

**DRAFT SUPPLEMENTAL  
ENVIRONMENTAL ASSESSMENT**

**AMERICAN RIVER WATERSHED COMMON FEATURES  
PROJECT, NATOMAS BASIN REACH D  
PUMPING PLANT 4  
SUTTER COUNTY, CALIFORNIA**

**SEPTEMBER 2020**



**US Army Corps of Engineers  
BUILDING STRONG.**

**DRAFT SUPPLEMENTAL  
ENVIRONMENTAL ASSESSMENT**

**AMERICAN RIVER WATERSHED COMMON FEATURES  
PROJECT, NATOMAS BASIN REACH D  
PUMPING PLANT 4  
SUTTER COUNTY, CALIFORNIA**

**SEPTEMBER 2020**

**Prepared by the Lead Federal Agency:**

**U.S. ARMY CORPS OF ENGINEERS  
SACRAMENTO DISTRICT**

## CONTENTS

1.0	PURPOSE AND NEED FOR ACTION.....	1
1.1	Proposed Action.....	1
1.2	Location of the Project Area.....	1
1.3	Background and Need for Action.....	1
1.4	Authority.....	2
1.5	Purpose of the SEA.....	2
1.6	Decisions Needed.....	2
2.0	ALTERNATIVES.....	3
2.1	Alternatives Considered But Eliminated from Further Consideration.....	3
2.2	Alternative 1 - No Action.....	3
2.3	Alternative 2 – Cofferdam at Pumping Plant 4 Project Construction.....	3
2.3.1	Features of the Proposed Project.....	4
2.3.2	Cofferdam.....	4
2.3.3	Schedule.....	4
2.3.4	Access, Staging, and Stockpile Areas.....	4
2.3.5	Operations and Maintenance.....	4
3.0	AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES	5
3.1	Environmental Resources Not Evaluated in Detail.....	5
3.2	Environmental Resources Evaluated in Detail.....	5
3.2.1	Vegetation and Wildlife.....	5
3.2.2	Fisheries.....	7
3.2.3	Special-Status Species.....	9
3.2.4	Water Resources and Quality.....	13
4.0	GROWTH-INDUCING EFFECTS.....	16
5.0	CUMULATIVE EFFECTS.....	16
5.2	Cumulative Effects.....	17
5.2.1	Vegetation and Wildlife.....	17
5.2.2	Fisheries.....	17
5.2.3	Special Status Species.....	17
5.2.4	Water Quality.....	18
6.0	COMPLIANCE WITH LAWS AND REGULATIONS.....	18
6.1	Federal.....	18
7.0	COORDINATION AND REVIEW OF THE DRAFT SEA.....	21
8.0	FINDINGS.....	21
9.0	LIST OF PREPARERS.....	21
10.0	REFERENCES.....	22

## Plates

1. Natomas Basin Area Map
2. Pumping Plant 4 Location Map
3. Pumping Plant 4 Design
4. Giant Garter Snake Habitat near Pumping Plant 4

## Appendices

- A. Correspondence Regarding Special-Status Species
- B. Final Natomas Reach D Giant Garter Snake Monitoring Report
- C. Water Quality Analysis

## Acronyms and Abbreviations

2010 EIS/EIR	Environmental Impact Statement/Environmental Impact Report on the American River Watershed Common Features Project/Natomas Post-authorization Change Report /Natomas Levee Improvement Program, Phase 4b Landside Improvements Project
BMPs	Best Management Practices
BO	Biological Opinion
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
Corps	U.S. Army Corps of Engineers
CVFPB	Central Valley Flood Protection Board
DWR	Department of Water Resources
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EM	Engineering Manual
FONSI	Finding of No Significant Impact
FWCA	Fish and Wildlife Coordination Act
GGS	giant garter snake
NBHCP	Natomas Basin Habitat Conservation Plan
NCC	Natomas Cross Canal
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NLIP	Natomas Levee Improvement Program
NMFS	National Marine Fisheries Service
NPDES	National Pollution Discharge Elimination System
O&M	operation and maintenance
PGCC	Pleasant Grove Creek Canal
PL	Public Law

RD 1000	Reclamation District No. 1000
RWQCB	Regional Water Quality Control Board
SAFCA	Sacramento Area Flood Control Agency
SEA	Supplemental Environmental Assessment
SPCP	Spill Prevention and Countermeasure Plan
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
TNBC	The Natomas Basin Conservancy
USACE	U.S. Army Corps of Engineers
USEPA	Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WRDA	Water Resources Development Act
WRRDA	Water Resources Reform and Development Act

*This page was left blank to facilitate two-sided photocopying.*

## **1.0 PURPOSE AND NEED FOR ACTION**

### **1.1 Proposed Action**

The U.S. Army Corps of Engineers (Corps) proposes to install a temporary cofferdam on the North Drainage Canal as a part of construction at Pumping Plant 4, located at Reach D of the American River Watershed Common Features Project, Natomas Basin (Project), which is located on the Natomas Cross Canal (NCC) south levee (Plate 1). Construction of a cofferdam within the North Drainage Canal is required in order to dewater the portion of the canal that leads to Pumping Plant 4, facilitating construction in the dried area. Pumping Plant 4 improvements include pipe replacement, levee improvements, pumping plant building improvements, and the placement of riprap on the waterside of the levee. This action is the final part of levee improvements being completed at Reach D.

### **1.2 Location of the Project Area**

The proposed work is located in Sutter County and is the northernmost reach of the Natomas Basin. The Natomas Basin is bordered on the north by the NCC, which is a 5.3-mile channel carrying water from several tributary watersheds in Placer and Sutter counties to the Sacramento River. Reach D is located along the NCC, beginning at the intersection of Sankey Road and Garden Highway near the confluence of the NCC and the Sacramento River and continues northeast to the intersection of Howsley Road and the Pleasant Grove Creek Canal (PGCC) east of State Route 99 (SR 99). Pumping Plant 4 is located at 38°47'55.13"N, 121°34'46.30"W at the terminus of the North Drainage Canal, which is a main drainage feature within the northern portion of the Natomas Basin (Plate 2).

### **1.3 Background and Need for Action**

The Natomas Basin includes portions of the counties of Sacramento and Sutter as well as a portion of the City of Sacramento, California. The basin is protected by 42 miles of levee, which almost completely encircles it. In 2006, the non-Federal sponsors, the Central Valley Flood Protection Board (CVFPB) and the Sacramento Area Flood Control Agency (SAFCA), began levee improvement design and construction efforts on the Natomas Basin levee system. Their project is referred to as the “Natomas Levee Improvement Program” or NLIP. As part of NLIP, the non-Federal sponsors have completed improvements integral to the authorized Federal project consisting of approximately two thirds of Reach B, almost all of Reach C, and almost all of Reach D.

