

**Success Lake  
Water Control Manual Deviation  
Final Environmental Assessment**



**May 2019**



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

## CONTENTS

<b>LIST OF FIGURES.....</b>	<b>ii</b>
<b>ACRONYMS .....</b>	<b>iii</b>
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
1.1 Proposed Action.....	1
1.2 Location of the Project .....	1
1.3 Background and Need for Action .....	1
1.4 Authority .....	2
1.5 Purpose of the Environmental Assessment .....	2
1.6 Decision Needed.....	2
1.7 Documents Incorporated by Reference.....	2
<b>2.0 ALTERNATIVES.....</b>	<b>3</b>
2.1 Alternatives Eliminated from Further Consideration .....	3
2.2 No Action .....	4
2.3 Proposed Action.....	4
<b>3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES.....</b>	<b>0</b>
3.1 Environmental Resources Not Considered in Detail .....	0
3.2 Cultural Resources .....	0
3.3 Recreation.....	1
3.4 Special Status Species .....	1
3.5 Traffic.....	4
3.6 Vegetation and Wildlife .....	4
3.7 Water Quality .....	5
<b>4.0 CUMULATIVE AND GROWTH-INDUCING EFFECTS.....</b>	<b>5</b>
4.1 Growth-Inducing Effects.....	5
4.2 Cumulative Effects .....	5
4.2.1 Local Projects .....	5
4.2.2 Effects Analysis .....	6
<b>5.0 COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS.....</b>	<b>6</b>
<b>6.0 COORDINATION AND REVIEW OF THE DRAFT ENVIRONMENTAL ASSESSMENT .....</b>	<b>8</b>
<b>7.0 FINDINGS .....</b>	<b>9</b>
<b>8.0 LIST OF PREPARERS .....</b>	<b>10</b>
<b>9.0 REFERENCES.....</b>	<b>10</b>

## **LIST OF FIGURES**

- Figure 1. Success Lake Project Area and Site Features
- Figure 2. Success Lake Increased Pool Footprint Area
- Figure 3. Tule River Area Footprint
- Figure 4. South Fork Tule River Area Footprint

## ACRONYMS

APE	area of potential effects
CDFW	California Department of Fish and Wildlife
CNDDB	California Natural Diversity Database
Corps	U.S. Army Corps of Engineers
CRF	California red-legged frog
CVRWQCB	Central Valley Regional Water Quality Control Board
DSAC	dam safety action classification
DSAP	Dam Safety Assurance Program
EA	environmental assessment
EIS	environmental impact statement
ESA	Endangered Species Act
FONSI	Finding of no significant impact
IPaC	Information for Planning and Consultation
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NRHP	National Register of Historic Places
SHPO	State Historic Preservation Officer
TRA	Tule River Water Association
U.S. Census	U.S. Census Bureau
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service

## **1.0 INTRODUCTION**

### **1.1 Proposed Action**

A series of atmospheric river storms with heavy precipitation impacted California in the 2019 rain season. As a result, most flood control reservoirs are at or above the top of conservation levels and many regions of the state have saturated ground. The Tule River Water Association (TRA) has requested a deviation from the Water Control Manual at Success Lake to store additional water. If granted by the U.S. Army Corps of Engineers (Corps), this deviation would allow TRA to construct a sandbag wall across the Success Lake spillway to increase the spillway elevation from 652.5 feet to 658.5 feet. This would allow a maximum increase of 4 feet in the reservoir's gross pool to elevation 656.5 feet with 2 feet of freeboard. Under its operational framework for Central Valley reservoirs, the Corps Water Management division will monitor the 656.5 maximum elevation and maintain the freeboard through additional flood control releases in concert with TRA's water releases for irrigation demand to ensure that the water elevation remains at this level (J. Forbis *pers comm.* 2019). The purpose of this deviation is to prevent downstream flooding in the Tulare Lake Basin and flood risk reduction to the town of Porterville from snow melt inflow. This project has been performed by TRA under agreement with the Corps in past years with similar weather conditions.

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

Success Dam and Reservoir is located along the Tule River approximately five miles east and upstream of the town of Porterville in Tulare County, and approximately 60 miles north of Bakersfield, California. The Tule River drains about 390 square miles into Success Lake, flowing from the reservoir through Porterville, and continuing 25 miles through agricultural areas. Construction of the dam was completed in May 1961. Figure 1 displays the Success Lake area and some of the features of the reservoir and recreation area.

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

Construction of Success Dam began in 1958 and was completed on May 15, 1961. The dam provides flood risk reduction benefits to the City of Porterville and to other communities downstream of the dam. In addition, the dam helps protect several hundred thousand acres of valuable farmland west of the dam including the Tulare Lakebed from damaging winter and spring floods.

Serious flood problems occur along the Tule River generally as a result of inadequate channel capacities. Damages from the 1983 flood were estimated to be \$11 million at 2014 price levels. From a 1999 Feasibility Study, Congress authorized the Tule River Project, which proposed to raise the Success Lake spillway 10 feet and widen the spillway to increase the gross pool elevation for flood control and irrigation

water supply as a permanent fix. Following several years of seepage and seismic risk studies, the Tule River Project is scheduled to commence in 2020.

During high water years, the TRA has periodically requested a water control manual deviation to better control releases during snow melt and avoid downstream flooding impacts. The deviation involves constructing a sandbag barrier in the spillway to increase capacity in the reservoir. The TRA has previously implemented the spillway barrier in 1967, 1969, 1982, 1998, and 2017. The April-July 2019 Department of Water Resources Water Supply Forecast, as of March 12, 2019, was 110,000 acre-feet and 175 percent of average (CDEC 2019). As a result, the TRA has requested to implement this deviation for up to 90 days beginning in May 2019 to avoid flooding the Tulare Lakebed farming operations.

