State of California
The Natural Resources Agency
DEPARTMENT OF WATER RESOURCES
Bay-Delta Office

2015 Emergency Drought Barrier Project (Removal) and West False River Salinity Barrier Geologic Exploration Project Environmental Permit Compliance Report, Annual Status Report, and Final Mitigation Report

December 2015

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1.0 Introduction

The purpose of this report is to fulfill the reporting requirements of the following permits for removal of the 2015 Emergency Drought Barrier (EDB) Project:

- The Department of Fish and Wildlife 2081 Incidental Take Permit (ITP) 2081-2014-026-03 and Streambed Alteration Agreement (SAA) 1600-2014-0111-R3,
- The Central Valley Regional Water Quality Control Board 401 Water Quality Certification,
- The U.S. Army Corps of Engineers 404 Permit SPK-2014-00187,
- The National Marine Fisheries Service conservation recommendations (5/1/2015 email), and
- The United States Fish and Wildlife Service conservation recommendations (5/1/2015 email).

And the following permits for the West False River Salinity Barrier (WFRSB) Geologic Exploration Project:

- The Department of Fish and Wildlife 2081 ITP 2081-2014-026-03 and SAA1600-2014-0111-R3,
- The Central Valley Regional Water Quality Control Board Notice of Applicability of General 401 Water Quality Certification (November 2, 2015),
- The U.S. Army Corps of Engineers 404 Permit authorization of use of Nationwide Permit 6 SPK-2014-00187,
- The National Marine Fisheries Service concurrence letter for Geologic explorations WCR-2015-3676,
- The United States Fish and Wildlife Service appending of the programmatic Biological Opinions for Delta Smelt and Giant Garter Snake 08FBDT00-2016-F-0001.

The Emergency Drought Barrier Project (EDB) was a project to construct (install and remove) a temporary salinity/drought barrier, in West False River, in response to the current drought condition in the State of California. The False River barrier was a temporary physical (rock rip-rap) barrier to reduce the intrusion of high-salinity water into the central and south Delta. The barrier measured approximately 800 feet long and up to 200 feet wide at the base and 12 feet wide at the top. Fill areas were recalculated based on as constructed surveys and mitigation for total permanent and temporary impacts recalculated and provided in Section 5 of this report. The barrier included two king pile-supported sheet pile walls (abutments) extending out from each levee into the channel for a distance for 75 feet. The abutments were buttressed with rock on both sides. To address erosion on the water side toe of both the Jersey and Bradford Island levees approximately 4,000 cubic yards of buttress rock was placed along the waterside levee toes. This rock ran for a distance of approximately 225 feet up and downstream of the centerline of the barrier (approximately 125 feet from the ends of the barrier rock placement). In addition to river sheet piles, approximately 300 feet of sheet piles were installed to a depth of approximately 35 feet parallel to the channel to prevent water piping from the river through the levee. These piping preventer sheet piles were set in to the tops of the levees on each side of the barrier and will remain in place. In addition to abutment piles and piping preventer piles, four 12-inch buoy line anchors were placed on the levees at the barrier site. To support water quality monitoring stations, twelve 12 –inch steel pipe piles were installed

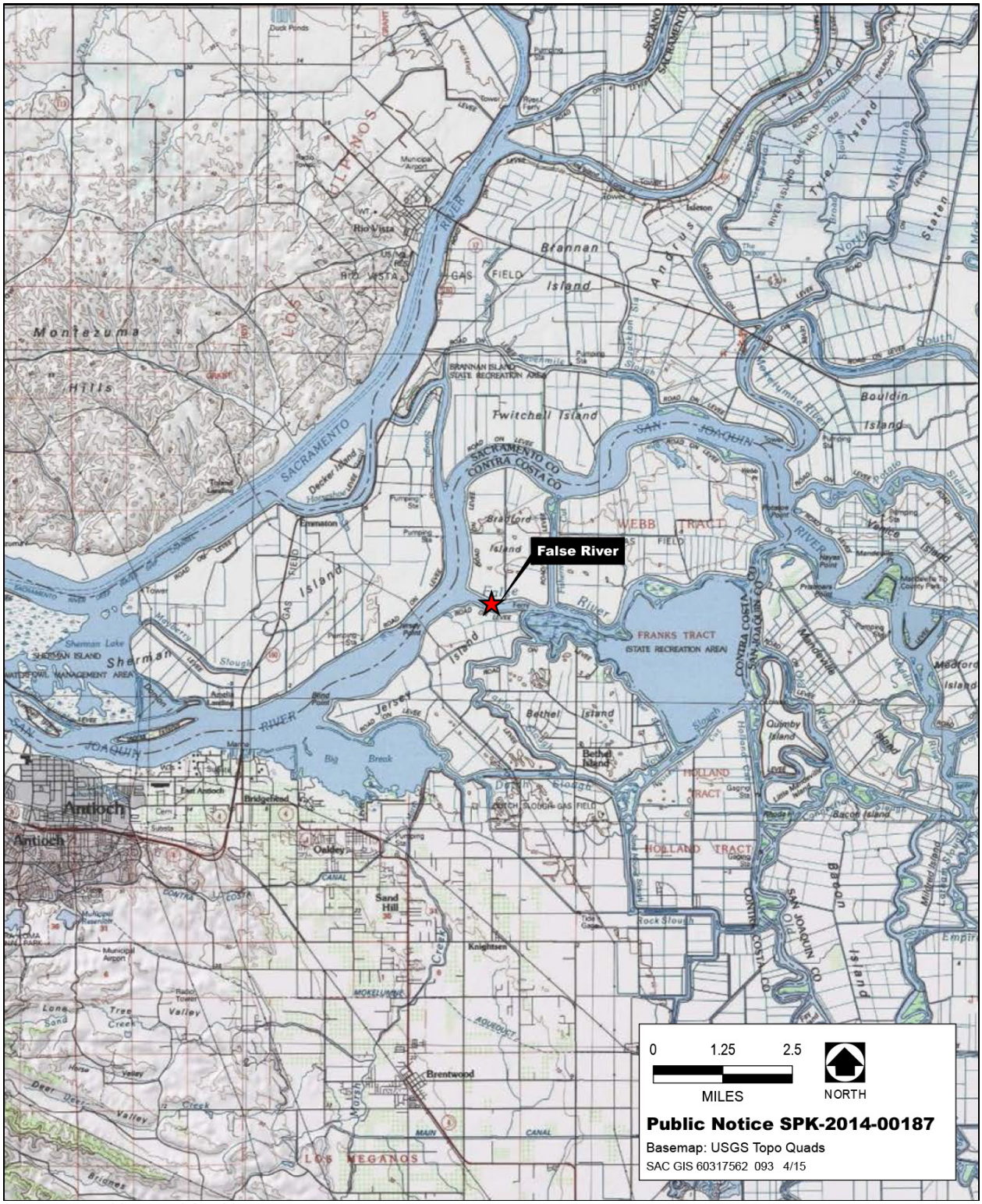
throughout the Delta. The solar-powered equipment will monitor water quality parameters like dissolved oxygen, turbidity, salinity as measured by electrical conductivity (EC), river stage, and flow velocity. Mobilization to the West False River Site installation started on May 5, 2015, the barrier was closed May 28 and completed June 12, and construction for installation was completed July 2, 2015. Mobilization for barrier removal was started on September 1, 2015, the barrier was breached on October 1, barrier removal was completed on November 15, and demobilization was completed on November 16, 2015.

In addition to the barrier work, geologic explorations were conducted to reduce uncertainty associated with the underlying ground that would support a future barrier, locate poor foundations soils like peat, and better estimate engineering design parameters. This work was conducted under the ITP and SAA agreements for barrier construction but required additional 404 and 401 permits. In total, two cone penetrometer tests (CPTs), two drill holes and one overwater drill hole were completed from November 9-13, 2015.

1.1 Project Location

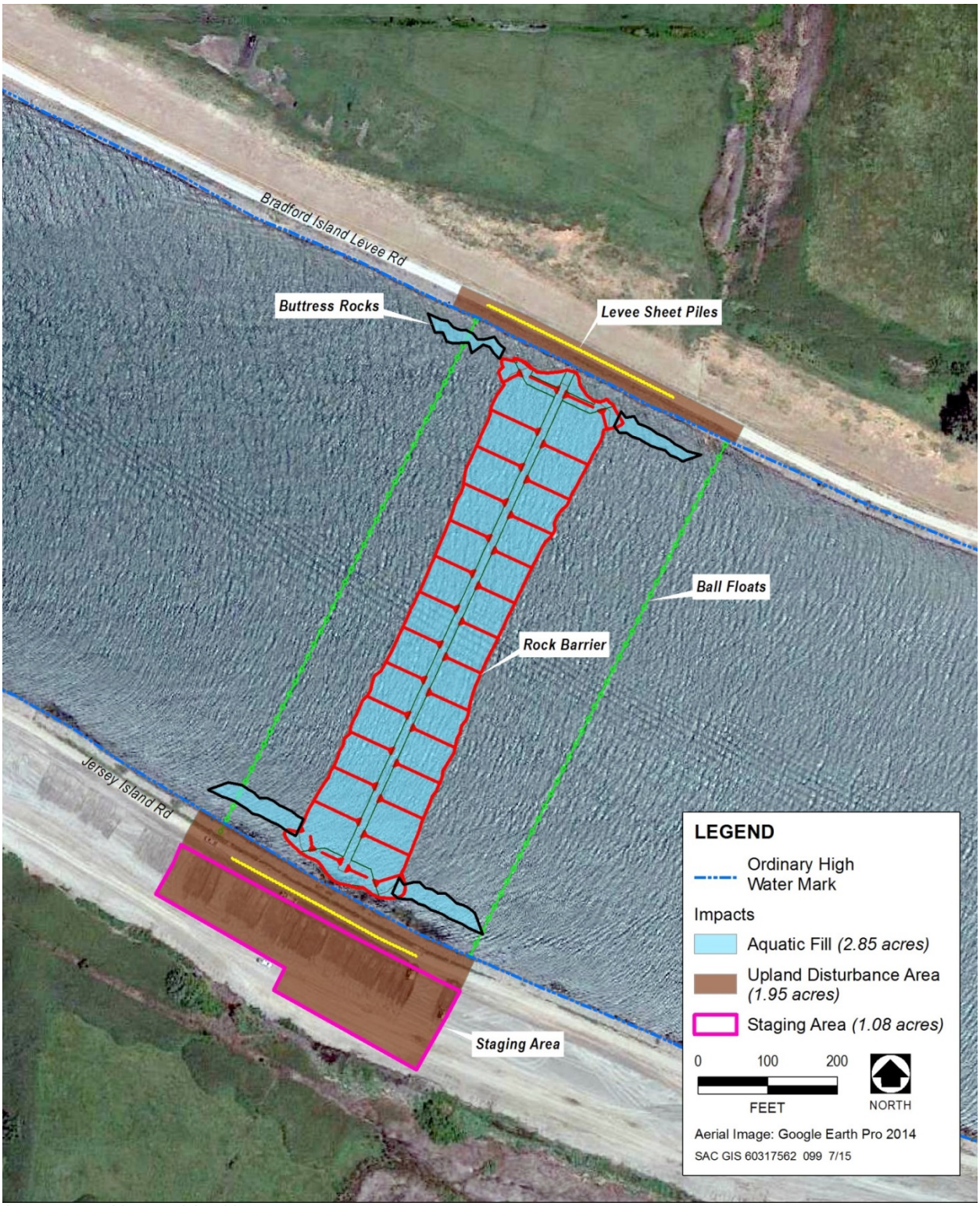
The West False River Barrier is located approximately 0.4 mile east of the confluence with the San Joaquin River, between Jersey and Bradford Islands in Contra Costa County, and is about 4.8 miles northeast of Oakley. The banks of the West False River site are rock-lined levees. Coordinates for the barrier are Latitude 38.057057°, Longitude 121.670432° (Figures 1 and 2). Representative site photos can be found in Appendix A.

Geologic exploration plans included CPTs on the crown and the toe of both the Bradford and Jersey Island levees, however due to precipitation events, the levee toes were not accessible and those two samples were not taken. Drill holes were sited on the Bradford and Jersey Island levee crowns and overwater in West False River (Figure 3).



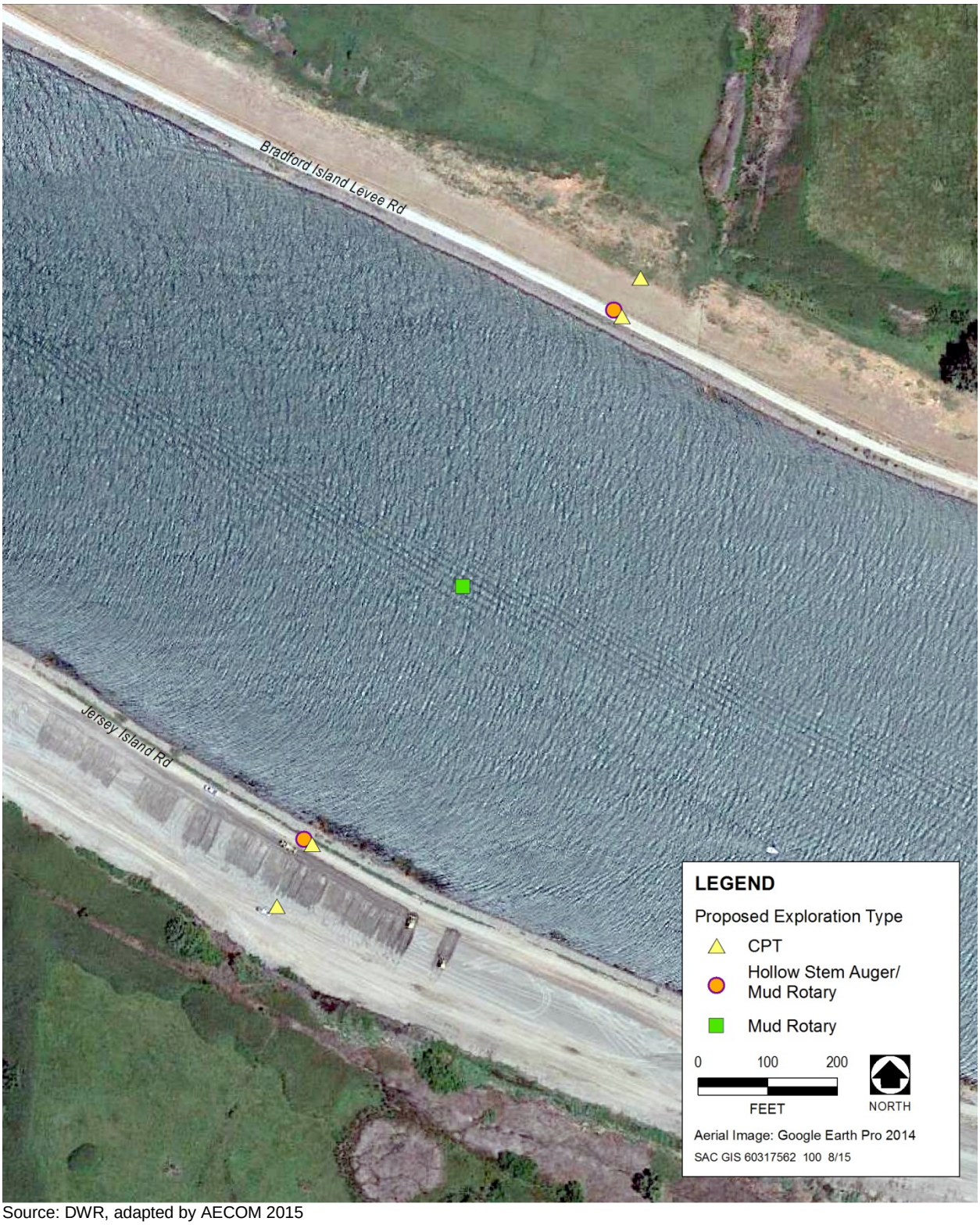
Source: DWR 2015, AECOM 2015

Figure 1: Location of Emergency Drought Barrier



Source: DWR 2015, AECOM 2015

Figure 2. Aerial View of the Project Site



Source: DWR, adapted by AECOM 2015

Figure 3: Aerial View of West False River Salinity Barrier Proposed Geologic Exploration Locations

1.2 Project Description

Mobilization to the West False River Site installation started on May 5, 2015, the barrier was closed May 28 and completed June 12, and construction for installation was completed July 2, 2015. Mobilization for barrier removal was started on September 1, 2015, the barrier was breached on October 1, barrier removal was completed on November 15, and demobilization was completed on November 16, 2015.

For the geologic explorations, CPTs on both Bradford and Jersey Island were conducted on November 9, 2015 and on-land drilling was initiated. On November 11, 2015 the overwater drill hole was initiated. On-land and overwater geologic exploration work was completed on November 13, 2015. See Table 1 for a more detailed timeline of removal and geologic exploration activities.

Table 1: Removal Timeline

Date	Activity
August 28, 2015	Pre-construction surveys
September 1, 2015	Mobilization to Jersey Island and installation of exclusion fence for staging area and Environmental Awareness Training on-site for small crew
September 4, 2015	Environmental Awareness Training at Contractor's yard
September 8, 2015	Initiate excavation of barrier rock
September 29-30, 2015	Removal of security fencing on Bradford Island
October 1, 2015	Breach event
October 22, 2015	Hydroseed Jersey Island Levee slope
November 3-7, 2015	Dive operations for abutment removal
November 9, 2015	Geologic explorations: CPTs on both Bradford and Jersey Island
November 10-11, 2015	Geologic explorations: Jersey Island drill hole
November 11-13, 2015	Geologic explorations: Bradford Island drill hole and overwater drill hole
November 15, 2015	Barrier Removed, demobilization of overwater equipment
November 16, 2015	On-land demobilization complete
Source: DWR 2015	

1.3 Summary of Installation Compliance Report

DWR biologists identified Delta tule pea, Mason's lilaeopsis, Suisun Marsh aster, Red-tailed Hawk nests, Great Horned owl nest, giant garter snake, and western pond turtle on-site or in the general area of the project during pre-construction surveys for installation. Special status plants in and near the project area were flagged and avoided, raptor nests were mapped and monitored, and no western pond turtles were documented in the project area during installation. Several confirmed and unconfirmed GGS were documented on or near the project area during installation. With approval from USFWS and CDFW two GGS were captured and from the immediate project area and relocated approximately 0.3 miles west of the project site.

Water quality measurements including turbidity and settleable solids were taken upstream and downstream of barrier construction each in-water work day. At no point during the construction of the barrier did the turbidity reach the background turbidity threshold of 150 Nephelometric Turbidity Units (NTU) agreed upon for the Delta, nor did settleable solids exceed the 0.1 ml/L threshold.

Data for continuous water quality monitoring in conjunction with the water quality monitoring plan was collected and summarized in the Water Quality Monitoring Interactive Map found at the following link:

http://www.water.ca.gov/waterconditions/emergencybarriers.cfm.

Sound Monitoring was conducted for in-water pile driving. However, since all pile driving was conducted using a vibratory hammer, there are no applicable sound thresholds for this project.

The terms and conditions of the environmental permits were met during installation and on-site environmental disturbance of the surroundings were minimized.

2.0 Compliance Report

2.1 Pre-Construction (Removal)

DWR biologists conducted pre-construction surveys specifically for special status plants, western pond turtle, and giant garter snake on August 28, 2015 (Appendix B). Surveys for nesting birds were not conducted because removal work occurred outside of nesting season. The survey was conducted by foot on both Jersey and Bradford Islands. No special status species were observed aside from the special status plants documented prior to installation. The immediate project area was re-surveyed for western pond turtle and giant garter snake daily by the environmental monitor during removal activities.

