

INFORMATION HANDOUT

MATERIALS INFORMATION

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2. FINAL HYDRAULIC REPORT FOR SAN JOAQUIN RIVER BRIDGE (REPLACEMENT) (Br. No. 41-0090), DATED AUGUST 30, 2011
3. USFWS BIOLOGICAL OPINION, DATED FEBRUARY 4, 2010

PERMITS

4. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD 401 PERMIT, DATED FEBRUARY 15, 2012
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ROUTE: 06-Fre/Mad-99-PM 26.7/R31.6 & R0.0/R1.6

Memorandum

*Flex your power!
Be energy efficient!*

To: Mr. GARY JOE, Chief
Bridge Design Branch 17
Office of Bridge Design Central

Attention: Rodney Simmons

From: DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
GEOTECHNICAL SERVICES – MS 5

Date: July 20, 2011

File: 06-Fre.Mad-99
PM 30.1/31.6,0.0/1.6
EA: 06-442621
San Joaquin River Br.
(Replacement)
Bridge No. (41-0090)

Subject: Foundation Report (FR)

Introduction

This report is presented in response to the request from Bridge Design Branch 17, dated November 9, 2010 to provide a final foundation report for the replacement of the existing San Joaquin River Bridge (Br. No. 41-0008) at 06-Mad-99-PM 0.0 (near center of bridge). The new structure type will be a 6-span continuous CIP/PS box girder bridge on short seated abutments. The span lengths are 120.5 ft, 159 ft, 159 ft, 159 ft, 159 and 120.5 ft. The piers will be round multi-columned and flared at the top. Large diameter Cast-In-Steel Shell (CISS) piles were chosen as foundation support after completion of a comparative cost, construction and performance analysis. Bridge construction will be in two stages to facilitate maintaining traffic with stage one consisting of a three-column bridge section and stage two consisting of a two-column bridge section.

The bridge site was drilled previously for the original 1928 construction and the subsequent 1948 and 1987 widening(s). For the present project one additional deep boring has been completed at proposed Pier 3 location. The purpose of the new borings is to gain soil information within the depth range of the foundation piles (maximum pile length 216 ft.). The deepest existing borings are 102 feet.

The scope of our work included evaluating alternative foundation designs based on functional, environmental and construction opportunity and constraints in conjunction with gravity loads, available information on site geology, and the seismic and hydrologic environment. An Acceleration Response Spectrum (ARS) curve is also included in this report.

Pertinent Reports and Investigations

The following documents and maps were utilized in preparing this report.

- General Plan, San Joaquin River Bridge Widen (Br. 41-0090 dated October 29, 2010).
- Structure Design Foundation design data sheet, and abutment and pier foundation design loads dated April 26, 2011.
- Final Hydrologic / Hydraulics Report dated April 29, 2011.
- Caltrans California Seismic Hazard Map 2007.
- Geologic Map of California – Fresno Sheet, Scale 1: 250,000 (Fourth printing 1992), State of California, Department of Conservation, Division of Mines and Geology.
- As-Built Log of Test Borings, San Joaquin River Bridge (Widen) Route 99, Bridge No. 41-08), Bridge Department, November 24, 1987.
- General and Foundation Plans for the San Joaquin River Bridge (Widen), Structure Design, dated November 24, 1987.
- Plans for the original San Joaquin River Bridge (Right Bridge) supported on timber piles, constructed in 1928.

Elevations used in this report are based on the NAVD 88 vertical datum. The “As-Built” elevations were converted from NAVD 29 to NAVD 88 by using a conversion factor of +2.6 ft for this project.

Regional Geology

The Bridge site is situated within the San Joaquin Valley that is located within in the southern part of the Great Valley Geomorphic province. This low lying flat terrain extends from the Cascade Ranges at the north end of the province to the Tehachapi Mountains at the south end of the province and it is bound on the east by the Sierra Nevada Mountains and on the west by the Coast Range Mountains. Structurally, the province is an elongate asymmetric basin that reaches depths of over 29,000 feet. Deposition of marine and non-marine sediments into this basin has been on going since the Mesozoic Era. Recent and Pleistocene soils that underlie the San Joaquin Valley at the project site are composed of interbeds and lenses of gravels, sands, silts and clays eroded primarily from the Sierra Nevada and transported by the San Joaquin River.

Site Geology

The 2011 test boring and the 1984 log of test borings (LOTB) shows that the subsurface materials consist primarily of medium dense to dense GRAVELS, SANDY GRAVELS and SAND with GRAVEL to depths of about 15 to 28 feet. Below to the maximum depth explored (226.5 feet) the soils become primarily interbedded medium dense to very dense fine to coarse grained SAND, SILTY SAND, medium dense to dense SANDY SILT, SILT and SANDY Lean CLAY. See LOTB for detailed description of soil conditions.

Scour Potential

Potential scour conditions at the bridge site, provided by Final Hydraulics Report (FHR) dated April 29, 2011 are summarized in Table 1 below.

Table 1 - Scour Summary

Support	Long Term Scour (Degradation / Contraction Elev.) (ft)	Short Term Scour (Local Scour Depth) (ft)	Local Scour Elev. (ft)
Abutment 1	n/a	n/a	n/a
Pier 2	n/a	n/a	n/a
Pier 3	215.8	13.7	206.1
Pier 4	215.8	13.7	206.1
Pier 5	215.8	13.7	206.1
Pier 6	n/a	13.7	206.1
Abutment 7	n/a	n/a	n/a
Vertical Datum NAVD 1988			

Notes:

1. Total potential scour is based on a 6-foot column diameter.
2. Based on a 75 year life expectancy of the bridge there is a good chance that the thalweg can migrate to either piers 3, 4 and 5.
3. Since Pier 2 and 6 are located outside the main channel, and the main channel appears to have been stable for the last 40 years, there is a lower likelihood of thalweg migration to piers 2 and 6.
4. Stream Section measured along U/S EOD of existing bridge, survey file date 10/1/2009.

Groundwater

Department of Water Resources records for the spring of 2007 show that the unconfined aquifer groundwater level under the site was at Elevation 200 feet, MSL. The 1984 LOTBs show groundwater at elevation of 222.0 (corrected to NAVD 1988 Datum). During the present foundation investigation the SJR river flow was at an elevation of

229.5 feet. Due to the closeness of the boring to the river channel and the assumed high permeability of the soils the groundwater elevation is assumed to be the same as the river elevation. Ground water conditions may have changed since the time of the above groundwater level recordings and will vary according to variations in rainfall, well pumping, and other activities. For design purposes, the groundwater was assumed at elevation 240.5 ft. (100 year flood water surface elevation, FHR dated April 29, 2011. For a frame of reference the ground elevations at the abutments are approximately 276 feet and ground/ channel elevations at the piers ranges from 220 feet to 242 feet (planned finish grade).

Corrosion

Based on the Corrosion Test Summary Report dated July 12, 2011 the site is not corrosive to the proposed foundation elements.

Seismicity

In accordance to Caltrans 2009 Seismic Design Procedure, the nearest active fault to the site is the San Andreas Fault zone (Creeping section) (Fault ID No. 311) with a M_{max} of 7.9. This fault is about 65 miles from the proposed bridge location, and is identified as a right lateral strike and slip fault.

Based on the Log of Test Borings, a V_{s30} (average shear wave velocity for the top approximate 100 feet of soil) was estimated by using the SPT blow counts and the correlation formulas to be 950 feet /second.

Based on the V_{s30} , the spectral acceleration (SA) generated from this fault is less than the SA generated from both minimum statewide SA and the probabilistic method. Therefore, the design Acceleration Response Spectrum (ARS) curve is based on an envelope of the minimum deterministic spectrum and the USGS 5% probability of exceedance in 50 years (corresponding to a 975 year return period). The design ARS curve with an estimated peak ground acceleration of 0.23 g is attached.

The potential for surface rupture at the site due to fault movement is considered insignificant since there are no known faults projecting towards or passing directly through the project site.

Liquefaction Potential

The analysis based on the combined 1984 and 2011 subsurface data and summarized in

the following table indicates the support locations where there is potential for the occurrence of liquefaction during a significant earthquake event.

Table 2 - Liquefaction data.

Support Location	Elevation of Liquefiable Layers (ft)
Abutment 1	n/a
Pier 2	216 to 211
Pier 3	235 to 230
Piers 4 and 5	227 to 222
Pier 6 and Abutment 7	n/a

Foundation Recommendations

Based on the available information noted above, we are providing the following foundation recommendations for the proposed new bridge. 74.5-inch diameter Cast-in-Steel-Shell (CISS) piles are selected as foundation support at the proposed bridge piers and 14-inch diameter Class 140 Alternative "W" Standard Open-ended driven steel pipe piles are recommend at the abutments. At the piers, other pile types such as CIDH, driven standard steel pipe and driven 'H' beams were evaluated but were found less suitable from a construction, cost and/or performance perspective.

The pile design recommendations are presented in the following tables.

Table 3 - Abutment Foundation Design Recommendations.

Support Location	Pile Type	Cut-off Elev (ft)	LRFD Service-I Limit State Load per Support – Compression (kips)		LRFD Service-I Limit State Load per Pile-Compression (kips)	Nominal Resistance (kips)	Design Tip Elevation (ft)	Spec Tip Elev (ft)	Nominal Driving Resistance Required (kips)
			Total	Permanent					
<u>Abut 1</u>	14” Class								
Stage 1	140	256.92	3070	2680	140	280	186 (a)	186	398
Stage 2	Alt. W		2230	1920	140	280	186 (a)	186	398
<u>Abut 7</u>	14” Class								
Stage 1	140	258.42	2940	2560	140	280	172 (a)	172	477
Stage 2	Alt. W		2150	1830	140	280	172 (a)	172	477

Notes:

- 1) Design tip elevations are controlled by (a) Compression.
- 2) The specified tip elevation shall not be raised above the design tip elevations for lateral loads.
- 3) The nominal driving resistance required is equal to the nominal resistance needed to support the factored load plus driving resistance from the unsuitable penetrated soil layers (very soft/loose, liquefiable, scourable, etc.), which do not contribute to the design resistance.

Table 4 - Pier foundations Design Recommendations for the proposed Bridge Replacement.

