected status to a number of specifically identified birds, mammals, reptiles, amphibians, and fish. These species cannot be taken, even with an incidental take permit (California Fish and Game Code, Sections 3505, 3511, 4700, 5050, and 5515).

5.11 Native Plant Protection Act

The Native Plant Protection Act (California Fish and Game Code Sec. 1900-1913) prohibits the taking, possessing, or sale within the state of any rare, threatened, or endangered plants, as defined by the CDFW. This prohibition applies to any plants with a state designation of rare, threatened, or endangered.

5.12 Bureau of Land Management

5.12.1 Sensitive Botanical and Wildlife Species

It is BLM's policy to manage for the conservation of special-status plant and animal species and the habitats on which they depend to ensure that actions it authorizes, funds, or implements do not contribute to the listing of any sensitive species as Threatened or Endangered under the ESA. Policies and procedures for special-status species management is provided in the BLM-California Manual Supplement 6840.06 and in the BLM-California Manual Handbook H-6840-1, respectively. State directors shall designate BLM sensitive species that 1) could become endangered or extirpated from a state; 2) are under review by USFWS or the National Marine Fisheries Service; 3) are experiencing downward trends in habitat capability; 4) are experiencing downward trends in population or density such that federal or state listing may be necessary; 5) are limited in distribution; 6) inhabit specialized or unique habitats; or 7) are state listed but may be better conserved through application of BLM sensitive species status.

5.12.2 Northwest Forest Plan

In 1994, BLM and U. S. Forest Service adopted standards and guidelines, commonly known as the Northwest Forest Plan (NWFP), for the management of habitat for late-successional and old-growth forest related species within the range of the NSO (U.S. Department of the Interior and U.S. Department of Agriculture 1994). The NWFP was designed to address human and environmental needs served by the Federal forests of the western part of the Pacific Northwest and northern California. The development of the NWFP was triggered in the early 1990's by the listing of the NSO and marbled murrelet as threatened under the ESA.

To mitigate potential impacts on plant and wildlife species that have the potential to occur within the range of the NSO, surveys are required for species thought to be rare, or whose status are unknown due to a lack of information. These species became known as Survey and Manage Species. The NWFP has gone through several revisions since its implementation in 1994, including the elimination of the Survey and Manage Mitigation Measure Standards and Guidelines in 2004. However, these guidelines were re-instated in January 2006 as the result of a court order.

As previously mention in Section 4.3, Suitable habitat for Survey and Manage Species does not occur within the BLM portion of the study area, as no old growth or old growth forest characteristics occur.

6. Biological Resources, Discussion of Impacts and Mitigation

6.1 Special-Status Plants

As discussed in Section 4.3.1, potential habitat for four special-status plant species was determined to be present in the study area including Tracy's eriastrum, porcupine sedge, northern clarkia, and Dudley's rush. A botanical survey was conducted in the study area on June 9, 2016. The survey coincided with the blooming period of all potentially occurring special-status plants except Dudley's rush, which generally blooms in July and August. All rushes occurring in the study area were identified to species and no Dudley's rush was present. Additionally, no other special-status plants were observed during the botanical survey. Given the botanical survey findings, no impacts on special-status plant species are anticipated as a result of project-related activities and no avoidance or minimization measures are recommended at this time.

6.2 Special-Status Wildlife

As discussed in Section 4.3.2, potential habitat for 12 special-status wildlife species was determined to be present in the study area including southern Oregon/northern California coasts ESU Coho salmon, little willow flycatcher, bald eagle, NSO, Klamath mountains province ESU steelhead, upper Klamath-Trinity rivers ESU spring-run Chinook salmon, foothill yellow-legged frog, western pond turtle, yellow warbler, yellow-breasted chat, pallid bat, and ring-tailed cat. Potential project-related impacts and recommended measures for avoidance and minimization for each species is provided below with the exception of NSO. As previously discussed, a NSO habitat assessment and auditory and visual impacts evaluation was conducted for the proposed project and determined that no potential nesting/roosting or foraging habitat for NSO occurs in the project area or immediate vicinity. Based on these findings, no potential impacts on NSO are expected and no avoidance or minimization measure are necessary.

6.2.1 Anadromous Fish

Potential Impacts

Habitat for southern Oregon/northern California coasts ESU Coho salmon, Klamath mountains province ESU steelhead, and upper Klamath-Trinity rivers ESU spring-run Chinook salmon occurs in the study area as the Trinity River and adjacent riparian zone. Additionally, the Trinity River and adjacent riparian are considered designated critical habitat for southern Oregon/northern California coasts ESU Coho salmon.