On August 28, 2015, DWR biologists also visited the Rio Vista stockpile site and no special status species were observed. However, that area was in the process of undergoing improvements as part of the Delta Flood Emergency Facilities Improvement Project. Surveys were conducted of the site in conjunction with their environmental documents and a survey was conducted by that project team on June 19, 2015, prior to that work being initiated, where they documented: “No active nests were observed. Two old stick nests located in the north-east end of the site were observed and recorded for future surveys. No burrows or burrowing owls were located at the project site. No elderberry shrubs were present on or adjacent to the project site. The project site lacks the hydraulic connectivity suitable for giant garter snake habitat.”

Environmental Awareness Training was held for personnel on-site by the environmental monitor prior to mobilization and installation of the staging area exclusion fence on September 1, 2015. Environmental Awareness Training was held by an approved DWR biologist at the contractor’s yard in Rio Vista for several DWR staff and most of the contractor’s personnel on September 4, 2015. Topics covered included the biology, listing status, and project-specific protection measures of giant garter snake, Burrowing Owl, Swainson’s Hawk, general migratory birds, western pond turtle, valley elderberry longhorn beetle, special status plants, Delta Smelt, Chinook Salmon, Central Valley Steelhead, and Green Sturgeon. Environmental Awareness Training was subsequently repeated by the environmental monitors for all new personnel throughout the duration of the project.

Since the geologic explorations were occurring in an active construction area, the pre-construction surveys were not repeated but there was a dedicated environmental monitor for the geologic explorations that

surveyed all immediate project areas prior to setting up equipment. Environmental Awareness Training for these personnel was held on-site by the environmental monitor. See Appendix C for a copy of the signed training forms for both the barrier construction and geologic explorations.

2.2 Construction

2.2.1 Biological Monitoring

On-site biological monitoring was performed by approved biologists daily for all construction activities. Removal activities conducted from September 1-30, 2015 were typically Monday through Saturday from 6:30 am to 5:30 pm. Removal activities conducted from October 1- November 15 were typically seven days a week for the same daily hours. There was no 24-hour work at the West False River site during removal activities. Upon arrival the monitor would typically clear the Jersey Island side within the staging area surrounded by exclusion fencing and then get on a boat that was on site and clear the Bradford Island side (when work was taking place on Bradford Island). Work in open water was typically monitored from Jersey Island; monitors did thorough surveys of the rip rap for snakes prior to work occurring on the abutments or levee slope and directly oversaw that work on the levee when it was occurring. There was a dedicated monitor for the geologic exploration on-land work, there was no requirement to have a monitor for the overwater drill hole but the on-land monitor would do a daily compliance checks on the barge and environmental awareness training was provided for all geologic exploration personnel. See Appendix D for all monitoring logs. Representative photos of construction and geologic activities can be found in Appendix A.

On September 10, 2015, the environmental monitor observed a single Suisun Marsh aster, a CNPS 1B.2 plant, within 3 feet of the barrier abutment on Jersey Island (Appendix A, photo 7). This plant was flagged and avoided while CDFW was consulted. On September 11, 2015, in an email communication, CDFW noted that Suisun marsh aster is not a State listed endangered, threatened, or rare plant and the incidental removal of this plant during abutment removal would not affect the existing population of Suisun Marsh aster in the project area. This plant was incidentally removed during the abutment removal process on November 5, 2015.

During barrier removal there was a single observation of a potential giant garter snake (GGS). On October 8, 2015, a water quality monitor was leaving the project site and observed what he thought was a buoy light washed up on the rip rap about a quarter mile east of the project site. When he went to collect it he saw a snake in the rip rap in a vegetated area immediately above the water line that was potentially a GGS. Only the mid-section of the snake was observed and it was startled and moved away, the head was not seen and the observer did not have a camera in hand to take a photo of the snake. Personnel were made aware of the possible occurrence but work was not altered because it was outside of the project area.

Several other reptiles were observed on or near the project site, including gopher snakes, king snakes, yellow-bellied racers, western fence lizard, and western pond turtle. A western pond turtle was observed in water hyacinth near the barrier abutments on September 24, 2015. On October 22, 2015 a western pond turtle was again observed in the same area, it is unknown if this was the same individual. On both days

the turtle was not in the immediate area of construction activities, monitors observed the turtle throughout the day to ensure that it did not enter an area where it could be directly impacted. Various bird species representative of the area were observed on or near the project site. Mammal species observed on or near the project site include sea lions, beaver, otters, mink, raccoon, coyote, red-fox squirrel, and black-tailed jackrabbit. On October 13-19, 2015, an injured Pied-billed Grebe was observed near the abutment off of Jersey Island, monitors tracked the bird to ensure that it was not directly impacted by project activities.

No additional environmental concerns were reported during removal activities or geotechnical explorations, and the relevant monitoring logs can be found in Appendix D. During installation California Natural Diversity Database (CNDDB) occurrences were entered for special status plants and the first three GGS sightings during installation (Aril 21, April 30, and May 6, 2015) were submitted as individual occurrences and documentation was provided in the Compliance Report for Installation (July 2015). Subsequent potential GGS sightings were documented with an internal potential occurrence form with the intent of submitting a single occurrence for the project upon completion of removal. Documentation of CNDDB submittals for western pond turtle occurrences, Swainson's Hawk occurrences, and the summary GGS occurrence can be found in Appendix E.

2.2.2 Water Quality Sampling

Water quality measurements including turbidity and settleable solids were taken, upstream and downstream of barrier construction at approximately 9am, 12pm, and 3pm each in-water work day. The water quality objectives, as outlined in the Water Quality Certification issued May 4, 2015, were met on all occasions. At no point during the construction of the barrier did the turbidity reach the background turbidity threshold of 150 Nephelometric Turbidity Units (NTU) agreed upon for the Delta, nor did settleable solids exceed the 0.1 ml/L threshold. The highest recorded turbidity measurement of 37.4 NTU occurred on September 11, 2015 during rock removal.

The ITP also included turbidity monitoring for overwater geotechnical activities. Condition 7.8 of the ITP stated that the permittee shall monitor turbidity 100 feet upstream from the source activity and 300 feet downstream of the source activity half-way through overwater geotechnical activities once each day. The condition includes a threshold of 15 NTU above baseline. All samples were well below the threshold; for complete water quality monitoring data see Appendix F.

2.2.3 Continuous Water Quality Monitoring

Monitoring was conducted of water quality measurements including flow, temperature, and salinity downstream of the Project at Jersey Point sampling station in the San Joaquin River and for flow, temperature, salinity, turbidity, chlorophyll, and dissolved oxygen. The water quality monitoring plan was included in the Compliance Report for Installation, and real-time data from the continuous water quality monitoring plan as well as the newly installed flow monitoring station on Fisherman's Cut is graphically summarized in the Water Quality Monitoring Interactive Map found at the following link: http://www.water.ca.gov/waterconditions/emergencybarriers.cfm.

Per the water quality monitoring plan, DWR will complete a final report detailing the localized and regional effects of the drought barrier on water quality. The final version of the report will be complete by January 2017.

2.2.4 Sound Monitoring

No pile driving occurred during barrier removal. A vibratory hammer was used to assist in the removal of the abutment sheet piles. The sheet piles were cut at or below finished grade; however, the floating interlock connecting the piles became locked due to debris and deformation in the steel. In addition, there were challenges for pile removal associated with slag from the underwater cutting torch re-bonding to the piles. The vibratory hammer was used to provide a brief vibration to free the interlock seam between the lose pile and the adjacent, in-place pile. Regulatory agencies were informed of the use of this technique prior to its implementation and that no sound monitoring was planned for this specific activity (email from Katherine Marquez on November 4, 2015).

2.3 Post-Construction: Removal

Upon completion of barrier removal, materials installed for staging and exclusion fencing were removed and the levee roads and staging area were restored to pre-project conditions. The staging area was hydroseeded on October 22, 2015. All appropriate regulatory agencies were notified upon completion of removal and full demobilization on November 17, 2015(email). See Appendix A for representative site photos after removal was complete.

3.0 Annual Status Report

Measures 4.10 of the SAA and 6.5 of the ITP require an annual status report to be submitted no later than January 31 of every year beginning with issuance of the SAA and ITP. This report was intended to include: (1) a summary of the project compliance reports; (2) a description of annual inspections and necessary repairs or replacement of transition rock for the abutments, including equipment used; (3) and an accounting of additional acres subject to temporary and/ or permanent disturbance. Requirement (1) is addressed in section 2.0 of this document.

On October 26, 2015 DWR applied for minor amendments to the SAA and ITP to include removal of the abutment, as required by our federal permits. On October 30, 2015, CDFW granted DWR permission to commence abutment removal while the amendments were processing. The abutments were removed November 3-7, 2015. Those amendments were finalized on December 8, 2015. With the removal of the abutments, there is no need to install or maintain transition rock, therefore no annual inspections or maintenance will be necessary and no additional temporary or permanent disturbance is expected. Thus, there is no additional information to report for requirements (2) and (3).

4.0 Final Mitigation Report

The SAA and ITP require a final mitigation report (measures 4.11 and 6.7 of the respective permits). This report is to include: (1)a summary of Compliance Reports; (2) beginning and ending dates of project activities; (3) an assessment of the effectiveness of the SAA and ITP measures in minimizing and fully mitigating Project impacts; (4) recommendations on how mitigation measures might be changes to more effectively minimize take and mitigate the impacts of future project; (5) and any other pertinent information.

Requirements (1) and (2) can be found in sections 2.0 and 1.2 of this document and requirements (3)-(5) are addressed in section 5.0 of this document.

5.0 Conclusions

The terms and conditions of the environmental permits were met during removal of the drought barrier and on-site environmental disturbance of the surroundings were minimized. The avoidance and minimization measures implemented were effective in minimizing the impacts of the project. The relocation of two GGS and the removal of an individual Suisun Marsh Aster are the only documented direct impacts to special status species during the project (installation, removal, and geologic explorations). Implementation of these measures for future projects should be effective in minimizing take and mitigating project impacts.

Giant garter snake and shallow water disturbances were compensated for through the purchase of mitigation credits at approved mitigation banks in accordance with the CDFW Incidental Take Permit (2081-2014-026-03). Proof of purchase for 1 acre of giant garter snake credit and 4.9 acres of smelt/salmonid credit was provided in the Compliance Report for Installation. Mitigation acreages were recalculated upon amending the SAA and ITP for abutment removal, due to the abutment footprint being converted from a permanent to a temporary impact and the project no longer necessitating transition rock. The amended SAA and ITP reduced the 4.9 acres of required smelt/salmonid credits to 3.38 acres. The 3.38 acres includes 2.6 acres of temporary impacts mitigated as a 1:1 ratio and 0.26 acres of permanent impacts mitigated at a 3:1 ratio (0.78 acres). The additional 1.52 acres of purchased smelt/salmonid credits may be used for a future DWR project with approval from CDFW.

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Appendix A: Representative Site Photographs

Pre-removal

Photo 1: Jersey Island Levee facing Northwest (August 28, 2015).

Photo 2: Jersey Island Levee facing Northeast (August 28, 2015).

Photo 3: Jersey Island levee crown and general staging area facing Southeast (August 28, 2015).

Photo 4: Bradford Island levee facing Southwest (August 28, 2015).

Photo 5: Bradford Island levee facing Southeast (August 28, 2015).

Removal

Photo 6: Rock removal mid-channel photo facing Bradford Island (September 8, 2015)

Photo 7: Flagged Suisun Marsh aster near Jersey Island abutment (September 10, 2015)

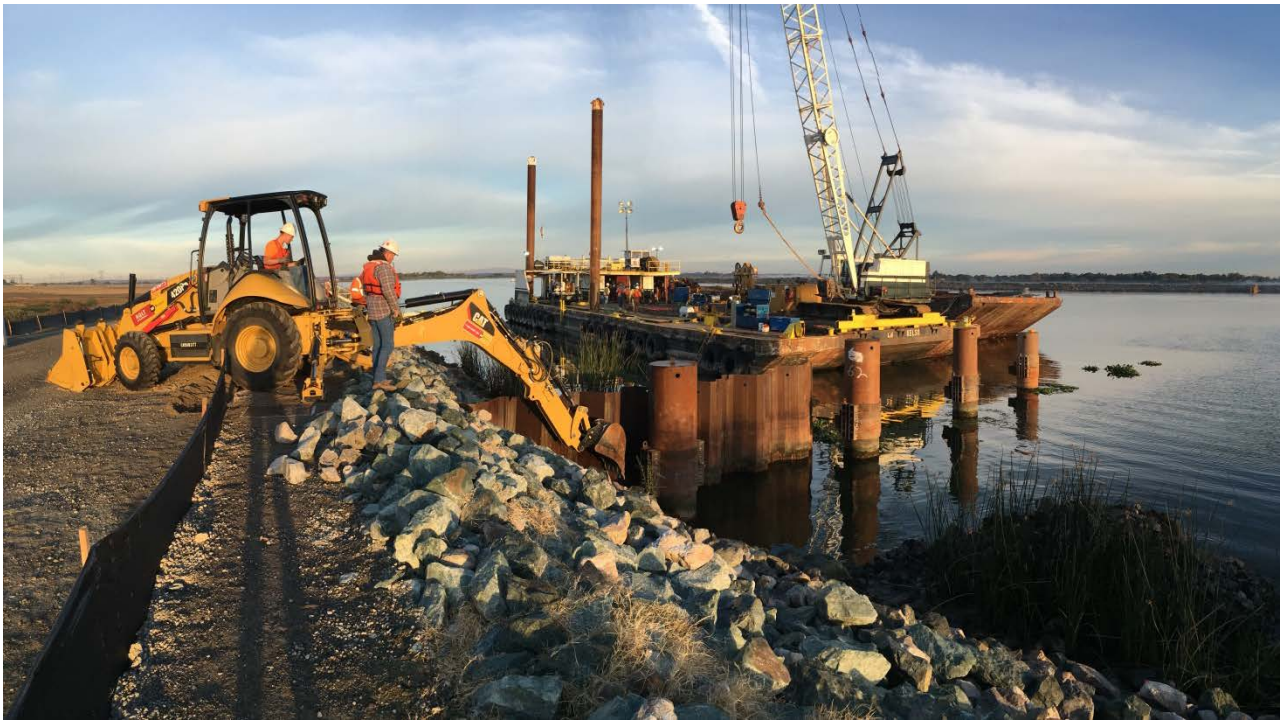

Photo 8: Jersey Island abutment removal (November 5, 2015)

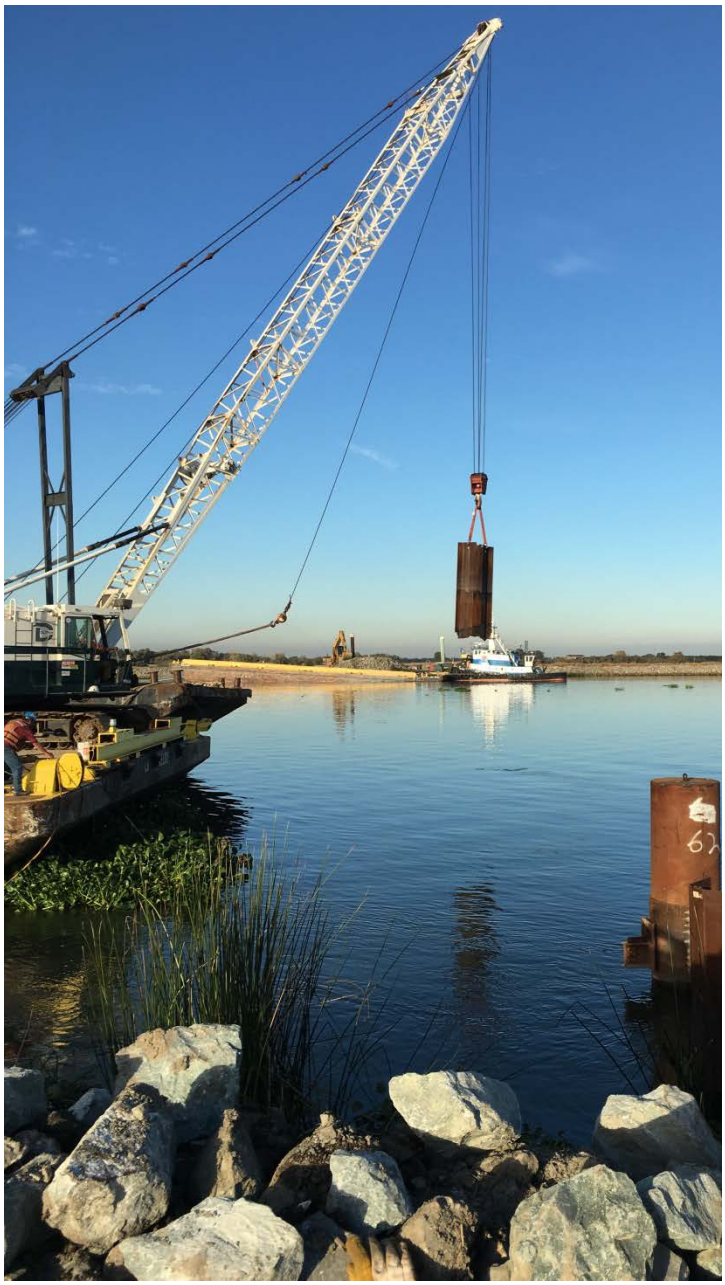

Photo 9: Jersey Island abutment removal (November 5, 2015)

Geologic Explorations

Photo 10: Jersey Island geologic explorations drill (November 10, 2015)

Photo 11: Jersey Island completed drill hole, facing West (November 11, 2015)

Photo 12: Bradford Island completed drill hole (November 13, 2015)

Photo 13: Overwater drill rig (November 11, 2015)

Post-removal Photos

Photo 14: Jersey Island facing the approximate barrier location, Northwest (November 16, 2015)

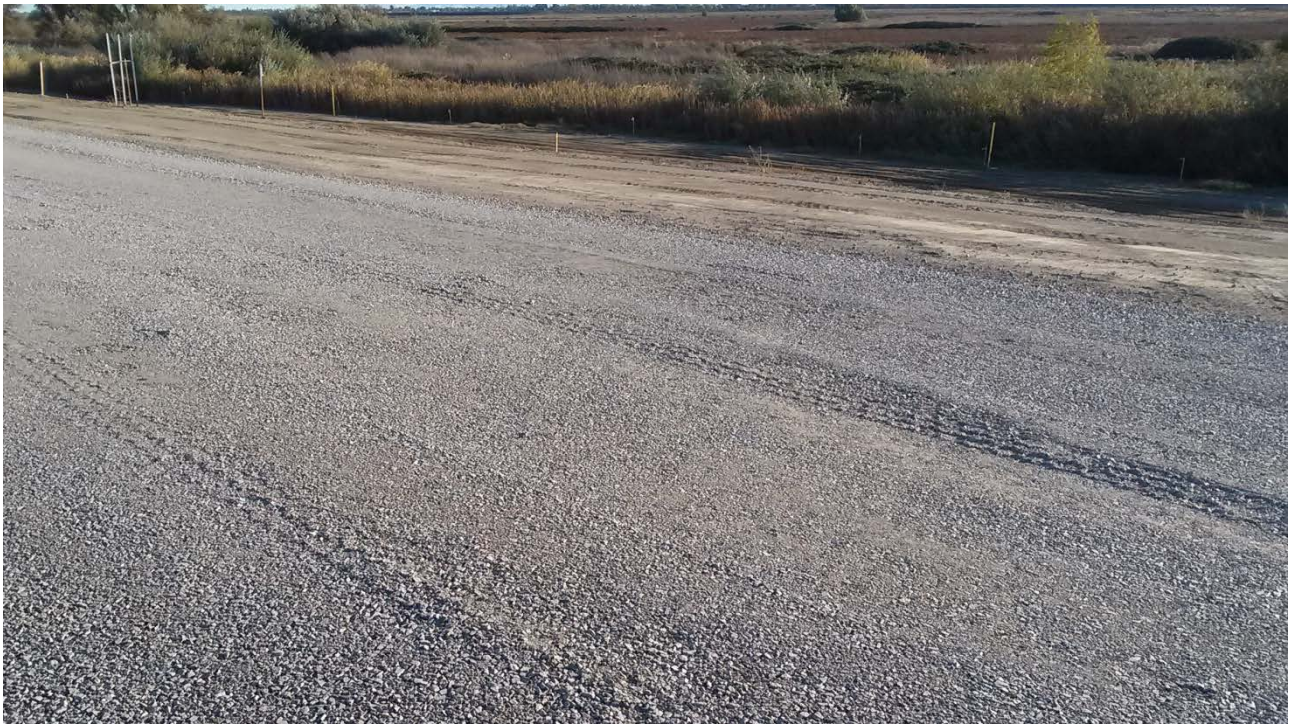

Photo 15: Jersey Island levee road and staging area facing Southeast (November 16, 2015)

Photo 16: Bradford Island Levee facing West (November 13, 2015)

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Appendix B: Removal Pre-construction Survey Report

From: Marquez, Katherine@DWR
To: Spurr, Crystal@Wildlife (Crystal.Spurr@wildlife.ca.gov); Starr, Jim@Wildlife
Cc: Squires, Kim@fws.gov; McQuirk, Jacob@DWR
Subject: EDB Removal Pre-construction Surveys
Date: Friday, August 28, 2015 3:33:00 PM

Hi,

This email is in regards to the Emergency Drought Barriers project. On August 28, 2015, DWR Biologists conducted pre-construction surveys specifically special status plants, western pond turtle, and giant garter snake. Surveys for nesting birds were not conducted because we are past nesting season. The survey was conducted by foot on both Jersey and Bradford Islands. No special status species were observed aside from the special status plants documented during prior to installation. The project area will be re-surveyed for western pond turtle and giant garter snake immediately prior to allowing the construction crew on-site.