Support Loc.	Pile Type	Cut-off Elev (ft)	Service-I Limit State Load per Support (kips)	Required Factored Nominal Resistance (kips)				Design Tip Elevations (ft)	Spec. Tip Elev (ft)	Nominal Driving Resist. Required (kips)	
				Strength Limit		Extreme Event					
				Comp. ($\phi=0.7$)	Tension ($\phi=0.7$)	Comp ($\phi=1$)	Tension ($\phi=1$)				
Pier 2 Col. 1 Col. 2 Col. 3 Col. 4 Col. 5	74.5- in CISS	232	2320	3560	0	1900	0	66(a-I) 162(a-II)	66	5290	
1930			2850	1500		94(a-I) 172(a-II)		94			4230
2310			3550	1900		67(a-I) 162(a-II)		67			5270
2770			4190	2300		39(a-I) 150(a-II)		39			6230
2320			3560	1900		67(a-I) 162(a-II)		67			5290
Pier 3 Col. 1 Col. 2 Col. 3 Col. 4 Col. 5	74.5- in CISS	230	2440	3680	0	2000	0	42(a-I) 137(a-II)	42	5700	
2020			2940	1600		73(a-I) 149(a-II)		73			4645
2430			3660	2000		43(a-I) 137(a-II)		43			5700
2920			4330	2400		14(a-I) 126(a-II)		14			6640
2450			3680	1900		42(a-I) 140(a-II)		42			5700
Pier 4 Col. 1 Col. 2 Col. 3 Col. 4 Col. 5	74.5- in CISS	230	2460	3700	0	2000	0	43(a-I) 142(a-II)	43	5650	
2040			2960	1600		73(a-I) 152(a-II)		73			4630
2450			3680	2000		44(a-I) 142(a-II)		44			5650
2940			4350	2400		14(a-I) 132(a-II)		14			6490
2470			3700	2000		43(a-I) 142(a-II)		43			5650
Pier 5 Col. 1 Col. 2 Col. 3 Col. 4 Col. 5	74.5- in CISS	230	2440	3680	0	2000	0	46(a-I) 142(a-II)	46	5500	
2030			2950	1600		76(a-I) 152(a-II)		76			4460
2440			3670	2000		47(a-I) 142(a-II)		47			5500
2940			4360	2400		15(a-I) 132(a-II)		15			6480
2460			3700	2000		45(a-I) 142(a-II)		45			5500
Pier 6 Col. 1 Col. 2 Col. 3 Col. 4 Col. 5	74.5- in CISS	230	2320	3560	0	1900	0	66(a-I) 154(a-II)	66	5280	
1930			2860	1500		90(a-I) 166(a-II)		90			4700
2310			3550	1900		66(a-I) 154(a-II)		66			5280
2780			4200	2300		39(a-I) 144(a-II)		39			6200
2330			3570	1900		66(a-I) 154(a-II)		66			5280

Notes:

- Design tip elevations are controlled by: (a-I) Compression (Strength Limit), (a-II) Compression (Extreme Event). There were no Tension loads and no Settlement tips.

2. The specified Tip elevations shall not be raised above the design tip elevations for lateral loads.
3. Design tip elevations include the affects of scour under Strength – I loading and Extreme Event loading.
4. The foundation design is based on a total permissible support settlement of 1-inch
5. Skin Friction was used to determine the compression tip elevations.
6. The nominal driving resistance required is equal to the nominal resistance needed to support the factored load plus driving resistance from the unsuitable penetrated soil layers (loose, liquefiable, scourable, etc.), which do not contribute to the design resistance.
7. Design tip elevation for Lateral Load is typically provided by SD.

Table 5 - Pile Data Table

Location	Pile Type	Nominal Resistance Per Pile (kips)		Design Tip Elevation (ft)	Specified Tip Elevation (ft)	Nominal Driving Resistance (kips)
		Compression	Tension			
Abut 1 Stage 1 Stage 2	Class "140" Pipe Piles	280	N/A	164 (a)	186	398
164 (a)				186	398	
Pier 2 Col. 1 Col. 2 Col. 3 Col. 4 Col. 5	74.5-in. CISS	5090	N/A	66 (a)	66	5290
4070		94(a)		94	4230	
5070		67 (a)		67	5270	
5990		39 (a)		39	6230	
5090		67 (a)		67	5290	
Pier 3 Col. 1 Col. 2 Col. 3 Col. 4 Col. 5	74.5-in. CISS	5260	N/A	42 (a)	42	5700
4200		73 (a)		73	4645	
5230		43 (a)		43	5700	
6190		14 (a)		14	6640	
5260		42 (a)		42	5700	
Pier 4 Col. 1 Col. 2 Col. 3 Col. 4 Col. 5	74.5-in. CISS	5290	N/A	43(a)	43	5650
4230		73(a)		73	4630	
5260		44(a)		44	5650	
6200		14(a)		14	6490	
5290		43(a)		43	5650	

(Table continued on next page)

Table 5 - Pile Data Table (continued).

Location	Pile Type	Nominal Resistance Per Pile (kips)		Design Tip Elevation (ft)	Specified Tip Elevation (ft)	Nominal Driving Resistance (kips)
		Strength	Tension			
<u>Pier 5</u>	74.5-in. CISS					
Col. 1		5260		46 (a)	46	5500
Col. 2		4200		76 (a)	76	4460
Col. 3		5240		46 (a)	47	5500
Col. 4		6230		15 (a)	15	6480
Col. 5	5290		45 (a)	45	5500	
			N/A			
<u>Pier 6</u>	74.5-in. CISS					
Col. 1		5090		66 (a)	66	5280
Col. 2		4090		90 (a)	90	4700
Col. 3		5070		66 (a)	66	5280
Col. 4		6000		39 (a)	39	6200
Col. 5	5100		66 (a)	66	5280	
			N/A			
<u>Abut 7</u>	Class "140"Pipe Piles					
Stage 1		280		149 (a)	172	477
Stage 2				149 (a)	172	477

Notes:

1. Design tip elevations for **Abutments** are controlled by: (a) Compression.
2. Design tip elevations for **Piers** are controlled by (a) Compression.

General Notes to Designer

1. The structure engineer shall show on the plans, in the pile data table, the minimum pile tip elevation required to meet the lateral load demands.
2. Should the specified pile tip elevation required to meet lateral load demands exceed the specified pile tip elevation given within this report, the Office of Geotechnical Design North should be contacted for further recommendations.
3. Support locations will be plotted on the Log of Test Borings, in plan view as stated in "Memos to Designers" 4-2 if additional borings are required. There is a conversion table placed of the original boring sheet that converts those borings locations to the present stationing an offset distances.

Construction Considerations

Standard Pipe Piles and CISS Piles

1. Pile acceptance criteria for the abutment Class 140 driven piles shall be based on the Gates formula (Caltrans Standard Specifications Section 49-1.08). Central relief drilling may be needed for small diameter pipe piles due to possible hard driving condition. The small diameter pipe piles driving shall be stopped as long as the piles reach a minimum embedment length of 60 ft (Abut. 1) and 70 feet (Abut. 7) and the pile reaches 3 times the required blow counts per Gates formula to prevent the piles from being damaged.
2. For the CISS piles, a soil plug equal to at least 10 diameters is required. A tremie seal shall be placed to facilitate dewatering.
3. Pile acceptance criteria for the pier CISS piles will be based on a dynamic measurements and a pile load test. See pile load test details below.
4. Piles, to be driven through embankment fills, shall be predrilled according to Caltrans Standard Specifications Section 49-1.06.
5. Excavated materials shall be handled and disposed of in accordance with the Special Provisions.

Pile Load Test

A single production pile load test, sited near proposed Pier 3 on the west side of the existing bridge is recommended. The pile diameter, wall thickness and tip elevation shall be as specified for Stage 1, Pier 3, and column 1. There will be four reaction piles designed to resist in tension one fourth plus about 20 percent of the test load. Alternatively, if it is not feasible to use a production pile then a non-production pile will be utilized.

The pile shall be tested three times at the proposed pile tip elevation. The pile shall be tested once prior to pile cleanout, once after pile cleanout but before seal course

placement, and finally after the seal course is placed. In the latter two cases, water shall be present inside the casing at the same elevation as the surrounding groundwater.
The test and reaction pile specifications and test loads are summarized in Table 5 below.

Table 5. Pile Load Test Data

Pile Specifications	Test Pile (1)	Reaction pile
Location	Stage 1, Pier 3, pile 1	Same
Type	Steel pipe	Steel pipe
Diameter (in)	74.5-in.	48-in.
Wall thickness	1.25	1.0
Tip Elevation (ft)	14	106
Length	216	125
Test pile Load (kips)	6640	*
Reaction pile Resistance (kips)	*	1990

Note: The pile load test will be performed at Pile 1 location but will be driven to Pile 4 tip elevation, the deepest pile at Pier 3.

MR. GARY JOE
Attn: R. Simmons
July 20, 2011
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FR
San Joaquin Riv. Br.
Br. No. 41-0090
EA 06-442621

The Foundation Recommendations included in this report are based on specific project information regarding structure type and structure location that has been provided by the Office of Bridge Design North, Design Branch 17. Any questions regarding the above recommendations should be directed to the attention of William Bertucci (916) 203-7992 or John Huang (916) 227-1037.

Report by:

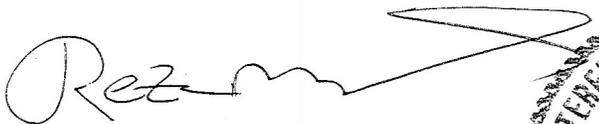
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ARS curve Attachment

cc: Jim Bane (District PM), Peggy Lim (PCE), Mark Willian, Trais Norris (District Env Manager), Ted Morradian (District Materials)

State of California – Department of Transportation
Division of Engineering Services
Structure Design Services

FINAL HYDRAULIC REPORT

San Joaquin River
Island Park 6-Lane Project
Bridge No. 41 0090
06 - MAD - 99
EA 06-442621

Prepared by:



Anthony Nedwick, PE
Structure Hydraulics and Hydrology
August 30, 2011



General:

It is proposed to replace the existing San Joaquin River Bridge (Bridge No. 41-0008). The new bridge will be Bridge No. 41-0090. The bridge is located on State Route 99 in Madera and Fresno Counties. The existing bridge was originally constructed in 1928 and currently carries northbound traffic. In 1948 a second bridge was constructed and currently carries southbound traffic. In 1985, the bridges were connected by building a third structure between the two older structures.

Both the 1928 and 1948 structures consist of 4-span deck truss with a 2-span plate girder approach on the south and a single-span plate girder approach on the north. The bridges are supported on reinforced concrete pier walls founded on piles. The 1985 structure is a 7-span concrete box girder on reinforced concrete pier walls founded on piles, and was constructed between the two earlier structures, creating a single bridge.

Based on the information provided by Structure Design, the new bridge is proposed as a 6-span, cast-in-place, pre-stressed concrete box girder on 5-column bents. The 6-ft diameter columns are to be founded on 6-ft diameter CISS piles. The proposed structure will have an overall length of 877'-0", an overall width of 144'-10", a structural depth of 6'-6" and will be constructed in two stages. Span lengths are 120'-6" for Spans 1 and 6, and 159'-0" for Spans 2 through 5.

This report is based on the plans and information provided by Structure Design, including General Plans dated 10-28-10. **All elevations indicated in this report are based on the Vertical Datum NAVD 1988.**

Basin:

At the bridge site, the watershed for the San Joaquin River encompasses approximately 1,800 square miles. The San Joaquin River originates in the Sierra Nevada mountain range and flows west to the San Joaquin Valley where the San Joaquin River Bridge is located near the town of Herndon at the northern edge of Fresno County. Elevations in the watershed range from approximately 220 feet at the bridge site to over 10,000 feet in the Sierra Nevada Mountains. Precipitation in the watershed tends to increase with altitude and varies from an average annual precipitation of 10 inches at the bridge site to about 70 inches in the higher elevations of the Sierra Nevada.

Discharge:

Flows in the San Joaquin River are highly regulated due to the diversion of flows for irrigation purposes and, to a lesser degree, in order to provide flood control to the region. Approximately 20 miles upstream of the bridge site, flows are controlled by Friant Dam. In addition to providing flood control, Friant Dam's reservoir, Millerton Lake, provides storage for irrigation. Flows are diverted from the lake via the Madera Canal and the Friant-Kern Canal.

