



— BUREAU OF —
RECLAMATION

Environmental Assessment

**West False River Temporary Drought Salinity Barrier
Removal**

CGB-EA-2021-040

Mission Statements

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated Island Communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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Section 1 Introduction

Background

The Bureau of Reclamation (Reclamation) proposes to provide funding to the California Department of Water Resources' (DWR) action to remove the temporary drought salinity barrier (temporary barrier) across West False River (Proposed Action).

The current water year is considered a critical year based on the current, degraded hydrological conditions. DWR installed the temporary barrier to reduce the intrusion of high-salinity water into the central and south Delta in order to protect water supplies and beneficial uses of the Delta during the current drought. Installation of the temporary barrier is an effective tool in reducing the intrusion of salt water into the central and south Delta. Construction and placement of the temporary barrier across West False River commenced in June 2021.

The Proposed Action is located on West False River, approximately 0.4 mile upstream of the confluence with the San Joaquin River, Latitude 38.057617°, Longitude -121.671276°, Contra Costa County, California (Figure 1). DWR contractors will begin removing rock from the temporary barrier at West False River with barge-mounted cranes with clamshells and/or dragline buckets. Rock will be removed from the center of the river in a uniform manner and then near the levee to prevent levee scour. The barrier will be completely removed no later than November 30 and it is anticipated that removal will occur continuously for up to 60 days.

The U.S. Army Corps (Corps) is the federal lead agency for implementation of the installation and removal of the temporary barrier, and has been designated federal lead for Reclamation's Proposed Action for Endangered Species Act (ESA) Section 7 and the National Historic Preservation Act (NHPA). The Corps has completed informal consultation with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) under Section 7 of the ESA, and will complete formal consultation once the emergency situation has ended. The Corps has also completed compliance with Section 106 of the NHPA for the Proposed Action. Reclamation will complete consultation with Native American tribes and organizations for its action of partially funding the removal of the drought barrier. Reclamation incorporates both consultations as part of this Environmental Assessment's (EA) analysis.

This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) (42 United States Code (USC) §4321 et seq.), the Council on Environmental Quality Regulations for implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations (CFR) Parts 1500-1508), and the Department of the Interior regulations for the Implementation of the NEPA (43 CFR Part 46).

Need for the Proposal

The need for the Proposed Action is to provide funding for DWR's action to remove the temporary barrier, which was installed to help reduce the intrusion of high-salinity water into the central and south Delta in order to protect water supplies and beneficial use of the Delta during the current drought.

Scope

This EA has been prepared to examine the potential impacts of approving a funding agreement with DWR for the removal of a temporary barrier in West False River (Proposed Action). Figure 1 depicts the location of the temporary barrier.



Figure 1: West False River Temporary Barrier Location

Section 2 Alternatives Including Proposed Action

No Action Alternative

Under the No Action Alternative, Reclamation will not provide funding to DWR to remove a temporary barrier in West False River. DWR would need to find alternative funding sources to complete the removal of the temporary barrier.

Proposed Action

Reclamation proposes to provide funding to DWR's action to remove the temporary barrier across West False River. Reclamation's funding will depend upon appropriations and entering into a mutually acceptable agreement with DWR for funding.

The physical rock-fill barrier consists of approximately 84,000 cubic yards of embankment rock constructed in a trapezoid-shaped barrier approximately 800 feet long by 200 feet wide at the base and 12 feet wide at the top. The barrier is made of well-graded 18-inch-minus embankment rock. The footprint of the barrier extends 2.75 acres within the waterway, from the Bradford Island levee on the north side to the Jersey Island levee on the south side and includes a 0.37-acre staging area on the Jersey Island levee. The barrier is currently installed in the West False River channel. The barrier would be removed no later than November 30, the beginning of the rainy season and increased flood risk.

The removal methodology is based partially on the methodology from the 2015 barrier removal. First, DWR contractors will mobilize their equipment and crew, establish a staging area adjacent to Jersey Island Road (i.e., on the left bank), and install silt and exclusion fencing. The staging area will be used only for parking, portable toilets, and a job trailer. DWR may also utilize an existing bulkhead facility at the United States Coast Guard Rio Vista Station.

DWR contractors will begin removing rock from the temporary barrier at West False River with barge-mounted cranes with clamshells and/or dragline buckets. Rock will be removed from the center of the river in a uniform manner and then near the levee to prevent levee scour. For construction activities during non-daylight hours, contractors will use light plants, situated on the levees and/or barges, as needed. Lighting will be directed downward toward construction activities to the extent practical.

DWR contractors will install fencing on the levees near the embankment rock to prevent trespassers and to impede ground squirrel movement. They will also install float lines, signs, and warning buoys on both sides of the barrier.

DWR contractors will transport the rock on barges from the project site to an off-loading site, where it will be transferred onto dump trucks using conveyors, excavators, and loaders and then hauled to a stockpile location (outside of waters of the United States), shown in Figure 2.

Alternatively, the contractors may retain the rock, storing and using it in accordance with their own separate permits and approvals at the San Rafael Quarry, also shown in Figure 2. As directed by DWR, the contractor could store some rock at the Rio Vista site and retain some rock.

Upon complete removal of the rock barrier, DWR contractors will remove the concrete anchor blocks, float lines, signs, and warning buoys. Because the buoys and signs are anchored by concrete blocks, the contractors will remove these structures using barge-mounted cranes. The contractors will be required to retain or properly dispose of these materials.

The barrier will be completely removed no later than November 30 and the affected areas will be restored to approximate pre-project conditions and revegetated as appropriate. To prevent giant garter snakes from entering the staging area, initial ground disturbance activities, such as mobilization and installation of silt and exclusion fencing will occur before October. It is anticipated that removal of the barrier will occur continuously for up to 60 days.

