Summary Form for Electronic Document Submittal

Lead agencies may include 15 hardcopies of this document when submitting electronic copies of Environmental Impact Reports, Negative Declarations, Mitigated Negative Declarations, or Notices of Preparation to the State Clearinghouse (SCH). The SCH also accepts other summaries, such as EIR Executive Summaries prepared pursuant to CEQA Guidelines Section 15123. Please include one copy of the Notice of Completion Form (NOC) with your submission and attach the summary to each electronic copy of the document. 2019069072 SCH #: Project Title: Lower Clear Creek Floodplain and Stream Channel Restoration Project, Phase 3C Lead Agency: Central Valley Regional Water Board Email: Guy.Chetelat@waterboards.ca.gov _____ Phone Number:<u>530.224.49</u>97 Project Location: Redding, CA Shasta County County City Project Decription (Proposed actions, location, and/or consequences). Reclamation and BLM's Proposed Action Alternative to restore aquatic habitat in the Lower Clear Creek channel is to construct a channel plug and redirect flows to a new channel constructed along the historic alignment with a variety of islands, riffles, side channels, and backwater alcoves. The project includes the following design elements to enhance riverine and riparian functions, and aquatic habitats: • Re-alignment of the stream channel to the historic alignment to lengthen the channel, increase sinuosity and establish a more complex channel with more suitable stream bed materials for spawning; · Channel splits to increase shoreline area for fry habitat; • Creation of additional channels and alcoves inundated at 200 cfs (cubic feet per second) and greater flows to expand fish rearing habitat within normal Clear Creek hydrology; Creation of an off-channel pond with adjacent seasonal wetlands to increase off-channel rearing habitat; Addition of large woody debris to increase channel complexity and improve rearing habitat; Maintain seasonal wetlands

Increase and enhance endemic existing riparian, emergent, and wetland vegetation;

Creation of floodplain surfaces at suitable elevations to increase natural recruitment of cottonwoods.

• Creation of a recreation trail to connect Phase 3C and Phase 3B project area.

Identify the project's significant or potentially significant effects and briefly describe any proposed mitigation measures that would reduce or avoid that effect.

See attached

Contact Name: Guy Chetelat

If applicable, describe any of the project's areas of controversy known to the Lead Agency, including issues raised by agencies and the public.

N/A	N	/A
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Provide a list of the responsible or trustee agencies for the project.

Bureau of Reclamation and the Bureau of Land Management

Supplemental Information for Summary Form for Electronic Document Submittal

Identify the project's significant or potentially significant effects and briefly describe any proposed mitigation measures that would reduce or avoid that effect.

Air Quality - temporary sources of fugitive dust emissions, ozone precursors and PM10. Effects would be reduced by:

- Complying with SCAQMD's Rule 3-16 and Rule 3-28.
- Using diesel-fueled equipment would be certified tier 2 or better and use ultra-low sulphur diesel fuel.
- All construction equipment would be maintained and properly tuned in accordance with manufacturers' specifications.
- Equipment idling would be minimized, and off-road equipment would shut off engines if idling for longer than five minutes.
- Disturbed areas of the Project site that would not be inundated by Clear Creek flows would be revegetated, which would offset CO2 emissions in the long-term.

Biological Resources - temporary effects to fish, valley elderberry longhorn beetle, raptors, special statues birds, bats, and vegetation. Measures to be implemented include:

- FISH-1. Fish Rescue Operations:
 - Reclamation and BLM, in coordination and consultation with the NMFS, USFWS and CDFW, would ensure that at least one permitted fish biologist is on-site to implement fish rescue operations through the use of seining, or electrofishing.
 - The most appropriate method of rescuing and relocating stranded fish from areas to be isolated from the main channel and have ponded water removed would be determined by fish biologists.
 - Initially, seining would be the preferred procedure. However, if electrofishing were deemed appropriate and necessary for the efficient and successful removal of fish, the NMFS electrofishing guidelines (NMFS 2000) would be strictly followed.
 - The fish rescue team would be comprised of qualified fishery biologists with professional experience using seines and electrofishing equipment. Up to two fish rescue teams of two to four persons would be used to facilitate efficient fish removal, reduce handling time, lower physiological stress, and reduce potential mortality rates.
 - If electrofishing were employed, a minimum of three passes through each stranding location would be conducted until most of the fish are removed.
 - Captured juvenile fish would be placed in 5-gallon buckets and segregated by size classes throughout captivity. At the end of each pass, captured fish

would be transferred into buckets with aerated water or into in-river holding tanks (e.g., buckets with small holes allowing freshwater infiltration). After fish are fully recovered, they would be released to the main flowing lower Clear Creek channel. All captured adult fish would be placed in appropriately-sized containers and immediately transported and released to the main flowing lower Clear Creek channel. All rescued fish would be counted, measured, and recorded by species at a minimum if they appear to be stressed the number and run-type of Chinook salmon and steelhead captured, and the number of fish accidentally killed prior to release, would be reported to NMFS and CDFW.