#### **1.4 Authority**

The investigation which led to the recommendation to construct Success Dam was authorized June 22, 1936. Success Lake was authorized for construction by the Flood Control Act of 1944, Pub. L. No. 78-534, 58 Stat. 887.

#### **1.5 Purpose of the Environmental Assessment**

This Environmental Assessment (EA) assesses the effects of the proposed water control manual deviation on the environment to determine whether an Environmental Impact Statement (EIS) should be prepared. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA), which requires full disclosure of the environmental effects, alternatives, potential mitigation, and environmental compliance procedures of the proposed action through an EA.

#### **1.6 Decision Needed**

The District Engineer, commander of the Sacramento District of the Corps, will decide whether or not the proposed water control manual deviation qualifies for a finding of no significant impact (FONSI) or whether an EIS must be prepared. The decision on whether to allow the TRA to proceed with the deviation will be made by Corps' South Pacific Division in San Francisco, California.

#### **1.7 Documents Incorporated by Reference**

The project activities described in this EA are identical to activities described in the *Success Lake Water Control Manual Deviation Final Environmental Assessment* (Corps 2017). All actions are consistent and performed under similar hydrological conditions with water storage capacity and snowpack conditions. Due to the similarities, the Corps is incorporating the 2017 analysis by reference with the sections below addressing any differences between the 2017 EA and the current 2019 conditions. The 2017 EA can be found at the following address:



**Figure 1. Success Lake Project Area and Site Features**

## **2.0 ALTERNATIVES**

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

The TRA has not identified additional alternatives beyond the No Action and the Proposed Action.

## **2.2 No Action**

The Corps would not grant the requested water control manual deviation. As a result, releases from Success Lake would increase, causing downstream flooding in Reclamation District 749 in the Tulare Lake basin. The extent of flooding in the basin are speculative, but are assumed to include impacts to up to 25,000 acres of agricultural land; vegetation and wildlife habitat, including special status species habitat; damage to roadways; pollutants and pesticides entering the Tule River watershed; and severe economic losses to the surrounding community.

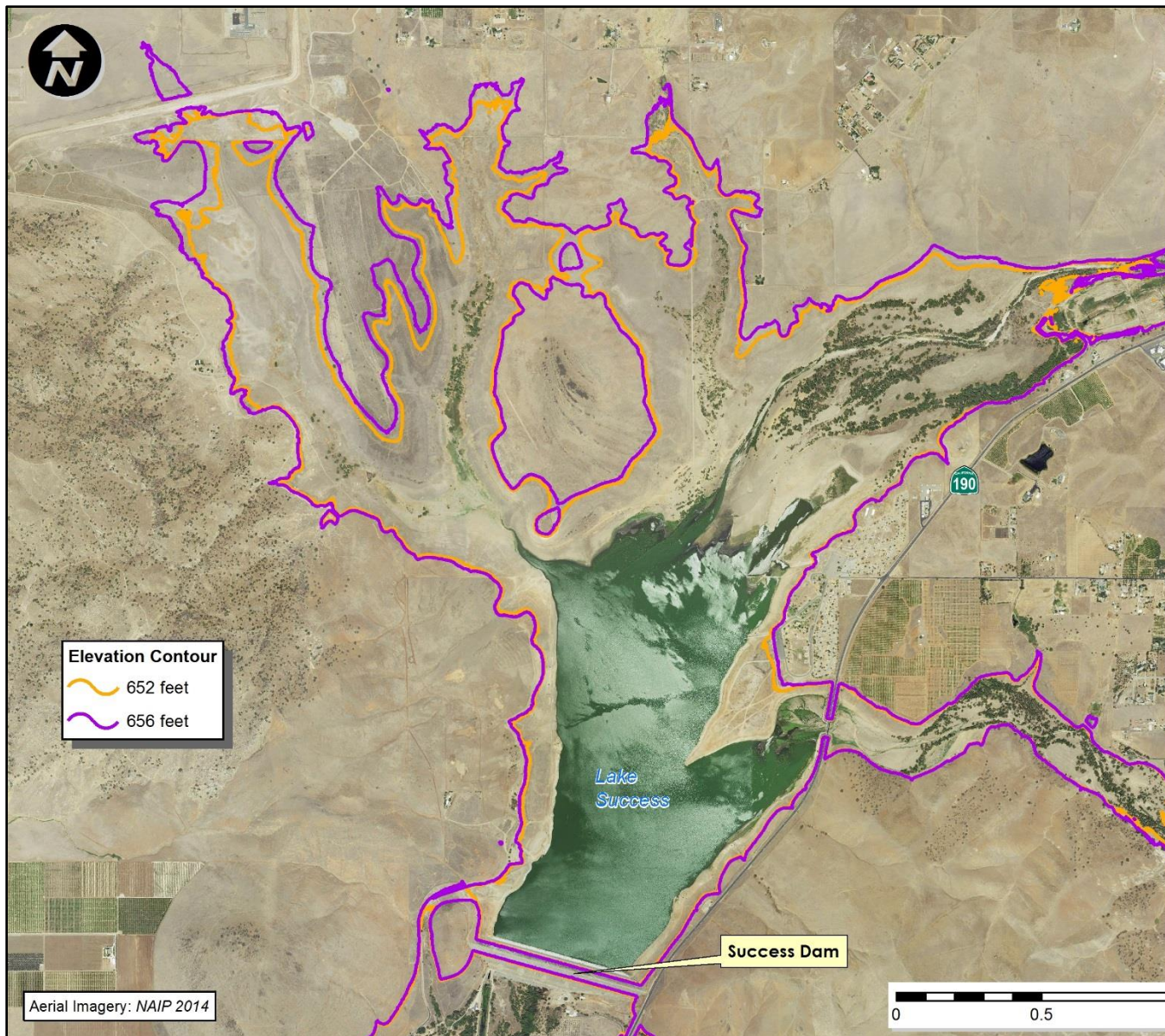
## **2.3 Proposed Action**

The proposed water control manual deviation would provide an additional 10,000 acre-feet of flood control space at Success Dam for the current snowmelt season. This would be accomplished through the construction of a temporary six-foot barricade of the spillway. The barricade would be constructed of sandbags and would take approximately 3 to 5 days to construct. The spillway area would be accessed from the south using Avenue 146/Worth Drive. The materials to construct the sandbag wall would be hauled to the spillway site and would be staged on-site in the roadway while the wall is constructed.