Riparian habitat provides those elements that make up shaded riverine aquatic habitat, which is a component of essential fish habitat and a primary constituent element of designated critical habitat. It provides critical functions in stream ecosystems by maintaining bank stability, providing overhead and instream cover for aquatic organisms, moderating water temperatures, contributing to nutrients and energy, and providing habitat diversity. Riparian generally includes the woody vegetation and cover structures associated with "natural" banks that function to provide shade; sediment, nutrient,

and chemical regulation; stream bank stability; and input of woody debris and leaves that provide cover and serve as substrates for food producing invertebrates.

No direct impacts are anticipated as no instream work is proposed. Proposed project activities near the river, outside of the wetted channel, would include rehabilitation or replacement of an existing aerial sewer line that crosses the river, sandblasting and repainting the support structures for the sewer line, rehabilitation of percolation beds located just north of the river, and replacement of the underground sewer line between the aerial line and the percolation beds. The potential project effects are limited to impacts on water quality due to sandblasting and repainting, and disturbance of habitat that could indirectly affect special-status fish species through the removal of riparian vegetation during construction, which could reduce shaded riparian, increase sediment and turbidity in surface runoff from the project area, and potentially alter natural chemical and nutrient cycling in the area. Consultation with the National Marine Fisheries Service is recommended to determine potential project related impacts on special-status fish and appropriate avoidance and minimization measures, if required.

Avoidance and Minimization Measures

The following avoidance and minimization measures are recommended to avoid the potential for project-related impacts on special-status fish:

- Project activities near the Trinity River shall at all times provide adequate erosion and sediment control devices to prevent potential degradation of water quality.
- The contractor shall prevent the discharge of sediment, and/or muddy, turbid, or silt laden waters, resulting from project activities, into the river.
- Minimization of the width of the construction disturbance zone within riparian habitat through careful pre-construction planning.
- Erecting construction fencing along the outer edges of the construction zone where needed to prevent accidental entry into riparian habitat.
- Mature riparian trees (e.g., cottonwoods, alders) located near construction areas shall be flagged and avoided during construction, where feasible. In the event that a mature tree contributing to shaded riverine aquatic habitat is disturbed during project construction, it shall be replaced. The amount of habitat created/restored should be at least three times greater than the amount lost due to project implementation (3:1 ratio, new plantings per large woody riparian plant destroyed). These planting ratios will help ensure successful establishment of at least one vigorous plant for each established tree removed to accommodate the project.
- Equipment and materials should be staged outside of riparian habitat.
- Impacts on herbaceous cover will be offset by reseeding with a suitable native seed mixture and/or mulching.

6.2.2 Little Willow Flycatcher

Potential Impacts

Little willow flycatcher may nest in montane riparian habitat along the Trinity River in the study area. Thus, disturbance during the nesting season could result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Loss of fertile eggs or any activities resulting in nest abandonment, may adversely affect this species. The project may also result in small, temporary reduction of nesting and/or foraging habitat for this species. However, due to the limited nature of the work and regional occurrence of similar habitats, temporary habitat loss is not expected to result in an adverse effect on little willow flycatcher.

Avoidance and Minimization Measures

Project activities in or adjacent to riparian habitat along the Trinity River should be scheduled to occur outside of the nesting season for birds (February 15 through September 15) to the extent possible.

If project activities are proposed in or adjacent to riparian habitat along the Trinity River during the nesting season then a pre-construction survey for little willow flycatcher is recommended. The survey should be conducted following the methods described in *A Willow Flycatcher Survey Protocol for California* (Bombay et al. 2003). If an active nest is found in or adjacent to the project, CDFW should be contacted to determine the appropriate avoidance buffer and/or other appropriate mitigation measures.

6.2.3 Bald Eagle

Potential Impacts

Bald eagles may nest along the Trinity River in or adjacent to the study area. Thus, disturbance caused by construction activities during the nesting season could result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Loss of fertile eggs or any activities resulting in nest abandonment, may adversely affect this species. The project may also result in a small, temporary reduction in foraging and/or roosting habitat for this species. However, due to the limited nature of the work and regional occurrence of similar habitats, temporary habitat loss is not expected to result in an adverse effect on bald eagle.