- FISH-2. NMFS and CDFW determined the in-water work window of July 1 to September 30 to minimize impacts to anadromous fish. This in-water work period is when flows in Clear Creek are lowest, stream temperatures are high and densities of anadromous fish are at their lowest. In-water work would not occur outside of this window, unless approved by NMFS and CDFW. Reclamation coordinated with NMFS and CDFW to install the stream crossing in the backwater channel for initial equipment access for vegetation removal June 1, and to allow removal of the stream crossings by September 30, with the possibility of extending this window to October 14 with NMFS and CDFW approval.
- FISH-3. The contractor would design all stream crossings to ensure that conditions are maintained for effective upstream and downstream fish passage, at all times and under all appropriate flow conditions.
- FISH-4. Prior to unavoidable in-water activities, equipment or materials would be operated/placed slowly and deliberately to alert and cause any adult and juvenile salmonids to shift away from the activity area. This would be repeated after extended periods of inactivity that give fish time to reoccupy the site.
- FISH-5. In-water activities, such as construction of the proposed channel alignment, new alcoves, and the logjam would be isolated from Clear Creek by constructing diversion berms. Turbidity curtains would be installed to contain any turbid water. Fish rescue and relocation operations would occur prior to pumping of ponded water or construction activities.
- FISH-6. Water intake pumps used to pump ponded water from isolated work areas prior to in-water construction would be screened with 3/32-inch mesh, complying both NMFS's 1997 Fish Screening Criteria for Anadromous Salmonids and CDFW's 2000 Fish Screening Criteria (with steelhead present) requirements. Additionally, the intake pumps will be covered with a velocity reducing device to further prevent debris and aquatic organisms from entering the pump system.
- VELB-1. A qualified biologist would provide training for all contractors, work crews, and any onsite personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance.
- VELB-2. When possible, a minimum setback of 20 feet from the dripline of all elderberry shrubs would be established. These areas would be fenced, flagged, and maintained during construction. Due to the proximity of the elderberry shrubs to the creek, it would

be difficult to observe the required 20-foot radius buffer zone for protection of all the elderberry shrubs along portions of the creek restoration areas. For those rare instances when 20-foot minimum buffer zone are not possible, the Reclamation is proposing a 14-foot radius or larger buffer zone at these locations, using concrete barriers for protection.

- VELB-3. All placement of barriers to protect elderberry shrubs adjacent to the construction areas shall be completed prior to construction activity.
- VELB-4. Herbicides and insecticides will not be used within the elderberry buffer zones discussed in VELB-2. Any herbicides and insecticides used in other areas of the project area will abide with the Redding BLM's Integrated Vegetation Management Plan Environmental Assessment (DOI-BLM-CA-N060-2016-0021-EA).
- VELB-5. A qualified biologist would monitor the work area at appropriate intervals to assure that all avoidance and minimization measures are implemented. The amount and duration of monitoring would depend on the project specifics and would be coordinated with the Service biologist.
- BIRD-1. Raptor Protection: Any tree removal, vegetation clearing, or the onset of potentially disturbing construction activities shall occur between September 1 and January 1 (outside of the nesting season for raptors with potential to occur within, or in the vicinity of the project site). Note: Also see measure WILD-1.
- BIRD-2. Surveys for active raptor nests to determine potential presence of nesting raptors will occur between January and March and be conducted by a qualified biologist. If an active nest is found, avoidance measures, such as observance of buffers, would be determined in consultation with USFWS and/or CDFW and implemented. The Raptor Nesting Season is January 1 through August 31. See also BIRD-3
- BIRD-3. Non-raptor/migratory bird species: If Project activities, including vegetation removal, cannot be done outside of the migratory bird nesting season in this region (March 1 to July 31), the following measures would be implemented:
 - Pre-Project surveys for active migratory bird nests within 500 feet of activity areas would occur up to 7 days prior to construction;
 - If active bird nests are observed, measures from the USFWS *Nationwide Standard Conservation Measures* for migratory birds would be implemented. These measures include establishment of a 250-foot buffer, unless a qualified biologist determines that smaller buffers would be sufficient to avoid impacts to nesting birds. Factors to be considered for determining buffer size would include: the presence of natural buffers provided by vegetation or topography; the bird species affected; nest height; locations of foraging territory; and baseline levels of noise and human activity. The buffer would be monitored by a biological monitor and maintained until July 31, or until nestlings fledge. NOTE: No nests area allowed to be removed during the nesting period, as per Fish and Game Code.3503.5.
 - If it is determined that work needs to occur within the 500-foot avoidance buffer, a qualified biologist would determine, based on location and activity specifics, an appropriate minimum buffer zone. The nest and attending adults would then be monitored during Project activities within