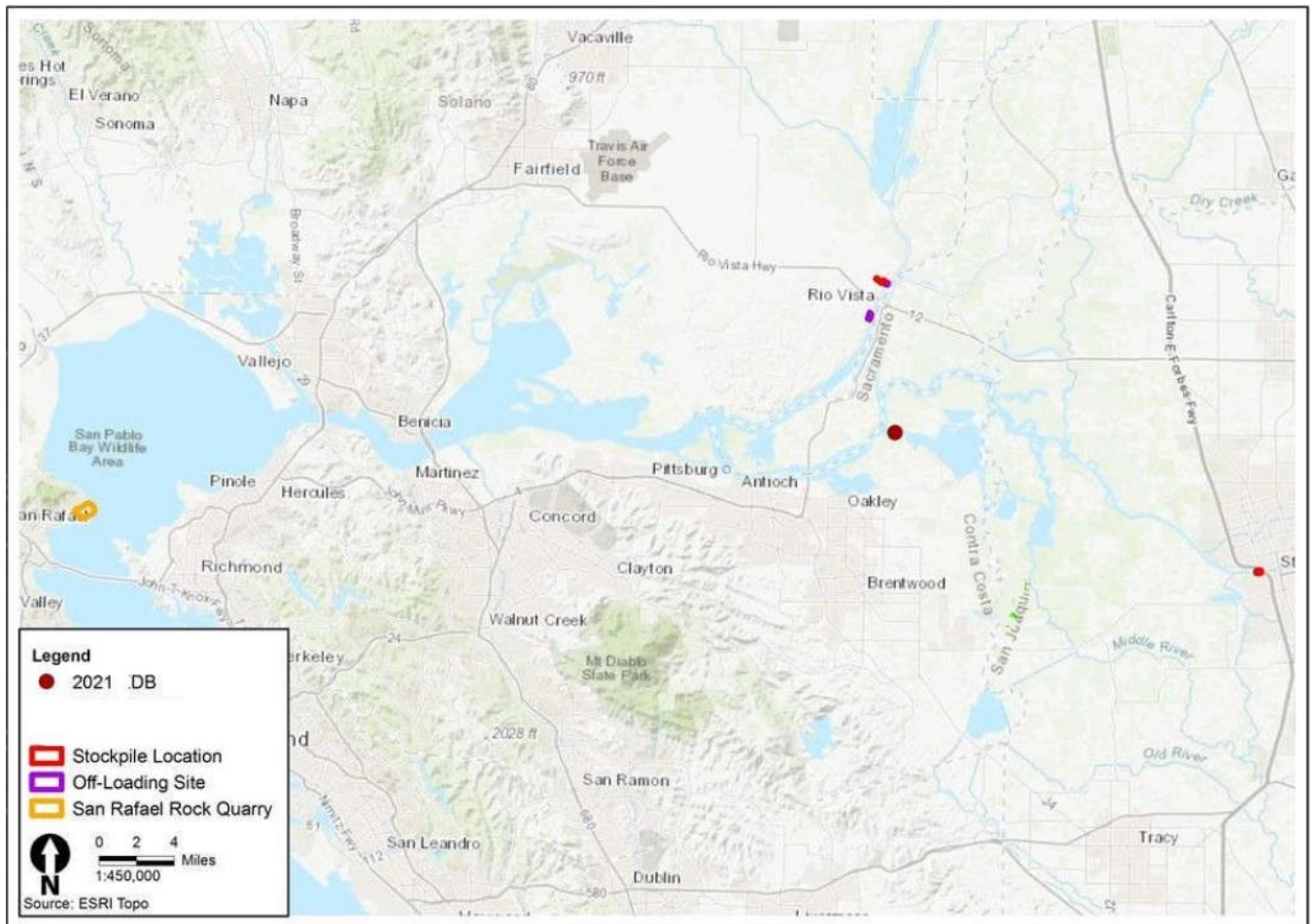


Figure 2. Stockpile locations

Section 3 Affected Environment and Environmental Consequences

This section identifies the potentially affected environmental resources and the environmental consequences that could result from the Proposed Action and the No Action Alternative.

Reclamation analyzed the affected environment and determined that the Proposed Action did not have the potential to cause adverse effects to the resources listed in Table 1.

Table 1. Resources Eliminated from Detailed Analysis

Resource	Reason Eliminated from Discussion
Environmental Justice	Neither the removal of the temporary barrier nor the No Action Alternative involve activities that will cause dislocation, changes in employment, or increase flood, drought, or disease, or disproportionately impact economically-disadvantaged or minority populations. Therefore, there will be no Environmental Justice-related effects.
Indian Sacred Sites	Neither the removal of the temporary barrier nor the No Action Alternative will limit access to ceremonial use of Indian Sacred Sites on Federal lands by Indian religious practitioners or adversely affect the physical integrity of such sacred sites. Therefore, there will be no impacts to Indian Sacred Sites.
Indian Trust Assets (ITA)	Neither the removal of the temporary barrier nor the No Action Alternative will impact ITAs. The closest ITA to the Proposed Action activity is about 33 miles to the northwest (Appendix A). Based on the nature of the planned work it does not appear to be in an area that will impact Indian hunting or fishing resources or water rights nor is the proposed activity on actual Indian lands.
Cultural Resources	The Corps determined that the Proposed Action is a Federal undertaking, as defined at 36 CFR § 800.16(y), and is the type of action that has the potential to cause effects on historic properties, should such properties be present, pursuant to Title 54 U.S.C. § 306108, commonly known as Section 106 of the NHPA regulations codified at 36 CFR § 800.3(a)(1). Using inventory conducted by ESA Environmental Sciences, which identified two cultural resources (Bradford Island Levee and Jersey Island Levee) within the area of potential effects, the Corps determined that the Proposed Action will result in no historic properties affected, pursuant to 36 CFR § 800.4(d)(1), and provided notification of this finding to the State Historic Preservation Officer, including Reclamation’s federal undertaking in their consultation. Reclamation has incorporated the Corps determination into the analysis and conducted consultation with Native American tribes and organizations specifically on Reclamation’s action of partially funding the removal of the temporary barrier.
Land Use	The removal of the temporary barrier will occur primarily within the West False River, therefore there will be no potential adverse effects on land use.
Socioeconomics	The removal of the temporary barrier may have beneficial effects on socioeconomic resources as the temporary drought barrier will prevent further salt intrusion on water supplies.
Recreation and Public Safety	The removal of the temporary barrier will provide signage and public notices informing boaters of alternate routes for passage. There will be no potential adverse effects on recreation or public safety

Water Resources

Affected Environment

West False River is part of the lower Delta, a series of interconnected channels and sloughs that support multiple public uses and native habitat. Tidal flows in the Delta are controlled by channel geometry, tidal elevations at the Golden Gate, inflows from the Sacramento and San Joaquin rivers, Central Valley Project (CVP) and State Water Project (SWP) export pumping in the South Delta, and Delta outflows.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, Reclamation will not provide funding to DWR to remove a temporary barrier in West False River. DWR would need to find alternative funding sources.

Proposed Action

The Proposed Action will not impact surface water supplies. The Proposed Action will provide funding for the removal of the temporary barrier built to remove the circulation and flow path for entering salt water while concentrating the outflowing water to maintain the salt water downstream of the Delta. Use of the temporary barrier helps prevent the need for operational flows to further prevent salt intrusion from San Francisco Bay. The barrier is temporary and is to be removed no later than November 30.