Avoidance and Minimization Measures

If construction activities are planned during the nesting season (February 15 through September 15), then a pre-construction survey for nesting raptors, including the bald eagle, shall be conducted by a qualified biologist within the study area and a 250-foot buffer around the study area to ensure that no nests will be disturbed during project implementation. At least one survey should be conducted no more than 14 days prior to the initiation of construction activities. During the survey, the biologist should inspect all trees in and immediately adjacent to the study area for raptor nests. If an active raptor nest is found close enough (i.e., within 250 feet) to the construction area to be disturbed by project activities, the biologist in coordination with CDFW, shall determine the extent of a

construction free buffer zone to be established around the nest. CDFW may require a biological monitor to be present during construction in the area to ensure that the active nest will not be adversely affected by construction activities.

If all necessary approvals have been obtained, potential nesting substrate (e.g., shrubs and trees) that will be removed during project construction should be removed before the onset of the nesting season (February 15 through September 15), if practicable. This will help preclude nesting and substantially decrease the likelihood of direct impacts.

6.2.4 Foothill Yellow-legged Frog

Potential Impacts

Habitat for foothill yellow-legged frog occurs in the study area as the Trinity River. Although no instream work is proposed and the species is rarely found far from water, construction activities adjacent to the Trinity River could adversely affect foothill yellow-legged frog if individuals are present in the project area during construction. Potential direct effects include harassment, injury, and mortality due to construction equipment and vehicle traffic. Indirect effects could occur if construction activities result in degradation of aquatic habitat and water quality due to erosion and sedimentation, accidental fuel leaks, and spills.

Avoidance and Minimization Measures

Because foothill yellow-legged frogs may move into or out of the project area along the Trinity River, a pre-construction survey for the species is recommended to confirm its status (presence/absence) on the site immediately prior to the onset of construction activities. The survey should be conducted by a qualified biologist and shall consist of at least one survey of all suitable habitat in the project area. The survey should be conducted a maximum of one week prior to initiation of construction activities in the area. If a foothill yellow-legged frog is found, the biologist shall either allow it to move away on its own or if in immediate danger move it to a safe location up or downstream of the project area.

If a foothill yellow-legged frog is encountered during construction activities, the activities in the vicinity shall cease until appropriate corrective measures have been implemented or it has been determined that the frog will not be harmed. Any frogs encountered shall be allowed to move away on their own. Any trapped, injured, or killed foothill yellow-legged frogs shall be reported immediately to CDFW.

Additional measures that are recommended include the Standard BMPs provided in Section 2.7.4. These measures will help ensure no potential impacts occur on surface water features including the Trinity River.

6.2.5 Western Pond Turtle

Potential Impacts

Aquatic habitat for the western pond turtle occurs in the study area along the Trinity River and in the sewage treatment pond located in the northern portion of the study area. The proposed project could

adversely affect western pond turtle if individuals are present in the project area during construction. Potential direct effects include harassment, injury, and mortality of individuals due to equipment and vehicle traffic. Indirect effects could occur if construction activities result in degradation of aquatic habitat and water quality due to erosion and sedimentation, accidental fuel leaks, and spills.

Avoidance and Minimization Measures

A pre-construction survey for western pond turtle is recommended where potential habitat exists in the study area to confirm its status (presence/absence) on the site immediately prior to the onset of project activities in the area. The survey will be conducted by a qualified biologist and shall consist of at least one survey for western pond turtle and their nests. The survey shall be conducted no more than one week prior to construction activities in or near suitable habitat. If a western pond turtle is found, the biologist shall either allow the turtle to move away on its own or if in immediate danger the biologist shall move it to a safe location within similar habitat. If a western pond turtle nest is found, the biologist shall flag the site and an avoidance buffer shall be established around the nest.

If a western pond turtle is encountered during construction activities, the activities in the vicinity shall cease until appropriate corrective measures have been implemented or it has been determined that the turtle will not be harmed. Any turtles encountered during work shall be allowed to move away on their own. Any trapped, injured, or killed turtles shall be reported immediately to CDFW.

Additional measures that are recommended include the standard BMPs provided in Section 2.7.4. These measures will help ensure no potential impacts occur on surface water features including the Trinity River.

6.2.6 Yellow Warbler and Yellow-breasted Chat

Potential Impacts

Potential nesting habitat for yellow warbler and yellow-breasted chat occurs in riparian habitats in and adjacent to the study area. Thus, construction disturbance during the nesting season could result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Loss of fertile eggs or any activities resulting in nest abandonment, may adversely affect these species. The project may also result in a small temporary reduction of foraging habitat for these species. However, due to the limited nature of the work and regional occurrence of similar habitats, temporary habitat loss is not expected to result in an adverse effect on yellow warbler or yellow-breasted chat.