*A Final Environmental Impact Statement/Final Environmental Impact Report on the American River Watershed Common Features Project/Natomas Post Authorization Change Report/Natomas Levee Improvement Project, Phase 4b Landside Improvements Project* dated October 22, 2010 (2010 EIS/EIR), supported approval of the *Post-Authorization Change Report and Interim General Reevaluation Report American River Watershed Common Features Project, Natomas Basin Sacramento and Sutter Counties, California Final Report*, dated December 2010 (PACR) and, ultimately, Congressional authorization of the Project in 2014. The 2010 EIS/EIR evaluated potential impacts from the construction of the Project under the National

Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). Evaluated impacts associated with the construction of Project included construction of features in Reaches A, B, D, E, F, G, H, and I, the windows remaining in Reaches B, C, and D, and the relocation of the Vestal Drain as part of Reach D.

Following the Project's 2014 authorization, the Corps proceeded to begin construction of the remaining Natomas Basin levee improvements. A Supplemental Environmental Assessment (SEA) was prepared in March 2018, fully analyzing several components of the Reach D construction, including work at the former Bennett and Northern pumping plants, Pumping Plant 4 improvements, and relocation of the Vestal Drain. A Finding of No Significant Impact (FONSI) was signed on April 1, 2018. Construction on Reach D of the Natomas Basin Project began in August 2018 and continued into 2020. During construction, it was determined that power lines over the Pumping Plant 4 building prevented access to the structure and pumps, and work relating to Pumping Plant 4 was removed from the contract. Revisions to the Pumping Plant 4 design determined that dewatering the portion of the North Drainage Canal leading into the project area is necessary for construction, and a cofferdam would be needed. As dewatering was never contemplated in the 2010 EIS/EIR or in the 2018 SEA, and its significance never considered, the effects of dewatering are addressed in this Supplemental Environmental Assessment (SEA). This document describes the remaining work at Pumping Plant 4 as it relates to the construction of the cofferdam.

#### **1.4 Authority**

The proposed levee work was authorized for construction in Section 7002 of Water Resources Reform and Development Act (WRRDA) 2014 (Pub. L. No. 113-121, 128 Stat. 1193 [2014]).

#### **1.5 Purpose of the SEA**

This SEA (1) describes the existing environmental resources in the project area; (2) evaluates the environmental effects of the construction of a cofferdam at Pumping Plant 4 on these resources; and (3) identifies measures to avoid or reduce any effects to a less-than-significant level where practicable. This SEA has been prepared in accordance with NEPA.

#### **1.6 Decisions Needed**

The District Engineer, commander of the Corps, Sacramento District, must decide whether the proposed project qualifies for a FONSI under NEPA or whether a supplemental EIS must be prepared due to potentially significant environmental impacts.



## **2.0 ALTERNATIVES**

### **2.1 Alternatives Considered But Eliminated from Further Consideration**

Two alternatives were analyzed: the No Action and Action Alternative. They are defined below.

### **2.2 Alternative 1 - No Action**

NEPA requires that the Federal lead agency (Corps) analyze a “no action” alternative that establishes the benchmark to compare the effects of the action alternatives.

#### **No Action Alternative**

Although the original construction design did not include a cofferdam, further evaluation determined that construction of the Pumping Plant 4 improvements would not be possible without dewatering the portion of the North Drainage Canal that leads to the pumping plant. However, for the purposes of analysis, the construction is assumed to move forward without the cofferdam. If the cofferdam was not built, the North Drainage Canal would have water leading up to Pumping Plant 4. Pumps and other features of the pumping station would remain immersed during construction, increasing safety hazards and potential water quality impacts due to construction in the water. Additionally, portions of the new pumping plant that require poured concrete could not be built, and the project would not be considered complete.

Potential Pumping Plant Failure. If the improvements to Pumping Plant 4 were not completed as designed, portions of the pumping plant could fail. According to RD 1000, all pumping stations within the entire Natomas basin are required to be fully functional during high water events, and the failure of a major pumping plant could overwhelm the remaining pumping plants in the system.

### **2.3 Alternative 2 – Cofferdam at Pumping Plant 4 Project Construction**

Pumping Plant 4 requires raising of the existing pipes going through the levee by 10 feet to cross through the levee above the 200-year water surface elevation. Upgrades to Pumping Plant 4 would include raising discharge and intake pipes, installing larger horsepower motors and higher head pumps, and constructing a new pumping plant to house the new pumps and more effectively transfer flood waters into the NCC (Plate 3). Construction at Pumping Plant 4 would require the dewatering of a portion of the North Drainage Canal, which would require a cofferdam.

The features, details of the pumping plant construction, staging and stockpile areas, borrow and disposal sites, construction workers and schedule, and Operations and Maintenance (O&M) requirements for the construction of Pumping Plant 4 were fully described in the 2018 SEA. Updates, changes, and revisions due to the construction of the cofferdam are described below.

### **2.3.1 Cofferdam**

Removal and replacement of the Pumping Plant 4 pumps, trash racks, and housing requires the dewatering of a portion of the North Drainage Canal, which is a main drainage feature within the northern portion of the Natomas Basin. A cofferdam set up adjacent to Pumping Plant 4 would enable dewatering of a small portion of the canal during construction. This cofferdam would likely consist of sheet pile driven into the sides of the canal, and some excavation of the sides of the North Drainage Canal may be necessary for proper placement. Placement of the sheet pile and initial dewatering would be monitored by a biological monitor in order to reduce potential impacts to special status species. It is anticipated that a pumping system to reduce water volumes in the area between the cofferdam and Pumping Plant 4 would be required at all times due to the high water table and seepage observed during the original construction of the 2018 Reach D Project. Water pumped out of the area between Pumping Plant 4 and the cofferdam would either be placed in the upstream portion of the North Drainage Canal or used to fill water trucks for dust control.

### **2.3.2 Schedule**

Construction is anticipated to begin in May 2021 and continue through fall 2021, with cleanup and restoration anticipating completion in the spring of 2022.

### **2.3.3 Access, Staging, and Stockpile Areas**

Access to the site would be from Sankey Road near Garden Highway. Construction vehicles and equipment would follow the maintenance road on the landside levee toe to access Pumping Plant 4 and all staging and stockpile areas. The project staging area would be located to the west of Pumping Plant 4 in an area between the levee and the Sankey Canal. This area was filled in during the previous Reach D construction.

During the construction of the Reach D project, material was stockpiled in two locations to the west of Pumping Plant 4. This material is to be used in the reconstruction of the levee upon the completion of the Pumping Plant 4 pipe removal and relocation. Haul trucks would access these stockpiles by driving in a loop from the entrance at Sankey Road, west to the levee toe road, east to the stockpiles, east to Pumping Plant 4, and west back to Sankey Road using the maintenance road located to the south of the Sankey Canal (Plate 2).

### **2.3.4 Operations and Maintenance**

After construction is completed, the non-Federal sponsors, CVFPB and SAFCA, would be responsible for O&M, including repair, rehabilitation, and replacement of all project features. CVFPB and SAFCA would transfer these responsibilities to the Reclamation District 1000 (RD 1000) to operate and maintain the pumping plant. All O&M activities would remain consistent with Corps guidance and the existing O&M manuals.