The sandbag wall would allow water to be stored up to 4-feet above the spillway crest with 2-feet of freeboard. These elevations are consistent with the implementation of this measure in past high-water years. As a result, the inundation area associated with this measure has been previously inundated, most recently in 2017.

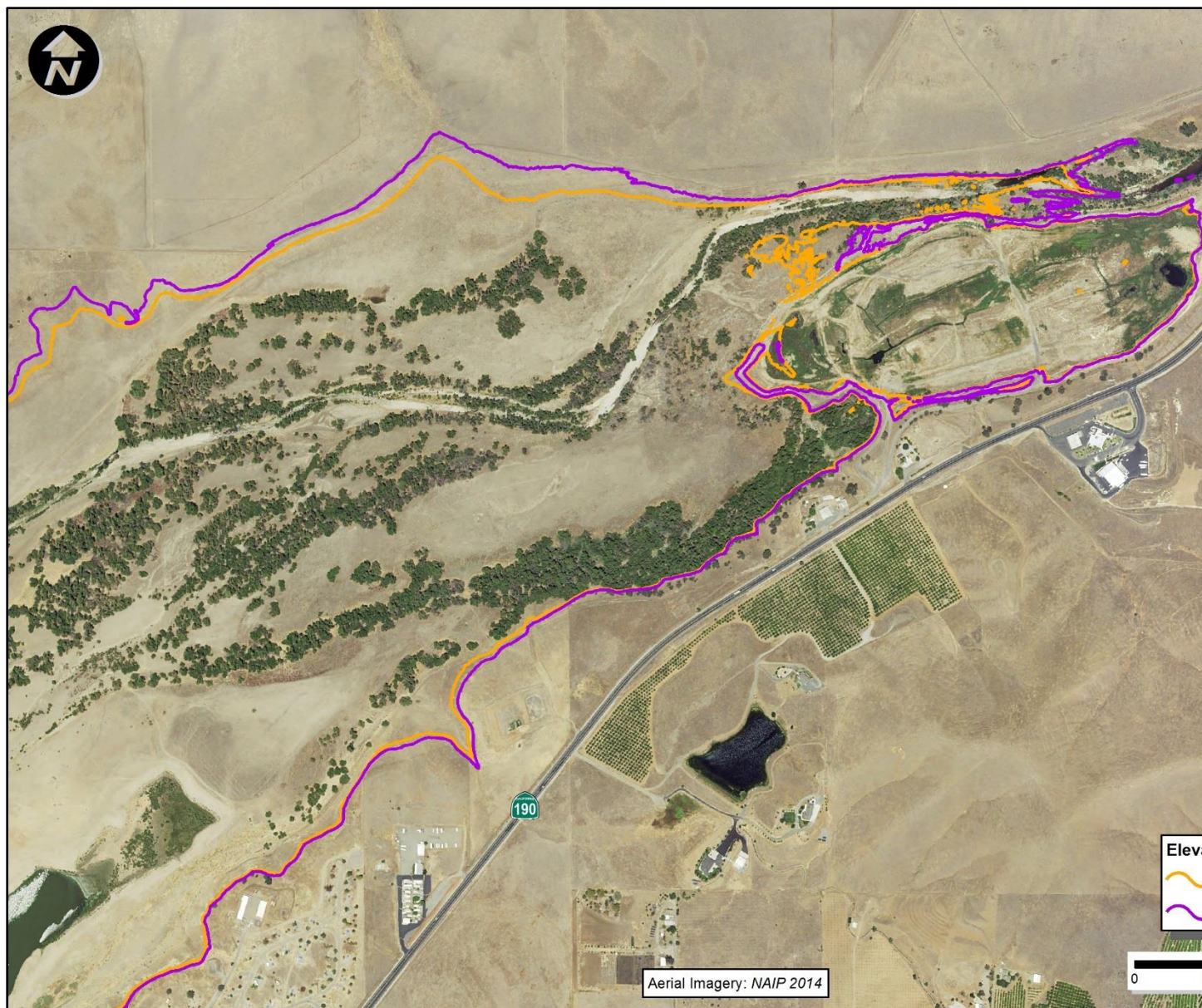
Following implementation of the sandbag barrier, reservoir releases would be managed to allow for the reduction of damaging flows to the Tulare Lakebed area. The deviation would last approximately 90 days beginning in May 2019. The footprint of the increased reservoir storage space is shown on Figure 2 below. Figures 3 and 4 are zoomed in views of the Tule River Area and the South Fork Tule River Area.