Avoidance and Minimization Measures

If construction activities are proposed during the nesting season (February 15 through September 15), then a pre-construction survey for nesting birds shall be conducted by a qualified biologist within the project area and 250-foot buffer around the project area to ensure that no nests will be disturbed during project implementation. At least one survey should be conducted no more than 14 days prior to initiation of construction activities. If an active bird nest is found within 250 feet of the study area, the biologist in coordination with CDFW, shall determine the extent of a construction free buffer zone to be established around the nest. CDFW may require a biological monitor to be present during construction in the area to ensure that the active nest will not be adversely affected by the project.

If all necessary approvals have been obtained, potential nesting substrate (e.g., shrubs and trees) that will be removed by the project should be removed before the onset of the nesting season, if practicable. This will help preclude nesting and substantially decrease the likelihood of direct impacts on yellow warbler or yellow-breasted chat.

6.2.7 Pallid Bat

Potential Impacts

Potential roosting habitat for pallid bat occurs in buildings, snags and hollow trees in the study area. The proposed project could adversely affect pallid bat if individuals are present in the project area during construction. Potential direct effects include harassment, injury, mortality, and loss of roost sites due to demolition of buildings or removal of snags or trees. The project may also result in a small, temporary reduction of foraging habitat for pallid bat. However, due to the limited nature of the work and regional occurrence of similar habitats, temporary habitat loss is not expected to result in an adverse effect on this species.

Avoidance and Minimization Measures

A pre-construction survey for roosting bats should be conducted prior to the demolition of any buildings or removal of trees or snags with a diameter at breast height of 12 inches or greater. The survey should be conducted by a qualified biologist and should occur no more than one week prior to demolition or tree removal work. If a maternity or hibernacula roost is found, the biologist in coordination with CDFW, will determine the extent of a construction free buffer zone around the roost. The buffer will remain in place until the bats are no longer dependent on the roost and have vacated the roost site.

6.2.8 Ring-tailed Cat

Potential Impacts

Potential denning habitat for ring-tailed cat occurs in riparian brush and logs adjacent to the Trinity River in the study area. The proposed project could adversely affect ring-tailed cat if a maternity or natal den is present in the project area during construction. Potential direct effects include harassment, injury, and mortality as a result of vegetation removal activities. The project may also result in a small, temporary reduction of habitat for ring-tailed cat. However, due to the limited nature of the work and regional occurrence of similar habitats, temporary habitat loss is not expected to result in an adverse effect on this species.

Avoidance and Minimization Measures

Through careful pre-construction planning, the construction disturbance zone in riparian habitat should be minimized to the extent practicable. Riparian vegetation located near construction areas shall be flagged and avoided during construction and equipment and materials should be stockpiled outside of riparian habitat.

If vegetation removal or construction activities occur outside of the breeding season for ring-tailed cat (February 1 through May 1), no pre-construction surveys for natal or maternity dens would be necessary as ring-tailed cats would be able to easily move away from construction activities on their own. If the breeding season cannot be avoided the following measure is recommended.

If tree and/or snag removal are to occur in suitable habitat for ring-tailed cat during the breeding season, a qualified biologist will conduct a pre-construction survey for potential natal or maternity dens no more than two weeks prior to initiation of tree and/or snag removal activities. If an active den is found, the biologist in coordination with CDFW, will determine the extent of a construction-free buffer zone to be established around the den until the mother and young have dispersed.

6.2.9 Migratory Birds and Raptors

Potential Impacts

Potential nesting habitat for migratory birds and raptors occurs throughout the study area. Adverse impacts on migratory birds and raptors could occur if they are actively nesting in the project area during construction. Construction disturbance during the nesting season could result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Loss of fertile eggs or any activities resulting in nest abandonment, may adversely affect nesting birds. The project may also result in a small temporary reduction of nesting or foraging habitat for birds. However, due to the limited nature of the work and regional occurrence of similar habitats, temporary habitat loss is not expected to result in an adverse effect on migratory birds and raptors.