Water Quality

Affected Environment

Salinity and other water quality parameters in the Delta are controlled mainly by freshwater inflows from the Sacramento and San Joaquin rivers and Delta outflow. Water quality parameters, such as minerals, nutrients, metals, and contaminants, generally are higher during drought conditions because the river flows are low and provide less dilution of these substances. Water quality in the West False River is controlled by Sacramento River inflow mixed with salinity and other constituents in seawater. The San Joaquin River inflow generally is pumped at the CVP and SWP export facilities in the South Delta; therefore, San Joaquin River water quality has very little effect on West False River water quality during drought conditions.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, Reclamation will not provide funding to DWR to remove a temporary barrier in West False River. DWR would need to find alternative funding sources. If DWR is unable to fund the removal of the barrier, water quality will not return to pre-barrier conditions and impacts would no longer be temporary.

Proposed Action

The Proposed Action may result in temporary water quality impacts due to the removal process of the temporary barrier. Increased turbidity from sediment disturbance will occur. DWR will implement turbidity monitoring mitigation measures during the removal process to minimize turbidity related impacts. Removal of the temporary barrier will allow for water circulation to return to pre-barrier conditions.

As the federal lead for DWR's action of installing and removing the temporary barrier, the Corps has acquired a Water Quality Certification, under Section 401 of the Clean Water Act for the Proposed Action. The Section 401 Certification maintains specific water quality requirements. Due to the temporary water quality impacts associated with the removal of the temporary barrier, the turbidity related DWR

minimization measures, and the 401 Certification conditions, the Proposed Action will not impact water quality.

Biological Resources

Affected Environment

The Proposed Action primarily occurs in open water in the West False River, which is located in the lower Delta. Open water habitat in the lower Delta provides covering and foraging habitat for a variety of aquatic and water-dependent wildlife and native and nonnative fish. The various waterways in the lower Delta also function primarily as migration and dispersal corridors for special-status fish species. The banks of the West False River are completely rock-lined and vegetation cover is limited.

Special Status Species

Special-status species addressed in this section include plants and animals that are legally protected or are otherwise considered sensitive by Federal, State, or local resource conservation agencies and organization. These include species that are State listed and/or Federally listed as rare, threatened, or endangered; those considered as candidates or proposed for listing as threatened or endangered.

Migratory Bird Treaty Act

A list of bird species with recorded occurrences within the surrounding quads was obtained from the California Natural Diversity Database (CNDDDB) (2018). The list was compared to the Service's list of protected species under the Migratory Bird Treaty Act (MBTA). Protected migratory bird species with recorded occurrences in the Proposed Action Area are included in Table 1.

Threatened or Endangered Species

The USFWS and NMFS have jurisdiction over federally listed threatened and endangered species. An endangered species is defined as "...any species which is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "...any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range" (16 USC Section 1532). Section 9 of the ESA makes it illegal to "take" (defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in such conduct") endangered and threatened species (16 USC 1538).

A special-status species list was generated from the USFWS' Information for Planning and Conservation (IPaC) website for the surrounding area on June 22, 2021 (USFWS 2021). The following Table 1 includes those federally listed species with recorded occurrences within the surrounding USGS 7.5-minute Quads based on the CNDDDB (2018). The table also includes the species' status, determination of impacts from the Proposed Action, and a summary of the rationale supporting the determination.

Table 1 – Special Status Species List				
Common Name	Scientific Name	Status ¹	Effect ²	Summary of Effects Determination ³
Reptiles				
Giant Garter Snake	<i>Thamnophis gigas</i>	FT ST	LAA	As the federal lead, the Corps has identified adverse effects to giant garter snake. Formal consultation will be conducted once the emergency has commenced. The removal of the temporary barrier will not result in permanent loss of habitat. Construction activities could harm giant garter snake if present within the barrier site.
Fishes				
Delta Smelt	<i>Hypomesus transpacificus</i>	FT	NE	Occurrences ⁴ and Critical Habitat outside of the Action Area
Invertebrates				
Valley Elderberry Longhorn Beetle	<i>Desmocerus californicus dimorphus</i>	FT	NE	Occurrences ⁴ and Critical Habitat outside of the Action Area
Delta Green Ground Beetle	<i>Elapharus viridis</i>	FE	NE	Occurrences ⁴ and Critical Habitat outside of the Action Area
Vernal Pool Fairy Shrimp	<i>Branchinecta lynchi</i>	FT	NE	The removal of the temporary barrier will occur in open-water and the rock-lined banks where Vernal Pool Fairy Shrimp are not expected to occur. No impacts are anticipated
Vernal Pool Tadpole Shrimp	<i>Lepidurus packardii</i>	FE	NE	The removal of the temporary barrier will occur in open-water and the rock-lined banks where Vernal Pool Tadpole Shrimp are not expected to occur. No impacts are anticipated
Birds				
Allen's Hummingbird	<i>Selasphorus sasin</i>	MBTA	NE	Occurrences ⁴ outside of the Action Area
Bald Eagle	<i>Haliaeetus leuccephalus</i>	SE MBTA	NE	Federally delisted. Bald & Eagle Protection Act. The Proposed Action area does not have suitable nesting or foraging habitat for Bald Eagles. Removal of the temporary barrier is set to occur in open water and on rock-lined banks.
Burrowing Owl	<i>Athene cuniculari</i>	MBTA	NE	Occurrences ⁴ outside of the Action Area
California Thrasher	<i>Toxostoma redivivum</i>	MBTA	NE	Occurrences ⁴ outside of the Action Area
Clarks Grebe	<i>Aechmophorus clarkia</i>	MBTA	NE	Occurrences ⁴ outside of the Action Area
Golden Eagle	<i>Aquila chrysaetos</i>	MBTA	NE	Bald & Eagle Protection Act. The Proposed Action area does not have suitable nesting or foraging habitat for Golden Eagles. The removal of the temporary barrier is set to occur in open water and on rock-lined banks.
Common Yellowthroat	<i>Geothlypis trichas sinuosa</i>	MBTA	NE	Occurrences ⁴ outside of the Action Area.
Lawrence's Goldfinch	<i>Carduelis lawrencei</i>	MBTA	NE	Occurrences ⁴ outside of the Action Area.
Long-billed Curlew	<i>Numenius americanus</i>	MBTA	NE	Removal of the temporary barrier is temporary and set to occur in open water and on rock-lined banks. It is not anticipated Long-billed Curlew will be within the Proposed Action area and the activities will not impact the species.
Nuttall's Woodpecker	<i>Picoides nuttallii</i>	MBTA	NE	Occurrences ⁴ outside of the Action Area.
Rufous Hummingbird	<i>Selasphorus rufus</i>	MBTA	NE	Occurrences ⁴ outside of the Action Area.
Short-billed Dowitcher	<i>Limnodromus griseus</i>	MBTA	NE	Occurrences ⁴ outside of the Action Area.