### **3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES**

This section describes the environmental resources in the project area, as well as potential environmental impacts of the alternatives on those resources.

#### **3.1 Environmental Resources Not Evaluated in Detail**

An initial evaluation of the effects of the Project indicated that there would likely be no effect or a negligible effect on several resources in the area from the increment of change to the Pumping Plant 4 project with use of a cofferdam. These resources include aesthetics and visual resources; recreation; socioeconomics; hazardous and toxic waste; geology, soils, and agriculture; traffic and circulation; noise and vibration; air quality and climate change; public utilities and services; and cultural resources. These resources are not discussed further in this document.

#### **3.2 Environmental Resources Evaluated in Detail**

The following resources are anticipated to receive minor to moderate adverse impacts and therefore were analyzed in detail.

##### **3.2.1 Vegetation and Wildlife**

###### **Baseline Conditions**

There are three major plant communities and cover types within and around the project area: ruderal herbaceous, open water (canal), and managed wetland. These communities and associated wildlife are described below.

Ruderal Herbaceous. The ruderal herbaceous community is a plant community that occurs in the project area. Ruderal species are fast growing species requiring little nutrition and have massive seed production, and is located predominantly on the canal slopes in the project area. This community is dominated by annual grasses, such as ripgut brome (*Bromus diadrus*), wild oat (*Avena fatua*), and forbs, including red stemmed filaree (*Erodium cicutarium*) and common groundsel (*Senecio vulgaris*). The ruderal herbaceous community provides cover and foraging habitat for resident and migratory songbirds, small mammals, and reptiles. The native grasses on the upper portion of the waterside and landside levee slopes occur as a result of reseeded restoration from the previous NLIP Project and they are mowed as part of the maintenance program by RD 1000 to reduce wildfire danger and allow observation of the ground surface for levee inspection.

Open Water. The North Drainage Canal is considered open water habitat. A number of canals and irrigation networks distribute water throughout the Natomas Basin, and excess water from the fields are drained into the Vestal Drain, which drains into the North Drainage Canal, and is pumped into the NCC through Pumping Plant 4. The main project staging area would be located adjacent to Pumping Plant 4, located near the Sankey Canal at the eastern terminus of the Vestal Drain and the North Drainage Canal.

Managed Wetland. Existing Natomas Basin Conservancy (TNBC) mitigation lands for GGS were created between 2003 and 2005 on the landside of the NCC south levee at Frazer North and Lucich North. This TNBC owned mitigation site covers over 300 acres of agricultural land that was converted into a managed wetland specifically designed to be favorable for GGS. This area is located east of Pumping Plant 4. No work would occur in this area; however, it is located in proximity to the cofferdam.

In addition to plant communities, a variety of wildlife utilize the site. Nesting birds are protected under the Migratory Bird Treaty Act, and in this area cliff swallows (*Petrochelidon pyrrhonota*) are known to nest in and around the Pumping Plant 4 building structure.

## **Environmental Effects**

### Basis of Significance

Direct and indirect effects on vegetation and wildlife would be considered significant if the alternatives result in any of the following:

1. Substantial loss, degradation, or fragmentation of any natural communities or wildlife habitat;
2. Substantial reduction in the quality or quantity of important habitat with the result that native wildlife could not live or successfully reproduce in the project area;
3. Interfere substantially with the movement of any native wildlife species (habitat connectivity) or with established native resident or migratory wildlife corridors;
4. Conflict with any local, state or Federal policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
5. Substantial effects on a sensitive natural community, including Federally-protected wetlands and other jurisdictional Waters of the U.S. as defined by Section 404 of the Clean Water Act.

Alternative 1 - No Action. Under the No Action alternative, the cofferdam would not be constructed. Under this alternative, the improvements to Pumping Plant 4 could not be completed as designed. The levee itself would be raised, and associated vegetation would be removed from the levee slopes. In-water work would be done in the North Drainage Canal, and some vegetation may be removed. Upon completion of the portions of the project that could be done without dewatering, Pumping Plant 4 and the affected levee reach would continue to be maintained by local levee maintenance districts. Maintenance activities typically include mowing and herbicide treatment to the levee slopes to regulate vegetation growth. Emergency actions taken to prevent flooding in the possible event of pumping plant failure could result in loss of vegetation.

Alternative 2 - Proposed Pumping Plant Improvements. The construction of the cofferdam within the North Drainage Canal may require the removal of some aquatic vegetation within the canal itself. The majority of aquatic habitat within the section of the North Drainage

Canal adjacent to Pumping Plant 4 is invasive water primrose (*Ludwigia spp.*), and no compensation for the removal of this invasive species is anticipated. Cliff swallows (*Petrochelidon pyrrhonota*) are known to nest within the Pumping Plant 4 building and trash rack. Improvements within and around the Pumping Plant 4 building itself may impact nesting cliff swallows if nests are established prior to the start of construction.

Temporary displacement of local wildlife populations due to noise and increased human presence is likely to occur during construction activities. The effects to vegetation and wildlife would be temporary and would be less than significant once the avoidance, minimization, and mitigation measures described below are implemented.

### **Avoidance, Minimization, and Mitigation Measures**

In order to reduce potential impacts to nesting birds, surveys would be conducted prior to construction. Where practicable, potential nesting habitat would be removed during the non-nesting season to minimize the potential for loss of active nests. If active nests are identified in or near the Pumping Plant 4 area during construction, mitigation measures would be coordinated with the U.S. Fish and Wildlife Service (USFWS) under the Migratory Bird Treaty Act. USFWS recommends that where feasible, active nests would be avoided and a buffer would be established that would minimize the potential for disturbing the nest. Additional mitigation measures are described in the 2010 EIS/EIR and the 2018 SEA. The proposed avoidance, minimization, and mitigation measures would reduce impacts to less than significant.

### **3.2.2 Fisheries**

#### **Existing Conditions**

The North Drainage Canal is a man-made drainage feature within the northern portion of the Natomas Basin. This canal cycles water drained from agricultural fields and other local drainage to Pumping Plant 4, which pumps water into the NCC. Fish species within the canal generally consist of non-native warm water species.

#### **Environmental Effects**

Basis of Significance. An alternative would be considered to have a significant effect on fisheries resources if it would in any of the following:

1. substantially interfere with the movement of any resident or migratory fish;
2. permanently remove or diminish Essential Fish Habitat; or
3. involve discharges of material into waterways that would pose a hazard to fish.

Alternative 1 - No-Action. Under the No Action alternative, the cofferdam would not be constructed. Under this alternative the improvements to Pumping Plant 4 could not be completed as designed. In-water work would be done in the North Drainage Canal, potentially increasing impacts to warm water fish species within the canal. Upon completion of the portions

of the project that could be done without dewatering, Pumping Plant 4 and the affected levee reach would continue to be maintained by local levee maintenance districts. Emergency actions taken to prevent flooding in the possible event of pumping plant failure could result in degradation of fish habitat and impacts to warm water fish species within the canal.