Avoidance and Minimization Measures

The following measures are recommended to avoid or minimize the potential for project related impacts on migratory birds:

- Project activities should be scheduled to avoid the nesting season to the extent feasible. The typical nesting seasons in northern California extends from February 15 through September 15. Thus, if project activities can be scheduled to occur outside of the nesting season, no impacts would be expected. If the nesting season cannot be completely avoided, the following measures shall be implemented.
- A qualified biologist shall conduct a minimum of one pre-construction survey for nesting migratory birds and raptors within the project area and a 250-foot buffer around the project area. The survey should be conducted no more than 14 days prior to the initiation of activities in any given area. The pre-construction survey should be used to ensure that no active bird nests occurring within or immediately adjacent to the project would be disturbed during project implementation. If an active nest is found, a qualified biologist should determine the extent of a construction-free buffer zone to be established around the nest. If it is anticipated that project activities will encroach on the buffer, a biological monitor will be present to ensure that the nesting birds are not disturbed by the activities.
- If vegetation is to be removed by the project and all necessary approvals have been obtained, potential nesting substrates (e.g., trees and shrubs) that will be removed by the project should

be removed before the onset of the nesting season, if feasible. This will help preclude nesting and substantially decrease the likelihood of direct impacts.

6.3 Riparian Woodland Habitat

Potential Impacts

Riparian woodland habitat occurs in the study area as black cottonwood, and willow trees and shrubs along the Trinity River. It also occurs in the vicinity of the sewage treatment pond and Dack Creek at the northern end of the study area. The proposed project may result in permanent and/or temporary impacts on riparian woodland as a result of constructing the new sewer lines.

As previously mentioned CDFW sometimes applies its regulatory jurisdiction under Section 1600 to extend to the outer boundary of the 100-year floodplain of a stream or river. If project related disturbances are proposed within the 100-year floodplain, CDFW may condition its issuance of a Streambed Alteration Agreement in a way that addresses concerns for project-related impacts on riparian woodland and other sensitive resources within the 100-year floodplain.

Avoidance and Minimization Measures

The following measures are recommended to avoid or reduce impacts on riparian habitat in the study area that could result from project implementation:

- The extent of construction disturbance within riparian habitat shall be minimized through careful pre-construction planning.
- Exclusionary fencing shall be installed along the boundaries of all riparian areas to be avoided to ensure impacts on riparian vegetation outside of the construction area are minimized. All construction-related pedestrian and vehicle/equipment travel shall be prohibited from fenced off areas. The exclusionary fencing shall be inspected and maintained on a regular basis throughout project construction and removed upon project completion.
- Riparian areas temporarily disturbed shall be replanted with native riparian species known to occur in the area.
- In addition to the measures described above, measures provided in Section 2.7 are also recommended to avoid and/or minimize effects on riparian habitats.

6.4 Habitat Connectivity and Deer Critical Winter Range

Potential Impacts

The Trinity River and riparian along the banks provide an environmental corridor for a variety of fish and wildlife species. Some construction activities would occur adjacent to the Trinity River, but would be relatively small, localized, and outside of the wetted channel. Suitable alternative terrestrial travel corridors occur in the area; therefore no potential impacts on terrestrial wildlife moving through the area are anticipated. Because no work would occur within the wetted channel during project construction, there would be no potential impact on fish passage through the study area.

The study area occurs in critical winter range for black-tailed deer (Weaverville herd). Critical winter ranges occur at lower elevations and in California are often less abundant than summer ranges due to increased human activity and land-uses at lower elevations. The Weaverville herd lost a substantial portion of its winter range when the construction of Trinity and Lewiston dams inundated approximately 17,000 acres of winter range for this herd (Trinity County 1987). As a result, the Weaverville herd are likely more concentrated in wintering habitats than previously. Because the new pipeline and other system improvements would mostly be constructed in existing roadways, road shoulders, and other previously disturbed areas, no potential impacts on black-tailed deer wintering range are anticipated.

Avoidance and Minimization Measures

No avoidance and/or minimization measures are recommended, as no potential impacts are anticipated.

6.5 Waters of the United States

Potential Impacts

A total of 1.066 acres of potential waters of the United States were mapped within the study area and include: riparian wetland (0.407 acre), seasonal wetland (0.062 acre), seep spring wetland (0.415 acre), vegetated ditch (0.037 acre, 785 linear feet), intermittent stream (0.014 acre, 279 linear feet), and perennial stream (0.131 acre, 74 linear feet). Six wastewater treatment ponds (1.576 acres), considered excluded features, were also mapped within the study area. Potential waters of the United States and excluded features in the study area are shown in Figure 5.

No permanent impacts on waters of the United States are anticipated as a result of project implementation. However, the project would result in temporary impacts on up to 0.011 acre of seep spring wetland during the abandonment and removal of Lift Station 2. Potential impacts on waters of the United States are shown in Figure 5.