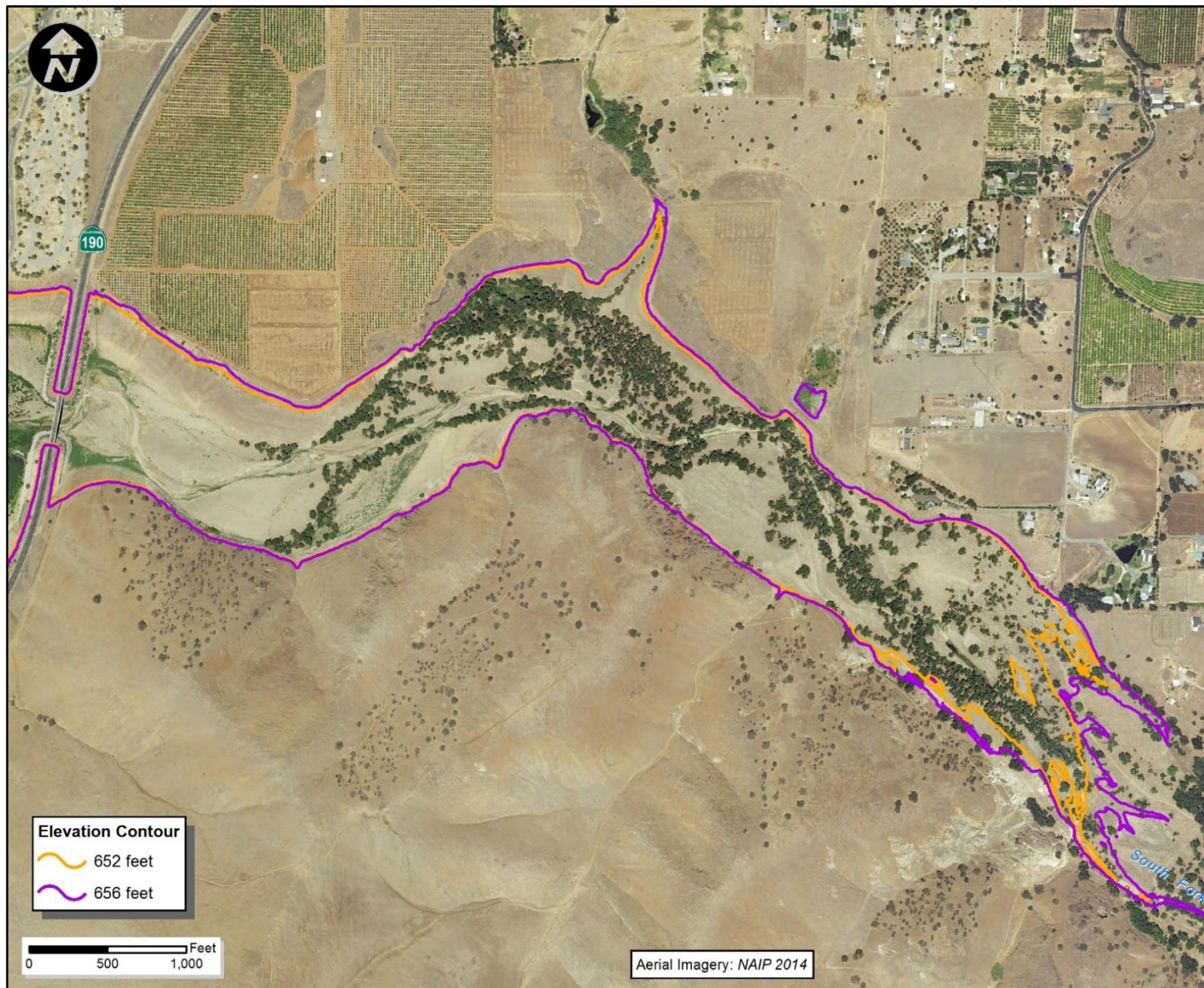
**Figure 2. Success Lake Increased Pool Footprint Area**





**Figure 3. Tule River Area Footprint**





**Figure 4. South Fork Tule River Area Footprint**

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

This section describes the environmental resources in the project area, as well as any effects of the alternatives on those resources. When necessary, mitigation measures are also proposed to avoid, reduce, minimize, or compensate for any significant effects. The environmental consequences of the No Action alternative are analyzed in the 2017 Success Deviation EA which is incorporated into this EA by reference (see Section 1.7 above), therefore the No Action alternative will not be addressed further in this document.

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

Initial evaluation of the effects of the project indicated that there would likely be no effect to minor effects on several resources. These resources, including Air Quality and Climate Change, Fisheries, Land Use and Socioeconomics, Noise, Topography/Geology/Soils, Traffic, and Visual Resources are described for context in the 2017 Success Deviation EA, which is incorporated by reference in this EA. There has been no change in the conditions of these resources since the 2017 EA.

#### **3.2 Cultural Resources**

Detailed information on cultural resource can be found in the 2017 Success Deviation EA, which is incorporated by reference in this EA.

In 2017, ahead of implementation of the most recent water control manual deviation, the Corps completed intensive cultural resources surveys encompassing the reservoir rim between the elevations of 652.5 to 658.5 feet above mean sea level. Upon completion of those surveys, in consultation with the State Historic Preservation Officer (SHPO) pursuant to the requirements of the National Historic Preservation Act (NHPA), § 106, 54 U.S.C. § 306108, the Corps reached a finding of no adverse effect to historic properties for that undertaking. Additional information regarding cultural resources and previous the Corps Section 106 compliance related to that water control manual deviation can be found in the 2017 Success Deviation EA and is incorporated by reference in this EA.

The current proposed action duplicates the undertaking and area of potential effects (APE) subject to Section 106 consultation in 2017. As such, the Corps has determined that no additional Section 106 review is required at this time. In 2017, monitoring of cultural resources within the deviation pool was identified as mitigation for the proposed action; however, impacts to cultural resources were anticipated to be minimal, with no adverse effects to historic properties. Site monitoring, which is still recommended as an appropriate mitigation measure, is anticipated to take place later this year. With monitoring in place for mitigation of impacts to cultural resources, the Corps anticipates no significant impacts on cultural resources from the proposed action.

### 3.3 Recreation

There have been no changes to recreation activities since the 2017 EA and the determination of the impacts to recreation activities at Success Lake in 2019 are still anticipated to be less than significant. Detailed information on recreational activities at Success Lake can be found in the 2017 Success Deviation EA, which is incorporated by reference in this EA. In addition to the existing conditions, the Basis of Significance and No Action Alternative Effects Analysis is also incorporated by reference from the 2017 EA. Since there have been no changes since the 2017 EA, the temporary effects to recreation are still considered less than significant.