Song Sparrow	<i>Melospiza melodia</i>	MBTA	NE	Removal of the temporary barrier is temporary and set to occur in open water and on rock-lined banks. It is not anticipated Song Sparrow will be within the Proposed Action area and the activities will not impact the species.
Spotted Towhee	<i>Pipilo maculatus clementae</i>	MBTA	NE	Occurrences ⁴ outside of the Action Area.
Tricolored Blackbird	<i>Agelaius tricolor</i>	MBTA ST	NE	Removal of the temporary barrier is temporary and set to occur in open water and on rock-lined banks. It is not anticipated Tricolored Blackbird will be within the Proposed Action area and the activities will not impact the species.
Whimbrel	<i>Numenius phaeopus</i>	MBTA	NE	Occurrences ⁴ outside of the Action Area.
Willet	<i>Tringa semipalmata</i>	MBTA	NE	Occurrences ⁴ outside of the Action Area.
Wrentit	<i>Chamaea fasciata</i>	MBTA	NE	Occurrences ⁴ outside of the Action Area.
Yellow-billed Magpie	<i>Pica nuttalli</i>	MBTA	NE	Occurrences ⁴ outside of the Action Area.
Amphibians				
California Red-legged Frog	<i>Rana draytonii</i>	FT	NE	Removal of the temporary barrier is temporary and set to occur in open water and on rock-lined banks. It is not anticipated California Red-legged Frog will be within the Proposed Action area and the activities will not impact the species.
California Tiger Salamander	<i>Ambystoma californiense</i>	FT	NE	Removal of the temporary barrier is temporary and set to occur in open water and on rock-lined banks. It is not anticipated California Tiger Salamander will be within the Proposed Action area and the activities will not impact the species.

¹ Status: Federal Listing (**FE**: Endangered; **FT**: Threatened; **X**: Critical Habitat)
State Listing (**SE**: Endangered; **ST**: Threatened; **SC**: Candidate)

MBTA: Migratory Bird Treaty Act

² Effects determination

NE: No Effect to federally listed species anticipated from the Proposed Action.

NLAA: Not Likely to Adversely Affect with Environmental Protection Measures

LAA: May Affect, and Likely to Adversely Affect

³ Summary of rationale supporting determination

⁴ California Natural Diversity Database 2018 recorded occurrences in the surrounding 9 Quads.

Giant Garter Snake

The giant garter snake (*Thamnophis gigas*) is federally and state listed as threatened. The species inhabits marshes, sloughs, ponds, small lakes, low gradient streams and other waterways, and agricultural wetlands in the Central Valley. Giant garter snakes are inactive or greatly reduce their activities during late fall and winter, typically emerging from winter retreats in late March to early April and often remaining active through October. The timing of their annual activities is subject to varying seasonal weather conditions.

There are eight documented CNDDDB occurrences of this species on the Jersey Island quadrangle. Two CNDDDB records (occurrence numbers 402 and 406) were documented in 2015 within a mile of the Proposed Action area. Both of these occurrences were documented during the 2015 temporary barrier work. One dead adult was found on Ferry Road approximately one mile from the action area. Another giant garter snake was observed in riprap on the waterside slope of the West False River on Jersey Island between the upland exclusion fencing and the in-water construction area for the 2015 temporary barrier action for three consecutive days. Following approval from the USFWS, the qualified biologist captured and relocated two giant garter snakes (the previously observed snake and another individual) on May 21, 2015 (DWR, 2021).

The stockpile and off-loading sites do not support suitable aquatic habitat for giant garter snake, nor is suitable aquatic habitat present within 200 feet of these sites. The area immediately north of the Rio Vista stockpile site could support aquatic habitat beyond 200 feet, but the storage site does not provide suitable upland habitat for the species. In addition, this region is not known to support any giant garter snake populations.

The West False River within the Proposed Action area and the irrigation ditches within 200 feet of the temporary barrier provides aquatic habitat for giant garter snake. The staging areas and levee roads provide upland movement and habitat between the irrigation ditches and the temporary barrier area. Because giant garter snake was found during the 2015 temporary barrier work, this species is assumed to occur within the Proposed Action area.

Fisheries

Impacts on fisheries with implementation of the Proposed Action will be limited to fish in the Proposed Action area. The Proposed Action area is habitat for six species of management concern: Delta Smelt (*Hypomesus transpacificus*), Fall-run Chinook salmon (*Oncorhynchus tshawytscha*), Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*), Sacramento River winter-run Chinook salmon (*O. tshawytscha*), California Central Valley (CCV) steelhead (*O. mykiss*), North American green sturgeon southern Distinct Population Segment (DPS) (*Acipenser medirostris*).

Delta Smelt (Hypomesus transpacificus)

Delta Smelt was listed as threatened on March 5, 1999 (59 FR 852). Delta Smelt are endemic to the Delta and Suisun Marsh (Moyle et al. 1992; Bennett 2005). Delta Smelt have been documented throughout their geographic range during much of the year (Merz et al. 2011; Sommer and Mejia 2013; Brown et al. 2014). In fall, prior to the winter spawning period, Delta Smelt are found in the Delta, Suisun Bay, San Pablo Bay, the Sacramento River and San Joaquin River confluence, Cache Slough, and the lower Sacramento River (Murphy and Hamilton 2013).

Fall-run Chinook Salmon (Oncorhynchus tshawytscha)

Fall-run Chinook salmon are the most widely distributed run of Chinook salmon in the Central Valley. The fall-run are an unambiguous ocean-type Chinook salmon adapted for spawning in lowland reaches of big rivers and their tributaries. They move up from the ocean in late summer and early fall in mature condition and typically spawn within a few days or weeks of arriving on the spawning grounds.

Central Valley spring-run Chinook salmon (O. tshawytscha)

Spring-Run Chinook Salmon were listed as threatened on September 16, 1999 (64 FR 50394). Spring-run Chinook salmon returning to spawn in the Sacramento River system enter the San Francisco Estuary from the ocean in January to late February and move through the Delta prior to entering the Sacramento River. Juvenile Spring-run Chinook salmon show two distinct out-migration patterns in the Central Valley: out-migrating to the Delta and ocean during their first year of life as young of the year (YOY) (i.e., ocean-type life history), or holding over in their natal streams and out-migrating the following fall/winter as yearlings (i.e., stream-type life history) (Moyle 2002). YOY Spring-Run Chinook Salmon presence in the Delta peaks during April and May.