Avoidance and Minimization Measures

In addition to implementation of measures described in Section 2.7.4, the following measures are recommended to avoid or minimize the potential for project-related impacts on waters of the United States.

- To the extent practicable, the discharge of dredged or fill material into waters of the United States, including wetlands, shall be avoided
- Prior to initiating work involving the disturbance or placement of dredge or fill materials into jurisdictional waters (to be determined by the Corps), the LCSD shall obtain all regulatory permits and authorizations required by regulatory agencies including, but not necessarily limited to, the Corps, NCRWQCB, and CDFW.
- To the maximum extent practicable, activities that increase the erosion potential in the project area shall be restricted to the relatively dry summer and early fall period to minimize the potential for rainfall events to transport sediment to surface water features. If these activities

must take place during the late fall, winter, or spring, then temporary erosion and sediment control structures shall be in place and operational at the end of each construction day and maintained until permanent erosion control structures are in place.

- Any monitoring, maintenance, and reporting required by regulatory agencies (i.e., Corps, NCRWQCB, and CDFW) shall be implemented and completed. All measures contained in the permits or associated with agency approvals shall be implemented.
- Stockpiles that are to remain on site through the wet season shall be protected to prevent erosion (e.g., silt fence, straw bales).
- All waters of the United States that are temporarily affected by project construction shall be restored as close as practicable to original contours and conditions within 10 days of completion of construction activities.

6.6 Waters of the State

Potential Impacts

Waters of the State include all waters of the United States and features that do not qualify as waters of the United States. A total of 2.286 acres of potential waters of the State that do not qualify as waters of the United States were mapped within the study area including six wastewater treatment ponds (totaling 1.542 acres) and riparian vegetation buffer areas (0.692 acre). Potential waters of the State in the study area are shown in Figure 5.

No permanent impacts on waters of the State are anticipated as a result of project implementation. However, the project would result in temporary impacts on up to 0.027 acre of riparian vegetation buffer areas included in the mapped waters of the State during the abandonment and removal of Lift Station 2. Potential impacts on waters of the State are shown in Figure 5.

Changes to the existing wastewater treatment ponds were not considered to result in temporary impacts to waters of the State as discharges to community sewer systems are typically not regulated by Regional Water Quality Control Boards (State Water Resources Control Board 2017).

Avoidance and Minimization Measures

In addition to implementation of measures described in Section 2.7.4, the following measures are recommended to avoid or minimize the potential for project-related impacts on waters of the State.

- To the extent practicable, the discharge of dredged or fill material into waters of the State, including wetlands, shall be avoided
- Prior to initiating work involving the disturbance or placement of dredge or fill materials into waters of the State, the LCSD shall obtain all regulatory permits and authorizations required by regulatory agencies including, but not necessarily limited to, the Corps, NCRWQCB, and CDFW.

- To the maximum extent practicable, activities that increase the erosion potential in the project area shall be restricted to the relatively dry summer and early fall period to minimize the potential for rainfall events to transport sediment to surface water features. If these activities must take place during the late fall, winter, or spring, then temporary erosion and sediment control structures shall be in place and operational at the end of each construction day and maintained until permanent erosion control structures are in place.
- Any monitoring, maintenance, and reporting required by regulatory agencies (i.e., Corps, NCRWQCB, and CDFW) shall be implemented and completed. All measures contained in the permits or associated with agency approvals shall be implemented.
- Stockpiles that are to remain on site through the wet season shall be protected to prevent erosion (e.g., silt fence, straw bales).
- All waters of the State that are temporarily affected by project construction shall be restored as close as practicable to original contours and conditions within 10 days of completion of construction activities.

6.7 Noxious Weeds and Invasive Plant Species

Potential Impacts

Four invasive plant species were observed in the project area during field visits: medusa head, Himalayan blackberry, yellow-star thistle, and Spanish broom. Project construction could result in the spread of non-native and invasive plant species by transporting seeds, root stock, and/or rooting plant material of non-native and invasive species into new areas.

Avoidance and Minimization Measures

The following avoidance and minimization measures are recommended during project construction to reduce the potential spread of non-native and invasive species:

- All equipment used for off-road construction activities will be weed-free prior to entering the project site.
- If project implementation calls for mulches or fill, they will be weed free.
- Any invasive plant species removed during construction will be properly disposed of to ensure the species does not spread to other areas.
- Any seed mixes or other vegetative material used for re-vegetation of disturbed sites will consist of locally adapted native plant materials to the extent practicable.

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