Alternative 2 - Proposed Pumping Plant Improvements. Cofferdam installation in the North Drainage Canal may impact fish species trapped between the constructed cofferdam and Pumping Plant 4; however, it is anticipated that only warm water non-native fish species would be present in the North Drainage Canal. Indirect impacts to all fish species could occur if siltation or other contamination enters the water during construction. These potential impacts would be avoided using the measures discussed below.

### **Avoidance, Minimization, and Mitigation Measures**

Prior to ground disturbance, all on-site construction personnel would be given instruction regarding the presence of sensitive species and the importance of avoiding these species and their habitats.

Instream work would be limited to the areas immediately adjacent to the Pumping Plant 4 construction area. No impacts to special status fish species would occur due to cofferdam placement within the North Drainage Canal due to the warm water nature of the canal itself.

Implementation of Best Management Practices (BMPs) during the construction of the project would prevent material from entering the canal located on the waterside of the project levee:

- The contractor would be required to develop and submit a Storm Water Pollution Prevention Plan (SWPPP) to minimize the potential for soil or contaminants to enter the canal.
- Erosion/sediment controls such as hay bales, straw wattles, silt fencing, or other types of barriers would be used at the waterside toe of the levee to prevent soil from entering the canal.
- Water trucks would be used for dust suppression along all areas of disturbed soil and along the haul routes on the top of the levee, and at the levee toes.
- Fuel would be brought to the project site on the day that work is to be performed. If fuels, lubricants, or other potential hazardous substances must be stored on site, the contractor would follow all applicable Federal, State, and local laws related to the transportation, storage, and handling of the materials, and take appropriate measures against accidental spillage.
- If equipment is to be refueled on site, the contractor would take measures to avoid and contain any spills. The contractor would be required to develop and submit a Spill Prevention and Countermeasure Plan (SPCP) prior to initiating construction activities.

The SWPPP and SPCP must be approved by the Corps. The proposed avoidance, minimization, and mitigation measures would reduce impacts to less than significant.

### 3.2.3 Special-Status Species

Special Status Species Evaluation. A list of Federally-listed, candidate species, and species of concern that may be affected by the proposed levee improvement project in Reach D was obtained on April 21, 2017 and July 15, 2020, via the USFWS website Information for Planning and Consultation (IPaC 2020). In addition, a search of the California Natural Diversity Database (CNDDB) was conducted on April 21, 2017 and July 15, 2020, and determined all of the listed species within the United States Geological Survey (USGS) quad Verona (Appendix A). These species lists indicated that several State- and Federally-listed species have been reported within, or near the project boundaries; however, only the Federally-listed as threatened giant garter snake (*Thamnopsis gigas*) (GGS) and the State-listed as threatened Swainson's hawk (*Buteo swainsoni*) have been reported within one half mile of the project boundary. The Federally listed as threatened western yellow-billed cuckoo (*Coccyzus americanus*) was not identified within ½ mile of the project area; however, cuckoos could use the woody vegetation along the Sacramento River as stopover habitat during their spring migration. Fisheries species are discussed in Section 3.2.2, Fisheries. Other special status species that were not identified as occurring or having habitat in the project area are not discussed further in this document. The complete USFWS and CNDDB lists are included in Appendix A.

Giant Garter Snake. The giant garter snake (GGS) was Federally listed as threatened in October 1993. GGS are one of the largest garter snakes, reaching up to 64 inches and 1.5 pounds. These snakes feed on small fish, tadpoles, and frogs inhabiting agricultural wetlands and other waterways such as irrigation and drainage canals, sloughs, ponds and adjacent uplands in the Central Valley. Most of the snake's natural habitat has been lost, which is why rice fields have become so critical for providing thousands of acres of habitat. GGS are dormant during the winter, inhabiting small mammal burrows above flood elevations and emerging in the warmer weather of spring around May.

Construction of the NLIP in 2006 required that mitigation for the GGS be constructed by SAFCA, and TNBC established hundreds of additional acres of GGS habitat throughout the entire Natomas Basin using mitigation fees collected through the implementation of the Natomas Basin Habitat Conservation Plan (NBHCP). As a result of this mitigation, there are GGS present and active in the area surrounding Pumping Plant 4 and the NCC. According to CNDDB, there are several reported sightings of GGS within a half mile of the Pumping Plant 4 project area (Plate 4).

During the Corps' construction of Reach D from 2018-2020, several individual GGS were identified in the project area. During the Corps' construction of the new Vestal Drain outfall structure in 2019-2020, individual GGS were also identified in the area between Pumping Plant 4 and the cofferdam installed the North Drainage Canal. Individual sightings were reported as 66 cumulative occurrences during biological monitoring conducted from October 1, 2019 to January 31, 2020. This biological monitoring report is included in Appendix B.

Western Yellow-billed Cuckoo. Currently, no Western yellow-billed cuckoos have been documented in or near the project area; however, the riparian habitat along the NCC could be used as stopover habitat for migratory birds. There is no suitable riparian habitat within the immediate vicinity of Pumping Plant 4 that would be impacted by the proposed action.

Swainson's Hawk. During biological surveys conducted for the Project in 2016, nesting Swainson's hawks were identified less than ¼-mile from the Pumping Plant 4 project area. Reproductive success of the nest was not determined. Additionally, two other pairs of Swainson's hawks were observed in and around the Reach D project area. Follow-up surveys conducted in 2017 identified a nesting Swainson's hawk about 1.5 miles and another about 1.2 miles north of the former Northern Main Pumping Plant. During the 2017 Project surveys, another Swainson's hawk was seen about 0.5 mile south of the former Bennett Pumping Plant. This hawk was perched upon a power pole while exhibiting foraging behaviors. Swainson's hawks were observed along Reach D and near Pumping Plant 4 in 2018, 2019, and 2020. Additional Project surveys conducted in accordance with the California Department of Fish and Wildlife (CDFW) Swainson's Hawk Survey Protocols (CDFW 2000) would be performed to ensure that the locations of nesting raptors are recorded. Raptor surveys would be conducted in the spring of 2021 prior to the beginning of Project construction.

### **Environmental Effects**

Basis of Significance. For this analysis, a direct or indirect effect was considered significant if it met one or more of the following significance criteria:

1. Have a substantial adverse effect, either directly or indirectly, on species growth, survival, or reproductive success through habitat modification, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by CDFW or the USFWS;
2. Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
3. Contribute to a substantial reduction or elimination of species diversity or abundance; or
4. Have an adverse effect on a species' designated critical habitat, if applicable.

Alternative 1 - No-Action. Under the No Action alternative, the cofferdam would not be constructed. Under this alternative, the improvements to Pumping Plant 4 could not be completed as designed. The levee itself would be raised, and impacts to special-status species could occur due to Pumping Plant 4 construction activities. In-water work would be done in the North Drainage Canal, which may impact giant garter snakes. Upon completion of the portions of the project that could be done without dewatering, Pumping Plant 4 and the affected levee reach would continue to be maintained by local levee maintenance districts. Emergency actions taken to prevent flooding in the possible event of pumping plant failure could result in impacts to special status species.