the 250-foot buffer. If at any time the qualified biologist determines that Project activities may have an adverse effect on nest-success or bird health, Project activities would immediately halt, and the 250-foot buffer would be re-established.

- Project phasing would be sequenced to begin in areas with fewer known nest sites and proceed to higher density sites after the nesting season ends July 31.
- BIRD-4. If Project activities occur during the western DPS yellow-billed cuckoo nesting season (June 1 to August 15), a protocol survey would be performed by a biologist with an ESA Section 10(a)(1)(A) permit at the start of the bird's nesting season, prior to the start of activities. If an active western DPS yellow-billed cuckoo nest is observed, the following measures would be implemented:
 - Construction fencing would be installed around the nest to create a 250-foot buffer from activities. The 250-foot buffer is not to be reduced;
 - A USFWS-approved biologist would monitor for any potential disturbance to the bird caused by the Project, until the nest is deemed no longer active (until August 15 when western yellow-billed cuckoo nesting season ends). If Project activities are determined to be adversely affecting the nesting birds or fate of the nest, the biologist would have the authority to stop activities and would contact USFWS to determine appropriate measures to continue construction.
- BIRD-5. Mature riparian trees and vegetation, and contiguous patches of riparian habitat would be avoided as much as feasible to maintain existing riparian habitat in the Project area.
- WILD-1. Prior to construction, a biologist will inspect the project site for signs of denning by ringtails. If ringtails are found to be denning, construction activities will be suspended until a qualified biologist, in consultation with CDFW, can establish appropriate measures to protect ringtail.
- BAT-1. Surveys for special-status bat species by a qualified bat biologist would be performed prior to vegetation removal during bat maternity season (April May 1 August 31), no less than 7 days and no more than 14 days prior to vegetation removal.
- BAT-2. If active special status bat species are detected, efforts would be made to locate maternity roosts. If maternity roosts are found, a buffer determined by a biologist would be established and observed until August 31, or the roost is no longer active.
- BAT-3. If roosts are determined to be present and must be removed, the bats would be excluded from the roosting site before it is removed. Exclusion methods may include use of one-way doors at roost entrances (bats may leave, but not re-enter), or sealing roost entrances when the site can be confirmed to contain no bats.

BAT-4. All vegetation clearing within potential western red bat roosting habitat (contiguous woody riparian habitat in stands at least 150 ft. by 150 ft. or larger, particularly those containing trees larger than 12 inches dbh and that have crevices and holes) shall be conducted between August 31 and May 1. These dates correspond to the

time period when bats would not be caring for non-volant young and have not yet entered torpor. Tree removal may occur prior to August 31st based upon site-specific tree removal plan approved by CDFW. The plan shall consider or include the following: Monitoring of the affected trees shall be conducted using bat detection equipment within 5 days of tree removal. If red bats are not present, tree removal can proceed. If red bats are present, a dusk survey on the night prior to tree removal may help confirm the use of that tree by bats. If bats are potentially using the tree, a qualified biologist shall monitor removal/trimming of trees that provide suitable bat roosting habitat. Tree removal/trimming shall occur over two consecutive days. On the first day in the afternoon, limbs and branches shall be removed using chainsaws only. Limbs with cavities, crevices, or deep bark fissures shall be avoided, and only branches or limbs without those features shall be removed. On the second day, the entire tree shall be removed. Prior to tree removal/trimming, each tree shall be shaken gently and several minutes shall pass before felling trees or limbs to allow bats time to arouse and leave the tree. The biologist shall search downed vegetation for dead or injured bat species and report any dead or injured special-status bat species to CDFW. All bat observations should be reported to CDFW.