Sacramento River winter-run Chinook salmon (O. tshawytscha)

Winter-run Chinook salmon were listed as threatened on August 4, 1989 (54 FR 32085). Winter-run Chinook salmon adults migrate through the Delta during winter and into late spring (May/June) in route to their spawning grounds in the mainstem Sacramento River downstream of Keswick Dam. Fry disperse from

mid-June through mid-October to areas downstream for rearing (Vogel and Marine 1991), and juvenile occupancy in the greater Sacramento River and estuary system is expected to last between five and nine months prior to entering the ocean (CDFG 1985, 1998).

California Central Valley Steelhead DPS (O. mykiss)

California Central Valley (CCV) steelhead were listed as threatened under the ESA on January 5, 2006 (71 FR 834) and include all naturally spawned populations of steelhead in the Sacramento and San Joaquin rivers and their tributaries, excluding steelhead from San Francisco and San Pablo Bays, and their tributaries. Critical habitat was designated for CCV steelhead on September 2, 2005 (70 FR 52488). Upstream migration of CCV Steelhead begins with estuarine entry from the ocean as early as July and continues through February or March in most years (McEwan and Jackson 1996; NMFS 2009). Populations of Steelhead occur primarily within the watersheds of the Sacramento River Basin, although not exclusively. Steelhead can spawn more than once, with postspawn adults (typically females) potentially moving back downstream through the Delta after completion of spawning in their natal streams. Upstream migrating adult Steelhead enter the Sacramento River and San Joaquin River Basins through their respective mainstem river channels. Steelhead entering the Mokelumne River system (including Dry Creek and the Cosumnes River) and the Calaveras River system to spawn are likely to move up the mainstem San Joaquin River channel before branching off into the channels of their natal rivers, although some may detour through the south Delta waterways and enter the San Joaquin River through the head of the Old River.

North American Green Sturgeon Southern DPS (Acipenser medirostris)

The Southern DPS of North American Green Sturgeon was listed as threatened on April 7, 2006 (71 FR 17757) and is designated as a California species of special concern. Adult Green Sturgeon move through the Delta from February through April, arriving at holding and spawning locations the upper Sacramento River between April and June (Heublein 2006; Kelly et al. 2007). Following their initial spawning run upriver, adults may hold for a few weeks to months in the upper river before moving back downstream in fall (Vogel 2008; Heublein et al. 2009) or they may migrate immediately back downstream through the Delta. After hatching, larvae and juveniles migrate downstream toward the Delta. Juveniles are believed to use the Delta for rearing for the first 1–3 years of their lives before moving out to the ocean and are likely to be found in the main channels of the Delta and the larger interconnecting sloughs and waterways, especially within the central Delta and Suisun Bay and Marsh (Reclamation 2008).

Critical Habitat

The federal ESA requires that USFWS and NMFS designate critical habitat for species listed as federally endangered or threatened. “Critical habitat” is defined in ESA as: (1) specific areas within the geographical area occupied by the species at the time of listing, if they contain physical or biological features essential to a species’ conservation, and those features may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation (16 USC 1531 et seq).

Critical habitat has been designated for the CCV Steelhead, Green Sturgeon, and Delta Smelt located within the Proposed Action area.

Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act (Public Law 104 to 297), mandates all federal agencies consult with NMFS on any activities or proposed activities authorized, funded, or conducted by that agency that may adversely impact essential fish habitat (EFH) of commercially managed marine and anadromous fish species (Section 305(b)(2)). These

regulations require that federal action agencies provide NMFS with a written assessment of the effects of their action on EFH (50 CFR Section 600.920). EFH includes specifically identified waters and substrate necessary for fish spawning, breeding, feeding, or growing to maturity. Important components of EFH for spawning, rearing, and migration include suitable substrate composition; water quality (e.g., dissolved oxygen, nutrients, temperature); water quantity, depth and velocity; channel gradient and stability; food; cover and habitat complexity (e.g., large woody debris, pools, channel complexity, aquatic vegetation); space; access and passage; and floodplain and habitat connectivity (Pacific Fishery Management Council 2003). EFH also includes all habitats necessary for the production of commercially valuable aquatic species, to support a long-term sustainable fishery, and contribute to a healthy ecosystem (16 USC 1802[10]).

EFH species or complexes considered include winter-run Chinook salmon, spring-run Chinook salmon, and the Pacific Groundfish.

Through Section 7 ESA consultation, the Corps consulted with NMFS and impacts to EFH were considered. DWR proposed conservation measures that will be sufficient in minimizing impacts to EFH, which NMFS has approved.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, Reclamation will not provide funding to DWR to remove a temporary barrier in West False River. DWR would need to find alternative funding sources. If DWR is unable to fund and remove the barrier, there would be impacts to biological resources as the action would no longer be temporary.

Proposed Action

Giant Garter Snake

The Corps has identified through their Section 7 ESA consultation with USFWS that the Proposed Action will have adverse impacts to giant garter snake. The Corps and USFWS have agreed to conservation measures (described below) to limit adverse effects on ESA-listed species, including giant garter snake.

There is minimal potential for giant garter snake to be affected by work associated with the Rio Vista stockpile site and the off-loading site since these areas are completely developed and lack suitable habitat.

The temporary barrier site provides suitable aquatic and upland overland movement habitat for giant garter snake. Giant garter snake was observed within the vicinity of the temporary barrier site during the 2015 work (DWR, 2019). Implementation of Conservation Measures 4, 5, and 11, including conducting a worker environmental awareness program to onsite crew members, conducting biological monitoring during construction associated with barrier removal, and implementing minimization measures for giant garter snake (including conducting pre-activity surveys and installing exclusion fencing along the edge of the construction and staging footprint) will minimize adverse effects on giant garter snake. Based on results of biological monitoring conducted during the 2015 temporary barrier project implementation, these measures are anticipated to be effective in minimizing adverse effects on aquatic habitat in the river and avoiding direct contact of giant garter snakes with project-related equipment, vehicles, materials, and personnel. No mortality or physical harm of giant garter snake was documented as a result of 2015 temporary barrier work; however, a dead adult was observed on Ferry Road approximately one mile from the temporary barrier site. The giant garter snake was likely killed as a result of a vehicle strike. It is unknown whether the vehicle was

associated with the 2015 temporary barrier work. Since giant garter snake was observed within the vicinity of the construction area during the 2015 temporary barrier work, this species is assumed to be present. While the Proposed Action will not result in permanent loss of habitat, construction activities could harm giant garter snake if present within the temporary barrier site. As describe in Conservation Measure 12, DWR also proposes to purchase at 1:1 acres of giant garter snake habitat. With the addition of conservation measures and the temporary nature of removal construction activities, significant impacts will not occur with giant garter snake.