Upstream of Millerton Lake, Mammoth Pool Dam serves primarily as a hydroelectric power plant, but its reservoir does provide some incidental flood control due to its storage capacity. Numerous other small reservoirs within the watershed store and divert flows from the San Joaquin River for irrigation.

Discharges for the San Joaquin River were determined using the September 2008 FEMA Flood Insurance Study. In the vicinity of the bridge site, the 50-year and 100-year peak discharges are 34,300 cfs and 69,000 cfs, respectively.

Hydraulic Analysis:

The channel hydraulics were modeled using the Army Corps of Engineers HEC-RAS modeling program, version 4.0, utilizing survey data provided by Preliminary Investigations-North. HEC-RAS was used to determine the water surface elevations and velocities throughout the project reach. Manning's roughness coefficients varied and were estimated using USGS guides as well as data gathered during site investigations. Manning's coefficients were estimated at 0.035 for this reach. For the San Joaquin River, the channel has a very flat average slope of approximately 0.6 % or less in the reach at the project site. The HEC-RAS model was calibrated to the FEMA Floodway Data and Flood Profile elevations for the project site, by using the FEMA data to set the upstream and downstream boundary conditions for the 50-year and 100-year Profile flows.

Two different scenarios were evaluated; the existing steel truss structure and the proposed concrete box girder structure with a structural depth of 6'-6".

The San Joaquin River is listed as a regulated stream in Table 8.1 of Title 23 of the California Code of Regulations. Therefore, 3 feet of freeboard is required above the Central Valley Flood Protection Board's (CVFPB) Design Flood Plane. However, according to the State Plan of Flood Control Descriptive Document dated November 2010 (Table 3.2), there is no data for the Design Capacity from either the O&M Manual or "Design Memo No. 1, 1955 (basis of State Operations)" for the reach at the project site. Approximately 10 miles downstream of the project site, the Design Capacity from the O&M Manual is 8,000 cfs, but according to the footnote, this is only applies to the leveed reach upstream of the Chowchilla Bypass, from River Mile 214.03 to River Miler 224.66. The project is located at approximately River Mile 235.

The water surface elevation at the site for the 8,000 cfs flow is 229.4 feet, yielding over 38 feet of freeboard at the proposed structure. Since there was no data for this reach, the design flood plane was assumed to be based on the water surface elevation for the 100-year discharge.

Based on the HEC-RAS model, both the existing structure and the proposed 6-span replacement structure have a modeled Water Surface Elevation of 245.3 feet for the 100-year flow. Based on the General Plans, the estimated "Lowest Soffit Elevation" for this structure is approximately 268.0 feet, which provides about 22.7 feet of freeboard over the 100-year flow of 69,000 cfs. Velocities for the 100-year flow were estimated to be approximately 8.0 fps for both existing and proposed conditions.

Streambed:

In the Preliminary Foundation Recommendations, dated April 12, 2010, the subsurface materials at the bridge site are described as medium dense gravels, sandy gravels and sand with gravel to depths of about 15-20 feet. Below that depth the soils become primarily dense to very dense sand, silty sand and silt. This material is considered to be scourable.

Scour Analysis:

Scour was estimated utilizing the methods set forth in the FHWA HEC-18, "Evaluating Scour at Bridges." All scour elevations are based on the 100-year discharge.

For the San Joaquin River Bridge (41-0090), based on the HEC-RAS model using the 100-year discharge, there is no overbank flow returning to the main channel immediately upstream of the structure. Therefore, abutment and contraction scour were determined to be negligible for this site. Based on a comparison of historical records, long term degradation of approximately 4.0 feet is anticipated within the main channel.

Channel migration is a consideration within the main channel affecting Piers 4 and 5. Piers 4 and 5 should be designed for the same scour elevations assuming channel migration. Local Pier Scour for the 6-foot diameter columns at Piers 4 and 5 is anticipated to reach a depth of 12.4 feet depth, to an elevation of 207.4 feet.

Channel migration is not expected to adversely impact Piers 2, 3 and 6. Local Pier Scour at Pier 2 is anticipated to reach a depth of 6.2 feet, to an elevation of 236.9 feet, while local Pier Scour at Pier 3 is anticipated to reach a depth of 7.0 feet, to an elevation of 232.7 feet, and local Pier Scour at Pier 6 is anticipated to reach a depth of 10.0 feet, to an elevation of 218.2 feet.

Summary & Recommendations:

Below is a summary of key design parameters based on the hydrology and hydraulic analysis performed for these structures.

All elevations given are referenced to the data provided by Structures Design and Preliminary Investigations-North, using the NAVD 88 vertical datum.

Hydrologic Summary for			
San Joaquin River Bridge, 41-0090			
Drainage Area: 1800 mi ²			
Frequency	State Plan*	Design Flood	Base Flood
		N/A	50-year
Discharge	No Data	34,300 cfs	69,000 cfs
Water Surface Elevation at Bridge	N/A	239.2 ft	245.3 ft
Flood plain data are based upon information available when the plans were prepared and are shown to meet federal requirements. The accuracy of said information is not warranted by the State and interested or affected parties should make their own investigation.			
Minimum Required Soffit Elevation*	248.3 ft		
Scour Depth	6.2 ft at Pier 2		
	7.0 ft at Pier 3		
	12.4 ft at Pier 4 and 5		
	10.0 ft at Pier 6		
Scour Elevation	236.9 ft at Pier 2		
	232.7 at Pier 3		
	207.4 ft at Piers 4 and 5		
	218.2 ft at Pier 6		

* The Central Valley Flood Protection Board requires 3 feet of Freeboard over their Design flood plane for new structures. The State Plan of Flood Control (November 2010) notes that the channel capacity, per the Army Corp O&M Manual, is 8,000 cfs for the leveed areas between Friant Dam and the Chowchilla Bypass. No data was available at the project site so the 100-year discharges were used.

Long Term Scour Depths, San Joaquin River, Br. No. 41-0090		
Supports	Degradation Scour Depth	Contraction Scour Depth
All Piers	4.0 ft	0 ft

Scour Data (Elevation and Depth), San Joaquin River, Br. No. 41-0090			
Supports	Long Term Scour Elev	Short Term (Local) Scour Elevation	
		Depth	Elevation
Pier 2	239.1 ft	6.2 ft	236.9 ft
Pier 3	235.7 ft	7.0 ft	232.7 ft
Pier 4	217.3 ft	12.4 ft	207.4 ft
Pier 5	221.5 ft	12.4 ft	207.4 ft
Pier 6	224.3 ft	10.0 ft	218.2 ft

This report has been prepared under my direction as the professional engineer in responsible charge of the work, in accordance with the provisions of the Professional Engineers Act of the State of California.



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

IN REPLY REFER TO:
81420-2010-F-0033-1

FEB 04 2010

Mr. Zachary Parker
Biology Branch Chief
California Department of Transportation, District 6
2015 East Shields Avenue, Suite A-100
Fresno, California 93726-5428

Subject: Appendage of the Island Park Six-Lane Project in Fresno and Madera Counties, California (California Department of Transportation 06-FRE/MAD-99-PM 30.3/1.6), to the *Formal Programmatic Consultation Permitting Projects with Relatively Small Effects on the Valley Elderberry Longhorn Beetle Within the Jurisdiction of the Sacramento Field Office, California* (Service File Number 1-1-96-F-0156)

Dear Mr. Parker:

This is the U.S. Fish and Wildlife Service's (Service) response to the California Department of Transportation's (Caltrans) request for formal consultation on the proposed Island Park Six-Lane Project (project) in Fresno and Madera Counties, California. Your original letter requesting consultation, dated October 5, 2009, was received in this office on October 13, 2009. You have also requested that this proposed project be appended to the March 11, 1997, *Programmatic Biological Opinion Formal Programmatic Consultation Permitting Projects with Relatively Small Effects on the Valley Elderberry Longhorn Beetle Within the Jurisdiction of the Sacramento Field Office* (Programmatic) (Service file number 1-1-96-F-0156; Service 1997). At issue are the potential effects of the proposed project on the federally-threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*; VELB). This response has been prepared in accordance with section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 *et seq.*) (Act).

The findings and recommendations in this formal consultation are based on: (1) the October 5, 2009, letter requesting formal consultation and appendage, and the accompanying project description, mapping, photo documentation, and survey data; (2) electronic mail (e-mail) exchanges and telephone conversations between Caltrans and the Service; (3) the Natural Environmental Study (NES), with supplemental information provided by Caltrans; and (4) other information available to the Service.

TAKE PRIDE
IN AMERICA 

Caltrans has determined that the project is likely to adversely affect the VELB, as two elderberry shrubs (*Sambucus* sp.) will be removed from the action area and transplanted. The Service concurs with this determination.

Consultation History

November 9, 2007. At a meeting between the Service and Caltrans, Zachary Parker (Caltrans) gave Rocky Montgomery (Service) a letter, dated November 8, 2007, requesting recommendations for San Joaquin kit fox (*Vulpes macrotis mutica*) surveys for the project along the State Route 99 corridor in proximity to a California Natural Diversity Database (CNDDDB) occurrence.

November 28, 2007. Sarah Keys (Caltrans) e-mailed Mr. Montgomery to arrange details for a site visit planned for December 2007.

December 19, 2007. Mr. Montgomery and Sarah Keys (Caltrans) met for a field visit at the project site.

October 13, 2009. The Service received a letter from Caltrans requesting formal consultation and the appendage of the project to the VELB Programmatic. The letter included a shortened biological assessment (mini-BA) with a summary of the project description and the conservation strategy to be implemented, as well as maps, photo documentation, and survey data pertinent to the project.

October 21-22, 2009. Jen Schofield (Service) e-mailed Mr. Parker with the concern that Caltrans' letter did not provide adequate information to review and requested a more substantial document, particularly in regards to the project description and survey details. Mr. Parker suggested he could send the NES to provide further project information.

October 29, 2009. Mr. Parker e-mailed the NES to Ms. Schofield.

December 10, 2009. Ms. Schofield e-mailed Mr. Parker with several questions concerning elements of the project description dealing with bridge work, water-work, and the size of the project footprint. She also corrected inaccurate calculations for the VELB compensation relevant to the elderberry seedlings and native plants. Ms. Schofield further explained that credit sales with the French Camp Conservation Bank (FCCB) were on hold, although the bank was still accepting transplants. An in-lieu conservation fund option for the VELB would temporarily stand-in for the credit sale component of the agreement.

January 7, 2010. Virginia Strohl (Caltrans) called Ms. Schofield to discuss the latest developments with the FCCB in regards to the project as well as several other VELB projects. She relayed that Frank Meraz (Caltrans) was working with the engineers to answer Ms. Schofield's questions from December 10, 2009. One of the queries involved whether project construction would be present along less than 250 linear feet (ft) of undeveloped bank habitat (this is considered one of the

requirements for appendage to the Programmatic). Ms. Strohl stated that if the distance turned out to be much greater, Caltrans recognized that a standard consultation would be necessary.