Biologists also visited the Rio Vista stockpile site and no special status species were observed there. However, that area is currently undergoing improvements as part of the Delta Flood Emergency Facilities Improvement Project. Surveys were conducted of the site in preparation for environmental documents but the most recent survey was conducted by that project team on June 19, 2015 and they documented: "No active nests were observed. Two old sticks nest located in the north-east end of the site were observed and recorded for future surveys (map). No burrows or burrowing owls were located at the project site. No elderberry shrubs were present on or adjacent to the project site. The project site lacks the hydraulic connectivity suitable for giant garter snake habitat."

Please let me know if you would like more information on the pre-construction surveys.

Katherine Marquez
Senior Environmental Scientist
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Appendix C: Environmental Awareness Training

Environmental Awareness Training
Emergency Drought Barrier Project, 2015

The purpose of this information sheet is to support training on sensitive biological resources, avoidance and minimization measures, and permit obligations that are required and enforced by the U.S. Fish & Wildlife Service, National Marine Fisheries Service, California Department of Fish & Wildlife, U.S. Army Corps of Engineers, and State Water Resources Control Board.

Environmental Monitoring

- **An environmental monitor (onsite biologist) must be present during daytime construction.**
- **A water quality monitor will be onsite a few times per day to collect samples.**
- **An underwater sound monitor must be present during in-water pile driving.**

General Measures

- **All onsite personnel will participate in this environmental awareness training.**
- **A copy of all environmental permits must be on the project site at all times.**
- **Construction staging shall occur in designated areas.**
- **All vehicles shall maintain onsite speeds no greater than 15 miles per hour.**
- **All exposed surfaces will be watered two times per day, as necessary to control fugitive dust.**
- **Haul truck transporting soil, sand, or other loose material off-site will be covered.**
- **All visible mud or track-out onto adjacent public roads will be removed using wet power vacuum street sweepers.**
- **Idling time of construction equipment shall be limited to 5 minutes when not in use.**
- **All construction equipment shall be maintained in proper working condition.**
- **Land-based access routes and construction area will be limited to the minimum area necessary. Access routes restricted to established roadways.**
- **All food-related trash items will be disposed of in closed containers and removed from the site on a daily basis.**
- **All hazardous or toxic materials will be staged outside of stream channel, banks and wetland/riparian areas and shall be prevented from contaminating the soil and/or entering the Waters of the State.**

Giant Garter Snake (GGS)

- Federally and State listed as Threatened
- Dorsal background coloration varies from brownish to olive with a checkered pattern of black spots, separated by a yellow dorsal stripe and two light colored lateral stripes.
- The underside is cream to olive or brown and sometimes infused with orange, especially in northern populations.
- Found in marshes, sloughs, drainage ditches and inhabits small mammal burrows and other soil crevices above prevailing flood elevations throughout its winter dormancy.

- **Work must be initiated during May 1 – October 1, which is considered GGS active season.**
- **Exclusion fencing will be erected in the work area prior to barrier installation. Work and material storage should only occur is designated areas bounded by the exclusion fence.**
- **If a GGS is encountered during construction, activities will cease until appropriate corrective measures have been completed or it has been determined the snake will not be harmed.**
- **No snakes will be harassed, harmed, or killed, and will be allowed to leave the project site of their own volition.**
- **If any snake is observed retreating into an underground burrow within the project limits, no construction will be allowed within a 50 ft radius of that burrow until the onsite biologist can make a determination that the snake is or is not a GGS.**

Burrowing Owl

- State Species of Special Concern
- Small (8-10" tall) brown and white owl with long legs, and yellow eyes with black pupils.
- Occurs in grasslands, using CA ground squirrel burrows for nesting and refuge.
- Often seen at burrow entrance or on fence post.

Photo by Elaine R. Wilson

- **Pre-construction surveys and biologist have determined that no BUOW were identified within the vicinity of the project site. If a BUOW burrow is identified, the contractor will be notified of any additional avoidance and minimization measures to be implemented.**

Swainson's Hawk (SWHA)

- State Threatened Species
- Medium-sized hawk.
- Ranges from all dark brown to dark-backed with a white belly and reddish neck.
- Forages for insects and small mammals in ag. fields and grasslands.
- Nest in large trees in riparian oak woodland areas, oaks, eucalyptus, cottonwoods, etc. in open grasslands, and trees near ag. fields for foraging.

- **Pre-construction surveys and biologist have determined that no active SWHA nests were identified within 0.25 mile of the project site. If a nest does get established within 0.25 miles, the contractor will be notified of any additional avoidance and minimization measures to be implemented.**

Migratory Birds

- U.S. Migratory Bird Treaty Act of 1918.
- Nearly all birds in California are protected.
- Nests in trees, thistle, mustard, and on ground.
- Unlawful to "take" (harass, harm, injure or kill) birds, their nests, eggs or feathers.

- **Two Red-tailed Hawk nests and a Great Horned Owl nest have been identified in the project vicinity. Environmental monitors will be monitoring nest behavior, if specific construction activities appear to be disturbing the nesting pair, work may be stopped temporarily until corrective measures can be taken.**
- **If you see any additional nesting birds or nests, contact the onsite biologist, the contractor will be notified of any additional avoidance and minimization measures to be implemented which will include disturbance buffers.**

Western Pond Turtle

- State Species of Special Concern
- Shell is drab dark brown, olive brown or blackish turtle with a low unkeeled carapace and usually with a pattern of lines or spots radiating from the centers of the scutes.
- Between April and August, females climb onto land (up to 400 feet from water) to dig a nest, usually along stream or pond margins, where they lay a clutch of 2 - 11 eggs.

- **If a pond turtle is encountered during construction activities, a qualified biologist will move the turtle to the nearest suitable habitat outside the project area.**
- **If an active nest is found, CDFW will be consulted and the contractor will be notified of any additional avoidance and minimization measures to be implemented.**

Valley Elderberry Longhorn Beetle

- Federally listed as Threatened
- Dependent on the Elderberry shrub in riparian corridors.
- Medium-sized wood-boring, red and dark green (or black) insect with long antennae.

- **A pre-construction survey was conducted and no Elderberry shrubs were identified in the project area.**

Special Status Plants

- Protected through fish and game code.
- Delta tule pea (LAJE, *Lathyrus jepsonii*), Mason's lilaeopsis (LIMA, *Lilaeopsis masonii*), and Suisun marsh aster (ASLE, *Aster lentus*) have been identified in the project area and avoidance areas have been marked.

- **Special-status plants shall be "flagged" and avoided.**

SPECIAL STATUS FISH

Delta Smelt

- Federally and State listed as Threatened
- Migrate from SF Bay to the Delta to spawn from January to July.
- Eat microscopic crustaceans.

Chinook Salmon

- Spring run: Federally Threatened; Winter run: Federally Endangered.
- Delta is migratory path for spawning upstream in fresh water.
- Juveniles migrate through the Delta year round.

Central Valley Steelhead

- Federally listed as Endangered.
- Spawn in fresh water from December to April.
- Utilize delta for migration from fresh water to salt water and back.

Green Sturgeon

- Federally listed as Threatened.
- Long-lived, slow-growing, mostly marine fish that spawn in fresh water.
- Adults and juveniles utilize Delta waters for migration.

- **An erosion control plan, spill prevention and control program, and hazardous materials management program will be prepared prior to construction activities that will cause ground disturbance.**
- **Real-time turbidity and water quality monitoring will be conducted and construction activities shall be adjusted according to monitoring results.**
- **During in-water pile driving, underwater sound monitoring will take place and if the established thresholds are exceeded, sound reduction measures shall be used which may include an impact hammer cushion block, gradually increasing energy and frequency until full force is achieved, pipe caissons, and/or a bubble curtain.**

TAKE OF A FEDERLLY OR STATE LISTED SPECIES CAN RESULT IN PROJECT DELAYS, FINES, OR CRIMNAL PENALTIES.

REPORT SIGHTINGS OF ANIMALS (LIVE/DEAD) THAT HAVE POTENTIAL TO BE ANY SPECIES LISTED IN THIS TRAINING TO THE ONSITE BIOLOGIST IMMEDIATELY. IF POSSIBLE, TAKE A PHOTO. DO NOT HANDLE ANY WILDLIFE!

For questions on any biological issues, please contact the Onsite Biologist or Katherine Marquez (916) 376-9785 (work) or (916) 402-7559 (cell).

Only workers who have attended this environmental awareness session are allowed to work at the construction site with the exception of the truck drivers who haul in supplies only.

By signing below, I affirm that I understand the work conditions identified by the project's Environmental Scientist.

Print Name	Signature	Affiliation	Date
Gina Radieve	Gina Radieve	DWR	9/1/15
Sara Paiva-Lowry	Sara Paiva-Lowry	DWR	9/1/15
ADAM GEHLERT	[illegible]	DUTRA	9/1/15
Kevin Ingles	Kevin Ingles	DUTRA	9/1/15
Tom Cobarrubin	[illegible]	DWR	09/01/15
JASON BACHER	[illegible]	DWR	9/1/15
Scott Brooks	[illegible]	Dutra	9/1/15
Cody Freitas	Cody Freitas	Dutra	9-1-15
Joaquin Garza	[illegible]	DWR	9-14-15
Eva Olin	[illegible]	DWR	9-8-15
Brett Larsen	[illegible]	DWR	9-24-15
David Schaaq	[illegible]	DWR	9-24-15
Steven Yokim	[illegible]	Dutra	10.19.2015
Mike Gutierrez	[illegible]	hydroseed	10-22-15
Joshua Peterson	[illegible]	hydroseed	10-22-15
Tim McNamee	[illegible]	Dutra	11-5-15
Erik Santellan	[illegible]	Gregg	11-9-15
Jason Neff	[illegible]	Gregg	11.9.15
Teresa K. Butler	Teresa K. Butler	DWR	11/9/15

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By signing below, I affirm that I understand the work conditions identified by the project's Environmental Scientist.

Print Name	Signature	Affiliation	Date
Rachel August		DWR	9/4/15
JASON BACHER		DWR	9/4/15
John Personeni		DWR	9/4/15
ADAM GEHLERT		DUTRA	9/4/15
Scott Brooks		Dutra	9/4/15
Armando Campos		Dutra	9-4-15
Rodolfo Arriaga		Dutra	9-4-15
DEREK Edwards		Dutra	9-4-15
Jessica Oakes		Dutra	9-4-15
Pablo Hernandez		Dutra	9-4-15
Adam Hopkins		Dutra	9-4-15
Michael Rodgers		Dutra	9-4-15
MIKE GARRETT		DUTRA	9-4-15
Horacio Pin		Dutra	9-4-15
A Javier corona		Dutra	9-4-15
Sean westbrook		Dutra	9-4-15

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By signing below, I affirm that I understand the work conditions identified by the project's Environmental Scientist.

Print Name	Signature	Affiliation	Date
Cody Freitas	Cody Freitas	Dutra	9-4-15
Wayne Wolfe	[illegible]	DWR	"
STEVE HELLER	[illegible]	DWR	"
BRYAN O'SULLIVAN	[illegible]	DUTRA	"
Howard C. Cooper	[illegible]	Dutra	"
E. Lloyd Alexander	[illegible]	DUTRA	"
Kyle S. Moore	[illegible]	DUTRA	"
Karen maples	Karen Maples	Dutra	9-4-15
Tony Man	[illegible]	Dutra	9-4-15
John Krenecki	John Krenecki	Dutra	9-4-15
FRANK WAGGS	[illegible]	DUTRA	9-4-15
Ryan Wilson	[illegible]	DUTRA	9-4-15
Chuck Walker	[illegible]	DUTRA	9-4-15
ISAIAS PEREZ	[illegible]	DUTRA	9-4-15

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By signing below, I affirm that I understand the work conditions identified by the project's Environmental Scientist.

Print Name	Signature	Affiliation	Date
Rich Clayton		Dutra	10-1-15
ROBERT UTLEY	ROBERT UTLEY	DUTRA	10.1.15
Cody Freitas		Dutra	10-1-15
Todd Sauve		Dutra	10/1/15
Mike Gannett		Dutra	10/1/15
Joe Correia		Dutra	10/1/15
Maryann Clanglin	Maryann Clanglin	DWR	10/1/15
FLORENCE LOW		DWR	10/1/15
Zack Cunningham		DWR	10/1/15
Ed Wilson		DWR	10/1/15
Paul A. Marshall		DWR	10/1/15
Wendy Francis		DWR	10/1/15
MIKE MILLER		DWR	10/1/15
May Khang		DWR	10/1/15
Elizabeth Scott	Elizabeth Scott	DWR	10/1/15
Mario Arroyo		DWR	10/1/15
David Ng		DWR	10/1/15
Scott Ollink		DWR	10/1/15
Marianne Kirkland	Marianne Kirkland	DWR	10/1/15
R A Madrid		DWR	10/1/15
Chris Ver		HTE	10-1-15

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By signing below, I affirm that I understand the work conditions identified by the project's Environmental Scientist.

Print Name	Signature	Affiliation	Date
Mark Forbert	[illegible]	DRS Marine	11/3/15
Mark Land	[illegible]	DRS marine	11/3/15
Chad Burkson	[illegible]	DRS Marine	11/3/15
Mark Pagenkopp	[illegible]	DWR	11/3/15
JIM MCPHERSON	[illegible]	MCPHERSON CRANE	11-3-15
Scott Sachar	[illegible]	DWR	11/3/15
RANDY DOCKERY	[illegible]	GDT	11/3/15

Environmental Awareness Training

West False River Salinity Barrier Geologic Exploration, 2015

The purpose of this information sheet is to support training on sensitive biological resources, avoidance and minimization measures, and permit obligations that are required and enforced by the U.S. Fish & Wildlife Service, National Marine Fisheries Service, California Department of Fish & Wildlife, U.S. Army Corps of Engineers, and State Water Resources Control Board.

Environmental Monitoring

- **An environmental monitor (onsite biologist) must be present during daytime construction.**

General Measures

- **All onsite personnel will participate in this environmental awareness training.**
- **A copy of all environmental permits must be on the project site at all times.**
- **Construction staging shall occur in designated areas.**
- **All vehicles shall maintain onsite speeds no greater than 10 miles per hour.**
- **All construction equipment shall be maintained in proper working condition.**
- **Land-based access routes and construction area will be limited to the minimum area necessary. Access routes restricted to established roadways.**
- **All food-related trash items will be disposed of in closed containers and removed from the site on a daily basis.**
- **All hazardous or toxic materials will be staged outside of stream channel, banks and wetland/riparian areas and shall be prevented from contaminating the soil and/or entering the Waters of the State.**

Giant Garter Snake (GGS)

- Federally and State listed as Threatened
- Dorsal background coloration varies from brownish to olive with a checkered pattern of black spots, separated by a yellow dorsal stripe and two light colored lateral stripes.
- The underside is cream to olive or brown and sometimes infused with orange, especially in northern populations.
- Found in marshes, sloughs, drainage ditches and inhabits small mammal burrows and other soil crevices above prevailing flood elevations throughout its winter dormancy.

- **Exclusion fencing will be erected in the work area prior to barrier installation. Work and material storage should only occur is designated areas bounded by the exclusion fence.**
- **If a GGS is encountered during construction, activities will cease until appropriate corrective measures have been completed or it has been determined the snake will not be harmed.**
- **No snakes will be harassed, harmed, or killed, and will be allowed to leave the project site of their own volition.**
- **If any snake is observed retreating into an underground burrow within the project limits, no construction will be allowed within a 50 ft radius of that burrow until the onsite biologist can make a determination that the snake is or is not a GGS.**

Burrowing Owl

- State Species of Special Concern
- Small (8-10" tall) brown and white owl with long legs, and yellow eyes with black pupils.
- Occurs in grasslands, using CA ground squirrel burrows for nesting and refuge.

Photo by Elaine R. Wilson

- Often seen at burrow entrance or on fence post.

- **Pre-construction surveys and biologist have determined that no BUOW were identified within the vicinity of the project site. If a BUOW burrow is identified, the contractor will be notified of any additional avoidance and minimization measures to be implemented.**

Swainson's Hawk (SWHA)

- State Threatened Species
- Medium-sized hawk.
- Ranges from all dark brown to dark-backed with a white belly and reddish neck.
- Forages for insects and small mammals in ag. fields and grasslands.
- Nest in large trees in riparian oak woodland areas, oaks, eucalyptus, cottonwoods, etc. in open grasslands, and trees near ag. fields for foraging.

- **Pre-construction surveys and biologist have determined that no active SWHA nests were identified within 0.25 mile of the project site. If a nest does get established within 0.25 miles, the contractor will be notified of any additional avoidance and minimization measures to be implemented.**

Migratory Birds

- U.S. Migratory Bird Treaty Act of 1918.
- Nearly all birds in California are protected.
- Nests in trees, thistle, mustard, and on ground.
- Unlawful to "take" (harass, harm, injure or kill) birds, their nests, eggs or feathers.

- **Two Red-tailed Hawk nests and a Great Horned Owl nest have been identified in the project vicinity. Environmental monitors will be monitoring nest behavior, if specific construction activities appear to be disturbing the nesting pair, work may be stopped temporarily until corrective measures can be taken.**
- **If you see any additional nesting birds or nests, contact the onsite biologist, the contractor will be notified of any additional avoidance and minimization measures to be implemented which will include disturbance buffers.**

Western Pond Turtle

- State Species of Special Concern
- Shell is drab dark brown, olive brown or blackish turtle with a low unkeeled carapace and usually with a pattern of lines or spots radiating from the centers of the scutes.
- Between April and August, females climb onto land (up to 400 feet from water) to dig a nest, usually along stream or pond margins, where they lay a clutch of 2 - 11 eggs.

- **If a pond turtle is encountered during construction activities, a qualified biologist will move the turtle to the nearest suitable habitat outside the project area.**
- **If an active nest is found, CDFW will be consulted and the contractor will be notified of any additional avoidance and minimization measures to be implemented.**

Valley Elderberry Longhorn Beetle

- Federally listed as Threatened
- Dependent on the Elderberry shrub in riparian corridors.