### 3.4 Special-Status Species

Certain special-status species and their habitats are protected by Federal, State, or local laws and agency regulations. The Endangered Species Act (ESA) of 1973 (16 U.S.C. § 1531 – 1599) provides legal protection for plant and animal species in danger of extinction (50 CFR Part 17). This act is administered by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). Other special status species lack legal protection, but have been characterized as “sensitive” based on the policies adopted by local government and the expertise of agencies like the California Department of Fish and Wildlife (CDFW). Detailed information for special status species and the basis of significance can be found in the 2017 Success Deviation EA, which is incorporated by reference in this EA.

In April of 2019 a team consisting the Corps and USFWS biologists toured the perimeter of Success Lake and surveyed the area for listed and other species presence. In addition to the survey, a list of Federally listed and candidate species, and species of concern that may be affected by the project in U.S. Geological Survey Quad Success Dam was obtained via the USFWS Information for Planning and Consultation (IPaC) website (USFWS 2019). Additionally, a search of the California Natural Diversity Database (CNDDDB) indicated that there were reported occurrences of Federal and State listed species near the project area. Based on the 2019 survey and website results, the following are Federally listed species that could still be potentially present and be affected by project activities at Success Lake. These species were considered in the 2019 *Success Dam Water Control Manual Deviation Biological Assessment*:

- |  |                 |
|--|-----------------|
| • California Red-legged frog ( <i>Rana draytonii</i> )         | U.S. Threatened |
| • Least Bell's Vireo ( <i>Vireo bellii pusillus</i> )          | U.S. Endangered |
| • San Joaquin Adobe Sunburst ( <i>Pseudobahia peirsonii</i> )  | U.S. Threatened |
| • Southwestern Willow Flycatcher ( <i>Empidonax traillii</i> ) | U.S. Endangered |

The following special-status species were considered but not evaluated fully:

- |   |                 |
|---|-----------------|
| • California Condor ( <i>Gymnogyps californianus</i> )  | U.S. Endangered |
| • Keck's Checkermallow ( <i>Sidalcea keckii</i> )       | U.S. Threatened |
| • San Joaquin Kit Fox ( <i>Vulpes macrotis mutica</i> ) | U.S. Endangered |
| • Striped Adobe Lily ( <i>Fritillaria striata</i> )     | CA Threatened   |

The only species listed above with designated critical habitat in the Success Lake area is the California condor. However, there is no appropriate nesting habitat for the condor within the project area. As a result, the Corps has determined the proposed project will have no impacts on the condor. In past years the Keck's checkermallow and the striped adobe lily populations were near the reservoir, but outside of the inundation area, therefore the pool increase will not affect their survival. There were no sightings of these plant species during the April 2019 survey, and therefore these special-status species will not be affected by the proposal and therefore are not further discussed. Kit fox presence in the area is unlikely from recent surveys and the lack of confirmed sightings of them in the project area (E. Tomasovic *pers comm.* 2019). Based on this evidence there would be no effect to kit foxes from project impacts.

The 2019 survey found the extant populations of the San Joaquin Adobe Sunburst at Success Lake are in a better than average condition, likely due to the wet winter season. This remaining population is part of a larger one that used to occupy an area that is now part of Success Lake. In recent years, the Success Lake extant population of San Joaquin adobe sunburst has varied from 50 to over 300 individual plants in four different areas; however, in April 2019, the numbers of plants in two confirmed populations ranged from 100s to 1000s (L. Guerrero *pers comm.* 2019). The two confirmed population locations were on the north bank of the North Fork Tule River, just south of the golf course (Cliffside Population), and to the northwest of Boat Island between the island and Frazier Dike (Frazier Population).

Proposed Action. The proposed planned water control manual deviation would provide an additional 10,000 acre-feet of flood control space at Success Lake for the current snowmelt season. This increase in flood control space would cause reservoir levels to rise which could result in the flooding of Federally listed special status species. The action could cause direct and indirect effects to the Southwestern willow flycatcher, the Least Bell's Vireo, the San Joaquin adobe sunburst, and the California red-legged frog. The deviation would last approximately 90 days beginning in May 2019.

*Southwestern Willow Flycatcher.* Effects to the southwestern willow flycatcher may occur if the proposed increase in gross pool floods willow flycatcher habitat and established nests. Success Lake is located north of the designated critical habitat, therefore there will be no destruction to willow flycatcher critical habitat. Where the Tule River enters the reservoir in the northeastern corner there is approximately 160 acres of Willow Riparian Woodland habitat, which is suitable for nesting, although not designated

critical habitat for this species. Potential impacts from habitat damage or disturbance could include nest abandonment, lifecycle disruption, or direct mortality. Most of this riparian area would flood on an annual basis at maximum reservoir levels during wet years, regardless of the proposed deviation. Since the reservoir levels in 2019 have remained high throughout the spring nesting season, the high water conditions without the deviation would make it unlikely that any suitable nesting habitat is present for the flycatcher. As a result, the additional reservoir footprint containing potential habitat associated with this deviation would have no effect on the Southwestern willow flycatcher.

*San Joaquin Adobe Sunburst.* For this project the Corps determined that effects to the San Joaquin adobe sunburst may occur if the proposed action floods the historically known populations on the Porterville clay around Success Lake. The Cliffside Population runs down a steep cliff side and ends at an undercut bank that is elevated over four feet above the North Fork Tule River. The distance between the river bank and the water surface that would make it unlikely that the water would reach the population at the 565.5-foot gross pool elevation. The Cliffside population sits in a depression area that could be flood prone to rising water levels in Success Lake. The location of the Frazier population was taken with GIS coordinates and compared to the 565.5-foot gross pool elevation. From desktop analysis it was determined that the four-foot rise from the deviation would not be enough to flood the location of both populations. Based on these surveys and desktop analysis the Corps determined that since the gross pool level would be maintained at the prescribed level and the desktop analysis showed no water encroachment, there would be no effects from project activities to the two known populations at Success Lake.