Fisheries

Historic data on occurrence of resident and migratory special-status fish species in Central Valley rivers and tributaries indicate adult and juvenile individuals of a variety of species could be present in the vicinity of the proposed barrier site during barrier construction and removal. However, in many cases typical peak occurrence occurs outside the period in which the Proposed Action will occur.

During removal of the temporary barrier, the removal of rock below the waterline will generate noise and create a physical disturbance that may adversely affect fish present in the area and temporarily interfere with migratory movements. Displaced fish may become more prone to predation in areas away from the zone of disturbance. Rock removal will increase turbulence and turbidity in the water column more so than under existing conditions, which could adversely affect fish temporarily through reduced availability of food, reduced feeding efficiency, and exposure to potentially toxic sediment released into the water column. These potential effects will be temporary and relatively small areas of the Proposed Action area will be affected. Therefore, most fish will likely to move away from the area of disturbance.

The use of construction equipment near the waterways potentially could impair water quality if hazardous chemicals (e.g., fuels and petroleum-based lubricants) are spilled or enter the river. These potential effects will be temporary. In addition, DWR will implement a spill prevention and control plan to minimize potential for an accidental spill or release.

The removal of the temporary barrier will also create very brief, temporary impediments to free movement of fish within the Delta channels. Following the complete removal of the temporary barrier, impediments will return to pre-barrier conditions. Removal of the temporary barrier will return flows to pre-barrier conditions, preventing any potential impacts to survival probability within individual reaches (e.g., by changing residence time and velocity, which could affect probability of predation). Removal of the temporary barrier will also return tidal hydraulics to pre-barrier conditions, preventing any potential tidal associated entrainment of juvenile salmonids at the South Delta export facilities.

DWR will implement the below-described conservation measures associated with biological resources to minimize adverse effects to ESA-listed species. Therefore, no adverse significant impacts to biological resources will result from implementation of the Proposed Action.

Conservation Measures

The following conservation measures will be implemented as part of the project to minimize and avoid consequences to federally listed species addressed in this EA.

Conservation Measure 1: Prepare and Implement a Water Quality Control Plan.

A water quality control plan will be prepared by DWR before the start of ground-disturbing construction activities. The plan will be developed with site-specific measures to control erosion, prevent spills, and

control sedimentation, dust, and runoff. The measures in this plan will be implemented throughout construction to minimize the potential for erosion and sedimentation during barrier construction and removal.

Conservation Measure 2: Prepare and Implement a Spill Prevention and Control Program.

A spill prevention and control program will be prepared before the start of construction to minimize the potential for a release of hazardous, toxic, or petroleum substances into the project area during construction and operation. The program will be implemented during construction. In addition, DWR will place best management practices such as sandbags, biologs, or other containment features around the areas used for fueling or other uses of hazardous materials to ensure that these materials do not accidentally leak into the river. DWR will adhere to the standard construction best management practices described in the current California Stormwater Quality Association (CASQA) – 2015 Construction BMP Handbook.

The spill prevention and control program will include procedures for mitigating potential spills caused if a vessel collides with or is stranded by the barrier during barrier operation. Spill control materials will be kept at the barrier site and at additional DWR-owned locations in the Delta. The barrier will have clear signage with telephone contact details for DWR personnel, as well as the contact number at the Governor's Office of Emergency Services for notifications regarding hazardous materials spills (1-800-852-7550).

Conservation Measure 3: Prepare and Implement a Hazardous Materials Management Program

A hazardous materials management program (HMMP) will be prepared and implemented to identify the hazardous materials to be used during construction; describe measures to prevent, control, and minimize the spillage of hazardous substances; describe transport, storage, and disposal procedures for these substances; and outline procedures to be followed in case of a spill of a hazardous material.

Conservation Measure 4: Conduct a Worker Environmental Awareness Program

Construction workers will participate in a worker environmental awareness program that addresses species under the jurisdiction of the permitting agencies (USFWS, and NMFS). Workers will be informed that listed and other protected species and their habitats may be present, and that unlawful take of these species or destruction of their habitats is a violation of ESA and/or Migratory Bird Treaty Act.

Conservation Measure 5: Conduct Biological Monitoring.

A qualified biologist will perform daily biological monitoring during all construction and barrier removal activities during daylight hours and during terrestrial work. Biological monitors will observe for sensitive species and coordinate with an on-call USFWS approved biologist in the event that listed species require handling and relocation. The qualifications of the biologist(s) will be presented to the permitting agencies for review and approval before construction activities begin at the project site. The complete set of permitting documents, along with a USFWS approved giant garter snake relocation plan will be available on-site during construction. The biologist(s) will be given the authority to stop work that may result in, or if there is, take of listed species in excess of the limits provided by the permitting agencies in any permitting document (BOs). Should the biologist(s) exercise this authority, the permitting agencies will be notified by telephone and electronic mail within one working day. A report of daily records from monitoring activities and observations will be prepared and provided to the permitting agencies upon completion of project activities.

Conservation Measure 6: Install In-Water Navigational Buoys, Lights, and Signage.

Navigational buoys, lights, and signage will be installed in West False River upstream and downstream of the temporary barrier, and near Fisherman's Cut, to advise boaters of the presence of the emergency salinity

barrier and maintain navigation along both waterways. Temporary floating signs and buoys will be anchored to the bottom with cables and concrete anchor blocks. DWR will coordinate with the U.S. Coast Guard on signage and buoys.

Conservation Measure 7: Limit Land-Based Access Routes and Construction Area.

The number of land-based access routes and size of the construction area will be limited to the minimum area necessary. Access routes will be restricted to established roadways and speed limits will be enforced by site safety officers. Construction area boundaries will be clearly demarcated.

Conservation Measure 8: Minimize Wildlife Attraction.

To minimize attraction of wildlife to the project site, all food-related trash items, such as wrappers, cans, bottles, and food scraps, will be disposed of in closed containers and removed from the site on a daily basis.

Conservation Measure 9: Implement Minimization Measures for Special-status Plants.

The following protocols will be implemented to determine whether special-status plants are present on or immediately adjacent to the project site, and to avoid and minimize potential impacts if such plants are found.

- Before any field activities, a desktop analysis for special-status plant species and habitats with potential to occur will be performed for the project area. A total inventory of species with potential to occur will be compiled and reviewed for likelihood to occur on-site and adjacent to the project area.
- A focused survey for special-status plant species identified during the desktop analysis will be conducted by a qualified botanist in areas of suitable habitat in the ground disturbance footprints and within 25 feet of the footprint boundaries.