- Medium-sized wood-boring, red and dark green (or black) insect with long antennae.

- **A pre-construction survey was conducted and no Elderberry shrubs were identified in the project area.**

Special Status Plants

- Protected through fish and game code.
- Delta tule pea (LAJE, *Lathyrus jepsonii*), Mason's lilaeopsis (LIMA, *Lilaeopsis masonii*), and Suisun marsh aster (ASLE, *Aster lentus*) have been identified in the project area and avoidance areas have been marked.

- **Special-status plants shall be "flagged" and avoided.**

SPECIAL STATUS FISH

Delta Smelt

- Federally and State listed as Threatened
- Migrate from SF Bay to the Delta to spawn from January to July.
- Eat microscopic crustaceans.

- **In-water work restricted to August 1 through November 30**

Chinook Salmon

- Spring run: Federally Threatened; Winter run: Federally Endangered.
- Delta is migratory path for spawning upstream in fresh water.
- Juveniles migrate through the Delta year round.

Central Valley Steelhead

- Federally listed as Endangered.
- Spawn in fresh water from December to April.

- Utilize delta for migration from fresh water to salt water and back.

Green Sturgeon

- Federally listed as Threatened.
- Long-lived, slow-growing, mostly marine fish that spawn in fresh water.
- Adults and juveniles utilize Delta waters for migration.

- **An erosion control plan, spill prevention and control program, and hazardous materials management program will be prepared prior to construction activities that will cause ground disturbance.**
- **Real-time turbidity monitoring will be conducted**

Cultural Resource Measures

- **Should additional cultural resources (or potential cultural resources) be uncovered while engaging in construction activities, all work will temporarily cease within 100 feet of the resource until the findings can be assessed by a qualified archaeologist and an appropriate course of action can be determined in consultation with the State Historic Preservation Officer**
- **In accordance with the California health and safety code, if human remains are uncovered during ground disturbing activities, such activities that may affect the remains shall be halted and DWR or its designated representative shall be notified. DWR shall immediately notify the county coroner and a qualified professional archaeologist. If the coroner determines that the remains are those of a Native American, the coroner must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code, Section 7050.5[c]).**

TAKE OF A FEDERLLY OR STATE LISTED SPECIES CAN RESULT IN PROJECT DELAYS, FINES, OR CRIMNAL PENALTIES.

REPORT SIGHTINGS OF ANIMALS (LIVE/DEAD) THAT HAVE POTENTIAL TO BE ANY SPECIES LISTED IN THIS TRAINING TO THE ONSITE BIOLOGIST IMMEDIATELY. IF POSSIBLE, TAKE A PHOTO. DO NOT HANDLE ANY WILDLIFE!

For questions on any biological issues, please contact the Onsite Biologist or Katherine Marquez (916) 376-9785 (work) or (916) 402-7559 (cell).

Only workers who have attended this environmental awareness session are allowed to work at the construction site with the exception of the truck drivers who haul in supplies only.

By signing below, I affirm that I understand the work conditions identified by the project's Environmental Scientist.

Print Name	Signature	Affiliation	Date
Mark Pagenkopp	[illegible]	DWR	11/9/15
Gurman Garcia	[illegible]	Gregg	11-9-15
Aureliano Patino	[illegible]	Gregg	11-9-15
Scott Sochar	[illegible]	DWR/DOE	11/11/15
Brandon Moses	[illegible]	GREGG	11/11/15
Rick Ryan	[illegible]	CDF	11-11-15
Chris St Pierre	[illegible]	GDF	11.11.15
Rachel August	[illegible]	DWR	11/11/15
James H McIntyre	[illegible]	Gregg	11-12-15

Appendix D: Biological Monitoring Logs

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	GINA RADIEVE		**Date**	20150901
	Start Time	0637	**End Time**	1425

Comments for all Concerns Noted Above/Species Observed/ General Comments:

0637 - arrived on site and walked top of levee, edge of riprap & levee slope between buoy lines on either side of EDB
NO SPECIAL STATUS SPECIES OBSERVED
0747 - Great Horned Owl lands in tree known as a Gitton nest site. ~200m south of barrier on Jersey Ik
~~0800 - work begins install~~
0812 - beaver swimming near Jersey shore on West side of barrier
1050 - Osprey perched 2 hours on sign on barrier
1425 - done for day

Construction Activities Performed:

0800 - work begins installing exclusion fence on top of levee w/hand tools & mini excavator

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Rachel August		**Date**	9/3/15
	Start Time	0630	**End Time**	0800

Comments for all Concerns Noted Above/Species Observed/ General Comments:
- Arrived at site at 0630
- Walked site to check for sensitive species
(south side of silt fence not in place)
- No sensitive species observed

Construction Activities Performed:
- No in water work performed
- mobile office/trailer delivered at 0730

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Rachel August		**Date**	9/4/15
	Start Time	0700	**End Time**	0800

Comments for all Concerns Noted Above/Species Observed/ General Comments:
- Arrived at Dutra yard in Rio Vista at 0700
- Attended safety/environmental awareness meeting

Construction Activities Performed:
- No work conducted at barner site due to Dutra
staffing conflicts

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Eva Olin		**Date**	2015 0908
	Start Time	0640	**End Time**	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0640- On site. Walked top of levee & edge of riprap
0930- Beaver on W. side of barrier
1200- Sea Lion on E. side of barrier

Construction Activities Performed:
~0700- Moving buoys & buoy line
0830- Placed gangway on shore
0935- started removing rock from Bradford side of barrier. Stopped @ 1045
1315- started installing silt fence

1720- stopped work

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name			**Date**	9/9/15
Don Guy.	**Start Time**	520	**End Time**	509

Comments for all Concerns Noted Above/Species Observed/ General Comments:
cleared site, safety tailgate on the barge
slow start
saw 1 beaver and 2 sea. lions

Construction Activities Performed:
spud cable repaired
removed rock

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Eva Olin		**Date**	20150910
	Start Time	0645	**End Time**	1715

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0645 - Arrived & Cleared Site
0700 - Safety mtng on Barge
0745 - Beaver observed @ Barrier & Jersey Island
* Flagged Suisun Marsh aster next to metal
sheet piles on Jersey Island. ~ 4 feet from pile ~ 1-2 feet from water
Small clump of ~5 stems growing out of
drift wood in riprap. Many other clusters
of Suisun Marsh aster present on Jersey Island
Levee. Some clusters are quite large.
1700 - Work ended

Construction Activities Performed:
- Rock removal
- No on-land work

	Department of Water Resources Biological Monitoring Field Report Project: Emergency Drought Barriers Project			
Biologist Name	David Bi[illegible]		Date	9/11/2015
	Start Time	0630	End Time	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:

Attended daily safety training @ 0710.
Cleared enclosure @ 0645. No wildlife observed during clearance survey. Observed flagged Suisun marsh aster near abutment.
common raven, CORA, black phoebe, western fence lizard
northern mockingbird, killdeer, barn swallow
double-crested cormorant, cliff swallow, Caspian tern, red-winged blackbird, California sea lion, American crow, jackrabbit

Construction Activities Performed:

Rock from Avalon Jersey Island. Half of barrier. Filled one barge in AM. Working on 2nd barge in PM. Barge filled at end of [illegible] day

	Department of Water Resources Biological Monitoring Field Report Project: Emergency Drought Barriers Project			
Biologist Name	David Bize		Date	9/12/2015
	Start Time	0630	End Time	1515

Comments for all Concerns Noted Above/Species Observed/ General Comments:

Clearance survey conducted. No wildlife observed during clearance survey. Went through new JHA with DWR inspector and signed it.

Belted Kingfisher, turkey vulture, American crow, double crested cormorant, green heron, western fence lizard, American kestrel, red-tailed hawk, tree swallow, long-tailed weasel (DWR), Caspian tern, great blue heron, great egret, mourning dove, barn swallow

Construction Activities Performed:

Attended daily safety meeting on barge. Removing rock on Jersey Island side of barrier

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Eva Olin		**Date**	2015 0914
	Start Time	0645	**End Time**	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0645- Arrived & cleared site
0700 - Safe tailgate on barge
env. awarcness training
1545- Sea Lion on W side of barrier
1700- Work ended

Construction Activities Performed:
Rock Removal

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Rachel August		**Date**	09/15/15
	Start Time	0630	**End Time**	1530

Comments for all Concerns Noted Above/Species Observed/ General Comments:
- Arrived on site at 0630
- Walked Jersey Island levee to check for sensitive species. None observed.
- Walked site several times during the day to observe sensitive species. None observed.

Construction Activities Performed:
- Rock removed from barrier

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Rachel August		**Date**	9/16/15
	Start Time	0600	**End Time**	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:
- Arrived on site at 0600
- Walked site to check for sensitive species.
None observed.
- Walked site several times throughout the day to
check for sensitive species. None observed.

Construction Activities Performed:
- Rock removed from barrier

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Tammy Lim		**Date**	Sept 17, 2015
	Start Time	0630	**End Time**	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:	
American coot	killdeer
double-crested cormorant	American kestrel
spotted towhee	song sparrow
great blue heron	house finch
barn swallow	northern harrier
red winged blackbird	Rock pigeon
Yellow-headed blackbird!!	western meadowlark
mourning dove	Forster's tern
turkey vulture	Larus sp. - gulls
black phoebe	western fence lizards
great egret	American mink!
European starling	red fox squirrel
red-tailed hawk	coyote, raccoon, otter tracks/poop

Construction Activities Performed:
Continued to remove rock & load onto barge. Only
traffic on levy road was Jason, my car & water
quality tester. No special-status sp. observed.

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	GINA RADIEVE		**Date**	20150918
	Start Time	0630	**End Time**	17

Comments for all Concerns Noted Above/Species Observed/ General Comments:

0645 - Jersey Island site cleared
0716 - mink seen traversing rip rap on Jersey Island West of barrier headed towards barrier
0835 - Forster's Terns frequently seen foraging in area
0514 - sea lion surfaced on west side of barrier near Bradford Island

Construction Activities Performed: Removing rock on west side of barr
0800 - turned barge around
~1200 - switch to adding rock where too much was removed

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	GINA RADIEVE		**Date**	20150919
	Start Time	0630	**End Time**	1330

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0645 - Site cleared
~~[illegible]~~
0842 - salmon carcass floating in San Joaquin
River near confluence with northe end of
Fisherman's Cut
1330 - done for the day

Construction Activities Performed:
All day - repair & install buoys & lights
near barrier & in Fisherman's
Cut

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Rachel August		**Date**	9/21/15
	Start Time	0630	**End Time**	1700

Comments for all Concerns Noted Above/Species Observed/ General Comments:
- Arrived on site at 630.
- Walked site on Jersey Island to check for sensitive species. None observed
- observed a small gopher snake in the water near Jersey Island at 0830.

Construction Activities Performed:
- Rock removed from barrier

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Rachel August		**Date**	9/22/15
	Start Time	0630	**End Time**	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:
- Arrived on site at 0630
- Performed site survey to check for species. No sensitive species observed.
- Gopher snake observed on Jersey Island levee road at 1720.

Construction Activities Performed:
- Rock removed from barrier

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	GINA RAPIEVE		**Date**	20150923
	Start Time	0630	**End Time**	1400

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0627 - Great Horned Owl low flying over West false River btwn 2 levee gates E of project area. Flushed from tules. Landed in willows S of levee road
0630 - cleared site to work
0639 - school of small fish on upstream side of barrier.
0722 - beaver along Jersey Shore swimming toward barrier on downstream side. Exploring area & ventured toward barges midstream, approaching work within 50 feet. Returned to Jers Shore & dove under hyacinth
0807 - beaver active in hyacinth. Climbed onto Jersey rip rap breifly. 25-35 lb ♂

Construction Activities Performed:
Removing rock from west side of barrier

0818 - beaver crossed EDB on rock near
Jersey Island piles & made a beeline upstream.
Last seen @ 0820 swimming hard upstream

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	GINA RADIEUE		**Date**	20150924
	Start Time	0630	**End Time**	1630

Comments for all Concerns Noted Above/Species Observed/ General Comments:

0630 - clear site

0649 - ~~[illegible]~~ beaver on upstream side

0701 - large male sea lion on downstream side near barges

0732 - Osprey on San Joaquin River

0906 - beaver on upstream side, swam into tules

0910 - large rafts of water hyacinth floating down SJR, none coming down WFR. [As day/tide progress, rafts are pushed up against downstream side of barrier

1006 - juvenile gopher snake just outside exclusion fence on east end near vehicles/rip rap. Escorted it out of harms way. (1 ft long)

1419 - WPT in hyacinth, 6 ft from Jars riprap. 28 in deep

Construction Activities Performed:

Removing rock from downstream side of barrier.

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Rachel August		**Date**	09/28/15
	Start Time	0630	**End Time**	1700

Comments for all Concerns Noted Above/Species Observed/ General Comments:
- Arrived on site at 0630.
- Performed site survey for sensitive species.
None observed.
- walked Jersey Island levee road several times
throughout the day to check for sensitive species.
- Beaver was spotted on barrier at 0530 near
Jersey Island. Swam upstream

Construction Activities Performed:
- Removed rock from barrier

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Mandi McElroy		**Date**	09 29 2015
	Start Time	0630	**End Time**	1600

Low 60's, WINDY

Inspector: Matt Miller

Comments for all Concerns Noted Above/Species Observed/ General Comments:

DCCO	TUVU	KILL	FOTE	BLPH	AMCR
GRBH	OSPR	RBGU	MODO	PSFL?	TRSW
GREG	NOHA	CAGU	EUCD	WIFL	BASW
SNEG	RTHA	CATE	ANHU	WESJ	MAWR
YEWA	COYE	OCWA	NOMO	EUST	BEWR
sparrow (unk)		SOSP	SPTO	BRBL	RWBL
AMGO					
fence lizards		cattle			
raccoon scat					
mink scat					
Surveyed exclusion fence - no findings, in compliance.					

Construction Activities Performed:

Underwater excavation of temporary barrier from barge.

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Norm Ponferrada		**Date**	9/30/2015 Wed.
	Start Time	0630	**End Time**	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:

Temp: 58°F, cloud cover 100%, wind ≈ 15mph
rained at 1025, stopped raining at 1305

Surveyed riprap surrounding the chainlink fence on the Bradford Island side prior to fence removal. Conveyed information to Dutra Staff to stop work and inform site-biologist if any species were seen during fence removal. Inspector/Manager instructed Dutra Staff to fill fence post holes with rocks after removal; however, no holes were ~~were~~ needed to be filled because fence post were sitting inside a concrete bucket-like structure.
Species observed: killdeer, American crow, gull species, tree swallow, cattle

Construction Activities Performed:

- Removed fence on Bradford Island
- Staged barge to prepare rock barrier removal the following day.

	Department of Water Resources Biological Monitoring Field Report Project: Emergency Drought Barriers Project			
Biologist Name	Tracey Walker		Date	10-1-15
	Start Time	0630	End Time	1710

Comments for all Concerns Noted Above/Species Observed/ General Comments:

- Arrived at site at 0635 and cleared GGS fencing ~~around~~ adjacent to barrier. No GGS or other spp observed. Finished clearing site at 0640.
- Met with Tom from DWR and he mentioned that PR visitors would be coming at 9:30am and would need enviro. training.
- ~~930am - Press team~~ 7am - gave enviro training to several new Dutra crew members
- 930am - Press team of ~12ppl arrived on site & I gave all of them an enviro. training. They left at ~12:30pm
- 1pm - gave enviro training to 1 crew member of Hills engineering subcontractor

weather: cloudy w/ periodic rain showers, calm winds, 53F-75F

Spp: WCSP, TUVU, RBGU, CLSW, BLPH, Am. Beaver, RWBL, NOFL, BT Jackrabbit, SPTO, COYE, SOSP, WEME, KILL, FOTE, OSPR, RTHA, DOWO, W. fence lizard, NU, BEKI

Construction Activities Performed:

Removing rock from barrier. Levee was breached at ~8am and opening was slowly widened. Barges took rock material away to off-site landfill in Rio Vista

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	GINA RADHEVE		**Date**	20151002
	Start Time	0630	**End Time**	1545

Comments for all Concerns Noted Above/Species Observed/ General Comments:
-0630 - Arrived on site. Safety meeting
nearly under way.
-0642 - Site clear. No sensitive species.
Fence needs repair at eastern end, was
"untucked" from ground.
0650 - fence repairs completed
0753 - pair of sandhill Cranes flew overhead
0910 - beaver swimming east along Jersey Shore,
east of barrier

Construction Activities Performed:
Pulling rock

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Norm Ponferrada		**Date**	Sat 10/3/2015
	Start Time	6:30am	**End Time**	5:30pm

Comments for all Concerns Noted Above/Species Observed/ General Comments:

Temp 58°F at 6:30 am and 83°F at 5:30pm
wind <3mph but picked up to ≈ 20mph in the pm.
cloud cover 80%

-Only one barge was working in the morning because spudwire broke on the other barge on the previous day. work was temporarily stopped due to a punctured hole through the barge, Dutra crew had to weld it shut from ≈9:40am until about 11:30am before resuming work. The other barge arrived in the afternoon and started removing rocks on the Bradford Island side.
species observed: tree swallow, house finch, brewer's blackbird California towhee, gull spp., forster's tern, beaver

Construction Activities Performed:

-Continued removing rocks
-removed clips and gate of chain link fence on Jersey island side. Biologist thoroughly surveyed the riprap around the fence to clear and observe for any wild life species

Scanned by CamScanner

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	David Bise		**Date**	10/4/2015
	Start Time	0630	**End Time**	1545

Comments for all Concerns Noted Above/Species Observed/ General Comments:

Cleared exclusion fence when arrived onsite. No animals found within fence.

Species Observed:

Great blue heron, American crow, Great egret, red-winged blackbird, gull sp. northern mockingbird, double-crested cormorant, western meadowlark snowy egret, black phoebe, turkey vulture, barn swallow western fence lizard, mink

Weather clear, 54°F @ 06:30, at close 80°F, clear

Construction Activities Performed:

Rock removal

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	GINA RADIEVE		**Date**	20151005
	Start Time	0620	**End Time**	1700

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0620 - Arrived & cleared site
1229 - river otter climbs Jersey Island rip rap
to circumvent barrier. Immediately
returns to water
1315 - sea lion upstream beyond buoy line

Construction Activities Performed:
Repair work on both barges/excavators
until ~1200.
Pulling rock thereafter.

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Jeffrey Tkach		**Date**	10/6/15
	Start Time	0630	**End Time**	1720

Comments for all Concerns Noted Above/Species Observed/ General Comments:
- 630 arrived on site and walked perimeter fence to clear site.
- Rock removal from channel
- Stopped work @ ~1715

Construction Activities Performed:

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Eva Olin		**Date**	10/7/15
	Start Time	0630	**End Time**	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0630- Arrived & cleared site
1000- RTHA, otter, & unidentified banded snake observed retreating into rip-rap. ~~[illegible]~~ signaled by construction personnel

Construction Activities Performed:
Rock Removal

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	GINA RADIEVE		**Date**	20151008
	Start Time	0620	**End Time**	1735

Comments for all Concerns Noted Above/Species Observed/ General Comments:

0620 - Arrived on site. GHOW calling very close to exclosure, may have been perched on trailer or fencing.

0627 - cleared site - no sensitive species

0723 - 10 Sandhill Cranes land on Bradford Island north of barrier

1054 - beaver observed crossing barrier riprap near sheet piling & ~80' from excavator work, heading east.

1410 - unidentified garter snake seen in riprap ~400 m east of barrier. See separate 665 form.

1735 - Left site.