Alternative 2 - Proposed Pumping Plant Improvements. The Project could result in direct effects to GGS and indirect effects to Swainson's hawks. The direct effects to GGS could be considered significant unless mitigated.

*Effects to the Giant Garter Snake.* Construction of the cofferdam to allow the construction of the pumping plant improvements would potentially result in direct effects to GGS and its habitat. Direct effects could include direct mortality caused by road strikes, excavation, and destruction of dens. Indirect effects include noise, vibration, presence of workers and equipment that may lead to the disruption of foraging or sunning that may cause a decrease in the reproductive success of the species.

*Effects to Swainson's Hawk.* Construction of the pumping plant improvements and cofferdam would potentially result in direct and indirect effects to Swainson's hawks. Construction activities in the vicinity of an active nest have the potential to result in forced fledging or nest abandonment by adult hawks, potentially causing significant effects due to the direct mortality and/or reduction in the success of a listed species. Indirect effects could occur due to the presence of construction vehicles and workers.

Avoidance, minimization, and mitigation measures to avoid these potential impacts are discussed below.

### **Avoidance, Minimization, and Mitigation Measures**

Prior to ground disturbance, all on-site construction personnel would be given instruction regarding the presence of sensitive species and the importance of avoiding these species and their habitats. Additional avoidance, minimization, and mitigation measures would include the following:

- Avoid impacts to nesting migratory birds by conducting pre-construction surveys for active nests in and around the work areas. Work activity around active nests would be avoided until the young have fledged.
- Minimize project impacts by reseeded disturbed areas at the completion of construction.

Species-specific avoidance, minimization, and mitigation measures are described below.

*Giant Garter Snake.* Biological surveys for the presence of GGS would be conducted by Corps biologists 24 hours in advance of construction. The active period of the snake is May 1 through October 1, and construction is currently scheduled to begin May 1 in order to reduce potential impacts to hibernating snakes. The construction work period is currently projected to continue past October 1. The Corps reinitiated formal consultation with USFWS on September 19, 2018, due to construction occurring in the fall and winter, the dormant period of the GGS. On November 14, 2018, USFWS responded with a Biological Opinion (BO) describing additional measures to be taken as extra precaution during the dormant period, in which snakes hibernate and cannot actively move out of the way of potential danger (Appendix A). Additional measures include the following:

- A USFWS-approved biological monitor would be on site during all excavation and earthmoving activities during the dormancy period of GGS. The monitor would have the authority to stop prevent take.
- The USFWS-approved biological monitor would inspect the site prior to the start of each construction day to determine the presence of GGS in the construction footprint.
- Exclusion fencing would be placed prior to October 1 between aquatic and upland habitat so that GGS do not move into the construction footprint in search of upland sites to overwinter. The fencing would be monitored daily prior to and during construction to ensure that there are no breaches that a snake could move through.
- If a GGS is encountered during construction, activities would cease until appropriate corrective measures have been completed and the biological monitor has determined that the snake will not be harmed.
- All GGS sightings would be reported to USFWS immediately.
- Project-related vehicles would observe a 20 mph speed limit within construction areas.
- After completion of construction activities, temporary fill and construction debris would be removed, and disturbed areas would be restored to pre-project conditions.

Mitigation for the Reach D project constructed between 2018 through 2020 required 17.5 acres of compensatory mitigation habitat for GGS to be deducted from overall Natomas mitigation at the managed marsh created near Fisherman's Lake within the Natomas Basin. Additional mitigation measures are described in the 2010 EIS/EIR and the 2018 SEA. The proposed mitigation measures would reduce the effects on GGS to less than significant.

*Western Yellow-billed Cuckoo.* Prior to construction, surveys would be conducted to determine the presence of potential habitat for the Western yellow-billed cuckoo. The Project is currently scheduled to begin May 1, 2021, which is prior to the nesting season for the Western yellow-billed cuckoo. An on-site biologist experienced with passerine behavior would survey potential nesting habitat while construction related activities are taking place. The biological monitor would have the authority to stop work and would consult with CDFW and USFWS to determine the best course of action necessary to avoid nest abandonment or take of individuals. Coordination with the USFWS is complete; however, re-initiation of consultation would occur if Western yellow-billed cuckoos are sighted near or on the project site.

*Swainson's Hawk.* Biological surveys according to the Swainson's Hawk Nesting Survey Protocol would be conducted between March and April, 2021. These survey protocols are useful for detecting the presence of nesting raptors (white-tailed kites and Swainson's hawks) and would continue to be conducted prior to construction. If active nests for Swainson's hawks are observed in or adjacent to the project area prior to the start of construction, CDFW would be notified in order to determine the potential impacts of the construction to the nests. To avoid potential effects to nesting raptors, CDFW typically requires the avoidance of nesting sites during construction activities and/or avoiding construction during the nesting season. The Project is currently scheduled to begin May 1, 2021, which is during the nesting season. If

necessary, an on-site biologist experienced with raptor behavior would monitor active nests while construction related activities are taking place. If the nesting raptors exhibit agitated behavior in response to construction related activities, the biological monitor would have the authority to stop work and would consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. The proposed mitigation measures would reduce the effects on Swainson's hawks to less than significant.

Additional mitigation measures are described in the 2010 EIS/EIR and the 2018 SEA. The proposed avoidance, minimization, and mitigation measures would reduce impacts to less than significant.

### **3.2.4 Water Resources and Quality**

#### **Baseline Conditions**

The Natomas Basin is bounded on all sides by waterways, including the Sacramento River to the west, the American River to the south, the Natomas East Main Drainage Canal and PGCC to the east, and the NCC to the north. Levees along these rivers and canals reduce flood risk and convey water from the Sierra Nevada to the Sacramento-San Joaquin Delta. Winter rains and spring snow melt can cause high flows in the valley's rivers. High water flows stress levees and berms, weakening them, causing them to erode, and possibly fail. To maintain the levee system, areas with existing or potential erosion and seepage damage are periodically identified and repaired.

The NCC is the major waterway in the Pumping Plant 4 project area. The water flow in the canal is influenced by local weather, spring snow melt, flood bypasses, upstream tributaries, and outflow of interior drainage from Pumping Plant 4. During high water events, backflow from the Sacramento River also increases water elevation within the NCC. Additional waterways around the project area include the Sankey Canal, the Vestal Drain, and the North Drainage Canal. The Sankey Canal obtains water from the Sacramento River via the Sankey Diversion pumping station and then distributes the water to the agricultural fields located in the area. Along the length of the Sankey and Northern Main canals, various irrigation canals deliver water to nearby agricultural fields. Excess water from the fields are drained into the Vestal Drain, which drains into the North Drainage Canal, and is pumped into the NCC through Pumping Plant 4.

The local rivers, lakes, and rainfall recharge the ground water table in the project area. Average ground water depth can be affected by seasonal changes in water volume in the valley, rivers, and lakes, local rainfall, and urban demand on the ground water (DWR 2012).