Conservation Measure 10: Implement Minimization Measures for Migratory Birds.

The following protocols will be implemented to determine whether migratory birds are nesting on or immediately adjacent to the project site, and to avoid and minimize potential impacts if active nests are found.

- If an active migratory bird nest is found within the construction footprint, a USFWS approved biologist will develop appropriate measures, such as implementation of a protective buffer, to avoid disturbance of the nest until it is no longer active.

Conservation Measure 11: Implement Minimization Measures for Giant Garter Snake.

The following protocols will be implemented for giant garter snake in the vicinity of the temporary barrier site and to avoid and minimize potential impacts if any are found.

- Pre-activity surveys for the giant garter snake and potential refugia (i.e., burrows, soil cracks) will be conducted by a USFWS-approved biologist within 24 hours prior to ground disturbance within the temporary barrier site. The biologist will also survey along the access route.
- Exclusion fencing will be installed along the edge of the construction and staging footprint to preclude any giant garter snake from entering the work area, where feasible. A biological monitor will be present during the installation of the fencing.
- Clearing of vegetation will be confined to the minimal area necessary for barrier installation.
- Speed limits along access roads will be limited to 15 miles per hour. Speed limits overland will be limited to 5 miles per hour. Drivers will look for snakes on the roadways and overland.
- If giant garter snake is observed in the work area, the biologist will have the authority to authorize the contractor to stop work until the snake is out of the work area. The snake will be allowed to

leave on its own, and the qualified biologist will remain in the area until the biologist deems his or her presence no longer necessary to ensure that the snake is not harmed. If authorized by the USFWS, the biologist will relocate the giant garter snake to a designated location along West False River, downstream of the construction activities.

- All giant garter snake observations will be reported to the USFWS via email and/or telephone within one working day. The observation will be recorded in the CNDDDB.
- Equipment will be stored in designated staging areas overnight. Any equipment left in work areas overnight will be inspected prior to operation to ensure that no giant garter snake have found shelter under it.
- After removal of the temporary barrier, any temporary debris associated with the construction activities will be removed and, all temporarily disturbed areas will be restored to pre-project conditions.
- One year of monitoring with a photo documentation report will be submitted to the USFWS one year from the restoration implementation showing pre- and post-project site photographs.

Conservation Measure 12: Purchase Compensatory Giant Garter Snake Mitigation.

DWR proposes to purchase compensatory mitigation at a 1:1 acre for temporary habitat loss.

Noise

The loudness of sound perceived by the human ear is dependent primarily on the overall sound pressure level and frequency content of the sound source. The human ear is not equally sensitive to loudness at all frequencies in the audible spectrum. To better relate overall sound levels and loudness to human perception, frequency-dependent weighting networks were developed. There is a strong correlation between the way humans perceive sound and A-weighted sound levels (abbreviated dBA). A-weighted sound levels are a standard tool to predict community response to environmental and transportation noise. Sound levels expressed as dB in this section are A-weighted sound levels, unless noted otherwise.

Affected Environment

Existing noise sources in the Proposed Action area include vehicular traffic, agricultural operations, and natural noise (i.e., wildlife vocalizations, wind, and birds). No airports or airstrips are in the vicinity of the project sites. However, because of the rural/agricultural nature of the land surrounding the Proposed Action area, ambient noise levels are expected to be quite low ambient—at or below 55 dBA Leq, 50 dBA Leq, and 45 dBA Leq during the daytime, evening, and nighttime hours, respectively.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, Reclamation will not provide funding to DWR to remove a temporary barrier in West False River. DWR would need to find alternative funding sources. There would be no impacts to noise resources since no construction would take place if DWR was unable to find alternative funding sources.

Proposed Action

Construction equipment noise levels listed in Table 1 are the equivalent sound levels at 50 feet. The equivalent hourly average noise level (Leq) is the average of the sound energy occurring over a specified

time period. In effect, the Leq is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour, A-weighted equivalent sound level (Leq[h]), is the energy average of A-weighted sound levels occurring during a 1-hour period.

Table 1 – Construction Equipment Noise Levels		
Type of Equipment	Leg @ 50 (DBA) ¹	Acoustical Usage Factor %
Tugboat	91	40
Cranes	83	16
Workboat	75	40
Dozers	81	40
Loaders	76	40
Dump Truck	80	40
Conveyors	84	40
Excavators	81	40
Grader	81	40

¹Source: Table 9.1 Construction Equipment Noise Emission Levels (USDOT 2017)

The removal of the barrier will incorporate the following mitigation measures for the control of construction noise levels.

- Written notification of heavy construction activities will be provided to all noise-sensitive receptor located adjacent to the project site and heavy construction activities, or within 50 feet of such activities. Notification will include anticipated dates and hours when construction activities are anticipated to occur, and contact information, including a daytime telephone number, for the project representative to be contacted in the event that noise levels are deemed excessive. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will be included in the notification.
- Fixed/stationary equipment (e.g., generators, compressors) will be located as far as possible from noise-sensitive receptors. All impact tools will be shrouded or shielded, and all intake and exhaust ports on powered construction equipment will be muffled or shielded.
- All construction equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers’ recommendations. Equipment engine shrouds will be closed during equipment operation.
- All motorized construction equipment will be shut down when not in use, to prevent excessive idling noise.
- All construction equipment powered by gasoline or diesel engines will have sound control devices that are at least as effective as those originally provided by the manufacturer, and all equipment will be operated and maintained to minimize noise generation.

- Noise reducing enclosures will be used around noise generating equipment, and temporary barriers will be used between noise sources and noise sensitive land uses, where feasible and when noise levels will exceed the threshold of 10 dB above ambient noise levels.

Construction noise will be short-term and temporary for the removal of the temporary drought barrier, and operation of heavy-duty construction equipment will be intermittent throughout the day during construction. No permanent increase in ambient noise levels will result and, therefore, no significant impacts to noise resources will occur.

Air Quality

Section 176 (c) of the Clean Air Act (CAA) (42 USC 7506 (c)) requires that any entity of the Federal government must conform to the applicable State Implementation Plan (SIP) required under Section 110 (a) of the CAA (42 USC 7401 (a)) before an action is otherwise approved. The action must be consistent with a SIP's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of those standards.

Affected Environment

The federal CAA and the California Clean Air Act (CCAA) required the U.S. Environmental Protection Agency (EPA) and California Air Resources Board (ARB) to establish health-based air quality standards at the federal and state levels. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) were established for the following criteria pollutants: carbon monoxide (CO), ozone, sulfur dioxide (SO₂), nitrogen dioxide (NO₂), particulate matter less than 10 microns in diameter (PM₁₀), particulate matter less than 2.5 microns in diameter (PM_{2.5}), and lead. These standards have been established with a margin of safety to protect the public's health. Both EPA and ARB designate areas of the state as attainment, nonattainment, maintenance, or unclassified for the various pollutant standards according to the federal Clean Air Act (CAA) and the California Clean Air Act (CCAA), respectively.