Construction Activities Performed:

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Jeffrey Tkach		**Date**	10/9/2015
	Start Time	0630	**End Time**	1800

Comments for all Concerns Noted Above/Species Observed/ General Comments:
- Arrived on site, conducted perimeter walk to clear site.
- Rock removal
- ~ 1600 pump out truck arrived to pump out port-a-potty.
- Stopped work and left site @ ~ 1800

Construction Activities Performed:

	Department of Water Resources Biological Monitoring Field Report Project: Emergency Drought Barriers Project			
Biologist Name	Norm Ponferrada		Date	10/10/2015 Sat
David Bise 12 PM	Start Time	0625	End Time	1715

Comments for all Concerns Noted Above/Species Observed/ General Comments:

at 0625

Temp 54°C, wind 0 mph, thick fog

@ 1715

Temp 88, wind 15 mph

Species observed: great blue heron, gull sp. snowy egret, killdeer, black phoebe, 2 gopher snakes (≈7"), western fence lizard yellow-billed racer, caspian tern

Construction Activities Performed:

- continued to remove rocks from rock barrier

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Rachel August		**Date**	10/11/15
	Start Time	0600	**End Time**	1745

Comments for all Concerns Noted Above/Species Observed/ General Comments:

- Arrived at site at 0600
- ~~Perfomed su~~ Performed survey for sensitive species. None observed.
- walked site several times throughout day.

Construction Activities Performed:

- Rock removed from barrier w/ 2 barges

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Eva Olin		**Date**	10/12/15
	Start Time	0630	**End Time**	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0630- Arrived & Cleared Site
1705- Work Stopped

Construction Activities Performed:
Rock Removal
Bathymetry Survey

	Department of Water Resources Biological Monitoring Field Report Project: Emergency Drought Barriers Project			
Biologist Name	GINA RADIEVE		Date	20151013
	Start Time	0620	End Time	

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0620 - cleared site, no sensitive species observed
0641 - sea lion near crane barge 1.
1246 - injured Pied-billed Grebe spotted in hyacinth
& tule along westside of barrier abutment. Decided to allow nature
to take it's course as long as not in way of work
1415 - excavator working around westside of abutment on
Jersey side. PBGR alert to activity but remains
hunkered down.
1533 - PBGR twitching both wings continuously
1620 - a lot of activity near grebe, still in tules.
Observed it dive to evade my presence.
1730 - left site
1934 - 1 of pheasants on rip rap btwn site & ferry

Construction Activities Performed:
Pulling rock

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Rachel August		**Date**	10/14/15
	Start Time	0600	**End Time**	1800

Comments for all Concerns Noted Above/Species Observed/ General Comments:

- Arrived on site at 0600
- Surveyed site for species of concern. None observed.
- Grebe was spotted just downstream of King piles. The left wing was injured. Construction workers were instructed to work of the area. Grebe was observed from 0700 - 1800 (departure time)

Construction Activities Performed:

- Kelso barge removed from site due to damaged spud. will be repaired & scheduled back in service Friday
- Rock removed from barrier via Crane Barge 1

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Jeffrey Hatch		**Date**	10/15/2015
	Start Time	0630	**End Time**	1715

Comments for all Concerns Noted Above/Species Observed/ General Comments:
- Arrived on site and cleared site
- Work started and rock removal operations on Bradford Island side of West Fall River
- Switched out barges @ ~ 1200. Work stopped for the day

Construction Activities Performed:
Rock Removal

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	R Avila		**Date**	10-16-2015
	Start Time	6:32	**End Time**	1800

Comments for all Concerns Noted Above/Species Observed/ General Comments:

Arrived while still dark, first survey done via flashlight. Multiple perimeter walks done both inside and outside fencing each hour, no snakes or snake tracks found. PBGR with injured wing seen throughout day near levee, not bothered by us or EDB removal. Red winged blackbird, snowy egret, black crown night-heron, black phoebe, morning dove, jack rabbit, pied billed grebe double crested cormorant, turkey vulture, kill deer, western meadolark red tailed hawk, California gull

A western yellow-bellied racer was seen along levee by someone checking water quality.

Construction Activities Performed: Rock removed from river and placed on barges

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	GINA RADIEVE		**Date**	20151017
	Start Time	0615	**End Time**	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0625 - cleared site
0715 - injured pied-billed grebe still loitering in Jersey Is. tules
west of barrier
1730 - done for day

Construction Activities Performed:
Pulling rock.
Kelso broke spud wire ~1400, will repair tmrw.

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	GINA RADIEVE		**Date**	20151019
	Start Time	0625	**End Time**	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0625 - cleared site
0700 - injured pied-billed grebe still loitering
in sheet pile tules west of Jersey barrier
1620 - grebe appears to have vacated area
while barge is working farther from
Jersey Island. Could not relocate grebe
for remainder of day
1730 - work finished. left site

Construction Activities Performed:
pulling rock

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Eva Olin		**Date**	10/20/15
	Start Time	0630	**End Time**	1740

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0630- cleared site
1735- Heard owl calling

Construction Activities Performed:
Rock Removal

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Rachel August		**Date**	10/21/15
	Start Time	0600	**End Time**	1800

Comments for all Concerns Noted Above/Species Observed/ General Comments:

- Arrived on site and surveyed for species of special concern. None observed.
- Beaver spotted swimming near crane barge at 0715 and then swam upstream
- walked site several times throughout to survey for sensitive species.
- mink was observed at 1745 about 0.1 mile east of barrier running on rip rap.

Construction Activities Performed:

- Rock removed from barrier with two barges.

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	GINA RADIEVE		**Date**	20151022
	Start Time	0625	**End Time**	

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0625- cleared site.
0700- Cody Freitas (Dutra) reported seeing a WPT on a hyacinth raft along Bradford shore yesterday afternoon the turtle was not disturbed by work.
0952- American mink travelling ~~along~~ west along water's edge on Jersey Island. Paused on west side of barrier to hunt in hyacinth.
1319- Joaquin Garza (DWR) reports seeing juv gopher snake at top of rip rap ~200m east of barrier on Jersey Island
1609- tailgate to hydroseed crew
1615- walked area to be hydroseeded. no sensitive species encountered
~~[illegible]~~ 1845- ~~[illegible]~~ left site

Construction Activities Performed:
All day- pulling rock
1700- hydroseed Jersey Island slope of levee & cleared flat area.
~~[illegible]~~ 1835- finish hydroseeding

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Jeffrey Tkach		**Date**	10/23/2015
	Start Time	0640	**End Time**	1745

Comments for all Concerns Noted Above/Species Observed/ General Comments:
- Arrived on site and cleared site of possible sensitive species
- Work commenced (Rock removal)
- Multiple boats tried to pass through channel, several were turned around.

Construction Activities Performed:
- Rock removal

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Jeffrey Thach		**Date**	10/26/2015
	Start Time	0630	**End Time**	1700

Comments for all Concerns Noted Above/Species Observed/ General Comments:

- Arrived on site and cleared site of possible sensitive species
- Several boats tried to navigate through the Channel; all were turned away
-

Construction Activities Performed:

Rake Removal.

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Rachel August		**Date**	10/27/15
	Start Time	0630	**End Time**	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:

- Arrived at site, at 630. Surveyed site for sensitive species. None observed.
- Surveyed site, several times throughout day for sensitive species. None observed.

Construction Activities Performed:

- Rock removed from West False River & placed on barges

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Eva Olin		**Date**	10/28/15
	Start Time	0630	**End Time**	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:
- Arrived & cleared site
- Double checked site after sunrise
- 1315 - Honey Bucket was cleaned
- Rock Removal ended ~1600

Construction Activities Performed:
Rock Removal

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Jeffrey Thark		**Date**	10/29/15
	Start Time	0630	**End Time**	1715

Comments for all Concerns Noted Above/Species Observed/ General Comments:
- Cleared site of potential sensitive species
- Work stopped @ ~ 1700hrs

Construction Activities Performed:
Rock removal

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Rachel August		**Date**	10/30/15
	Start Time	0630	**End Time**	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:

- Arrived on site and surveyed for sensitive species. None observed.
- Surveyed site throughout the day for sensitive species. None observed.
- No land work performed.

Construction Activities Performed:

- Rock removed from barrier (esperally near abutments to prepare for divers) and placed on barge.

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name			**Date**	Sunday 11/1/2015
Norm Ponferrada Mandi McElroy	**Start Time**	0630	**End Time**	1703

Comments for all Concerns Noted Above/Species Observed/ General Comments:

Weather at 0630: Temp = 59°F, wind ≈ 15-20 mph gusty, cloudcover = 60% sunny

1430: 70°F, 10-15 mph wind, overcast / dark clouds 90% cover

General Comments: Cleared the are where fencing is located prior to removal. No wildlife was observed within the area.

Species observed: American crow, double-crested cormorant, red-tail hawk, California towhee, Savannah sparrow, mourning dove, Northern harrier, western fence lizard, SANDHILL CRANES!, California gull, new gull, great egret, great blue heron, black phoebe, Forsters tern, red-winged blackbird

Construction Activities Performed:

- Fence removal on the Jersey Island Side.

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	SARAH ZORN		**Date**	11-2-15
	Start Time	0630	**End Time**	1725

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0645: ARRIVED ON SITE. CLEARED SITE
1115: INSPECTED RIP-RAP AROUND ABUTMENT ON JERSEY ISL SIDE FOR GGS PRIOR to REMOVAL OF RIP-RAP NO GGS OBSERVED. RIP RAP WAS REMOVED VERY CAUTIOUSLY FROM THE ABUTMENT PERIMITER
1500: FENCE POLES REMOVED FROM AROUND JERSEY ABUTMENT.
1515: 2 SEA LIONS OBSERVED SWIMMING ~250 ft UPSTREAM OF BARRIER SITE
1724 ~~STOP~~ END WORK

Construction Activities Performed:
ROCK REMOVAL (INCLUDING FROM AROUND JERSEY ABUTMENT)
FENCE POST REMOVAL

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	GINA BADIEVE		**Date**	20151103
	Start Time	0625	**End Time**	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0625- Arrived on site & clear exclosure area.
No sensitive
0730 - Gave Enviro tailgate to dive crew (3)
aboard the Kelso
1730 - Left site.

Construction Activities Performed:
Digging rock around Jersey Island sheet piles
Divers cutting Jersey Island sheet piles.

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Eva Olin		**Date**	11/4/15
	Start Time	0640	**End Time**	

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0640 Arrived & cleared site
0800- Sandhill cranes observed flying over
1000- SWHA observed

Construction Activities Performed:
Rock removal
Sheet pile removal on Jersey Island. Work
conducted w/ boat, diver, and crane

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	SARAH ZORN		**Date**	11/5/15
	Start Time	0630	**End Time**	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:

0630: Arrived on-site and cleared proj. area for work. No sensitive species observed

Crew removed a portion of the exclusion fence in front of the Jersey abutment to bring in an excavator to excavate rock from around the abutment. During this process, a Suisun Marsh aster plant was removed. Removal was unavoidable. Rip-rap was surveyed thoroughly for GGS prior to excavation. No GGS observed.

1200: 1 King pile removed on Jersey Side

1340: 2nd King pile removed on Jersey Side

3rd King pile not fully removed

Sheet piles removed on Jersey side

* 1720: Replaced exclusion fence & placed caps back on King piles not removed

Construction Activities Performed:

Excavate riprap from Jersey Isl. side abutment

Remove rock from Bradford side

Cut 2 King Piles (Driver) on Jersey Side (2)

Removed sheet piles on Jersey Side

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Eva Olin		**Date**	11/6/15
	Start Time	0630	**End Time**	1645

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0630. Arrived & cleared site.
Pile removal on Jersey Isl.
0830- Went to Bradford to clear site. No spp. observed
- some work on piles, work on buoy line piles,
& underwater rock removal around piles
Afternoon- heard & observed 3-4 RTHA west of staging
area
1500- Sea lion near Jersey Isl.
1645- Work done for day.

Construction Activities Performed:
Rock placement near Bradford.
Pile removal finished (land & diver) on Jersey Isl.
Prep for pile removal & remove whalers on Bradford

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	David Bise		**Date**	11/7/2015
	Start Time	0630	**End Time**	1700

Comments for all Concerns Noted Above/Species Observed/ General Comments:

Cleaned enclosure @ DL 45. No animals observed

Foggy 43°F upon arrival

Species

Y-R warbler, Sayl's phoebe, black phoebe, gull sp., red-winged blackbird, red-tailed hawk, killdeer, double-crested cormorant, sandhill crane, northern harrier (Bradford), belted Kingfisher, western fence lizard, snowy egret, song sparrow, great egret, western meadowlark, great blue heron

Construction Activities Performed:

Cutting piles on Bradford Island side. Replacing nest @ piling location on Jersey Island side.

	Department of Water Resources Biological Monitoring Field Report Project: Emergency Drought Barriers Project			
Biologist Name	Gina Radieve		Date	20151109
	Start Time	0625	End Time	1735

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0625 - Arrived at site, cleared exclusion area
No sensitive species observed.
1045 - lots of RTHA activity on Jersey in
willows south of exclusion. 2 adults & 1
juvenile bird calling, chasing, playing
mid flight, perching & stooping. This
is in area of known 2015 nest site.
1232 - juv RTHA perched on office trailer in
exclusion for ~10 minutes
1735 - repaired fence & left site

Construction Activities Performed:
CB1 contouring river bottom
Kelso removing buoys, warning signs
Survey Boat

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Eva Olin		**Date**	11/10/15
	Start Time	0630	**End Time**	1740

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0630- Arrived & cleared site
Sandhill crane & RTHA observed near site
1100- ~~Kelso & Barge~~ Buoy removal finished.
Kelso & Barge left site shortly thereafter

Construction Activities Performed:
Rock Removal/placement near Bradford
Buoy & line removal

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Gina Radieve		**Date**	2015/11/11
	Start Time	0630	**End Time**	1700

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0630 – Arrived on site & cleared exclusion area
No sensitive species observed
Abundant SACR activity in patchy tule
fog. Calling, flocks flying overhead
1145 – dead vole noted outside exclusion fence
along top of riprap on Jersey Island
near a bait station (~2m). Animal
appears recently deceased, no rigormortis.
Appears small open wound at nose.
1700 – left site

Construction Activities Performed:
grading river bottom

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	SARAH ZORN		**Date**	11/12/15
	Start Time	0630	**End Time**	1645

Comments for all Concerns Noted Above/Species Observed/ General Comments:

0640: Cleared site. Major fog in area. About 10 ft of visibility

0730: Crew removed exclusion fencing. Used the small dozer/excavator to fill in the trench where the fence was buried.

: Fixed area of riprap on Jersey & Bradford sides right on levee. Both areas were thoroughly surveyed prior to moving rock.

Construction Activities Performed:

Remove exclusion fence, fill in exclusion fence trench. Removed Mobile office ~~Removed~~ Fixed riprap where sheet piles were showing through

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Eva Olin		**Date**	11/13/15
	Start Time	0640	**End Time**	0820

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0640- Arrived & checked site. no species observed.
Attended Safety meeting
~ 0800 - Work began - grading river bottom
Several flocks of SACR observed.
Multiple RTHA observed adjacent to staging area

Construction Activities Performed:
Grading river bottom - mostly rock removal
Geotech - see separate monitoring log.

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	GINA BAPIEVE		**Date**	20151114
	Start Time	0720	**End Time**	1715

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0720- Arrived at site after lockout issue. (RD locked ~~and~~ Dutra & DWR locks off chain)
0757- American Mink swimming & running at base of rip rap headed west.
0945 - Steve Yoakim (Dutra) observed mink heading east in rip rap
1100- juv RTHA perched in small willow south of barrier site. this bird & atleast 1 adult & 1 other RTHA (age unk) seen in this area frequently
1715 - left site

Construction Activities Performed:
grading river bottom
0730-1100 no work, repairing spud wire

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	GINA RADIEVE		**Date**	20151115
	Start Time	0630	**End Time**	1705

Comments for all Concerns Noted Above/Species Observed/ General Comments:
0630 - Arrived & cleared site. Picked up scattered duct tape left behind from fence. No sensitive species observed
1410 - 2 RTHA circling over Eucalyptus on Bradford @ 2015 nest site
1530 - left site

Construction Activities Performed:
grading river bed

	Department of Water Resources **Biological Monitoring Field Report** **Project: Emergency Drought Barriers Project**			
Biologist Name	Eva Olin		**Date**	11/16/15
	Start Time	1015	**End Time**	1630

Comments for all Concerns Noted Above/Species Observed/ General Comments:
1015 - Arrived & cleared site. No sensitive spp observed.
~1415 - Cleared site for ~~work~~ gravel placement
1645 - Work ended

Construction Activities Performed:
Grading levee road
Equipment removal

	Department of Water Resources Biological Monitoring Field Report Project: West False River Salinity Barrier Geologic Exploration		
Biologist Name	Jeffrey Tkach	Date	11/9/2015
	Start Time 0730	End Time	1730

Comments for all Concerns Noted Above/Species Observed/ General Comments:

- Arrived on site @ 0730
- Crossed False River on Ferry to Bradford Island @ 0800
- Arrived @ bore hole location @ 0820 and provided environmental awareness training to drill crew
- About 10am a landowner approached Mark Pryor Kopp and informed him that we were not supposed to be blocking the road
- the crew finished the sounding @ ~ 1045 and finished grouting the hole by 11.
- Off site by 1130 and waited for the ferry to pick us up.
- Drill rig arrived on Jersey Island here and set up @ ~ 1300 and CPT arrived @ ~ 1400 and started sounding.
- ~~#~~ 1645 CPT Finished sounding and finished grouting by 1720.

Construction Activities Performed:

- CPT sounding and drilling bore hole set up.

	Department of Water Resources **Biological Monitoring Field Report** **Project: West False River Geologic Exploration Project**			
Biologist Name	SARAH ZORN		**Date**	11/10/15
	Start Time	0700	**End Time**	1715

Comments for all Concerns Noted Above/Species Observed/ General Comments:

0715: Arrived onsite (Jersey Isl) and cleared area. Drilling began

1200: wire issue w/ rig. Stopped drilling for 1.5 hrs until fixed.

1700: Clean-up for day. Directed drillers to shovel up some drilling mud that had dripped out of a pipe. Placed bucket under spot that was dripping for overnight.

2 RTHA observed flying around barge

Construction Activities Performed:

Drilled 69.5ft on Jersey Island.

	Department of Water Resources Biological Monitoring Field Report Project: West False River Salinity Barrier Geologic Exploration			
Biologist Name	Rachel August		Date	11/11/15
	Start Time	0645	End Time	1700

Comments for all Concerns Noted Above/Species Observed/ General Comments:

- Arrived on site at 0645 at Jersey Island. Surveyed site for sensitive species. None observed. Gave environmental awareness training to land drill team.
- Went to barge over water ~ 0800 and gave environmental awareness training.
- Dead vole observed outside exclusion fencing near bait station at 1145
- Land drilling team went to Bradford Island via Ferry at 1300. Survey for sensitive species was conducted. None observed.

Construction Activities Performed:

- Bore hole completed & grouted on Jersey Island
- Over water bore hole started in center of channel. Stopped @ 17.5 ft
- Bore hole on Bradford Island started @ 1400

* As overwater barge got in position, spud cable broke. Hole is slightly off position. repair barge expected to arrive Friday.

	Department of Water Resources **Biological Monitoring Field Report** **Project: West False River Salinity Barrier Geologic Exploration**			
Biologist Name	Rachel August		**Date**	11/12/15
	Start Time	0700	**End Time**	1630

Comments for all Concerns Noted Above/Species Observed/ General Comments:

- Arrived on Jersey Island and took skiff to drilling barge. Site looked good to start work & gave environmental awareness to new crew member.
- Took skiff to Bradford & surveyed for sensitive species. None observed.
- Took ferry to Bradford & continuously monitored site for sensitive species. None observed

Construction Activities Performed:

- Drilling over water. Finished day 17.5 ft from bottom
- Drilling on Bradford Island levee. Finished drilling at 101 ft. Will grout tomorrow

	Department of Water Resources **Biological Monitoring Field Report** **Project: West False River Salinity Barrier Geologic Exploration**			
Biologist Name	Rachel August		**Date**	11/13/15
	Start Time	0730	**End Time**	

Comments for all Concerns Noted Above/Species Observed/ General Comments:

- Took ferry to Bradford Island. Surveyed site for sensitive species. None observed.
- No new crew members.
- Finished grouting & left site @ 1130.
- Repair barge w/ crane is expected to arrive at 1500 to remove damaged cable spud from overwater drill barge.