#### **Environmental Effects**

Basis of Significance. A project would significantly affect water resources if it would:

1. Violate any water quality standards or waste discharge requirements;

2. Substantially deplete surface water or groundwater supplies, or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level;
3. Substantially alter the existing drainage pattern of a site or area, including the alteration of a course of a stream or river; or
4. Interfere with existing beneficial uses or water rights.

Alternative 1 - No Action. Under this alternative, the cofferdam would not be constructed. Under this alternative, the improvements to Pumping Plant 4 could not be completed as designed. The levee itself would be raised, and impacts to water quality could occur due to Pumping Plant 4 construction activities. In-water work would be done in the North Drainage Canal, which would temporarily increase sedimentation within the canal. Upon completion of the portions of the project that could be done without dewatering, Pumping Plant 4 and the affected levee reach would continue to be maintained by local levee maintenance districts. The surface and groundwater conditions would continue to be affected by agricultural and urban contaminants through runoff. Extreme flooding events could wash siltation and contaminants into the water system, and if emergency repair work became necessary to prevent pumping plant failure, measures required for the protection of water quality might not be able to be used.

Alternative 2 - Proposed Pumping Plant Improvements. Within the North Drainage Canal, a cofferdam would be set up between the Pumping Plant 4 building and the Vestal Drain outflow in order to block water during construction. The cofferdam would likely consist of sheetpile driven into the sides of the North Drainage Canal, but may consist of other materials. Once the cofferdam has been constructed, the area would be pumped to establish a dry space for construction. Additional water inflows into the project area from drainage, seepage, and storm events would be pumped or diverted into the upstream portion of the North Drainage Canal in a manner that does not cause erosion or damage to the canal. Pumping and diversions would be coordinated with RD 1000 and the Natomas Mutual Water Company.

The entirety of the Pumping Plant 4 site is less than 5 acres, and it is anticipated that no more than one acre of soil would be disturbed per day. Upon completion of construction, the cofferdam would be removed and the levee slope, canal banks and staging area would be reseeded with native noninvasive species.

### **Avoidance, Minimization, and Mitigation Measures**

In-water construction activities would be monitored at all times and sampled for water quality in compliance with the Central Valley Regional Water Quality Control Board. Water sampling would be conducted during any in-water work; in the event that any materials enter any waterway; or when any activities result in the creation of a visible plume of material in surface waters or wetlands. Samples would be collected every 4 hours during in-water work to monitor turbidity, pH, and dissolved oxygen. Samples would be taken upstream out of the influence of the project and 300 feet downstream of the work area.

Dust control measures would be implemented on the levee crown, side slopes, maintenance roads and stockpiles to avoid dust and soil from entering the river, canal, or other drainages as a result of construction activities. BMPs would be followed to avoid erosion and movement of soils into the drainage system. In addition, inadvertent spills of oil or fuels from construction equipment could be a source of contamination at work or staging areas. Precautions would be followed to avoid contamination. The contractor would be required to properly store and dispose of any hazardous waste generated at the site. These BMPs and the avoidance, minimization, and mitigation measures listed below would prevent any contaminants from entering the river.

Since the Pumping Plant 4 project as a whole would disturb more than 1 acre of land, the contractor would be required to obtain a National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board (RWQCB), Central Valley Region. As part of the permit, the contractor would be required to prepare a SWPPP, identifying BMPs to be used to avoid or minimize any adverse effects to surface waters during construction.

The incorporation of the following BMPs would reduce effects to water quality to less than significant:

- The contractor would prepare a spill control plan and a SWPPP prior to initiation of ground disturbing construction activities. The SWPPP would be developed in accordance with guidance from the RWQCB, Central Valley Region. These plans would be reviewed and approved by the Corps before construction begins.
- During placement of riprap into the water, materials such as coir mats or hay bales, rock groins, sand bags, and drain screens would be utilized to prevent sediment from traveling outside the construction area footprint.
- Implement appropriate measures to prevent debris, soil, rock, or other material from entering the water when not actively placing riprap. Use a water truck or other appropriate measures to control dust on haul roads, construction areas, and stockpiles.
- Properly dispose of oil or other liquids.
- Fuel and maintain vehicles in a specified area that is designed to capture spills. This area cannot be near any ditch, stream, or other body of water or feature that may convey water to a nearby body of water.
- Inspect and maintain vehicles and equipment to prevent dripping of oil or other liquids.
- Schedule construction to avoid the rainy season as much as possible. Ground disturbance activities are scheduled to begin May 1, 2021. If rains are forecasted during construction, erosion control measures would be implemented as described in the RWQCB Erosion and Sediment Control Field Manual.
- Maintain sediment and erosion control measures during construction. Inspect the control measures before, during, and after a rain event.
- Train construction workers in stormwater pollution prevention practices.
- Revegetate disturbed areas in a timely manner to control erosion.

BMPs would be implemented to maintain the integrity of soil stockpiles; no erosional material would enter the NCC or the Sacramento River. Additional mitigation measures are described in the 2010 EIS/EIR and the 2018 SEA. The proposed avoidance, minimization, and mitigation measures would reduce impacts to less than significant. The improvements to Pumping Plant 4 would only lift pipes up and over the levee prism, and would not increase outflow from the North Drainage Canal into the NCC. There would be no changes to surface water, groundwater, or groundwater recharge. There would be no changes to existing drainage patterns to the area or interfere with water rights. The completed levee improvements would not significantly alter the alignment of the current levee nor would they alter the river hydraulics or the downstream capacity of the levee system. Since no significant adverse effects to groundwater or surface water resources are anticipated, no additional mitigation is required.

#### **4.0 GROWTH-INDUCING EFFECTS**

Local population growth and development would be consistent with the *Sutter County General Plan*, adopted in 2011 (Sutter County, 2011). The proposed action alternative would not induce growth in or near the project area because the *Sutter County General Plan* is designed to maintain the agricultural and rural setting of this area. Population growth in Sutter County is anticipated to remain low, with the greatest growth experienced in Yuba City and Live Oak. Unincorporated portions of Sutter County are anticipated to maintain a low growth rate (Sutter County, 2011). Additionally, the NBHCP maintains existing upland and riparian habitat for the conservation of listed and unlisted species, and currently maintains over 300 acres of managed wetland habitat on the south side of the NCC, east of the Pumping Plant 4 site. This habitat is intended to remain undeveloped in perpetuity, and additional tracts of land surrounding the managed wetland are also intended to maintain undeveloped or rural agricultural characteristics (NBHCP 2003).

The goal of the proposed action alternative is to complete the remaining Reach D Project levee improvements at Pumping Plant 4 of the Natomas Basin in order to meet Corps requirements for levee seepage criteria. Construction, operation, and maintenance of the improved levee would not result in a substantial increase in the number of permanent workers or employees.

#### **5.0 CUMULATIVE EFFECTS**

NEPA requires discussion of project effects that, when combined with the effects of other projects, result in significant cumulative effects. The NEPA regulations define a cumulative effect as:

“The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonable foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor or collectively significant actions taken over a period of time” (40 CFR § 1508.7).