- TURT-1. Prior to standing water removal or construction of the stream crossing, the pond and backwater channel would be surveyed by a qualified biologist to relocate northwestern pond turtles that may be present. Any turtles that are discovered would be captured and moved to suitable habitat areas outside the action area, preferably downstream. All turtles would be relocated the same day they are captured and as quickly as possible to reduce stress on the animal.
- VEG-1. Impacts to existing vegetation, especially mature riparian trees and contiguous communities, would be avoided to the extent feasible.
- VEG-2. Disturbed areas would be revegetated with native plant species.
- VEG-3. The riparian and wetland restoration would follow the restoration plan prepared by a contracted botanist/riparian ecologist, in coordination with USFWS, Reclamation, and BLM.(North State Resources 1999).
- VEG-4. Prior to arriving at the construction area, all equipment used for the Project would be thoroughly washed off-site to remove invasive NIS plant seed, stems, etc. and inspected to prevent transfer of aquatic invasive species, such as quagga mussel and New Zealand mud snail.
- VEG-5. Sediment would be salvaged to support revegetation efforts.
- VEG-6. Any off-site rock, gravel, or sediments would be from NIS plant seed-free source(s).
- Waters of the U.S. temporary fill, permanent fill, and permanent excavation below the OHWM of Clear Creek, which is a water of the U.S. and State. Measures to be implemented include:

- WOUS/S-1. Wetlands located near construction areas, and at risk of inadvertent disturbance, would be protected with high-visibility fencing installed 15 feet from the feature.
- WOUS/S-2. Storm water runoff would be directed away from wetland features and waters of the U.S./State with water bars or other storm water controls.
- WOUS/S-3. Temporarily impacted waters of the U.S./State would be restored to preproject grade and revegetated within 30 days of project completion, according to a revegetation plan prepared by Reclamation and BLM.
- WOUS/S-4. Existing access roads would not be widened or improved. Ephemeral drainages and seeps along these roads would be avoided.
- Hazards and Hazardous Materials the project would utilize potentially hazardous materials (e.g., oil and fuels) associated with the operation of vehicles and construction equipment during construction. Hazards would be minimized through the implementation of:
 - HAZ-1. The contractor would develop and implement a Spill Prevention, Control and Countermeasures Plan (SPCCP) with the CV Water Board prior to the onset of construction to regulate the use of hazardous materials, such as petroleum-based products for equipment fuel and lubricants. The SPCCP would include measures to be implemented onsite that would keep construction and hazardous materials out of waterways and drainages. The SPCCP would include provisions for daily checks for leaks; hand-removal of external oil, grease, and mud; and the use of spill containment booms for refueling.
 - HAZ-2. Soils contaminated with fuels or chemicals would be disposed of in an approved landfill to prevent potential discharge to surface waters.
 - HAZ-3. Temporary diversion berms would be used to isolate construction areas from flowing waters where feasible.
 - HAZ-4. All construction equipment refueling and maintenance would be restricted to designated staging areas located away from streams and sensitive habitats.
 - On-site fuels and toxic materials would be placed or contained in an area protected from direct runoff, outside of water bodies, such as in the Alternative Stage, Stockpile, Processing Area.
 - Spill kits would be maintained at fueling areas and other appropriate locations.
 - HAZ-5. Signs would be placed along the road, warning of large equipment entering/exiting Clear Creek Road.
- Hydrology and Water Quality Construction activities have the potential to increase erosion, sedimentation and disturb heavy metals such as mercury. Measures to avoid and minimize the potential for adverse effects of turbidity or resuspension of sediment during instream work include the following:
 - TURB-1. The contractor would develop and implement a Storm Water Pollution Prevention Plan (SWPPP) in coordination with the CV Water Board and other regulatory agencies. The SWPPP would include measures to minimize erosion and storm water

sediment runoff to Clear Creek, such as sediment containment devices, protection of construction spoils, and proper installation of diversion berms. This may include but is not limited to straw bales, straw wattles and silt fences around ground disturbance and stockpiles.