January 14, 2010. Mr. Meraz (Caltrans) e-mailed Ms. Schofield with responses to her earlier questions from December 10, concerning bridge work, water quality control measures, project acreage, the distance of linear ft of undeveloped riparian habitat present, and compensation.

Project Description

Caltrans proposes to construct two additional lanes in the median of State Route (SR) 99 over a 3.2 mile (mi) segment by converting the existing four-lane freeway to a six-lane freeway. The segment begins just south of the Grantland Avenue under-crossing in Fresno County (Post Mile (PM) 30.3) and continues just north of the Avenue 7 over-crossing in Madera County (PM 1.6). Bridge work over the San Joaquin River is also involved. These proposed actions are anticipated to improve traffic operations, increase the capacity of the extended segment of SR 99, and reduce congestion in the area. Activities will include:

- Demolition of the existing San Joaquin River Bridge and replacement with a new structure.
 - Typical bridge construction will consist of driving piles, pouring footings/columns, constructing falsework and the bridge deck, and finally removal of falsework. Pending the design stage geotechnical and hydraulic recommendations, large diameter pile foundations (cast-in drill hole or cast-in-steel shell) rather than pile cap foundations may be necessary at some or all pier locations. Driven piles will be expected at the abutments.
 - Vehicular traffic will be carried on the existing bridge during stage one and on a portion of the new structure during stage two. Bridge removal operations will be required during each stage. It is anticipated that a trestle (a temporary construction bridge) will be required to span the active waterway for the purposes of construction through-access, foundation construction operations, and falsework erection/removal.
- Construction of a temporary construction easement extending a minimum of 30 feet (ft) on both sides of the bridge.
- Construction of temporary equipment access roads within the construction easement.
- Removal of trees within the temporary easement.
- Relocation of utilities
- Staging for equipment

Equipment parking, project access, supplies logistics, equipment maintenance, and other project-related activities will occur within the temporary construction easement. Designated staging areas for equipment storage, vehicle parking, and other project-related activities will be pre-approved by a Service-approved biologist. Equipment staging will likely occur in the northwest section of the project area.

The borrow site from which fill material will be obtained is currently unknown at this stage, as the contractor will be responsible for the selection and compliance of the selected site prior to construction activities.

To allow equipment to access the project site, vegetation will be removed within the footprint of the proposed bridge, and temporary access roads will be constructed. Vegetation removal for staging areas and construction work will occur between mid August and the end of February when nesting birds will not be present.

Construction of the project is not likely to begin for approximately three years, placing the project start schedule around October 2012. Construction completion is expected to occur in December 2015. Construction activities near elderberry shrubs will occur only between August 1 and March 1 to avoid the season in which the adult VELB emerges from the elderberry stems to feed and mate.

Proposed Avoidance and Minimization Measures

According to the mini-BA, the NES, and further discussion with Caltrans biologists, Caltrans also proposes to implement the following measures to minimize and avoid effects to the VELB that may occur within the action area.

1. Caltrans shall follow the Service's 1999 Conservation Guidelines for the Valley Elderberry Longhorn Beetle (Guidelines).
2. Caltrans shall ensure that the project employs dust control measures such as water swiping and spraying. Areas shall be watered down as necessary to prevent dirt from becoming airborne and accumulating on elderberries in and adjacent to the action area.
3. A qualified Service-approved biologist shall conduct an environmental education program for construction employees covering the status of the VELB, how to avoid damaging the elderberry shrubs, the importance of avoiding impacts to the beetle, and the penalties for not complying with biological minimization requirements.
4. Eight of the total ten elderberry shrubs within the project area shall be avoided during construction activities. These shall be designated as ESAs and protected by a minimum buffer of 20 ft from each shrub's canopy drip-line. No construction activities shall be permitted within these 20 ft buffer zones, other than those activities necessary to erect the staking or fencing. Signs shall be posted every 50 ft along the perimeter of the buffer area fencing stating, "This area is habitat of the valley elderberry longhorn beetle, a

threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment.”

5. Prior to construction, orange mesh shall be installed within the Caltrans right-of-way (ROW) in order to avoid accidental construction-related effects to the shrubs.
6. The two affected elderberry shrubs shall be removed and be transplanted to the FCCB during the dormant season. The FCCB is located in San Joaquin County, and includes a service area that covers the project area.
7. To account for the approximately three year lapse before construction is anticipated to commence and the likelihood of stem growth over the next several years, Caltrans proposes to apply minimization measures to an additional six stems in excess of the original two stems. Caltrans proposes, and shall compensate for direct effects to the VELB, by planting a total of 19 elderberry seedlings and 19 associated native plants at the FCCB (see Table 1 below) within a minimum area of 0.165 acre (ac). Prior to groundbreaking and dependent upon which option first becomes available, Caltrans shall minimize effects to the VELB either by purchasing four credits directly from the FCCB, or by depositing funds into the VELB In-Lieu Conservation Fund. The latter is an agreement between the Service, the Center for Natural Lands Management (CNLM), and the Conservation Fund Participant (Caltrans, in this instance). When fully executed, the three-party agreement will satisfy, in part, conservation measures described for the project.
8. Caltrans shall conduct elderberry shrub surveys within one year of construction to verify the actual number of stems that will be removed as a result of the proposed project, along with an accounting of any VELB exit holes. If the stem count is less than that approved in this biological opinion, Caltrans shall notify the Service of the actual number of stems and compensate for the appropriate amount. If take exceeds the amount specified herein, Caltrans shall request reinitiation of formal consultation to address the discrepancy.

The FCCB has been undergoing remediation with the Service; until the bank's good standing is re-established, credit sales are on-hold and monies will be temporarily held in the VELB In-Lieu Conservation Fund. The funds will be returned to the FCCB once the remediation process is completed and the commencement of credit sales has been approved by the Service.

Table 1. Elderberry stems directly affected by the proposed project, the number of stems with anticipated additional growth, and proposed compensation.

# Shrubs	Stem Size	# of Stems	Exit Holes	Riparian Habitat	Elderberry Seedling Ratio	# Elderberry Seedlings	Associated Native Ratio	# Associated Natives
2	1"-3"	1	No	Yes	2:1	2	1:1	2
	1"-3" (anticipated additional growth)	4	No	Yes	2:1	8	1:1	8
	3"-5" (anticipated additional growth)	2	No	Yes	3:1	6	1:1	6
	>5"	1	No	No	3:1	3	1:1	3
	Total	8				19		19

Action Area

The action area is defined in 50 CFR § 402.02 as, "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." The action area for the proposed project includes the 43.5 ac project footprint, incorporating all areas of project construction, as well as staging and access areas within the temporary easements; the 3.2 mi segment of existing SR 99 undergoing widening (including the undercrossing and overcrossing just south of Grantland Avenue and Avenue 7, respectively); the inside median in which the two additional lanes will be built; a portion of the San Joaquin River and riparian habitat in which bridge demolition, reconstruction, and access will occur; and a segment of the San Joaquin River, immediately downstream of the project footprint, to account for water quality effects during, and following, bridge work. The action area also includes the borrow site, from which fill material will be obtained, but which is not yet identified.

Appending to the Programmatic Biological Opinion

The Service has determined that it is appropriate to append the Island Park Six-Lane Project to the Programmatic. This letter is an agreement by the Service to append the proposed project to the Programmatic and represents the Service's biological opinion on the effects of the proposed action. Compensation for projects appended to the Programmatic involves adhering to the Service's Guidelines (Service 1999), except as approved by the Service. Compensation implemented through the Guidelines should lead to the development of protected habitat areas distributed across the landscape. It is anticipated these protected areas can then be used as

foundations for future habitat conservation plans by local communities. A copy of these Guidelines is found as an appendix to the Programmatic.

The Service is tracking losses of VELB habitat permitted under the Programmatic. The Service reevaluates the effectiveness of this Programmatic at least every six months to ensure continued implementation will not result in unacceptable effects to the VELB or the habitats upon which it depends.

In accordance with the Programmatic, projects that are appended to that biological opinion will provide compensation according to these Guidelines unless otherwise approved by the Service. The compensation identified in the Programmatic includes transplantation of affected elderberry plants to a compensation area(s), and planting of additional elderberry seedlings/cuttings and associated native species at the compensation area(s).

The proposed project will adversely affect two elderberry shrubs that are suitable habitat for VELB. These shrubs currently have two stems one inch in diameter or greater at ground level, while an additional six stems one inch in diameter or greater at ground level, are anticipated to grow over the next three years. Caltrans is providing compensatory measures for the anticipated adverse effects, which will minimize the effect of the take on the species (see Table 1). Plantings will occur on a Service-approved site that meets the requirements documented in the Service's revised October 2009 *Selected Review Criteria for Conservation Banks and Section 7 Off Site Compensation* (Review Criteria). Caltrans has proposed using the FCCB as the compensation site. If a site other than the FCCB is proposed, the Service will require additional information on the site, the protections afforded the site (see enclosed Review Criteria), and who will be responsible for the monitoring and maintenance under the Review Criteria.

Effects of the Proposed Action

Two elderberry shrubs within the action area, one located within riparian habitat and the second within non-riparian habitat, will be removed and transplanted in order to minimize project effects on VELB and their habitat. An approximate width of 224 linear ft of proposed right-of-way, as measured at the San Joaquin River's centerline, will be affected directly by construction. This segment of the River is highly degraded, lacks natural flow levels, and was historically the site of an asphalt plant. Efforts will be made to minimize disturbance to riparian vegetation in this locale, however, the entire area will be temporarily affected. After the relocation of the single riparian-based elderberry underneath the existing bridge, there will be no remaining elderberries within the immediate riparian habitat.

Both the riparian and non-riparian elderberry shrubs are potential VELB habitat and will be transplanted in order to minimize their loss as a result of highway widening activities. These two shrubs currently contain a total of two stems; one with a diameter greater than 5 inches at ground level, and one stem with a diameter between 1 and 3 inches at ground level (Table 1). In order to anticipate future stem growth prior to construction, Caltrans proposes to incorporate the need to permanently remove and transplant an additional six stems, with the potential to contain the VELB. Specifically, Caltrans anticipates four stems with a diameter between 1 and 3 inches at

ground level and two stems with a diameter between 3 and 5 inches at ground level. Caltrans will minimize the potential for losing all VELB within the two elderberry shrubs by transplanting them to the FCCB during the shrubs' dormant period, between November 1 and February 15. Transplanting during this window also minimizes disturbance and stress to the shrubs. However, since effects to the VELB may occur as a result of transplanting itself, Caltrans will further compensate for the impacts to the VELB by planting 19 elderberry seedlings and 19 associated native plants at the FCCB in accordance with the Guidelines (Service, 1999) (see Table 1).

Eight additional elderberry shrubs occur within the action area, but will be avoided during construction activities, as they are located at a distance greater than 100 ft away from project activities. These shrubs will not be transplanted. Effects to the VELB may occur if elderberry shrubs are disturbed during project construction. However, implementation of dust-control measures, personnel education, ESA buffers, and orange mesh fencing, will reduce any effects from construction activities within the vicinity of the eight elderberry shrubs to insignificant. Construction activities near the shrubs will occur only between August 1 and March 1 to avoid the season when the adult beetles emerge. There will be no soil disturbance adjacent to the roots of any of these eight buffered elderberry shrubs. No vegetation removal will occur adjacent to these shrubs and will only take place elsewhere between mid August and the end of February.