An "attainment" designation for an area signifies that pollutant concentrations did not violate the NAAQS or CAAQS for that pollutant in that area. A "nonattainment" designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as identified in the criteria. A "maintenance" designation indicates that the area previously had nonattainment status and currently has attainment status for the applicable pollutant; the area must demonstrate continued attainment for a specified number of years before it can be redesignated as an attainment area. An "unclassified" designation signifies that data do not support either an attainment or a nonattainment status.

The Proposed Action is located within the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB is designated as a nonattainment area for the State and federal 8-hour ozone standards, the State PM₁₀ standards, the State PM_{2.5} annual arithmetic mean standard, and the national PM_{2.5} 24-hour standard. It is considered an attainment area or unclassified for the other criteria pollutants (BAAQMD 2014). Bay Area Air Quality Management District (BAAQMD) is the agency responsible for protecting public health and welfare through the administration of federal and State air quality laws and policies in the SFBAAB. In 2010, BAAQMD updated the CEQA Air Quality Guidelines that, compared to the 1999 version, include new and more stringent quantitative thresholds for operation and construction-related criteria air pollutants and precursors, TACs, odors, and GHG emissions (BAAQMD 2010a). The Guidelines are intended to provide lead agencies, consultants, and project applicants with uniform procedures for addressing air quality

in environmental documents.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, Reclamation will not provide funding to DWR to remove a temporary barrier in West False River. DWR would need to find alternative funding sources. There would be no impacts to air quality resources since no construction would take place if DWR was unable to find alternative funding sources.

Proposed Action

The Proposed Action will involve minor ground disturbance, the use of construction equipment, and worker commutes that will result in temporary emissions.

Construction emissions will vary from day to day and by activity, timing, intensity, and wind speed and direction. Generally, air quality impacts from the Proposed Action will be temporary and localized in nature.

Short-term air quality impacts associated with removal of the barrier will generally arise from dust generation (fugitive dust), operation of construction equipment, and worker vehicle trips. Fugitive dust results from land clearing and vehicle traffic on paved and unpaved roads. Fugitive dust is a source of airborne particulates, including PM10 and PM2.5. Large earth-moving equipment, trucks, and other mobile sources powered by diesel or gasoline are also known sources of combustion emissions, including nitrogen oxides (NOX), CO, volatile organic compounds (VOC), SO2, and small amounts of air toxins.

The Proposed Action will follow construction related guidelines recommended by the BAAQMD. Due to the temporary and short-term nature of the Proposed Action, there will not be impacts to air quality resources.

Section 4 Consultation and Coordination

Public Review Period

This EA is available for public comment for 5 days.

Persons and Agencies Consulted

Reclamation is relying on the Corps' ESA and SHPO consultations. The Corps is the federal lead on Reclamation's Proposed Action. The Corps has completed informal consultation with USFWS and NMFS per Section 7 of the ESA and will complete formal consultation once the emergency has ended. The Corps has coordinated with DWR on the installation and removal of the temporary barrier.

Per Section 7 of the ESA, the Corps, as the federal lead, determined that the installation and removal may affect and is likely to adversely affect giant garter snake, Delta smelt, Central Valley spring-run Chinook salmon, Sacramento River winter-run Chinook salmon, Central Valley steelhead, North American green sturgeon, and critical habitat for all steelhead, sturgeon, and smelt. Due to emergency procedures, formal ESA consultation with NMFS and USFWS will occur once the emergency is under control. As agreed by NMFS and USFWS, DWR will conduct conservation measures to minimize adverse effects to ESA-listed species, as related to their action to install and remove the temporary barrier. It is important to note that for

Reclamation's action of providing partial funding for the removal of the temporary barrier, effects will be limited to those associated with removal of the temporary barrier.

The Corps, as the federal lead, determined that the Proposed Action is a Federal undertaking, as defined at 36 CFR § 800.16(y), and is the type of action that does have the potential to cause effects on historic properties, should such properties be present, pursuant to Title 54 U.S.C. § 306108, commonly known as Section 106 of the NHPA regulations codified at 36 CFR § 800.3(a)(1). Using inventory conducted by ESA Environmental Sciences, which identified two cultural resources (Bradford Island Levee and Jersey Island Levee) within the area of potential effects, the Corps determined that the Proposed Action will result in no historic properties affected, pursuant to 36 CFR § 800.4(d)(1), and provided notification of this finding to the State Historic Preservation Officer, including Reclamation's federal undertaking in their consultation. Reclamation will complete tribal consultation with Native American tribes and organizations for its action of partially funding the removal of the temporary barrier.

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Appendix A

Indian Trust Assets Request Form (CGB Region)

Requested by (office/program)	BDO Luke Davis
Fund	21XR0680A1
WBS	RX178689490000000
Fund Cost Center	
Region # (if other than CGB)	California Great Basin, Bay-Delta Office
Project Name	West False River Temporary Drought Salinity Barrier
CEC or EA Number	CGB-EA-2021-040

ITA Determination:

The closest ITA to the proposed West False River Temporary Drought Salinity Barrier project is Wilton Rancheria which is approximately 33 miles northwest of the project area. (See attached image).

Based on the nature of the planned work it does not appear to be in an area that will impact Indian hunting or fishing resources or water rights nor is the proposed activity on actual Indian lands. It is reasonable to assume that the proposed action will not have any impacts on ITAs.

K.Clancy

Signature

Kevin Clancy

Printed name of approver

07/13/02021

Date



Figure 1: Proposed Action location

https://ngs.bor.doi.net/portal/apps/webappviewer/index.html?id=47d124d216a448bb895c377931ab75

Search...

Native American Lands Application powered by BOGIS

Find address or place

NativeAmericanLands_Widget

This application locates Native American Lands trust assets within the selected search radius and lists the results with distances.

Step 1. Select a search radius (miles)

50

Step 2. Longitude and Latitude

If you CLICK on the map, the coordinates for the location will be inserted below. Or, you can type them manually.

Longitude:

Latitude:

Show closest only
 Hide circle

Step 3. Find closest Native American Lands

Distance to closest native american land: 32.69 miles
 Name: Wilton
 Tribe: Wilton Rancheria

Asset Name	Miles
Wilton	32.69
Lytton	36.86
Buena Vista	43.78

112.740 37.118 Daguerre

78°F Sunny 08:25 AM 7/18/2021