*California Red-legged Frog.* Effects to the CRLF may occur if the proposed action floods the Willow Riparian Woodland habitat. There is no designated critical habitat for CRLF near Success Lake and no reports of CRLF in Tulare County. Historically CRLF was found in the area but is believed to have been extirpated. CRLF are mostly found in dense growths of woody riparian vegetation, especially willows which are present near the inflow from Tule River. It is, however very unlikely that any CRLF live in Success Lake or that the area could be repopulated by neighboring metapopulations. The 2019 field survey conducted by the Corps also had no confirmed CRLF sightings. Since CRLF have not been recorded in this area in some time and following recent surveys the Corps concludes that there would be no effects to CRF from the proposed water control manual deviation.

*Least Bell's Vireo.* Effects to the vireo may occur if the proposed increase in gross pool floods riparian habitat and established nests. Success Lake is not located within designated critical habitat for the vireo. At the Tule River inlet, there is approximately 160 acres of Willow Riparian Woodland habitat. Most of this riparian area would flood on an annual basis at maximum reservoir levels, and has been flooded throughout the spring of 2019. With the proposed action, approximately 2.3 acres would be additionally flooded. Most flooded areas contain sparsely populated trees in oak woodland. 7The proposed water control manual deviation could potentially result in



direct effects to nesting least bell's vireos if the water levels increase after the start of nesting season. Potential impacts from habitat damage or disturbance could include nest abandonment, lifecycle disruption, or direct mortality. However, since the reservoir levels have remained high throughout the spring nesting season, it is unlikely that suitable nesting habitat was present for the vireo. As a result, the additional reservoir footprint associated with this deviation would have no effect on the least Bell's vireo.

Although the gross pool level has changed in 2019 conditions, the impacts resulting from the project are not enough to result in any significant effects. Therefore, no effects were determined to impact special status species.

### **3.5 Traffic**

There have been no changes to traffic in the area since the 2017 EA and the determination of the impacts to traffic at Success Lake in 2019 are still anticipated to be less than significant. Detailed information on recreational activities at Success Lake can be found in the 2017 Success Deviation EA, which is incorporated by reference in this EA. In addition to the existing conditions, the Basis of Significance and No Action Alternative Effects Analysis is also incorporated by reference from the 2017 EA, since there has been no change in conditions that would affect these sections. There are no additional changes from traffic in 2017 to 2019, therefore there are no changes in effects.

### **3.6 Vegetation and Wildlife**

There have been no changes to vegetation and wildlife since the 2017 EA and the determination of the impacts to vegetation and wildlife at Success Lake in 2019 are still anticipated to be less than significant. Detailed information on recreational activities at Success Lake can be found in the 2017 Success Deviation EA, which is incorporated by reference in this EA. In addition to the existing conditions, the Basis of Significance and No Action Alternative Effects Analysis is also incorporated by reference from the 2017 EA, since there has been no change in conditions that would affect these sections.

Following several years of drought, there have been two winters with high-water years over the past three years. The higher winter flows have diminished the available willow forest habitat. Willow removal is a part of ongoing operation and maintenance practices at the reservoir in order to ensure that vegetation growth during low water levels does not impact long-term gross pool space within the reservoir. Changes to current willow removal practices are not part of this proposed deviation.

Impacts to vegetation are temporary in nature, and less than significant; therefore no mitigation for vegetation is required. Field surveys conducted in 2019 did not find burrowing owls or nests; however, if the presence of burrowing owls are determined within the impact area, minimization measures would be developed in coordination with



the appropriate resource agencies. Although the gross pool level in Success Lake has changed from 2017 to 2019, there are no additional impacts resulting from the project.

### **3.7 Water Quality**

There have been no changes to water quality since the 2017 EA and the determination of the impacts to water quality at Success Lake in 2019 are still anticipated to be less than significant. Detailed information on recreational activities at Success Lake can be found in the 2017 Success Deviation EA, which is incorporated by reference in this EA. In addition to the existing conditions, the Basis of Significance and No Action Alternative Effects Analysis is also incorporated by reference from the 2017 EA, since there has been no change in conditions that would affect these sections. Although the gross pool level in Success Lake has changed from 2017 to 2019, there are no additional impacts resulting from the project.

## **4.0 CUMULATIVE AND GROWTH-INDUCING EFFECTS**

### **4.1 Growth-Inducing Effects**

The proposed water control manual deviation would not induce growth in or near the project area. The deviation from the water control manual is a temporary action intended to respond to the significant snow pack in the Sierra Nevada mountain range, and would enable the TRA to better manage releases from the reservoir to avoid downstream flooding. Implementing the proposed action would not impact local development planning efforts. In addition, the proposed action would not require an increase in employment at the reservoir. The proposed action is temporary in nature and conditions would return to the existing condition following the up to 90-day change in operations.

### **4.2 Cumulative Effects**

NEPA requires the consideration of cumulative effects of the proposed action combined with the effects of other projects. NEPA defines a cumulative effect as the effect on the environment which results from the incremental effect of an action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR § 1508.7). The area where the proposed project has impacts includes the shoreline perimeter of Success Lake, the spillway area at Success Dam, and the lower Tule River. Any impacts would occur in a period to not exceed 90 days from May through July for 2019.

#### **4.2.1 Federal Projects**

Tule River Project. The Tule River Project Feasibility Report and EIS/EIR was completed by the Corps in 1999. This project proposes a 10-foot raise of the Success Dam spillway. The project is fully funded through the entire project and is scheduled for completion in 2021. The only project activity that has been performed has been pre-construction boring, but other activities slated to occur include: widening the spillway from 200-to-400 feet; installation of the new gravity operated spillway; relocation of the road along the spillway; and armoring Frazier Dyke and the Route 190 Bridge from wing and wave action.