Conclusion

Based on the current status of the VELB, the environmental baseline, and cumulative effects as analyzed in the Programmatic, in addition to the project-specific effects of the proposed Island Park Six-Lane project, it is the Service's biological opinion that the project, as proposed, is not likely to jeopardize the continued existence of the VELB.

INCIDENTAL TAKE STATEMENT

Section 9(a)(1) of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened fish and wildlife species without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by impairing behavioral patterns including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with this Incidental Take Statement.

Amount or Extent of Take

The Service has determined that implementation of the proposed project will result in the incidental take of all VELB inhabiting two elderberry shrubs containing two stems measuring one inch or greater in diameter at ground level, plus an additional six stems measuring one inch or greater in diameter at ground level, anticipated to grow over the next three years prior to the commencement of project construction. The incidental take is anticipated to take the form of death, injury, harassment, or harm as a result of habitat loss due to the addition of two new highway lanes and bridge demolition and reconstruction, leading to the necessity for shrub removal.

Effect of the Take

As the effects of this project fall within the parameters established within the Programmatic, the Service has determined that this level of anticipated take is not likely to jeopardize the continued existence of the valley elderberry longhorn beetle. The proposed conservation measures will minimize the effect of the take on the species.

RE-INITIATION--CONCLUSION

This concludes the Service's review of the proposed Island Park Six-Lane Project outlined in your request. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or, (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

Mr. Zachary Parker

10

If you have any questions pertaining to this letter regarding the Island Park Six-Lane Project, please contact either Jen Schofield or Susan P. Jones at (916) 414-6600.

Sincerely,


6/ Susan K. Moore
Field Supervisor

Enclosures:

Revised October 2009 *Selected Review Criteria for Conservation Banks and Section 7 Off-Site Compensation*

cc:

Mr. Walter C. Waidehich, Jr., Division Administrator, Federal Highway Administration,
Sacramento, California

Ms. Julie Vance, California Department of Fish and Game, Fresno, California

Sacramento Fish and Wildlife Office
Selected Review Criteria for Section 7 Off-Site Compensation
Revised Oct. 2009

Property Assurances and Conservation Easement

- Title Report (preliminary at proposal, and Final Title Insurance at recordation), shall be no older than six months;
- Property Assessment and Warranty;
- Subordination Agreement [if there is any outstanding debt on the property];
- Legal Description and Parcel Map;
- Conservation Easement (should use the current multi-agency standardized CE template document); or
- Non-Template Conservation Easement;

Site Assessment and Development

- Phase I Environmental Site Assessment;
- Restoration or Development Plan;
- Construction Security [if applicable];
- Performance Security;

Site Management

- Interim Management Plan;
- Interim Management Security Analysis and Schedule;
- Long-Term Management Plan;
- Endowment Fund Analysis and Schedule;

**Guidelines to assist in understanding what is required are detailed on pages 2-7.

Guidelines

Property Assurances and Conservation Easement (CE)

Title Report

1. Who holds fee title to property? Should be the Project Applicant. If not, there may be liability and contracting issues.
2. Are there any liens or encumbrances (existing debts or easements) on the property?
 - a. Review necessary supporting instruments to evaluate liens and encumbrances. Property owner should submit a "*Property Assessment and Warranty*," which discusses each and every exception listed on the Preliminary and Final Title Insurance Policies, evaluating any potential impacts to the conservation value that could result from the exceptions (see below).
 - b. The *Property Assessment and Warranty* template is available at http://www.fws.gov/sacramento/es/cons_bank.htm, and should include a summary and full explanation of all exceptions remaining on the title, with a statement that the owner/Grantor accepts responsibility for all lands being placed under the CE as available for the primary purposes of the easement, as stated in the easement, and assures that these lands have a free and clear title and are available to be placed under the CE.
3. Could any of these liens or encumbrances potentially interfere with either biological habitat values or ownership? If existing easements can potentially interfere with the conservation values/habitat of the property, those portions of the land should be deducted from the total compensation acreage (or number of credits) available on the site.
4. A *Subordination Agreement* is necessary if there is any outstanding debt on the property. Review *Subordination Agreement* for adequacy—the lending bank or other lien holder must agree to fully subordinate each lien or encumbrance.

Legal Description and Parcel Map

1. Ensure accuracy of map, and location and acreage protected under the CE.
2. Both the map and the legal description should explain the boundaries of the individual project compensation site. The site should *not* have 'leftover' areas for later use.

Conservation Easement from Template

1. The current CE template can be found at http://www.fws.gov/sacramento/es/cons_bank.htm.
2. Who will hold the easement?
 - a. Must have third-party oversight by a qualified non-profit or government agency. Qualifications include:
 - i. Organized under IRC 501(c)(3);

- ii. Qualified under CA Civil Code § 815;
- iii. Bylaws, Articles of Incorporation, and biographies of Board of Directors on file at, and approved, by USFWS.
 - 1. Must meet requirements of USFWS, including 51% disinterested parties on the Board of Directors;
- b. Must have satisfactorily completed the CDFG due diligence process for easement/endowment holders and/or be accredited by the Land Trust Accreditation Commission <http://www.landtrustaccreditation.org/home>.
- 3. If not using the multi-agency template, applicant should specify objections they have to the template as provided, and may substantially delay processing as they will require Solicitor review. Alternate CEs must be approved by the USFWS prior to recording.

Non-Template Conservation Easements

- 1. You must either 1) add USFWS as a third-party beneficiary, or 2) add language throughout the document, in all appropriate places, that will assure USFWS the right to enforce, inspect, and approve any and all uses and/or changes under the CE prior to occurrence (including land use, biological management or ownership).
- 2. Include, at a minimum, language to:
 - a. Reserve all mineral, air, and water rights under the CE as necessary to maintain and operate the site in perpetuity;
 - b. Ensure all future development rights are forfeited;
 - c. Ensure all prohibited uses contained in the multi-agency conservation agreement template are addressed; and
 - d. Link the CE, Management Plan, and the Endowment Trust Fund within the document (e.g., note that each exists to support the others, and where each of the documents can be located if a copy is required).
- 3. Insert necessary language, particularly, but not exclusively, per: (can compare to multi-agency CE template)
 - a. Rights of Grantee
 - b. Grantee's Duties
 - c. Reserved Rights
 - d. Enforcement
 - e. Remedies
 - f. Access
 - g. Costs and Liabilities
 - h. Assignment and Transfer
 - i. Merger
 - j. Notices

Site Assessment and Development

Phase I Environmental Site Assessment

1. The Assessment must show that the compensation site is not subject to any recognized environmental conditions as defined by the American Society for Testing and Materials (ASTM) Standard E1527-05 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, available at <http://www.astm.org/Standards/E1527.htm>, (i.e., the presence or likely presence of any Hazardous Substances or petroleum products).
2. If the Phase I Environmental Site Assessment identifies any recognized environmental conditions, the Project Applicant must represent and warrant to the USFWS that all appropriate assessment, clean-up, remedial, or removal action has been completed.

Development Plan [not required if doing preservation only]

1. The overall plan governing construction and habitat establishment activities required to be conducted on the Property, including, without limitation, creation, restoration, and enhancement of habitat.
 - a. This plan should include the baseline conditions of the Property including biological resources, geographic location and features, topography, hydrology, vegetation, past, present, and adjacent land uses, verified *Waters of the U.S. Jurisdictional Determination*, if applicable, species and habitats occurring on the property, a description of the activities and methodologies for creating, restoring, or enhancing habitat types, a map of the approved modifications, overall habitat establishment goals, objectives and Performance Standards, monitoring methodologies required to evaluate and meet the Performance Standards, an approved schedule for reporting monitoring results, a discussion of possible remedial actions, and any other information deemed necessary by the USFWS.
2. Any permits and other authorizations needed to construct and maintain the site shall be included and in place prior to the start of construction of the habitat.
3. Full construction plans for any habitat construction must be *USFWS-approved* prior to the start of construction of the habitat.

Construction Security

- a. The Project Applicant shall furnish a Construction Security in the amount of 100% of a reasonable third party estimate or contract to create, restore, or enhance habitats on the property in accordance with the Development Plan.
- b. The Construction Security shall be in the form of an irrevocable standby letter of credit, or a cashier's check.
 - i. The letter of credit, if chosen, shall be issued for a period of at least one year, and shall provide that the expiration date will be

automatically extended for at least one year on each successive expiration date unless, until extension is no longer necessary.

Performance Security

- c. The Project Applicant shall furnish a Performance Security in the amount of 20% of the Construction Security.
 - d. The Performance Security shall be in the form of an irrevocable standby letter of credit, or a cashier's check.
 - i. The letter of credit, if chosen, shall be issued for a period of at least one year, and shall provide that the expiration date will be automatically extended for at least one year on each successive expiration date unless, until extension is no longer necessary.
4. The Construction and Performance Securities must:
- a. Be held by a qualified, Service-approved, non-profit organization or government agency [see requirements under CE above], and
 - b. Be held according to minimum standards for assuring maximum success in earning potential, and will include assurances for no loss of principle, and
 - c. Disbursements or releases from each of the funds must be for documented expenditures, as they occur.

Site Management

Interim Management Plan

1. The Interim Management Plan should identify the short-term management, monitoring, and reporting activities to be conducted from the time construction ends until the Endowment Fund has been fully funded for one year and all the Performance Standards in the Development Plan have been met.

Interim Management Security Analysis and Schedule

- a. The Project Applicant shall furnish an Interim Management Security (in the form of a standby letter of credit) in the amount equal to the estimated cost to implement the Interim Management Plan during the first year of the Interim Management Period, as set for in the Interim Management Security Analysis and Schedule
- b. The Interim Management Security Analysis and Schedule shall consist of a table and/or spreadsheet that shows all of the tasks (management, monitoring, reporting), task descriptions, labor (hours), cost per unit, cost frequency, timing or scheduling of the tasks, the total annual funding necessary for each task, and any associated assumptions for each task required by the Interim Management Plan. The total annual expenses should include administration and contingency costs.
- c. The Interim Management Security must:

- i. Be held by a qualified, Service-approved, non-profit organization or government agency [see requirements under CE above], and
- ii. Be held according to minimum standards for assuring maximum success in earning potential, and will assurances for no loss of principle.
- iii. Disbursements or releases from the fund must be for documented expenditures, as they occur.

Long-Term Management Plan (LTMP)

- 1. The LTMP template can be found at http://www.fws.gov/sacramento/es/cons_bank.htm and identifies the long-term management, monitoring and reporting activities to be conducted after the interim Management Period.
- 2. The LTMP should include at minimum:
 - a. Purpose of the Project and purpose of the LTMP;
 - b. A baseline description of the setting, location, history, and types of land use activities, geology, soils, climate, hydrology, habitats present (once project meets Performance Standards), and species descriptions;
 - c. Overall management, maintenance and monitoring goals; specific tasks and timing of implementation; and discussion of any constraints, which may affect goals;
 - d. The Endowment Fund Analysis and Schedule (see below),
 - e. Discussion of Adaptive Management actions for reasonably foreseeable events and possible thresholds for evaluating and implementing Adaptive Management;
 - f. Rights of access to the Property and prohibited uses of the Property as provided in the CE; and
 - g. Procedures for Property transfer, land manager replacement, amendments, and notices.
- 3. A copy of the LTMP must be either recorded with the CE, or the CE must state in its body that the current management plan can be obtained upon request from the USFWS, if not using the CE template.