Construction Activities Performed:

- Grouted bore hole on Bradford Island.
- Overwater hole finished & grouted

Appendix E: CNDDB Forms and GGS Observation Forms

CNDDB Online Field Survey Form Report

California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/

This data has been reported to the CNDDB, but may not have been evaluated by the CNDDB staff

Source code BAR15F0012
Quad code 3812116
Occ. no.
EO index no.
Map index no.

Scientific name: *Thamnophis gigas*

Common name: giant garter snake

Date of field work (mm-dd-yyyy): 05-21-2015

Comment about field work date(s): Observations occurred between 05/18/2015 and 05/21/2015

OBSERVER INFORMATION

Observer: Jessica Barnes

Affiliation: CA Department of Water Resources

Address: 3500 Industrial Blvd, West Sacramento, CA 95691

Email: jessica.barnes@water.ca.gov

Phone: (916) 376-9789

Other observers: Rhiannon Klingonsmith, Sarah Zorn, Rachel August

DETERMINATION

Keyed in:

Compared w/ specimen at:

Compared w/ image in: Calherps

By another person: Laura Patterson (CDFW)

Other:

Identification explanation: Individuals were processed in the field, including identifying scale measurements. Photos were also taken.

Identification confidence: Very confident

Species found: Yes **If not found, why not?**

Level of survey effort: Observations occurred while conducting visual pre-construction surveys and monitoring construction activities. Two GGS individuals were hand captured and relocated (by permitted individuals with agency approval).

Total number of individuals: 2

Collection? No **Collection number:**

Museum/Herbarium:

ANIMAL INFORMATION

How was the detection made? Captured/released

Number detected in each age class:

adults	juveniles	larvae	egg mass	unknown
2				

Age class comment:

Site use description: Rip-rap

What was the observed behavior? Basking on rip-rap

Describe any evidence of reproduction:

SITE INFORMATION

Habitat description: Rip-rap along the bank of West False River

Slope: Land owner/manager:

Aspect:

Site condition + population viability: Good

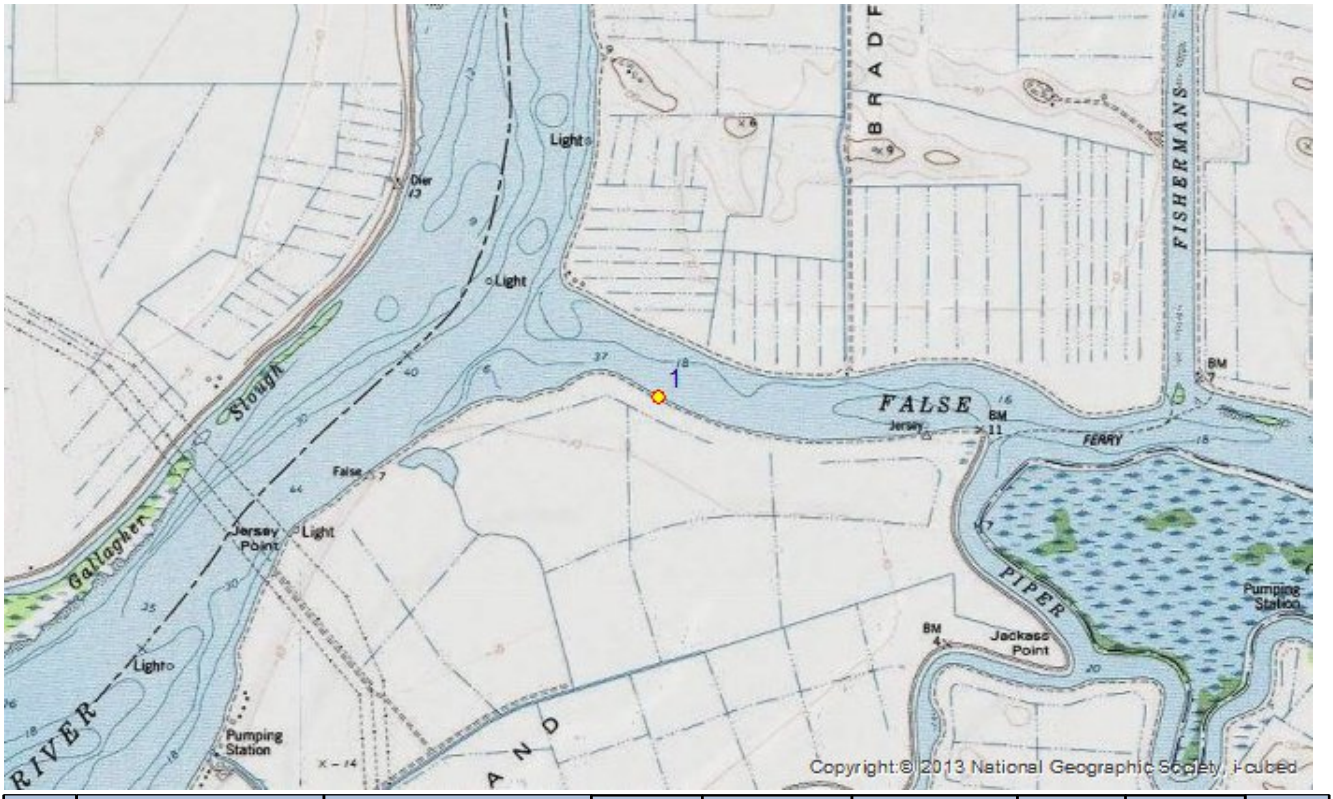
Immediate & surrounding land use: Immediate land use is rip-rapped bank. Surrounding land use includes navigable waterway to the north, gravel levee road to the south, and irrigated pasture with ditches and sparse riparian habitat on the island interior

Visible disturbances: Levee road travel and ongoing and potential construction projects int he area. Recent levee improvement work

Threats: Vehicle strikes, potential construction projects, habitat degradation and fragmentation

General comments:

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Contra Costa	Jersey Island	0	38.05675	-121.67211	616497	4212944	10
1	**Public Land Survey**	**Feature Comment**						
	M T03N R03E 32							

The mapped feature is accurate within: 10 m

Source of mapped feature: Google Maps

Mapping notes:

Location/directions comments: Northern end of Jersey Island along False River

Attachment(s): DSCF1793.JPG, GGS 1, photo 1; DSCF1795.JPG, GGS 1, photo 2; DSCF1797.JPG, GGS 2, photo 1; DSCF1798.JPG, GGS 2, photo 2

CNDDB Online Field Survey Form Report

California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/

This data has been reported to the CNDDB, but may not have been evaluated by the CNDDB staff

Source code BAR15F0013
Quad code 3812116
Occ. no.
EO index no.
Map index no.

Scientific name: *Thamnophis gigas*

Common name: giant garter snake

Date of field work (mm-dd-yyyy): 10-08-2015

Comment about field work date(s): Observations occurred between 05/08/2015 and 10/08/2015

OBSERVER INFORMATION

Observer: Jessica Barnes

Affiliation:

Address: 3500 Industrial Blvd, West Sacramento, CA 95691

Email: jessica.barnes@water.ca.gov

Phone: (916) 376-9789

Other observers:

DETERMINATION

Keyed in:

Compared w/ specimen at:

Compared w/ image in: Calherps

By another person:

Other:

Identification explanation: Visual observations made, but none were close enough to the individual to positively identify the species or take photos that would aid in identification. Observations were in an area where positive GGS observations had occurred during same time period

Identification confidence: Not very confident

Species found: Yes **If not found, why not?**

Level of survey effort: Observations occurred during travel to work site and monitoring during project construction activities

Total number of individuals: 5

Collection? No **Collection number:**

Museum/Herbarium:

ANIMAL INFORMATION

How was the detection made? Seen

Number detected in each age class:

adults	juveniles	larvae	egg mass	unknown
5				

Age class comment:

Site use description: Two individuals observed basking on levee road, two individuals observed moving away from project area to wetlands/uplands, and one individual observed at nearby landowner's property

What was the observed behavior? Basking and/or moving away from project site

Describe any evidence of reproduction:

SITE INFORMATION

Habitat description: Gravel levee road, wetland, and/or upland

Slope: Land owner/manager:

Aspect:

Site condition + population viability: Good

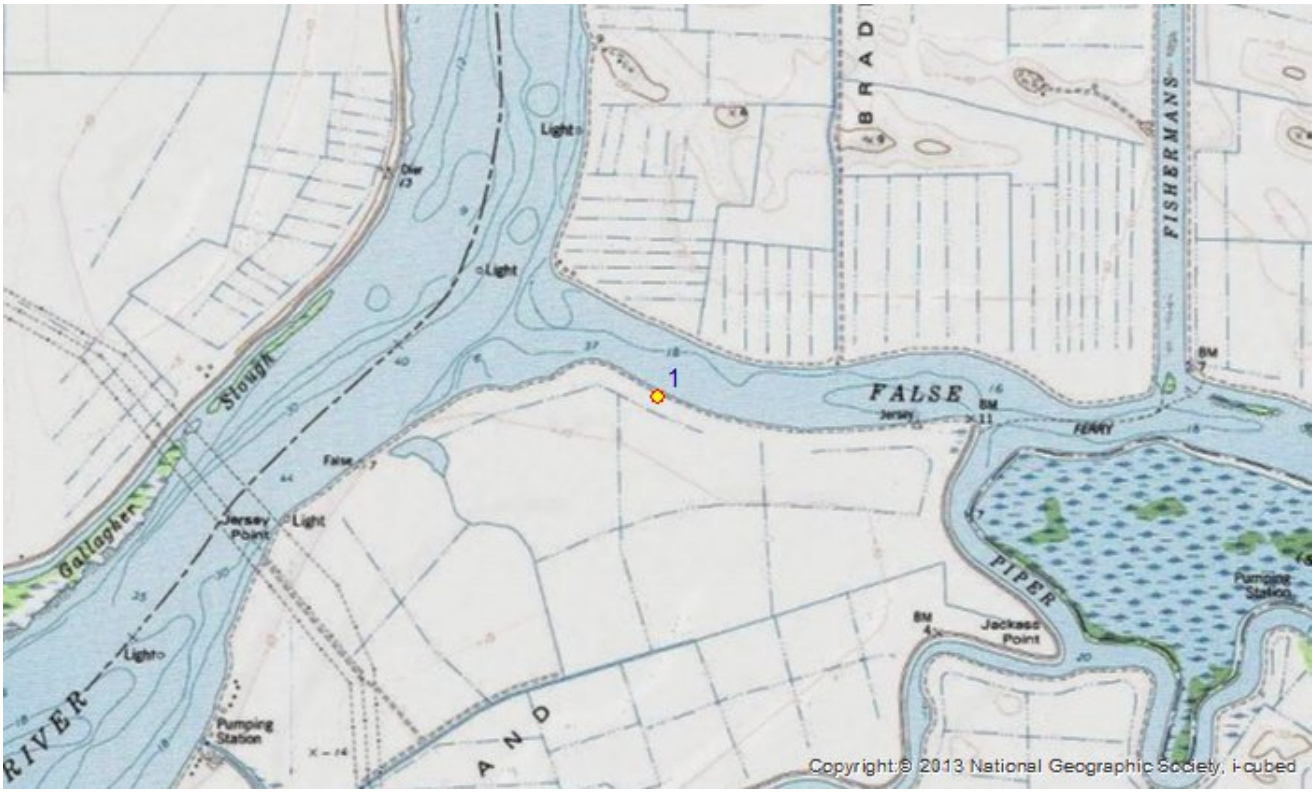
Immediate & surrounding land use: Gravel levee roads, navigable waters, rip-rapped banks, and irrigated pasture with ditches and some sparse riparian habitat on island interiors

Visible disturbances: Levee road travel and potential construction projects in the area.

Threats: Vehicle strikes, potential construction projects, habitat degradation, and fragmentation.

General comments:

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Contra Costa	Jersey Island	0	38.05637	-121.67173	616531	4212902	10
1	**Public Land Survey**	**Feature Comment**						
	M T03N R03E 32							

The mapped feature is accurate within: 1000 m

Source of mapped feature: Google Maps

Mapping notes: Multiple observations made, including along the levee road while accessing project site, and one observation on Bradford Island

Location/directions comments:

Attachment(s):

CNDDB Online Field Survey Form Report

California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/

This data has been reported to the CNDDB, but may not have been evaluated by the CNDDB staff

Source code RAD15F0002
Quad code 3812116
Occ. no. _____
EO index no. _____
Map index no. _____

Scientific name: *Emys marmorata*

Common name: western pond turtle

Date of field work (mm-dd-yyyy): 09-24-2015

Comment about field work date(s):

OBSERVER INFORMATION

Observer: Gina M. Radieve

Affiliation: California Department of Water Resources

Address: 4401 58th Street , Sacramento, CA 95820

Email: gina.radieve@gmail.com

Phone: (415) 686-4327

Other observers:

DETERMINATION

Keyed in:

Compared w/ specimen at:

Compared w/ image in: CalHerps

By another person:

Other:

Identification explanation: Viewed at distance of ~30m through binoculars. Turtle without red markings. Scute edges not serrated. Head and neck with dark and light mottled pattern.

Identification confidence: Very confident

Species found: Yes **If not found, why not?**

Level of survey effort:

Total number of individuals: 1

Collection? No **Collection number:**

Museum/Herbarium:

ANIMAL INFORMATION

How was the detection made? Seen

Number detected in each age class:

adults	juveniles	larvae	egg mass	unknown
1				

Age class comment:

Site use description: Emergency Drought Barrier was being removed at this location at the time of detection.

What was the observed behavior? Turtle was basking on floating raft of water hyacinth.

Describe any evidence of reproduction:

SITE INFORMATION

Habitat description: Open water in West False River. Turtle arrived at point on large floating mat of water hyacinth. These floating mats were abundant on the water on this date and were coming from the north on the San Joaquin River. As the tide changed, some mats were pushed east on West False River, and became lodged against the Emergency Drought Barrier on the Jersey Island side.

Slope:

Land owner/manager:

Aspect:

Site condition + population viability:

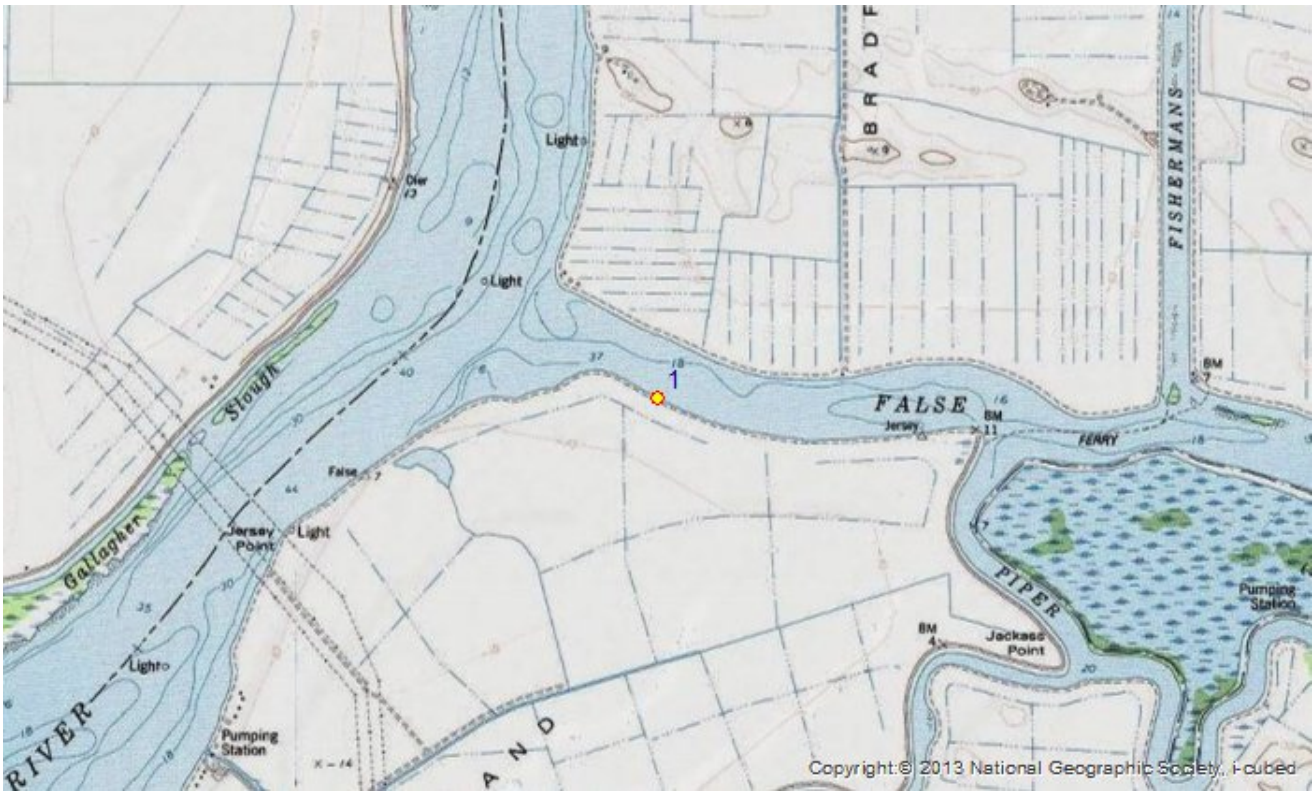
Immediate & surrounding land use:

Visible disturbances:

Threats:

General comments: Turtle remained on hyacinth mat until dusk. Turtle was not observed at the site the following morning. On 20151021 a WPT was reported by a worker at the site in a hyacinth mat across the river from this location, near Bradford Island.

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Contra Costa	Jersey Island	0	38.05671	-121.67196	616511	4212940	10
1	**Public Land Survey**	**Feature Comment**						
	M T03N R03E 32							

The mapped feature is accurate within: 10 m

Source of mapped feature: internet map application

Mapping notes:

Location/directions comments:

Attachment(s):

CNDDB Online Field Survey Form Report

California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/

This data has been reported to the CNDDB, but may not have been evaluated by the CNDDB staff

Source code MAR15F0002
Quad code 3812116
Occ. no. _____
EO index no. _____
Map index no. _____

Scientific name: *Emys marmorata*

Common name: western pond turtle

Date of field work (mm-dd-yyyy): 05-04-2015

Comment about field work date(s):

OBSERVER INFORMATION

Observer: Katherine F. Marquez

Affiliation:

Address: 3500 Industrial Boulevard , West Sacramento, CA 95691

Email: katherine.marquez@water.ca.gov

Phone: (916) 376-9785

Other observers:

DETERMINATION

Keyed in:

Compared w/ specimen at:

Compared w/ image in: CalHerps

By another person:

Other:

Identification explanation: Medium sized olive brown turtle (no red coloration) with smooth scutes.

Identification confidence: Very confident

Species found: Yes **If not found, why not?**

Level of survey effort:

Total number of individuals: 1

Collection? No **Collection number:**

Museum/Herbarium:

ANIMAL INFORMATION

How was the detection made? Seen

Number detected in each age class:

adults	juveniles	larvae	egg mass	unknown
1				

Age class comment:

Site use description:

What was the observed behavior? Turtle was walking along the road parallel to the river.

Describe any evidence of reproduction:

SITE INFORMATION

Habitat description: Paved levee road along rip-rapped levee.