The cumulative effects of the Project were addressed in the 2010 EIS/EIR. Ongoing regional flood risk reduction projects in the area were described in the 2018 SEA. Avoidance, minimization, and mitigation would occur during the construction of each of these projects in order to result in no net loss of riparian values. However, there would be cumulative temporary losses and probable changes in the specific types, quantities, and locations of the habitat.

## **5.2 Cumulative Effects**

The effects of the proposed cofferdam to build the improvements at Pumping Plant 4 would have no adverse cumulative effects on aesthetics and visual resources; air quality; recreation; socioeconomics; hazardous and toxic waste; geology, soils, and agricultural resources; traffic and circulation; noise and vibration; climate change; public utilities and services; or cultural resources. There would be short term but negligible cumulative effects on vegetation and wildlife, fisheries, special-status species, and air quality as described briefly below.

### **5.2.1 Vegetation and Wildlife**

The cofferdam would result in the temporary loss of open water aquatic habitat that would occur concurrently with other construction activities in the Natomas Basin. However, these impacts would be short term and temporary. The abundance of open water habitat in the area would provide habitat during the construction season, and measures to reduce impacts to vegetation and wildlife during the construction of the cofferdam and all work associated with Pumping Plant 4 would reduce potential impacts to less than significant. The cofferdam therefore would have only a negligible contribution to cumulative adverse effects to vegetation and wildlife in the Natomas Basin.

### **5.2.2 Fisheries**

The cofferdam has the potential to entrain a limited number of small warm water fish. No anadromous or other special status species would be affected. This impact does not contribute to any significant cumulative effect to fisheries in the Natomas Basin.

### **5.2.3 Special Status Species**

The construction of the cofferdam may impact special status species, particularly GGS and Swainson's hawks. GGS have been identified in the area proposed to be dewatered between the cofferdam and Pumping Plant 4. Work in this area would not start until May 1, the active season of the GGS. Biological monitoring would be conducted during the installation of the cofferdam in order to avoid GGS. Additionally, a mitigation site for GGS is located immediately to the east of the construction area, and the temporary reduction in habitat availability due to the cofferdam has no cumulative impact on the overall amount of habitat in the area.

Swainson's hawks have been identified near the area proposed to be constructed. There are no trees of appropriate size for nesting Swainson's hawks within or around the cofferdam or Pumping Plant 4 itself; however, some potentially nesting sites are located less than ¼ mile away

from the proposed work. Swainson's hawk nesting surveys, as well as avoidance and minimization measures, would reduce impacts to less than significant. Due to the availability of habitat in the surrounding Natomas Basin, as well as available nesting habitat north of the project site in Sutter County, the temporary reduction in habitat availability due to the cofferdam has no cumulative impact on the overall amount of habitat in the area.

Once the construction is complete levels of disturbance would return to existing levels. No long-term impacts are anticipated to occur due to these projects. Establishment of new, additional native vegetation mitigation areas in the Natomas Basin would result in the long-term net improvement of habitat extent and connectivity. As a result, the Project, when added to other past, present, and reasonably foreseeable future projects, would not result in cumulative adverse effects on special status species.

#### **5.2.4 Water Quality**

The construction of the cofferdam, other related improvements at Pumping Plant 4, other reaches in the Natomas Basin, and other projects in the area could result in accidental spills or leaks that could affect surface and ground water quality. With multiple projects under construction, the possibility exists that several accidental spills or leaks could enter the water. Projects would follow BMPs as well as avoidance, minimization, and mitigation measures included in the construction plans that would be implemented to avoid or reduce these effects to less than significant. As a result, these projects would not contribute significantly to cumulative effects on water quality. In addition, the projects in the area could have an overall beneficial effect on water quality. By diminishing the possibility for a catastrophic flood event, significant long-term impacts to water quality through contamination from flooded vehicles, household and industrial chemicals, raw sewage, and other wastes that may be present in the area would be reduced to less than significant.

## **6.0 COMPLIANCE WITH LAWS AND REGULATIONS**

### **6.1 Federal**

**Clean Air Act of 1972, as amended, 42 U.S.C. 7401, et seq.** *Compliance.* The proposed action is not expected to violate any Federal air quality standards, exceed the EPA's general conformity *de minimis* threshold, or hinder the attainment of air quality objectives in the local air basin. Implementation of BMPs would reduce nitrogen oxide emissions. Thus, the Corps has determined that the proposed project would have no significant effects on the future air quality of the area.

**Clean Water Act of 1972, as amended, 33 U.S.C. 1251, et seq.** *Compliance.* The Clean Water Act (CWA) is the primary Federal law governing water pollution. It established the basic structure for regulating discharges of pollutants into waters of the U.S. and gives the U.S. Environmental Protection Agency (USEPA) the authority to implement pollution control programs, such as setting wastewater standards for industries. In some states, such as California, the USEPA has delegated authority to regulate the CWA to state agencies.



Section 401 of the CWA regulates the water quality for any activity that may result in any in-water work or discharge into navigable waters. These actions must not violate Federal water quality standards. The Central Valley RWQCB administers Section 401 of the CWA in California, and either issues or denies water quality certifications. Construction of the cofferdam would occur within a manmade canal, and no impacts to wetlands would occur. No additional permits for the cofferdam are necessary.

With respect to Section 402 of the CWA, the contractor would be required to obtain a NPDES permit from the California RWQCB, Central Valley Region, since the project would disturb 1 or more acres of land and involve possible storm water discharges to surface waters. As part of the permit, the contractor would be required to prepare a SWPPP identifying BMPs to be used to avoid or minimize any adverse effects of construction on surface waters.

**Endangered Species Act of 1973, as amended, 16 U.S.C. 1531, et seq. Compliance.** In accordance with Section 7(c), the Corps obtained a list from USFWS of Federally listed and proposed species likely to occur in the project area on 21 April 2017 and July 15, 2020 via the USFWS website Information for Planning and Consultation. The Federally threatened GGS, and the Federally threatened Western yellow-billed cuckoo were identified as potentially affected by construction activities in the project area.

Prior to the construction of Reach D, the Corps reinitiated consultation with USFWS on June 20, 2016 and September 19, 2018 in order to update the Biological Opinion originally issued on October 8, 2008 (USFWS 2008), an appended December 8, 2014, due to changes to the project description and in order to analyze effects to the Federally threatened Western yellow-billed cuckoo. The Corps made the determination that the construction of the Reach D Project as a whole may affect and is likely to adversely affect GGS. A total of 17.5 acres of compensatory mitigation habitat for GGS is to be deducted from overall Natomas mitigation at the managed marsh created near Fisherman's Lake within the Natomas Basin. These mitigation measures reduced the effects on GGS during the construction of Reach D to less than significant. These same compensatory mitigation measures would also reduce the construction of the Pumping Plant 4 cofferdam to less than significant. The Corps has made the determination that the project may affect, but is not likely to adversely affect the Western yellow-billed cuckoo. On August 11, 2016, USFWS concurred with this determination.