Endowment Fund Analysis and Schedule

- a. Can use a PAR or PAR-like analysis that must be based upon the final, approved LTMP.
- b. The analysis and schedule shall consist of a table and/or spreadsheet that shows all of the tasks (management, monitoring, reporting), task descriptions, labor (hours), cost per unit, cost frequency, timing or scheduling of the tasks, the total annual funding necessary for each task, and any associated assumptions for each task required by the Interim Management Plan. The total annual expenses should include administration and contingency costs.
- c. The Endowment Fund must:

- i. Be held by a qualified, Service-approved, non-profit organization or government agency [see requirements under CE above], and
- ii. Be held according to minimum standards for assuring maximum success in earning potential, and will include assurances for no loss of principle.
- iii. Disbursements or releases from the fund must be for documented expenditures, as they occur.



Matthew Rodriguez
Secretary for
Environmental Protection

California Regional Water Quality Control Board Central Valley Region

Karl E. Longley, ScD, P.E., Chair

1685 E Street, Fresno, California 93706
(559) 445-5116 • FAX (559) 445-5910
<http://www.waterboards.ca.gov/centralvalley>



Edmund G. Brown Jr.
Governor

15 February 2012

Virginia Strohl, Central Region Biology Branch Chief
California Department of Transportation
855 M Street, Suite 200
Fresno, CA 93721

CLEAN WATER ACT §401 TECHNICALLY CONDITIONED WATER QUALITY CERTIFICATION FOR DISCHARGE OF DREDGED AND/OR FILL MATERIALS FOR THE ISLAND PARK 6-LANE PROJECT, WDID#5B10CR00053, FRESNO AND MADERA COUNTIES

WATER QUALITY CERTIFICATION STANDARD CONDITIONS:

1. This Certification is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to §13330 of the California Water Code and §3867 of Title 23 of the California Code of Regulations (23 CCR).
2. This Certification is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to 23 CCR §3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. The validity of any non-denial certification action shall be conditioned upon total payment of the full fee required under 23 CCR §3833, unless otherwise stated in writing by the certifying agency.
4. Certification is valid for the duration of the Island Park 6-Lane Project (Project) described in the attached "Project Information Sheet." This Certification is no longer valid if the Project (as summarized in the "Project Information Sheet" and described in the water quality certification application) is modified, or coverage under the project permit issued by the U.S. Army Corps of Engineers pursuant to §404 of the Clean Water Act has expired. The California Department of Transportation (Discharger) shall notify the Central Valley Regional Water Quality Control Board (Central Valley Water Board) in writing within seven days of Project completion.
5. All reports, notices, or other documents required by this Certification or requested by the Central Valley Water Board shall be signed by a person described below or by a duly authorized representative of that person.
 - a. For a corporation: by a responsible corporate officer such as (1) a president, secretary, treasurer, or vice president of the corporation in charge of a principal

California Environmental Protection Agency

business function; (2) any other person who performs similar policy or decision-making functions for the corporation; or (3) the manager of one or more manufacturing, production, or operating facilities if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- b. For a partnership or sole proprietorship: by a general partner or the proprietor.
 - c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official.
6. Any person signing a document under Standard Condition No. 5 shall make the following certification, whether written or implied:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

ADDITIONAL TECHNICALLY CONDITIONED CERTIFICATION CONDITIONS:

In addition to the six standard conditions, the Discharger shall satisfy the following:

1. The Discharger shall notify the Central Valley Water Board in writing seven days prior to beginning any in-water activities.
2. Except for activities permitted by the U.S. Army Corps of Engineers under §404 of the Clean Water Act, soil, silt, or other organic materials shall not be placed where such materials could pass into surface water or surface water drainage courses.
3. All areas disturbed by Project activities shall be protected from washout or erosion.
4. The Discharger shall maintain a copy of this Certification and supporting documentation (Project Information Sheet) at the Project site during construction for review by site personnel and agencies. All personnel (employees, contractors, and subcontractors) performing work on the proposed Project shall be adequately informed and trained regarding the conditions of this Certification.
5. An effective combination of erosion and sediment control Best Management Practices (BMPs) shall be implemented and adequately working during all phases of construction.
6. All temporarily affected areas shall be restored to pre-construction contours and conditions upon completion of construction activities.
7. The Discharger shall perform surface water sampling: 1) when performing any in-water work; 2) in the event that Project activities result in any materials reaching surface waters

or; 3) when any activities result in the creation of a visible plume in surface waters. The following monitoring shall be conducted immediately upstream out of the influence of the Project and approximately 300 feet downstream of the active work area. Sampling results shall be submitted to this office by the first day of the second month following sampling. The sampling frequency and monitoring locations may be modified for certain projects with written permission from the Central Valley Water Board Executive Officer.

Parameter	Unit	Type of Sample	Frequency of Sample
Turbidity	NTU	Grab	Every 4 hours during in-water work
Settleable Material	ml/L	Grab	Same as above
pH	Standard units	Grab	Daily during concrete activity
Visible construction related pollutants	Observation	Visible Inspections	Continuous throughout the construction period

8. Activities shall not cause:

- (a) where natural turbidity is less than 1 Nephelometric Turbidity Units (NTUs), increases exceeding 2 NTU;
- (b) where natural turbidity is between 1 and 5 NTUs, increases exceeding 1 NTU;
- (c) where natural turbidity is between 5 and 50 NTUs, increases exceeding 20 percent;
- (d) where natural turbidity is between 50 and 100 NTUs, increases exceeding 10 NTUs;
- (e) where natural turbidity is greater than 100 NTUs, increases exceeding 10 percent.

In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected. Averaging periods may only be used with prior permission of the Central Valley Water Board Executive Officer.

- 9. Activities shall not cause settleable material to exceed 0.1 ml/L in surface waters as measured in surface waters downstream from the Project.
- 10. Activities shall not cause the pH to be depressed below 6.5 nor raised above 8.5.
- 11. The discharge of petroleum products or other excavated materials to surface water is prohibited. Activities shall not cause visible oil, grease, or foam in the work area or downstream. The Discharger shall notify the Central Valley Water Board immediately of any spill of petroleum products or other organic or earthen materials.
- 12. The Discharger shall notify the Central Valley Water Board immediately if any of the above conditions are violated, along with a description of measures it is taking to remedy the violation.

13. The Discharger shall comply with all California Department of Fish and Game Code §1600 requirements for the Project.
14. The Discharger must obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activities issued by the State Water Resources Control Board for any project disturbing an area of one acre or greater.
15. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under State law and §401 (d) of the federal Clean Water Act. The applicability of any State law authorizing remedies, penalties, process, or sanctions for the violation or threatened violation constitutes a limitation necessary to ensure compliance with this Certification.
16. If the Discharger or a duly authorized representative of the Discharger fails or refuses to furnish technical or monitoring reports, as required under this Certification, or falsifies any information provided in the monitoring reports, the Discharger will be subject to civil liability, for each day of violation, or criminal liability.
17. In response to a suspected violation of any condition of this Certification, the Central Valley Water Board may require the Discharger to furnish, under penalty of perjury, any technical or monitoring reports the Central Valley Water Board deems appropriate, provided that the burden, including cost of the reports, shall be in reasonable relationship to the need for the reports and the benefits to be obtained from them.
18. The Discharger shall allow staff of the Central Valley Water Board, or an authorized representative(s), upon the presentation of credentials and other documents, as may be required by law, to enter the Project premises for inspection, including taking photographs and securing copies of project-related records, for the purpose of assuring compliance with this Certification and determining the ecological success of the Project.

CENTRAL VALLEY WATER BOARD CONTACT PERSON:

Debra Mahnke, Water Resource Control Engineer
1685 E Street
Fresno, CA 93706
(559) 445-6281
dmahnke@waterboards.ca.gov

WATER QUALITY CERTIFICATION:

I hereby issue an order certifying that the proposed discharge from the California Department of Transportation Island Park 6-Lane Project, WDID# 5B10CR00053, will comply with the applicable provisions of §301 ("Effluent Limitations"), §302 ("Water Quality Related Effluent Limitations"), §303 ("Water Quality Standards and Implementation Plans"), §306 ("National Standards of Performance"), and §307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Resources Control Board Water Quality Order No. 2003-0017 DWQ "Statewide General

Waste Discharge Requirements For Dredged Or Fill Discharges That Have Received State Water Quality Certification.”

Except insofar as may be modified by any preceding conditions, all certification actions are contingent on (a) the discharge being limited to and all proposed mitigation being completed in strict compliance with the Discharger's project description, the attached "Project Information Sheet," and the Discharger's water quality certification application; and (b) compliance with all applicable requirements of the Central Valley Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised October 2011.

Any person aggrieved by this action may petition the State Water Board to review the action in accordance with Water Code §13320 and California Code of Regulations, title 23, §2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this action, except that if the thirtieth day following the date of this action falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.



Pamela C. Creedon
Executive Officer

Enclosure: Water Quality Order No. 2003-0017 DWQ
Attachment: Project Information Sheet

cc: Jason Brush, Supervisor, Wetlands Regulatory Office, U.S. Environmental Protection Agency, Region 9, San Francisco (email)
Paul Maniccia, Chief, Sacramento South Branch, Regulatory Unit, Department of the Army, Corps of Engineers, Sacramento
Bill Orme, Water Quality Certification Unit Chief, Division of Water Quality, State Water Resources Control Board, Sacramento (email)
Jeffrey Single, Regional Manager, San Joaquin Valley-Southern Sierra Region, California Department of Fish and Game, Fresno

PROJECT INFORMATION SHEET

Application Date: 19 October 2011

Applicant: California Department of Transportation

Applicant Representatives: Virginia Strohl, Central Region Biology Branch Chief
Sarah Paulson, Project Biologist

Project Name: Island Park 6-Lane Project

Application Number: WDID# 5B10CR00053

Type of Project: Freeway expansion

Project Location: Section 31, Township 12 South, Range 19 East, MDB&M.
Latitude: 36.84302° and Longitude: -119.93254°

Project Duration: September 2012 through December 2015

Counties: Fresno and Madera

Receiving Water: San Joaquin River, Friant Dam to Mendota Pool reach, San Joaquin River Hydrologic Basin, San Joaquin Valley Floor Hydrologic Unit #545.20, Madera HA

Water Body Type: River

Designated Beneficial Uses: The *Water Quality Control Plan for the Sacramento River and the San Joaquin River Basins*, Fourth Edition, revised October 2011 designates beneficial uses for surface and ground waters within the region. The designated beneficial uses of the San Joaquin River are municipal and domestic supply; agricultural supply; industrial process supply; hydropower generation; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; migration of aquatic organisms; spawning, reproduction and/or early development; and wildlife habitat.

Project Description: The Project will widen a segment of State Route 99 by constructing two additional lanes in the median to convert the existing four-lane freeway to a six-lane freeway. The Project requires demolition of the existing San Joaquin River bridge and replacement with a new structure.

Preliminary Water Quality Concerns: Increased turbidity and potential discharge of construction materials.