- TURB-2. During in-water work, turbidity would be monitored to remain within criteria established by the CV Water Board in the Clean Water Act, Section 401 Water Quality Certification obtained for the Project. Requirements may include, but not be limited to the following:
 - In-water work would occur during periods of low flow and no precipitation.
 - Monitoring turbidity levels so that activities do not cause turbidity increases in surface water to exceed:
 - Where natural turbidity is between 0 and 5 Nephelometric Turbidity Units (NTUs), increases shall not exceed 1 NTU;
 - Where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent;
 - Where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs; and
 - Where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.
 - An additional 15 NTUs exceedance over ambient conditions during in-water construction may be granted along with appropriate averaging periods that may be applied provided that beneficial uses would be fully protected, as approved by CV Water Board staff.
 - Activities would not cause settleable matter to exceed 0.1 mL/L in surface waters as measured in surface waters within approximately 300 feet downstream of the Project.
 - Reclamation would notify the CV Water Board immediately if the above criteria for turbidity, settleable matter or other water quality objectives are exceeded.
- TURB-3. A standing water removal plan would be prepared and implemented by the contractor, as approved by the CV Water Board. Removed water is anticipated to either be pumped to water trucks to be used for dust abatement throughout the Project site or discharged to a settling basin excavated on-site to allow infiltration or evaporation. The settling basin would be located east of the existing pond, at least 50 feet away from the main Clear Creek channel, and pumping velocities would be adjusted to ensure discharge does not exceed infiltration or evaporation. A berm and silt fence would be constructed around the settling basin to ensure no runoff water discharges into waters of the U.S/State. The settling basin would be located within the footprint of the proposed channel alignment; therefore, settled sediments would eventually be excavated during channel creation, and the area may be covered with native material 2.5 to 5 inches in diameter.

- TURB-4. Mature riparian vegetation would be avoided as much as feasible. All areas of ground disturbance would be revegetated with native plant species. Vegetative cover reduces the potential for erosion and storm water sediment runoff.
- TURB-5. Construction of the new channel alignment would be isolated from the existing channel by first constructing diversion berms and turbidity curtains before working inwater and potentially causing turbidity in the creek.
- TURB-6. Either diversion berms would be lined with a plastic material or turbidity curtains would be used, as necessary, around in-water work areas to minimize turbidity such as for constructing the alcoves, temporary stream crossings, and the logjam.
- TURB-7. Temporary stream crossings would be constructed to have minimal effect on water quality and flows; they could consist of either a railroad flat car bridge or clean spawning gravel and cobble with culverts, or something similar. Following completion of restoration activities, any spawning gravel used for crossings would either be removed from the stream channel or spread evenly across the bottom of the channel.
- TURB-8. Removal of diversion berms and allowing of creek flows to occupy the new channel would occur gradually to minimize turbidity downstream.
- TURB-9. Disturbed areas not revegetated immediately after construction completion and that would be monitored under an adaptive management plan for revegetation would be stabilized with erosion control mats or similar devices until the next revegetation period. The next anticipated revegetation period is two springs after construction completion.

Noise - Construction activities temporarily increase noise levels in and near the project area. Measures to minimize noise include the following:

- NOISE-1. Construction activities would be limited to 7 a.m. to 7 p.m., Monday through Friday, with the option of working through Saturday.
- NOISE-2. The inhabitants of the residence near the construction area would be notified in advance about the proposed construction timing and duration.
- NOISE-3. Reclamation would require placement of all stationary noise-generating equipment as far away as feasibly possible from sensitive noise receptors or in an orientation minimizing noise impacts (e.g., behind existing barriers, storage piles, unused equipment).
- NOISE-4. All construction equipment would be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds would be closed during equipment operation.
- NOISE-5. All motorized construction equipment would be shut down when not in use to prevent idling.
- NOISE-6. The contractor would designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting

too early, bad muffler, etc.) and would require that reasonable measures warranted to correct the problem be implemented. A flyer with the telephone number for the disturbance coordinator would be provided to nearby residences and posted at the construction administration area to allow for reporting of excessive noise.

Traffic - Construction activities temporarily increase traffic in and near the project area. Measures to minimize traffic include the following:

- Meet requirements of Reclamation Safety and Health Standards Sections 9 and 20; and Manual on Uniform Traffic Control Devices, Part 6.
- Provide cones, delineators, concrete safety barriers, barricades, flasher lights, danger signals, signs, and other temporary traffic control devices, as required, to protect work and public safety on roads and waterways.
- Provide flaggers and guards as required to prevent accidents and damage or injury to passing traffic.
- Do not begin work along public or private roads until proper traffic control devices for warning, channeling, and protecting motorists are in place in accordance with reviewed traffic control plan.
- Maintain traffic flow on roads and waterways and conduct implementation operations to minimize obstruction and inconvenience to public traffic in accordance with reviewed plan.
- Protect roads closed to traffic with effective barricades and warning signs.
- Illuminate barricades and obstructions from sunset to sunrise.
- Remove traffic control devices on as-needed basis.