#### **4.2.2 Effects Analysis**

Since the local projects discussed above would not be implemented during the temporary water control manual deviation, there would be no cumulative effects from the combination of these actions. However, implementation of the Tule River Project would result in a permanent increase in gross pool elevation that exceeds the proposed temporary increase from the water control manual deviation. Therefore, if implemented, the impacts to cultural resources, recreation, special status species, traffic, vegetation and wildlife, and water quality addressed in this EA would be permanent with potentially additional effects from additional flooded footprint. As a result, there are no cumulative effects associated with the proposed water control manual deviation. The effects resulting from the Tule River Project were analyzed in the Tule River Project EIS/EIR and will be updated as needed with future implementation of the project.

### **5.0 COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS**

Clean Air Act of 1972, as amended, 42 U.S.C. 7401, et seq. *Full Compliance.* The proposed action is not expected to violate any Federal air quality standards, exceed the U.S. EPA's general conformity *de minimis* threshold, or hinder the attainment of air quality objectives in the local air basin. 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. *Full compliance.* The proposed action is not expected to adversely affect surface or ground water quality or deplete ground water supplies. No discharge of dredge or fill materials into navigable waters or adjacent wetlands would occur under the project. The proposed construction area is less than 1 acre, therefore the contractor would not be required to obtain a National Pollutant Discharge Elimination System permit or prepare a Stormwater Pollution Prevention Plan. The Corps has determined that the proposed project would have no significant effects on the future water quality of the area.

Endangered Species Act of 1973, as amended, 16 U.S.C. 1531, et seq. *Full compliance.* The Corps obtained an IPAC list in 2019 from USFWS of Federally listed and proposed species likely to occur in the project area. After reviewing the species list and conducting a field survey of the potential action area, the Corps determined that the

following listed species would not be affected by the proposed action and therefore would not require consultation with USFWS: San Joaquin adobe sunburst, California red-legged frog, Least Bell's Vireo, and Southwestern willow flycatcher.

The Corps, as the action agency, has made the determination that there would be no effect on any listed species under the jurisdiction of NMFS. As a result, consultation is not required with NMFS under Section 7 of the Endangered Species Act.

Executive Order 11988, Floodplain Management. Executive Order 11988 was signed into law on May 24, 1977, requiring that Federal agencies provide leadership and take action to restore and preserve the natural and beneficial values served by floodplains. Before proposing, conducting, supporting, or allowing an action in the floodplain, each Federal agency must determine if planned activities would affect the floodplain and evaluate the potential effects of the intended action on the floodplain's functions.

Guidelines for compliance with Executive Order 11988 identify an eight-step process for agencies to use in determining how projects would have potential impacts to or within the floodplain. As described in this guidance, if a proposed action is located within the base floodplain (Step 1), where the "base floodplain" is the area which has a one percent or greater chance of flooding in any given year (also referred to as the "100-year Flood Zone," "Flood Hazard Area," or "0.1 Exceedance Area"), agencies should conduct early public review (Step 2), identify and evaluate practicable alternatives to locating in the base floodplain (Step 3), identify impacts of the proposed action (Step 4), develop measures to minimize the impacts and restore and preserve the floodplain as appropriate (Step 5), reevaluate alternatives (Step 6), and present the findings and a public explanation (Step 7), with the final step being to implement the action (Step 8) (FEMA, 2012).

Based on the above discussion, it has been determined that the proposed water control manual deviation would be in compliance with Executive Order 11988. The increased reservoir pool levels would have no adverse effects on floodplain function, and the proposed action is recommended as the most responsive option to planning objectives and requirements established by Executive Order 11988.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. *Full compliance.* This Executive Order states that Federal agencies are responsible for conducting their programs, policies, and activities that substantially affect human health of the environment in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons from participation in, denying persons the benefits of, or subjecting persons to discrimination under such programs, policies, and activities because of their race, color, or national origin. During years with heavy precipitation and an extremely large snowpack, floodwater volume to the Tulare Lakebed typically increases and results in flooding of additional land and thus loss of agriculture. Agricultural workers are predominantly made up of low-income and minority populations. If the proposed

water control manual deviation is not approved, jobs lost as a result of reduced agricultural production could affect the downstream farmworker community. However, with implementation of the deviation, there would be little to no effect on minority or low-income populations.

Migratory Bird Treaty Act (15 U.S.C 701-18h). *Full compliance.* Construction would be timed to avoid physical destruction of active bird nests or young birds that breed in the area from the increased inundation area. Because no removal of vegetation would be required for construction, no impacts to nesting migratory birds are anticipated. There could be potential impacts to burrowing owls, if they are nesting in the increased inundation area. If nesting burrowing owls are detected, the Corps would coordinate with the USFWS to develop appropriate avoidance and minimization measures. With the implementation of any required measures, the project is in full compliance with this Act.

National Environmental Policy Act of 1969, as amended, 42 U.S.C. 4321, et seq. *Full Compliance.* This EA is in compliance with this act. This EA was completed under the guidelines of the Corp's ER 200-2-2 and meets the criteria used for compliance with 40 CFR 1501.4 (e) (1) where upon a notice of availability will be sent to concerned agencies, organizations, and the interested public following the finalization of this EA and FONSI.

National Historic Preservation Act, as amended, 54 USC § 300101 et seq. *Full Compliance.* The project is in compliance with 54 USC § 306108, commonly known as Section 106 of the NHPA (36 CFR Part 800). Under Section 106, Federal agencies are required to take into account the effects of their undertakings on historic properties (i.e., cultural resources that are included in, or eligible for inclusion in, the NRHP) in consultation with the SHPO, Indian tribes, and other consulting parties. The Corps determined the currently proposed action duplicates the undertaking and APE subject to Section 106 compliance in 2017 for the previous water control manual deviation and requires no additional consultation under 36 CFR Part 800.