Slope: Land owner/manager:

Aspect:

Site condition + population viability:

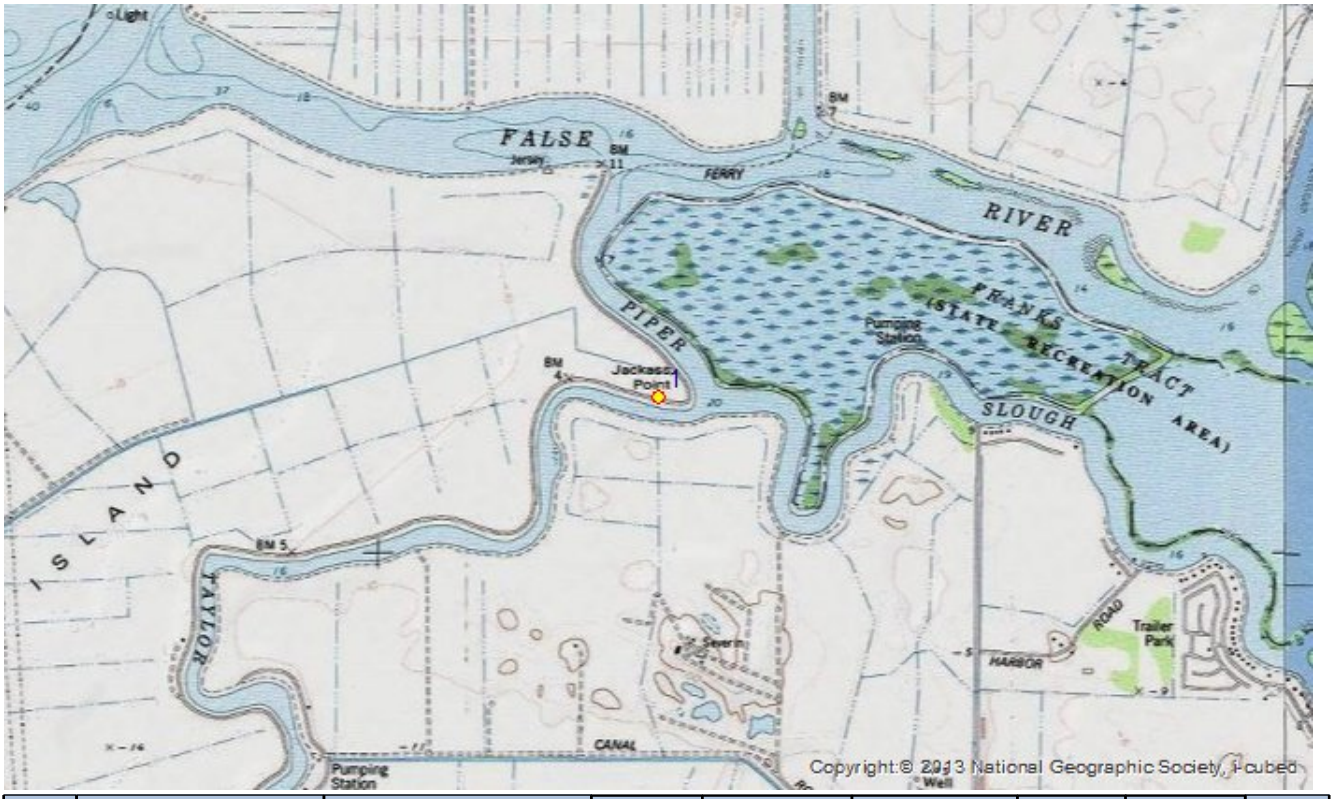
Immediate & surrounding land use: irrigated pasture

Visible disturbances: Fishing, road travel to ferry and construction sites north of the occurrence.

Threats: vehicle strikes

General comments:

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Contra Costa	Jersey Island	0	38.04714	-121.65474	618037	4211900	10
1	**Public Land Survey**	**Feature Comment**						
	M T02N R03E 4							

The mapped feature is accurate within: 10 m

Source of mapped feature: internet map application

Mapping notes:

Location/directions comments:

Attachment(s):

Appendix F: Water Quality Monitoring Data

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Tues
DATE: 09/08/15
TECHNICIAN: Chris Weber

SAMPLE: Morning - 0900
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

SAMPLE: Mid-Day
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1210	7.7	< 0.1	Shore
NORTH - BELOW	1200	11.6	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1455	5.4	< 0.1	Shore
NORTH - BELOW	1505	6.8	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

DAY: Wed
DATE: 09/09/15
TECHNICIAN: Chris Weber

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0850	7.8	< 0.1	Shore
SOUTH - BELOW	0900	4.0	< 0.1	Boat

OBSERVATION: Removing rock
South only

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1152	7.3	< 0.1	Shore
SOUTH - BELOW	1200	6.9	< 0.1	Boat

OBSERVATION: Removing rock
South only

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1458	6.2	< 0.1	Shore
SOUTH - BELOW	1500	8.1	< 0.1	Boat

OBSERVATION: Removing rock
South only

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Thur
DATE: 09/10/15
TECHNICIAN: Chris Weber

SAMPLE: Morning - 0900
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1200	4.0	< 0.1	Shore
NORTH - BELOW	1156	3.9	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1505	7.1	< 0.1	Shore
NORTH - BELOW	1500	7.3	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

DAY: Fri
DATE: 09/11/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0857	6.3	< 0.1	Shore
SOUTH - BELOW	0905	5.4	< 0.1	Boat

OBSERVATION: Removing rock
South Only

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1155	19.6	< 0.1	Shore
SOUTH - BELOW	1205	27.2	< 0.1	Boat

OBSERVATION: Removing rock
South Only

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1457	29.1	< 0.1	Shore
SOUTH - BELOW	1503	37.4	< 0.1	Boat

OBSERVATION: Removing rock
South Only

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Sat
DATE: 09/12/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0904	8.1	< 0.1	Shore
SOUTH - BELOW	0910	10.7	< 0.1	Boat

OBSERVATION: Removing rock
South only

SAMPLE: Mid-Day
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1156	24.8	< 0.1	Shore
SOUTH - BELOW	1205	23.5	< 0.1	Boat

OBSERVATION: Removing rock
South only

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1503	12.8	< 0.1	Shore
SOUTH - BELOW	1455	9.7	< 0.1	Boat

OBSERVATION: Removing rock
South only

DAY: Sun
DATE: 09/13/15
TECHNICIAN: -

No work at site.

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Mon
DATE: 09/14/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0920	6.7	< 0.1	Shore
NORTH - BELOW	0909	11.2	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

SAMPLE: Mid-Day
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1230	5.3	< 0.1	Shore
NORTH - BELOW	1224	18.8	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

SAMPLE: Afternoon - 1500
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

DAY: Tues
DATE: 09/15/15
TECHNICIAN: Chris Weber

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0905	12.3	< 0.1	Shore
NORTH - BELOW	0855	15.2	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

SAMPLE: Mid-Day
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1158	5.4	< 0.1	Shore
NORTH - BELOW	1210	11.4	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing Rock
North only

SAMPLE: Afternoon - 1500
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Wed
DATE: 09/16/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0915	5.7	< 0.1	Shore
NORTH - BELOW	0905	4.2	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock North only

SAMPLE: Mid-Day
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1208	5.8	< 0.1	Shore
NORTH - BELOW	1220	6.0	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock North only

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1453	6.7	< 0.1	Shore
NORTH - BELOW	1505	7.5	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock North only

DAY: Thur
DATE: 09/17/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0910	8.6	< 0.1	Shore
SOUTH - BELOW	0902	7.5	< 0.1	Boat

OBSERVATION: Removing rock South only

SAMPLE: Mid-Day - 1200
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1453	9.3	< 0.1	Shore
SOUTH - BELOW	1500	8.1	< 0.1	Boat

OBSERVATION: Removing rock South only

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Fri
DATE: 09/18/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0908	4.6	< 0.1	Shore
SOUTH - BELOW	0920	10.4	< 0.1	Boat

OBSERVATION: Removing rock South only

SAMPLE: Mid-Day
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1216	4.2	< 0.1	Shore
SOUTH - BELOW	1205	5.7	< 0.1	Boat

OBSERVATION: Removing rock South only

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1512	4.7	< 0.1	Shore
SOUTH - BELOW	1505	5.3	< 0.1	Shore

OBSERVATION: Removing rock South only

DAY: Sat
DATE: 09/19/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning - 0900
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

SAMPLE: Mid-Day
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1210	4.3	< 0.1	Shore
SOUTH - BELOW	1200	3.6	< 0.1	Shore

OBSERVATION: Removing rock South only

SAMPLE: Afternoon - 1500
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Sun
DATE: 09/20/15
TECHNICIAN: -

No work at site.

DAY: Mon
DATE: 09/21/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning - 0900
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

SAMPLE: Mid-Day
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1210	6.8	< 0.1	Boat
NORTH - BELOW	1205	9.3	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

SAMPLE: Afternoon
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1455	38.5	< 0.1	Boat
NORTH - BELOW	1505	31.2	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Tues
DATE: 09/22/15
TECHNICIAN: Chris Weber

SAMPLE: Morning - 0900
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1215	4.2	< 0.1	Shore
SOUTH - BELOW	1200	4.8	< 0.1	Boat

OBSERVATION: Removing rock
South only

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1458	5.6	< 0.1	Shore
SOUTH - BELOW	1505	8.7	< 0.1	Shore

OBSERVATION: Removing rock
South only

DAY: Wed
DATE: 09/23/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0918	2.9	< 0.1	Shore
NORTH - BELOW	0910	6.2	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1203	2.3	< 0.1	Shore
NORTH - BELOW	1212	3.9	< 0.1	Shore
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

SAMPLE: Afternoon - 1500
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Thur
DATE: 09/24/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0925	2.6	< 0.1	Shore
NORTH - BELOW	0910	13.5	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock North only

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1208	3.8	< 0.1	Boat
NORTH - BELOW	1220	5.2	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock North only

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1513	2.9	< 0.1	Shore
NORTH - BELOW	1504	11.1	< 0.1	Shore
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock North only

DAY: Fri
DATE: 09/25/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0912	12.3	< 0.1	Shore
SOUTH - BELOW	0905	17.4	< 0.1	Shore

OBSERVATION: Removing rock South only

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1210	2.3	< 0.1	Shore
SOUTH - BELOW	1200	10.3	< 0.1	Shore

OBSERVATION: Removing rock South only

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1455	2.3	< 0.1	Shore
SOUTH - BELOW	1505	10.3	< 0.1	Shore

OBSERVATION: Removing rock South only

TEMPORARY BARRIER SITE	False River Emergency Barrier - Removal
TURBIDITY (TURB) CRITERIA	Below 150 NTU is acceptable.
SETTLEABLE SOLIDS (SS) CRITERIA	Below 0.1 ml/L is acceptable.

DAY	Sat
DATE	09/26/15
TECHNICIAN	-

No work at site.

DAY	Sun
DATE	09/27/15
TECHNICIAN	-

No work at site.

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Mon
DATE: 09/28/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0916	3.9	< 0.1	Shore
SOUTH - BELOW	0906	9.1	< 0.1	Boat

OBSERVATION: Removing rock
South only

SAMPLE: Mid-Day
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1218	2.9	< 0.1	Shore
SOUTH - BELOW	1208	14.0	< 0.1	Shore

OBSERVATION: Removing rock
South only

SAMPLE: Afternoon - 1500
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

DAY: Tues
DATE: 09/29/15
TECHNICIAN: Chris Weber

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0910	3.8	< 0.1	Shore
NORTH - BELOW	0900	5.3	< 0.1	Shore
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1210	4.0	< 0.1	Shore
SOUTH - BELOW	1158	6.0	< 0.1	Shore

OBSERVATION: Removing rock
South only

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1502	4.5	< 0.1	Shore
SOUTH - BELOW	1457	8.5	< 0.1	Shore

OBSERVATION: Removing rock
South only

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Wed
DATE: 09/30/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning - 0900
TIDE:

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

SAMPLE: Mid-Day - 1200
TIDE:

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

SAMPLE: Afternoon - 1500
TIDE:

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

DAY: Thur
DATE: 10/01/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0923	4.1	< 0.1	Shore
NORTH - BELOW	0919	7.1	< 0.1	Boat
SOUTH - ABOVE	0943	3.2	< 0.1	Shore
SOUTH - BELOW	0916	16.1	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1223	4.0	< 0.1	Shore
NORTH - BELOW	1217	11.6	< 0.1	Boat
SOUTH - ABOVE	1239	4.5	< 0.1	Shore
SOUTH - BELOW	1217	15.8	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1526	4.5	< 0.1	Shore
NORTH - BELOW	1523	13.8	< 0.1	Boat
SOUTH - ABOVE	1541	3.5	< 0.1	Shore
SOUTH - BELOW	1521	12.0	< 0.1	Boat

OBSERVATION: Removing rock North and South

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Fri
DATE: 10/02/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0915	10.6	< 0.1	Shore
NORTH - BELOW	0910	8.8	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock North only

SAMPLE: Mid-Day
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1210	7.2	< 0.1	Shore
NORTH - BELOW	1205	17.3	< 0.1	Boat
SOUTH - ABOVE	1215	8.3	< 0.1	Shore
SOUTH - BELOW	1200	14.6	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon - 1500
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

DAY: Sat
DATE: 10/03/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0914	7.4	< 0.1	Shore
SOUTH - BELOW	0905	6.1	< 0.1	Shore

OBSERVATION: Removing rock South only

SAMPLE: Mid-Day
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1219	5.2	< 0.1	Shore
SOUTH - BELOW	1227	11.3	< 0.1	Shore

OBSERVATION: Removing rock South only

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1535	5.2	< 0.1	Shore
NORTH - BELOW	1529	6.6	< 0.1	Boat
SOUTH - ABOVE	1503	4.5	< 0.1	Shore
SOUTH - BELOW	1527	6.8	< 0.1	Boat

OBSERVATION: Removing rock North and South

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Sun
DATE: 10/04/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0935	9.5	< 0.1	Shore
NORTH - BELOW	0930	9.6	< 0.1	Boat
SOUTH - ABOVE	0940	4.4	< 0.1	Shore
SOUTH - BELOW	0925	11.5	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1245	6.9	< 0.1	Shore
SOUTH - BELOW	1240	16.0	< 0.1	Shore

OBSERVATION: Removing rock South only

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1510	8.6	< 0.1	Shore
SOUTH - BELOW	1459	16.9	< 0.1	Boat

OBSERVATION: Removing rock South only

DAY: Mon
DATE: 10/05/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning - 0900
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1210	10.3	< 0.1	Shore
SOUTH - BELOW	1205	8.6	< 0.1	Shore

OBSERVATION: Removing rock South only

SAMPLE: Afternoon
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1500	10.6	< 0.1	Shore
NORTH - BELOW	1455	14.6	< 0.1	Shore
SOUTH - ABOVE	1510	13.6	< 0.1	Boat
SOUTH - BELOW	1450	13.0	< 0.1	Boat

OBSERVATION: Removing rock North and South

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Tues
DATE: 10/06/15
TECHNICIAN: Chris Weber

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0915	13.6	< 0.1	Shore
NORTH - BELOW	0900	6.2	< 0.1	Boat
SOUTH - ABOVE	0910	6.9	< 0.1	Shore
SOUTH - BELOW	0905	7.0	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day - 1200
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1510	8.1	< 0.1	Shore
SOUTH - BELOW	1500	10.5	< 0.1	Shore

OBSERVATION: Removing rock South only

DAY: Wed
DATE: 10/07/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0906	17.4	< 0.1	Shore
NORTH - BELOW	0902	7.4	< 0.1	Boat
SOUTH - ABOVE	0917	9.4	< 0.1	Shore
SOUTH - BELOW	0900	5.8	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1209	13.3	< 0.1	Shore
NORTH - BELOW	1205	10.2	< 0.1	Boat
SOUTH - ABOVE	1158	5.3	< 0.1	Shore
SOUTH - BELOW	1204	9.2	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1457	6.8	< 0.1	Shore
NORTH - BELOW	1454	7.9	< 0.1	Boat
SOUTH - ABOVE	1507	5.1	< 0.1	Shore
SOUTH - BELOW	1452	8.4	< 0.1	Boat

OBSERVATION: Removing rock North and South

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Thur
DATE: 10/08/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0930	7.4	< 0.1	Shore
NORTH - BELOW	0925	11.0	< 0.1	Boat
SOUTH - ABOVE	0942	5.3	< 0.1	Shore
SOUTH - BELOW	0923	17.0	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1208	10.7	< 0.1	Shore
NORTH - BELOW	1203	8.9	< 0.1	Boat
SOUTH - ABOVE	1217	8.1	< 0.1	Shore
SOUTH - BELOW	1202	9.1	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1458	9.6	< 0.1	Shore
NORTH - BELOW	1453	7.8	< 0.1	Boat
SOUTH - ABOVE	1510	9.3	< 0.1	Shore
SOUTH - BELOW	1451	7.3	< 0.1	Boat

OBSERVATION: Removing rock North and South

DAY: Fri
DATE: 10/09/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0915	14.4	< 0.1	Shore
NORTH - BELOW	0925	8.6	< 0.1	Boat
SOUTH - ABOVE	0930	13.8	< 0.1	Shore
SOUTH - BELOW	0925	19.4	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1200	15.9	< 0.1	Shore
NORTH - BELOW	1155	12.5	< 0.1	Boat
SOUTH - ABOVE	1210	11.5	< 0.1	Shore
SOUTH - BELOW	1205	10.0	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1509	16.8	< 0.1	Shore
NORTH - BELOW	1451	13.5	< 0.1	Boat
SOUTH - ABOVE	1502	11.4	< 0.1	Shore
SOUTH - BELOW	1455	11.3	< 0.1	Boat

OBSERVATION: Removing rock North and South

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Sat
DATE: 10/10/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0915	21.0	< 0.1	Shore
NORTH - BELOW	0910	8.5	< 0.1	Boat
SOUTH - ABOVE	0920	23.5	< 0.1	Shore
SOUTH - BELOW	0905	11.2	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1205	21.5	< 0.1	Boat
NORTH - BELOW	1200	9.9	< 0.1	Boat
SOUTH - ABOVE	1210	10.7	< 0.1	Boat
SOUTH - BELOW	1155	11.2	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1510	12.1	< 0.1	Boat
NORTH - BELOW	1505	8.9	< 0.1	Boat
SOUTH - ABOVE	1515	17.9	< 0.1	Boat
SOUTH - BELOW	1500	12.6	< 0.1	Boat

OBSERVATION: Removing rock North and South

DAY: Sun
DATE: 10/11/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0920	19.5	< 0.1	Boat
NORTH - BELOW	0915	16.2	< 0.1	Boat
SOUTH - ABOVE	0905	9.1	< 0.1	Boat
SOUTH - BELOW	0910	10.6	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1205	8.4	< 0.1	Boat
NORTH - BELOW	1200	6.4	< 0.1	Boat
SOUTH - ABOVE	1210	12.1	< 0.1	Boat
SOUTH - BELOW	1155	5.6	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1500	13.6	< 0.1	Boat
NORTH - BELOW	1505	11.8	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock North only

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Mon
DATE: 10/12/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0917	11.0	< 0.1	Shore
NORTH - BELOW	0913	18.0	< 0.1	Boat
SOUTH - ABOVE	0927	8.1	< 0.1	Shore
SOUTH - BELOW	0912	11.9	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1221	8.4	< 0.1	Shore
NORTH - BELOW	1216	6.9	< 0.1	Boat
SOUTH - ABOVE	1147	4.3	< 0.1	Shore
SOUTH - BELOW	1214	6.2	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1452	14.8	< 0.1	Shore
SOUTH - BELOW	1500	12.2	< 0.1	Shore

OBSERVATION: Removing rock South only

DAY: Tues
DATE: 10/13/15
TECHNICIAN: Chris Weber

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0910	8.1	< 0.1	Shore
SOUTH - BELOW	0900	11.4	< 0.1	Boat

OBSERVATION: Removing rock South only

SAMPLE: Mid-Day
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1210	6.9	< 0.1	Shore
SOUTH - BELOW	1200	6.2	< 0.1	Boat

OBSERVATION: Removing rock South only

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1505	16.5	< 0.1	Shore
SOUTH - BELOW	1500	12.2	< 0.1	Shore

OBSERVATION: Removing rock South only

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Wed
DATE: 10/14/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0915	14.5	< 0.1	Shore
SOUTH - BELOW	0900	11.3	< 0.1	Shore

OBSERVATION: Removing rock
South only

SAMPLE: Mid-Day
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1205	15.2	< 0.1	Shore
SOUTH - BELOW	1200	12.3	< 0.1	Shore

OBSERVATION: Removing rock
South only

SAMPLE: Afternoon
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1505	14.1	< 0.1	Shore
SOUTH - BELOW	1500	8.4	< 0.1	Shore

OBSERVATION: Removing rock
South only

DAY: Thur
DATE: 10/15/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0915	9.0	< 0.1	Boat
NORTH - BELOW	0910	11.0	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1205	11.9	< 0.1	Boat
NORTH - BELOW	1200	13.1	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1530	11.5	< 0.1	Boat
NORTH - BELOW	1525	9.4	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Fri
DATE: 10/16/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0910	9.3	< 0.1	Boat
SOUTH - BELOW	0906	11.1	< 0.1	Boat

OBSERVATION: Removing rock South only

SAMPLE: Mid-Day
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1230	7.2	< 0.1	Boat
NORTH - BELOW	1228	13.9	< 0.1	Boat
SOUTH - ABOVE	1236	5.5	< 0.1	Boat
SOUTH - BELOW	1225	8.3	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1528	10.2	< 0.1	Shore
SOUTH - BELOW	1520	9.4	< 0.1	Shore

OBSERVATION: Removing rock South only

DAY: Sat
DATE: 10/17/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0912	10.8	< 0.1	Boat
NORTH - BELOW	0906	9.0	< 0.1	Boat
SOUTH - ABOVE	0910	10.6	< 0.1	Boat
SOUTH - BELOW	0903	8.1	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1213	8.2	< 0.1	Boat
NORTH - BELOW	1206	10.1	< 0.1	Boat
SOUTH - ABOVE	1210	8.6	< 0.1	Boat
SOUTH - BELOW	1203	9.5	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1453	8.2	< 0.1	Boat
NORTH - BELOW	1457	7.5	< 0.1	Boat
SOUTH - ABOVE	1452	10.1	< 0.1	Boat
SOUTH - BELOW	1459	9.2	< 0.1	Boat

OBSERVATION: Removing rock North and South

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Sun
DATE: 10/18/15
TECHNICIAN: -

No work at site.