Proposed Mitigation to Address Concerns: The Project is designed to avoid and minimize adverse effects to waters to the maximum extent practicable. The bridge in-water columns are designed to minimize permanent fill within the San Joaquin River and no cofferdams will be required due to the use of cast-in-steel shaft concrete piles. The Discharger will prepare and submit a demolition plan for approval prior to demolition of the old bridge. Detention basins will be constructed to treat storm water runoff from the new bridge.

Fill/Excavation Area: The Project will temporarily impact 0.280 acres and permanently impact 0.017 acres of un-vegetated riverbed. The Project includes permanent fill of 111 cubic yards of concrete, 36.5 cubic yards of rock, and 3333 cubic yards of gravel.

Dredge Volume: None

U.S. Army Corps of Engineers Permit Number: Nationwide Permit #14

Department of Fish and Game Streambed Alteration Agreement: The Discharger applied for a Streambed Alteration Agreement on 17 October 2011.

Status of CEQA Compliance: The California Department of Transportation filed a Mitigated Negative Declaration and approved a Notice of Determination on 24 August 2010 (SCH# 2009061047).

As a Responsible Agency under California Environmental Quality Act (CEQA), the Central Valley Water Board reviewed the Mitigated Negative Declaration and found that impacts to water quality were adequately addressed. Mitigation for impacts to water quality is discussed in the "Proposed Mitigation to Address Concerns" section above.

Compensatory Mitigation: None, as the new bridge design will result in a net gain of 0.053 acres of jurisdictional waters.

Application Fee Provided: Total fees of \$1,457.00 have been submitted as required by 23 CCR §3833(b)(3)(A) and by 23 CCR §2200(e).

STATE WATER RESOURCES CONTROL BOARD

WATER QUALITY ORDER NO. 2003 - 0017 - DWQ

**STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR
DREDGED OR FILL DISCHARGES THAT HAVE RECEIVED
STATE WATER QUALITY CERTIFICATION (GENERAL WDRs)**

The State Water Resources Control Board (SWRCB) finds that:

1. Discharges eligible for coverage under these General WDRs are discharges of dredged or fill material that have received State Water Quality Certification (Certification) pursuant to federal Clean Water Act (CWA) section 401.
2. Discharges of dredged or fill material are commonly associated with port development, stream channelization, utility crossing land development, transportation water resource, and flood control projects. Other activities, such as land clearing, may also involve discharges of dredged or fill materials (e.g., soil) into waters of the United States.
3. CWA section 404 establishes a permit program under which the U.S. Army Corps of Engineers (ACOE) regulates the discharge of dredged or fill material into waters of the United States.
4. CWA section 401 requires every applicant for a federal permit or license for an activity that may result in a discharge of pollutants to a water of the United States (including permits under section 404) to obtain Certification that the proposed activity will comply with State water quality standards. In California, Certifications are issued by the Regional Water Quality Control Boards (RWQCB) or for multi-Region discharges, the SWRCB, in accordance with the requirements of California Code of Regulations (CCR) section 3830 et seq. The SWRCB's water quality regulations do not authorize the SWRCB or RWQCBs to waive certification, and therefore, these General WDRs do not apply to any discharge authorized by federal license or permit that was issued based on a determination by the issuing agency that certification has been waived. Certifications are issued by the RWQCB or SWRCB before the ACOE may issue CWA section 404 permits. Any conditions set forth in a Certification become conditions of the federal permit or license if and when it is ultimately issued.
5. Article 4, of Chapter 4 of Division 7 of the California Water Code (CWC), commencing with section 13260(a), requires that any person discharging or proposing to discharge waste, other than to a community sewer system, that could affect the quality of the waters of the State,¹ file a report of waste discharge (ROWD). Pursuant to Article 4, the RWQCBs are required to prescribe waste discharge requirements (WDRs) for any proposed or existing discharge unless WDRs are waived pursuant to CWC section 13269. These General WDRs fulfill the requirements of Article 4 for proposed dredge or fill discharges to waters of the United States that are regulated under the State's CWA section 401 authority.

¹ "Waters of the State" as defined in CWC Section 13050(e)

IT IS HEREBY ORDERED that WDRs are issued to all persons proposing to discharge dredged or fill material to waters of the United States where such discharge is also subject to the water quality certification requirements of CWA section 401 of the federal Clean Water Act (Title 33 United States Code section 1341), and such certification has been issued by the applicable RWQCB or the SWRCB, unless the applicable RWQCB notifies the applicant that its discharge will be regulated through WDRs or waivers of WDRs issued by the RWQCB. In order to meet the provisions contained in Division 7 of CWC and regulations adopted thereunder, dischargers shall comply with the following:

1. Dischargers shall implement all the terms and conditions of the applicable CWA section 401 Certification issued for the discharge. This provision shall apply irrespective of whether the federal license or permit for which the Certification was obtained is subsequently deemed invalid because the water body subject to the discharge has been deemed outside of federal jurisdiction.
2. Dischargers are prohibited from discharging dredged or fill material to waters of the United States without first obtaining Certification from the applicable RWQCB or SWRCB.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on November 19, 2003.

AYE: Arthur G. Baggett, Jr.
Peter S. Silva
Richard Katz
Gary M. Carlton
Nancy H. Sutley

NO: None.

ABSENT: None.

ABSTAIN: None.


Debbie Irvin
Clerk to the Board



U S Army Corps of
Engineers
Sacramento District

Nationwide Permit Summary

33 CFR Part 330; Issuance of Nationwide
Permits – March 19, 2012

14. Linear Transportation Projects. Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

A. Regional Conditions

1. Regional Conditions for California, excluding the Tahoe Basin

<http://www.spk.usace.army.mil/organizations/cespk-co/regulatory/nwp/2012-nwps/2012-NWP-RC-CA.pdf>

2. Regional Conditions for Nevada, including the Tahoe Basin

<http://www.spk.usace.army.mil/organizations/cespk-co/regulatory/nwp/2012-nwps/2012-NWP-RC-NV.pdf>

3. Regional Conditions for Utah

<http://www.spk.usace.army.mil/organizations/cespk-co/regulatory/nwp/2012-nwps/2012-NWP-RC-UT.pdf>

4. Regional Conditions for Colorado.

<http://www.spk.usace.army.mil/organizations/cespk-co/regulatory/nwp/2012-nwps/2012-NWP-RC-CO.pdf>

B. Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer.

Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR §§ 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR § 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation.

(a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters,

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the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

- 2. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.
- 3. **Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. **Migratory Bird Breeding Areas.** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. **Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
- 6. **Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
- 7. **Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. **Adverse Effects From Impoundments.** If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. **Management of Water Flows.** To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
- 10. **Fills Within 100-Year Floodplains.** The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
- 11. **Equipment.** Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. **Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.
- 13. **Removal of Temporary Fills.** Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
- 14. **Proper Maintenance.** Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
- 15. **Single and Complete Project.** The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
- 16. **Wild and Scenic Rivers.** No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
- 17. **Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- 18. **Endangered Species.**
 - (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.
 - (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to

demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have “no effect” on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.noaa.gov/fisheries.html> respectively.

19. **Migratory Birds and Bald and Golden Eagles.** The permittee is responsible for obtaining any “take” permits required under the U.S. Fish and Wildlife Service’s regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such “take” permits are required for a particular activity.

20. **Historic Properties.**

(a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified

historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or

ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.

(2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

- (3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) – (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
- (4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
- (5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.
- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.
- (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.
- (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.
- (g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.
- 24. Safety of Impoundment Structures.** To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
- 25. Water Quality.** Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.
- 26. Coastal Zone Management.** In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.
- 27. Regional and Case-By-Case Conditions.** The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

(Transferee)

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
- (c) The signature of the permittee certifying the completion of the work and mitigation.

31. Pre-Construction Notification.

(a) **Timing.** Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification

(PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) 45 calendar days have passed from the district engineer’s receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is “no effect” on listed species or “no potential to cause effects” on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee’s right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2)..

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed project;

- (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);
- (4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;
- (5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.
- (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and
- (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property

may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

- (c) Form of Pre-Construction Notification: he standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.
- (d) Agency Coordination:
 - (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.
 - (2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via email, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where

there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

C. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. For a linear project, this determination will include an evaluation of the individual crossings to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10- acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining

whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

D. Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWP's do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWP's do not grant any property rights or exclusive privileges.
4. NWP's do not authorize any injury to the property or rights of others.
5. NWP's do not authorize interference with any existing or proposed Federal project.

E. Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved. Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term "discharge" means any discharge of dredged or fill material.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by

strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWP, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of standing or flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR 328.3(e)).

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term “single and complete project” is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of “independent utility”). Single and complete non-linear projects may not be “piecemealed” to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States. Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line, which is defined at 33 CFR 328.3(d).

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWPs, a waterbody is a jurisdictional water of the United States. If a jurisdictional wetland is adjacent – meaning bordering, contiguous, or neighboring – to a waterbody determined to be a water of the United States under 33 CFR 328.3(a)(1)-(6), that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of “waterbodies” include streams, rivers, lakes, ponds, and wetlands.

CALIFORNIA DEPARTMENT OF FISH AND GAME
REGION 4 - CENTRAL REGION
1234 East Shaw Avenue
Fresno, California 93710



STREAMBED ALTERATION AGREEMENT
NOTIFICATION NO. 1600-2011-0187-R4
San Joaquin River, Fresno and Madera Counties

CALIFORNIA DEPARTMENT OF TRANSPORTATION
CALTRANS DISTRICT 6
Virginia Strohl
855 M Street, Suite 200
Fresno, California 93721

SR 99 ISLAND PARK 6-LANE PROJECT
06-FRE-99 PM 30.3-31.6 & 06-MAD-99 PM 0.0-1.6 EA 06-44262

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Game (DFG) and California Department of Transportation Caltrans District 6 (Permittee) as represented by Virginia Strohl acting on behalf of Permittee.

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) Section 1602, Permittee notified DFG on October 19, 2011, that Permittee intends to complete the Project described herein.

WHEREAS, pursuant to FGC section 1603, DFG has determined that the Project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the Project in accordance with the Agreement.

PROJECT LOCATION

The Project is located on State Route (SR) 99 where it crosses the San Joaquin River (SJR), in Fresno and Madera counties, State of California; Township 12 South, Range 19 East, Section 31, United States Geological Survey (USGS) map Herndon, Mount Diablo meridian.