The Corps has made the determination that the cofferdam construction is not likely to affect fisheries due to the nature of the increment and the lack of habitat within the North Drainage Canal, which is a warm water interior drainage canal. No additional consultation with NMFS is required.

**Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. Compliance.** This order directs all Federal agencies to identify and address adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. Any impacts caused by construction activities would not disproportionately affect minority or low-income populations.

**Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks.** *Compliance.* This order directs all Federal agencies to identify and assess environmental health and safety risks that may disproportionately affect children. There are no schools or other facilities near the project area. The project would not have adverse or disproportionate impacts on children.

**Farmland Protection Policy Act (7 U.S.C. 4201, et seq).** *Compliance.* No impacts to Prime Farmland or Farmland of Statewide Importance would occur due to the construction of the cofferdam. Full analysis of other areas impacted by the Natomas Basin Project as a whole are included in the 2010 EIS/EIR.

**Fish and Wildlife Coordination Act of 1958, as amended, 16 U.S.C. 661, et seq.** *Compliance.* The Fish and Wildlife Coordination Act (FWCA) ensures that fish and wildlife receive consideration equal to that of other project features from projects that are constructed, licensed, or permitted by Federal agencies. The FWCA requires federal agencies that construct water resource development projects to consult with USFWS, NMFS, and the applicable state fish and wildlife agency (CDFW) regarding the project's impacts on fish and wildlife and measures to mitigate those impacts. The USFWS and CDFW have participated in evaluating the proposed project. Consultation with NMFS and USFWS has been completed, and correspondence regarding special status species is included in Appendix A.

**Migratory Bird Treaty Act (15 U.S.C 701-18h).** *Ongoing.* An on-site biologist experienced with raptor behavior would monitor active nests while construction related activities are taking place. If the nesting raptors exhibit agitated behavior in response to construction related activities, the biological monitor would have the authority to stop work and would consult with CDFW and USFWS to determine the best course of action necessary to avoid nest abandonment or take of individuals.

**National Environmental Policy Act of 1969, as amended, 42 U.S.C. 4321, et seq.** *Ongoing.* Comments received during the public review period will be incorporated into the final 2020 SEA, as appropriate, and a comments and responses appendix will be prepared. The final 2020 SEA will be accompanied by a final FONSI if determined appropriate by the District Engineer after consideration of public comments.

**National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470 et seq.** *Ongoing.* Section 106 of the NHPA of 1966, as amended, requires a Federal agency to consider the effects of Federal undertakings on historical and archaeological resources. A PA for the American River Watershed Common Features, Natomas Basin Project was executed September 10, 2015 (2015 PA). The Proposed Action falls within the Area of Potential Effects (APE) identified in the 2015 PA. Completion of the stipulations required by the 2015 PA would assure compliance with Section 106 of the NHPA. The stipulations of the 2015 PA include identification and evaluation of potential historic properties within the APE for the undertaking, determination of effects to historic properties, resolution of adverse effects to historic properties, as necessary, and consultation with the SHPO, Native American tribes, and interested parties. All of the identification measures have been completed and known sites have been evaluated for their eligibility for listing in the National Register for Historic Places.

## **7.0 COORDINATION AND REVIEW OF THE DRAFT SEA**

The draft SEA will be circulated for 30 days to agencies, organizations, and individuals known to have a special interest in the project. Copies of the draft SEA will be made available for viewing at local public libraries, and provided by mail upon request. Coordination with all the appropriate Federal, State, and local government agencies including USFWS, NMFS, SHPO, CDFW, and CVFPB is ongoing.

## **8.0 FINDINGS**

This draft SEA evaluated the environmental effects of the proposed action. Potential adverse effects to the following resources were evaluated in detail: special status species, vegetation and wildlife, and water resources and quality.

Results of the draft SEA, field visits, and coordination with other agencies indicate that the proposed action would have no significant long-term effects on environmental resources. Short-term effects during construction would either be less than significant or mitigated to less than significant using BMPs.

SAFCA, as the Non-Federal Sponsor serving as the Lead Agency for CEQA, has determined that the 2010 EIS/EIR is sufficient documentation for all impacts previously evaluated pursuant to CEQA, and no additional CEQA documentation is required.

## **9.0 LIST OF PREPARERS**

### **Pumping Plant 4 Cofferdam Update:**

Robin Rosenau  
Environmental Manager, U.S. Army Corps of Engineers  
Report preparation and coordination

### **Natomas Reach D 2018 Supplemental Environmental Assessment:**

Keleigh Dietsch  
Environmental Manager, U. S. Army Corps of Engineers  
Report preparation and surveys

Melissa Montag  
Archeologist, U.S. Army Corps of Engineers  
Cultural resources analysis and coordination

Patrick O'Day  
Archaeologist, U.S. Army Corps of Engineers  
Cultural resources analysis and coordination

## 10.0 REFERENCES

- California Department of Fish and Wildlife (CDFW). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee, May 31, 2000.
- Sacramento County Department of Water Resources (DWR). 2008. Natomas Basin Projected Flood Inundation Map Effective December 8, 2008 (Levees Provide Less Than 100yr Flood Protection).
- California Department of Water Resources (DWR). 2012. Groundwater Information Center. <http://www.water.ca.gov/groundwater/>.
- Information for Planning and Consultation (IPaC). 2020. Environmental Conservation Online System, U.S. Fish and Wildlife Service project planning tool. <https://ecos.fws.gov/ipac/>.
- Natomas Basin Habitat Conservation Plan (NBHCP). 2003. Final Natomas Basin Habitat Conservation Plan, City of Sacramento, Sutter County, Natomas Basin Conservancy, Reclamation District No. 1000, and the Natomas Central Mutual Water Company. <http://www.natomasbasin.org/helpful-documents/2003-nbhcp-related-documents>.
- Sutter County. 2011. Sutter County General Plan, Adopted by Sutter County Board of Supervisors March 29, 2011. Resolution No. 11-029. Section 6.5, Biological Resources. <https://www.co.sutter.ca.us/contents/pdf/cs/ps/gp/documents/deir/06.05%20Bio%20Resources.pdf>.
- U.S. Army Corps of Engineers (USACE). 2010. Final Environmental Impact Statement/Final Environmental Impact Report on the American River Watershed Common Features Project/Natomas Post-authorization Change Report/Natomas Levee Improvement Program, Phase 4b Landside Improvements Project, Sacramento, CA. U.S. Army Corps of Engineers, Sacramento District, South Pacific Division.
- U.S. Fish and Wildlife Service (USFWS). 2008. Section 7 Programmatic Formal Consultation on the Natomas Levee Improvement Program, Landside Improvements Project, Sacramento and Sutter Counties, California. Biological Opinion Issued October 9, 2008; Amended May 6, 2009; Appended September 28, 2009; Appended May 10, 2010; Appended October 12, 2010; Appended August 11, 2016.