DAY: Mon
DATE: 10/19/15
TECHNICIAN: Chris Weber

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0915	12.2	< 0.1	Boat
NORTH - BELOW	0900	6.1	< 0.1	Boat
SOUTH - ABOVE	0910	5.1	< 0.1	Boat
SOUTH - BELOW	0903	7.0	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1208	10.5	< 0.1	Boat
NORTH - BELOW	1158	9.2	< 0.1	Boat
SOUTH - ABOVE	1210	7.7	< 0.1	Boat
SOUTH - BELOW	1205	8.9	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1510	6.4	< 0.1	Boat
NORTH - BELOW	1505	7.5	< 0.1	Boat
SOUTH - ABOVE	1515	5.6	< 0.1	Boat
SOUTH - BELOW	1500	6.5	< 0.1	Boat

OBSERVATION: Removing rock North and South

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Tues
DATE: 10/20/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0923	9.4	< 0.1	Boat
NORTH - BELOW	0920	8.0	< 0.1	Boat
SOUTH - ABOVE	0926	9.0	< 0.1	Boat
SOUTH - BELOW	0916	8.3	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1236	8.3	< 0.1	Boat
SOUTH - BELOW	1231	7.5	< 0.1	Boat

OBSERVATION: Removing rock South only

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1458	6.8	< 0.1	Shore
SOUTH - BELOW	1504	6.9	< 0.1	Shore

OBSERVATION: Removing rock South only

DAY: Wed
DATE: 10/21/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0909	6.6	< 0.1	Boat
NORTH - BELOW	0906	6.4	< 0.1	Boat
SOUTH - ABOVE	0911	6.3	< 0.1	Boat
SOUTH - BELOW	0902	5.8	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1204	12.7	< 0.1	Shore
SOUTH - BELOW	1209	7.1	< 0.1	Shore

OBSERVATION: Removing rock South only

SAMPLE: Afternoon
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1500	8.2	< 0.1	Boat
NORTH - BELOW	1456	26.4	< 0.1	Boat
SOUTH - ABOVE	1509	9.2	< 0.1	Boat
SOUTH - BELOW	1454	9.1	< 0.1	Boat

OBSERVATION: Removing rock North and South

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Thur
DATE: 10/22/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0907	16.0	< 0.1	Boat
NORTH - BELOW	0904	7.0	< 0.1	Boat
SOUTH - ABOVE	0910	8.2	< 0.1	Boat
SOUTH - BELOW	0902	5.3	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1227	9.5	< 0.1	Boat
NORTH - BELOW	1223	7.7	< 0.1	Boat
SOUTH - ABOVE	1230	16.4	< 0.1	Boat
SOUTH - BELOW	1221	9.0	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1458	8.0	< 0.1	Shore
SOUTH - BELOW	1506	11.4	< 0.1	Shore

OBSERVATION: Removing rock South only

DAY: Fri
DATE: 10/23/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0911	12.0	< 0.1	Boat
NORTH - BELOW	0907	6.2	< 0.1	Boat
SOUTH - ABOVE	0913	10.3	< 0.1	Boat
SOUTH - BELOW	0905	5.5	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1228	10.1	< 0.1	Boat
NORTH - BELOW	1225	9.1	< 0.1	Boat
SOUTH - ABOVE	1229	9.7	< 0.1	Boat
SOUTH - BELOW	1223	11.7	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1515	9.6	< 0.1	Boat
NORTH - BELOW	1511	9.2	< 0.1	Boat
SOUTH - ABOVE	1500	7.8	< 0.1	Shore
SOUTH - BELOW	1506	7.7	< 0.1	Shore

OBSERVATION: Removing rock North and South

TEMPORARY BARRIER SITE	False River Emergency Barrier - Removal
TURBIDITY (TURB) CRITERIA	Below 150 NTU is acceptable.
SETTLEABLE SOLIDS (SS) CRITERIA	Below 0.1 ml/L is acceptable.

DAY	Sat
DATE	10/24/15
TECHNICIAN	-

No work at site.

DAY	Sun
DATE	10/25/15
TECHNICIAN	-

No work at site.

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Mon
DATE: 10/26/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0928	10.1	< 0.1	Boat
NORTH - BELOW	0925	10.3	< 0.1	Boat
SOUTH - ABOVE	0930	7.9	< 0.1	Boat
SOUTH - BELOW	0923	7.0	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1210	7.9	< 0.1	Boat
NORTH - BELOW	1207	7.2	< 0.1	Boat
SOUTH - ABOVE	1200	6.9	< 0.1	Boat
SOUTH - BELOW	1200	5.7	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1510	13.4	< 0.1	Boat
NORTH - BELOW	1507	11.6	< 0.1	Boat
SOUTH - ABOVE	1513	14.6	< 0.1	Boat
SOUTH - BELOW	1504	12.7	< 0.1	Boat

OBSERVATION: Removing rock North and South

DAY: Tues
DATE: 10/27/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0923	8.6	< 0.1	Boat
NORTH - BELOW	0919	12.0	< 0.1	Boat
SOUTH - ABOVE	0926	6.6	< 0.1	Boat
SOUTH - BELOW	0917	7.7	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1203	8.3	< 0.1	Boat
NORTH - BELOW	1207	7.3	< 0.1	Boat
SOUTH - ABOVE	1200	9.8	< 0.1	Boat
SOUTH - BELOW	1210	7.8	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1507	19.6	< 0.1	Shore
SOUTH - BELOW	1502	9.7	< 0.1	Shore

OBSERVATION: Removing rock South only

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Wed
DATE: 10/28/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0930	11.5	< 0.1	Boat
NORTH - BELOW	0920	8.4	< 0.1	Boat
SOUTH - ABOVE	0935	10.1	< 0.1	Boat
SOUTH - BELOW	0925	9.1	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1205	12.3	< 0.1	Boat
NORTH - BELOW	1155	9.9	< 0.1	Boat
SOUTH - ABOVE	1210	11.1	< 0.1	Boat
SOUTH - BELOW	1200	7.1	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1505	13.9	< 0.1	Boat
NORTH - BELOW	1455	8.4	< 0.1	Boat
SOUTH - ABOVE	1510	12.1	< 0.1	Boat
SOUTH - BELOW	1500	7.6	< 0.1	Boat

OBSERVATION: Removing rock North and South

DAY: Thur
DATE: 10/29/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0930	14.1	< 0.1	Boat
NORTH - BELOW	0920	13.9	< 0.1	Boat
SOUTH - ABOVE	0935	10.2	< 0.1	Boat
SOUTH - BELOW	0925	9.8	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1210	13.7	< 0.1	Boat
NORTH - BELOW	1205	11.1	< 0.1	Boat
SOUTH - ABOVE	1215	10.4	< 0.1	Boat
SOUTH - BELOW	1200	9.9	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1505	18.8	< 0.1	Boat
NORTH - BELOW	1500	11.6	< 0.1	Boat
SOUTH - ABOVE	1510	21.1	< 0.1	Boat
SOUTH - BELOW	1515	12.2	< 0.1	Boat

OBSERVATION: Removing rock North and South

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Fri
DATE: 10/30/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0908	8.7	< 0.1	Boat
NORTH - BELOW	0912	9.4	< 0.1	Boat
SOUTH - ABOVE	0906	8.6	< 0.1	Boat
SOUTH - BELOW	0914	10.0	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1205	6.2	< 0.1	Boat
NORTH - BELOW	1201	8.5	< 0.1	Boat
SOUTH - ABOVE	1207	7.5	< 0.1	Boat
SOUTH - BELOW	1158	10.4	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1509	8.5	< 0.1	Boat
NORTH - BELOW	1504	8.6	< 0.1	Boat
SOUTH - ABOVE	1512	12.0	< 0.1	Boat
SOUTH - BELOW	1502	6.7	< 0.1	Boat

OBSERVATION: Removing rock North and South

DAY: Sat
DATE: 10/31/15
TECHNICIAN: -

No work at site.

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Sun
DATE: 11/01/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0920	10.1	< 0.1	Boat
SOUTH - BELOW	0915	6.8	< 0.1	Boat

OBSERVATION: Removing rock
South only

SAMPLE: Mid-Day
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1205	7.2	< 0.1	Boat
SOUTH - BELOW	1200	8.8	< 0.1	Boat

OBSERVATION: Removing rock
South only

SAMPLE: Afternoon
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1515	12.9	< 0.1	Shore
SOUTH - BELOW	1510	8.8	< 0.1	Shore

OBSERVATION: Removing rock
South only

DAY: Mon
DATE: 11/02/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning - 0900
TIDE: -

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

SAMPLE: Mid-Day
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1235	13.2	< 0.1	Boat
SOUTH - BELOW	1230	8.1	< 0.1	Boat

OBSERVATION: Removing rock
South only

SAMPLE: Afternoon
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1500	12.7	< 0.1	Boat
SOUTH - BELOW	1455	12.1	< 0.1	Boat

OBSERVATION: Removing rock
South only

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Tues
DATE: 11/03/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0930	10.1	< 0.1	Boat
NORTH - BELOW	0905	8.4	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock North only

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1300	6.7	< 0.1	Boat
NORTH - BELOW	1305	9.1	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock North only

SAMPLE: Afternoon
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1510	7.6	< 0.1	Shore
NORTH - BELOW	1500	8.1	< 0.1	Shore
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock North only

DAY: Wed
DATE: 11/04/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0914	10.5	< 0.1	Shore
SOUTH - BELOW	0905	18.9	< 0.1	Shore

OBSERVATION: Removing rock South only

SAMPLE: Mid-Day
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1202	10.0	< 0.1	Shore
SOUTH - BELOW	1208	13.0	< 0.1	Shore

OBSERVATION: Removing rock South only

SAMPLE: Afternoon
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1502	8.2	< 0.1	Shore
SOUTH - BELOW	1509	9.4	< 0.1	Shore

OBSERVATION: Removing rock South only

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Thur
DATE: 11/05/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0946	9.0	< 0.1	Boat
NORTH - BELOW	0942	8.5	< 0.1	Boat
SOUTH - ABOVE	0918	7.8	< 0.1	Shore
SOUTH - BELOW	0914	6.8	< 0.1	Shore

OBSERVATION: Removing rock North and South

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1201	11.0	< 0.1	Boat
NORTH - BELOW	1158	8.0	< 0.1	Boat
SOUTH - ABOVE	1203	9.5	< 0.1	Boat
SOUTH - BELOW	1155	7.9	< 0.1	Boat

OBSERVATION: Removing rock North and South

SAMPLE: Afternoon
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1540	9.0	< 0.1	Shore
SOUTH - BELOW	1535	10.0	< 0.1	Shore

OBSERVATION: Removing rock South only

DAY: Fri
DATE: 11/06/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0910	7.6	< 0.1	Boat
NORTH - BELOW	0905	9.3	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock North only

SAMPLE: Mid-Day - 1200
TIDE: -

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1515	8.1	< 0.1	Shore
SOUTH - BELOW	1510	7.2	< 0.1	Shore

OBSERVATION: Removing rock South only

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Sat
DATE: 11/07/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0905	9.7	< 0.1	Shore
SOUTH - BELOW	0900	8.9	< 0.1	Shore

OBSERVATION: Removing rock
South only

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1210	17.1	< 0.1	Boat
SOUTH - BELOW	1205	11.2	< 0.1	Boat

OBSERVATION: Removing rock
South only

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1505	21.5	< 0.1	Boat
SOUTH - BELOW	1500	16.8	< 0.1	Boat

OBSERVATION: Removing rock
South only

DAY: Sun
DATE: 11/08/15
TECHNICIAN: -

No work at site.

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Mon
DATE: 11/09/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0918	5.6	< 0.1	Boat
SOUTH - BELOW	0915	5.7	< 0.1	Boat

OBSERVATION: Removing rock
South only

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1240	13.2	< 0.1	Boat
NORTH - BELOW	1237	14.2	< 0.1	Boat
SOUTH - ABOVE	1157	12.2	< 0.1	Boat
SOUTH - BELOW	1203	13.7	< 0.1	Boat

OBSERVATION: Removing rock
North and South

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1512	14.3	< 0.1	Boat
SOUTH - BELOW	1506	14.0	< 0.1	Boat

OBSERVATION: Removing rock
South only

DAY: Tues
DATE: 11/10/15
TECHNICIAN: Chris Weber

SAMPLE: Morning
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	0910	6.3	< 0.1	Boat
NORTH - BELOW	0900	6.1	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	1205	6.0	< 0.1	Boat
NORTH - BELOW	1200	5.6	< 0.1	Boat
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: Removing rock
North only

SAMPLE: Afternoon
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1505	16.2	< 0.1	Shore
SOUTH - BELOW	1500	11.5	< 0.1	Shore

OBSERVATION: Removing rock
South only

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Wed
DATE: 11/11/15
TECHNICIAN: Jason La Deaux

No rock removal at site.

DAY: Thur
DATE: 11/12/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning - 0900
TIDE: -

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1205	11.2	< 0.1	Shore
SOUTH - BELOW	1200	9.9	< 0.1	Shore

OBSERVATION: Removing rock
South only

SAMPLE: Afternoon - 1500
TIDE: -

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

TEMPORARY BARRIER SITE: False River Emergency Barrier - Removal

TURBIDITY (TURB) CRITERIA: Below 150 NTU is acceptable.

SETTLEABLE SOLIDS (SS) CRITERIA: Below 0.1 ml/L is acceptable.

DAY: Fri
DATE: 11/13/15
TECHNICIAN: Joaquin Garza

SAMPLE: Morning
TIDE: Ebb

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0908	10.1	< 0.1	Boat
SOUTH - BELOW	0905	10.3	< 0.1	Boat

OBSERVATION: Removing rock South only

SAMPLE: Mid-Day
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1213	11.7	< 0.1	Boat
SOUTH - BELOW	1206	8.1	< 0.1	Boat

OBSERVATION: Removing rock South only

SAMPLE: Afternoon
TIDE: Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1458	17.1	< 0.1	Shore
SOUTH - BELOW	1503	13.7	< 0.1	Shore

OBSERVATION: Removing rock South only

DAY: Sat
DATE: 11/14/15
TECHNICIAN: Jason La Deaux

SAMPLE: Morning - 0900
TIDE: -

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	-	-	-	-
SOUTH - BELOW	-	-	-	-

OBSERVATION: No in-water work

SAMPLE: Mid-Day
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1210	11.2	< 0.1	Shore
SOUTH - BELOW	1200	8.6	< 0.1	Shore

OBSERVATION: Removing rock South only

SAMPLE: Afternoon
TIDE: Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1510	10.1	< 0.1	Shore
SOUTH - BELOW	1500	9.8	< 0.1	Shore

OBSERVATION: Removing rock South only

TEMPORARY BARRIER SITE	False River Emergency Barrier - Removal
TURBIDITY (TURB) CRITERIA	Below 150 NTU is acceptable.
SETTLEABLE SOLIDS (SS) CRITERIA	Below 0.1 ml/L is acceptable.

DAY	Sun
DATE	11/15/15
TECHNICIAN	Jason La Deaux

SAMPLE	Morning
TIDE	Slack

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	0905	8.7	< 0.1	Shore
SOUTH - BELOW	0900	9.6	< 0.1	Shore

OBSERVATION	Removing rock South only

SAMPLE	Mid-Day
TIDE	Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1205	19.1	< 0.1	Shore
SOUTH - BELOW	1200	10.7	< 0.1	Shore

OBSERVATION	Removing rock South only

SAMPLE	Afternoon
TIDE	Flood

	TIME	TURB	SS	TAKEN
NORTH - ABOVE	-	-	-	-
NORTH - BELOW	-	-	-	-
SOUTH - ABOVE	1515	16.9	< 0.1	Shore
SOUTH - BELOW	1505	17.1	< 0.1	Shore

OBSERVATION	Removing rock South only

TEMPORARY BARRIER SITE	False River Emergency Barrier - Removal
TURBIDITY (TURB) CRITERIA	Below 15 NTU difference between above and below is acceptable.
SETTLEABLE SOLIDS (SS) CRITERIA	Below 0.1 ml/L is acceptable.

DAY	Wed
DATE	11/11/15
TECHNICIAN	Jason La Deaux
TIDE	Ebb

	TIME	TURB	SS	TAKEN
100' ABOVE	1350	12.6	< 0.1	Boat
300' BELOW	1345	13.8	< 0.1	Boat

OBSERVATION	Drilling for geotech core samples

DAY	Thur
DATE	11/12/15
TECHNICIAN	Jason La Deaux
TIDE	Slack

	TIME	TURB	SS	TAKEN
100' ABOVE	1015	11.5	< 0.1	Boat
300' BELOW	1010	9.1	< 0.1	Boat

OBSERVATION	Drilling for geotech core samples

DAY	Fri
DATE	11/13/15
TECHNICIAN	Joaquin Garza
TIDE	Flood

	TIME	TURB	SS	TAKEN
100' ABOVE	1210	7.8	< 0.1	Boat
300' BELOW	1208	7.2	< 0.1	Boat

OBSERVATION	Drilling for geotech core samples