## **6.0 COORDINATION AND REVIEW OF THE DRAFT ENVIRONMENTAL ASSESSMENT**

The Final EA and FONSI will be available on the Corp's Sacramento District website and available for public view. Interested parties will receive a Notice of Availability letter for the project, including information regarding where to view the EA and FONSI.

## **7.0 FINDINGS**

This EA evaluated the environmental effects of the proposed Success Lake Water Control Manual Deviation. Potential adverse effects to the following resources were evaluated in detail: cultural resources, recreation, special status species, traffic, vegetation and wildlife, and water quality.

Results of the EA, field visits, and coordination with other agencies indicate that the proposed project 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 avoidance and minimization measures.

Based on this evaluation, the Corps proposes to make a FONSI as described in 40 CFR 1508.13. A FONSI may be prepared when an action would not have a significant effect on the human environment and for which an environmental impact statement would not be prepared.

## **8.0 LIST OF PREPARERS**

Dave Walsh  
Environmental Manager, U.S. Army Corps of Engineers  
Report preparation and coordination

Joanne Goodsell  
Archeologist, U.S. Army Corps of Engineers  
Cultural resources analysis and coordination

Anne Baker  
Senior Environmental Manager, U.S. Army Corps of Engineers  
District Quality Control Review

Andrea Meier  
Section Chief for Environmental Analysis, U.S. Army Corps of Engineers  
District Quality Control Review

## **9.0 REFERENCES**

Bell, H.M. 1994. Analysis of habitat characteristics of San Joaquin kit fox in its northern range. Master Thesis. California State University, Hayward, California.

California Department of Fish and Wildlife (CDFW). 2017. California Natural Diversity Database. Accessed March 20, 2017.

California Data Exchange Center. 2019.  
<http://cdec.water.ca.gov/snow/bulletin120/index.html>) and the updated B-120 report, specifically (<http://cdec.water.ca.gov/b120up.html>).

Hayes, M.P. and M.R. Jennings. 1988. Habitat correlates of distribution of the California red-legged frog (*Rana aurora draytonii*) and the foothill yellow-legged frog (*Rana boylei*): Implications for management. Pp. 144-158. In proceedings of the symposium on the management of amphibians, reptiles, and small mammals in North America. R. Sarzo, K.E. Severson, and D.R. Patton, (technical coordinators). U.S.D.A. Forest Service General Technical Report RM-166.

Orloff, S., L. Spiegel, and F. Hall. 1986. Distribution and habitat requirements of the San Joaquin kit fox in the northern extreme of its range. Trans. Western Section, The Wildlife Society 22:60-70.

- Scott-Graham, E. 1994. American Farmland Trust: a proposal for incentive-driven habitat creation and enhancement on farmlands in the San Joaquin Valley under the Federal Endangered Species Act. Draft Rep. Visalia, CA, 34 pp.
- U.S. Army Corps of Engineers. 2006. Success Dam Water Control Plan Deviation Environmental Assessment. Tulare County, California.
- U.S. Army Corps of Engineers. 2014. Biological Studies for Routine Operation of Success Dam and Lake. 2014 Habitat Assessment and Survey Results for Southwestern Willow Flycatcher and Least Bell's Vireo at the Tule River Delta Area, Tulare County, California.
- U.S. Army Corps of Engineers. 2017. Success Lake Water Control Manual Deviation Final Environmental Analysis. Prepared by Corps Environmental Analysis section. Sacramento, California.
- U.S. Census Bureau. 2010. American Factfinder Database.  
<https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml#>
- U.S. Fish and Wildlife Service. 1991. Status Survey of *Pseudobahia bahiifolia* and *Pseudobahia peirsonii* (Asteraceae) in the San Joaquin Valley, Sacramento, CA.
- U.S. Fish and Wildlife Service. 1992. Endangered and threatened wildlife and plants; proposed endangered status for two grassland plants from the Central Valley of California. *Pseudobahia bahiifolia* and *Pseudobahia peirsonii*). Federal Register 57: 56549-56555, November 30, 1992.
- U.S. Fish and Wildlife Service. 1996. Endangered and threatened wildlife and plants: determination of threatened status for the California red-legged frog. Federal Register 61(101):25813-25833.
- U.S. Fish and Wildlife Service. 2000. Southwestern Willow Flycatcher Protocol Revision.  
[www.fws.gov/pacific/ecoservices/endangered/recovery/documents/SWWFlycatcher.2000.protocol.pdf/](http://www.fws.gov/pacific/ecoservices/endangered/recovery/documents/SWWFlycatcher.2000.protocol.pdf)
- U.S. Fish and Wildlife Service. 2013. Southwestern Willow Flycatcher Critical Habitat Revision Question and Answers. Arizona Ecological Services Office. Phoenix, Arizona. [www.fws.gov/southwest/es/arizona/](http://www.fws.gov/southwest/es/arizona/)
- U.S. Fish and Wildlife Service. 2017. Information for Planning and Consultation.  
<https://ecos.fws.gov/ipac/>

U.S. Forest Service. 2005. Ecological Subregions of California.  
<http://www.fs.fed.us/r5/projects/ecoregions/>

U.S. Geological Survey. 2010. A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher. Techniques and Methods 2A-10.  
[pubs.usgs.gov/tm/tm2a10/pdf/tm2a10.pdf](https://pubs.usgs.gov/tm/tm2a10/pdf/tm2a10.pdf)

### **Personal Communication**

Eric Tomasovic. 2019 U.S. Army Corps of Engineers. Environmental Manager.

Lorena Guerrero. 2019 U.S. Army Corps of Engineers. Environmental Manager