PROJECT DESCRIPTION

The Project is limited to:

- Permittee proposes to increase the capacity of a 2.9-mile segment of SR 99 by constructing two additional lanes in the median to convert the existing 4-Lane freeway to a 6-Lane freeway from just south of Grantland Avenue under-crossing, in Fresno County Post Mile (PM) 30.3 to just north of the Avenue 7 over-crossing in Madera County PM 1.6.
- The existing 90 foot wide by 877 foot long SJR Bridge (Br No 41-0090) will be removed and replaced with a new 141 foot wide (four 12-foot lanes in each direction, 23-foot median and 10-foot outside shoulders) by 877 foot long, 6-span Cast-in-Place Post-Tensioned Concrete Box Girder Bridge. The bridge will be widened to the west. The elevation of the beginning of the bridge and the end of the bridge will be the same as existing but there will be a crest at the midpoint of the bridge. This will allow the stormwater to drain to the bridge ends and be treated by the bio-swales. The roadway will initially be widened to three lanes in each direction, which will leave two lanes (one each direction) free for future widening to an 8-Lane freeway without further bridge work.
- The construction will be completed in two stages in order to maintain two lanes of traffic in each direction during construction. The new bridge will be supported by 6-foot diameter Concrete columns founded on 6-foot diameter Cast-in Steel-Shaft (CISS) concrete piles, to be installed while water is flowing. Each of the 5 Piers will consist of 5 columns (3 columns for Stage 1 and 2 columns for Stage 2). During Stage 1 all traffic will be on the current east bridge while the west bridge is demolished and rebuilt. During Stage 2 all traffic will be routed onto the new west bridge while the east bridge is demolished and rebuilt.
- After demolition of the existing SJR Bridges no portions of the old structure will be left in the channel, and where abutments are removed, no depression will be left, but will be filled with clean gravel of an appropriate size (0.5 to 4 inches).
- Within the ordinary high water mark (OHWM) of the SJR, 111 cubic yards of Concrete Pile and 37 cubic yards of rock will be discharged as permanent fill. Another 3,333 cubic yards of rock will be placed temporarily within the OHWM in order to construct a temporary construction pad.
- The Project has been designed to avoid and minimize adverse effect to "Waters of the United States" (WOUS) to the maximum extent practicable. The size and location of the bridge's in-water columns have been designed to minimize permanent fill. In addition, through the use of CISS piles, the use of cofferdams will not be necessary, thereby reducing the temporary impacts and the need for additional equipment to be placed with in WOUS.

- Currently, storm water run-off from the existing bridge and nearby roadway, discharges directly into the SJR via storm drain holes in the existing bridge. The Project will upgrade existing drainage systems to reduce impacts in water quality to the SJR and to conform to hydraulic recommendations. This will include the construction of two bi-filtration swales (0.15 acres) for storm water treatment on the west side of the highway adjacent to the SJR and one infiltration basin would be constructed just north of the Avenue 7 over-crossing. In addition, construction of one new detention basin and expansion of one existing detention basin is also proposed.
- Utility relocation within the temporary construction easement that would extend approximately 120 feet (ft) to the west and 55 ft to the east of the existing bridge deck.
- Equipment to be used includes a backhoe, Bidwell and roller screeds, bulldozer/loader, chain saw, compressor, crane, excavator, flatbed, fork lift, front-end loader, genie man lift, grader, haul truck, jack and bore machine, pile driver/drill rig, pump truck, roller/compactor, scraper, and water truck. Construction equipment will need to enter the water way, and water will be present when work is done in the SJR channel so a water diversion will be required. Access will cause temporary impacts to 0.77 acres of riparian habitat.
- The Project will require the removal of riparian trees including the following species: Fremont's cottonwood (*Populus fremontii*), white alder (*Alnus rhombifolia*), northern California black walnut (*Juglans californicus* ssp. *Hindsii*), Gooddings black willow (*Salix gooddingii*), MacKenzie's willow (*Salix prolixa*), sandbar willow (*Salix sessilifolia*), western sycamore (*Platanus racemosa*), Oregon ash (*Fraxinus latifolia*), and blue elderberry (*Sambucus Mexicana*). Prior to ground breaking, Permittee will do a vegetation count within the area of proposed impacts. All native tree species, over four inches in diameter at breast height (DBH) will be replaced on-site at a ratio approved by DFG.
- The Project will result in impacts to multiple elderberry shrubs. Permittee will complete the mitigation required by the United States Fish and Wildlife Service (USFWS) for impacts to Valley elderberry longhorn beetle as required by the Biological Opinion for this Project (Service File Number 1-1-96-F-0156, Reference number 81420-2010-F0033-1)
- As a result of the San Joaquin River Restoration Program, an experimental population of Chinook salmon may be released into the SJR during the construction of the Caltrans' Island Park 6-Lane Project. Should salmon be introduced during this period, all in water work would be timed to avoid breeding salmon by prohibiting in-water work during the months of September through January for fall-run Chinook salmon and April through May for spring-run Chinook salmon.

PROJECT IMPACTS

This Agreement is intended to avoid, minimize, and mitigate adverse impacts to the fish and wildlife resources that occupy the area of the San Joaquin River, and the immediate adjacent riparian habitat. Absent implementation of the protective measures required by this Agreement, the following species and habitat types could potentially be impacted within the area covered by this Agreement: Federal Endangered Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) and State Threatened Swainson's hawk (*Buteo swainsoni*), as well as birds, mammals, fish, reptiles, amphibians, invertebrates and plants that comprise the local riparian ecosystem.

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1. Documentation at Project Site: Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the Project site at all times and shall be presented to DFG personnel or personnel from another State, Federal, or local agency upon request.
- 1.2. Providing Agreement to Persons at Project Site: Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the Project at the Project site on behalf of Permittee; including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3. Notification of Conflicting Provisions: Permittee shall notify DFG if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the Project by another local, State, or Federal agency. In that event, DFG shall contact Permittee to resolve any conflict.
- 1.4. Project Site Entry: Permittee agrees that DFG personnel may enter the Project site at any time to verify compliance with the Agreement.
- 1.5. Legal Obligations: This Agreement does not exempt the Permittee from complying with all other applicable local, State and Federal law, or other legal obligations.
- 1.6. Unauthorized "Take": This Agreement does not authorize the "take" (defined in FGC Section 86 as to hunt, pursue, catch, capture, or kill; or attempt to hunt, pursue, catch, capture, or kill) of State- or Federal-listed threatened or endangered species. Any such "take" shall require separate permitting as may be required.

- 1.7. Water Diversion: To the extent that the Provisions of this Agreement provide for the diversion of water, they are agreed to with the understanding that the Permittee possesses the legal right to so divert such water.
- 1.8. Trespass: To the extent that the Provisions of this Agreement provide for activities that require the Permittee to trespass on another owner's property, they are agreed to with the understanding that the Permittee possesses the legal right to so trespass.
- 1.9. Construction/Work Schedule: The Permittee shall submit a **construction/work schedule** to DFG (lpdiaz@dfg.ca.gov with reference to Agreement 1600-2011-0187-R4) prior to beginning any activities covered by this Agreement. The Permittee shall also notify DFG upon the completion of the activities covered by this Agreement.
- 1.10. Training: Prior to starting any activity within the stream, all employees, contractors, and visitors who will be present during Project activities shall have received training from a qualified individual on the contents of this Agreement, the resources at stake, and the legal consequences of non-compliance. A **training sign-in sheet** for the employees and contractors shall be provided to DFG and shall include the date of the training and who gave the training.

2. **Avoidance and Minimization Measures**

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

- 2.1. Flagging/Fencing: Prior to any activity within the lake or creek, the Permittee shall identify the limits of the required access routes and encroachment into the stream. These "work area" limits shall be identified with brightly colored flagging/fencing. Work completed under this Agreement shall be limited to this defined area only. Flagging/fencing shall be maintained in good repair for the duration of the Project. All areas beyond the identified work area limits shall be considered Environmentally Sensitive Areas (ESA) and shall not be disturbed.
- 2.2. Listed Species: This Agreement does not allow for the "take," or "incidental take," of any State- or Federal-listed threatened or endangered species.
 - 2.2.1. The Permittee affirms that no "take" of listed species will occur as a result of this Project and will take prudent measures to ensure that all "take" is avoided. The Permittee acknowledges that they fully understand that they do not have "incidental take" authority. If any State- or Federal-listed threatened or endangered species occur within the proposed work area or could be impacted by the work proposed, and thus "taken" as a result of Project activities, the Permittee is responsible for obtaining and complying with required

State and Federal threatened and endangered species permits or other written authorization before proceeding with this Project.

2.2.2. Liability for any "take," or "incidental take," of such listed species remains the separate responsibility of the Permittee for the duration of the Project.

2.2.3. The Permittee shall immediately (the same day) notify DFG of the discovery of any such rare, threatened, or endangered species prior to and/or during construction.

2.3. Swainson's Hawk (SWHA): While there are no California Natural Diversity Database (CNDDDB) records of SWHA within 12 miles of the Project, the area does have suitable habitat and there is the potential that a nesting pair could move into the area before the Project is completed. SWHA Specific Measures:

2.3.1. **Focused SWHA Surveys:** Surveys shall be conducted by a qualified biologist no more than 14 days before the onset of any ground-disturbing activities and no earlier than March 20. See attached SWHA Technical Advisory Committee May 31, 2000 protocol for appropriate survey details (Exhibit B).

2.3.2. No work shall occur which could result in either direct or indirect impacts to nesting SWHA. Between March 1 and September 1, Project activities shall not be conducted within a minimum 0.5 mile of any active SWHA nest. This minimum buffer may be reduced for any particular nest, but only if DFG concurs in writing that a reduced buffer will not result in a direct or indirect adverse impact to any nesting SWHA adults, chicks, or eggs. In the event a qualified biologist with appropriate raptor experience determines Project activities are having or could cause an adverse impact to any nesting SWHA adults, chicks, or eggs based on bird behavior or other indicators regardless of the existing buffer, Permittee shall immediately cease the activities and contact DFG for further guidance.

2.4. Anadromous Fish Specific Measures:

2.4.1. Once the San Joaquin River Restoration Plan is implemented and salmon are reintroduced, the Permittee shall not allow any activity within the SJR from September through January for fall-run Chinook salmon and April through May for spring-run Chinook salmon. Any exception to this time restriction shall be handled on an individual site-specific basis and must be approved. This request shall be in written form and submitted to DFG at least two (2) weeks in advance of the proposed time extension period.

2.5. Valley Elderberry Longhorn Beetle (VELB) Specific Measures:

2.5.1. Elderberry bushes near the Project shall be completely avoided or mitigated according to USFWS regulations.

2.6. Fish and Wildlife: If any fish or wildlife is encountered during the course of construction, said fish and wildlife shall be allowed to leave the construction area unharmed.

2.6.1. An approved biologist shall perform **general wildlife surveys** of the Project area (including access routes and storage areas) prior to Project construction start with particular attention to evidence of the presence of the species listed above and shall report any possible adverse affect to fish and wildlife resources not originally reported. If the survey shows presence of any wildlife species which could be impacted, Permittee shall contact DFG and mitigation, specific to each incident, shall be developed. If any State- or Federal-listed threatened or endangered species are found within the proposed work area or could be impacted by the work proposed, a new Agreement and/or a 2081(b) State Incidental Take Permit may be necessary and a new CEQA analysis may need to be conducted, before work can begin.

2.6.2. To protect nesting birds, no construction shall be completed from February 15 through August 31 unless the following **avian surveys** are completed by a qualified biologist:

- **Raptors:** Survey for nesting activity of raptors within a 0.25-mile radius of the construction site. Surveys shall be conducted at appropriate nesting times and concentrate on trees with the potential to support raptor nests. If any active nests are observed, these nests and nest trees shall be designated an ESA and protected (while occupied) with a minimum 500-foot buffer during Project-construction unless otherwise agreed upon and approved in writing by DFG.
- **Other Avian Species:** Survey riparian areas for nesting activity within a 300-foot radius of the defined work area two (2) to three (3) weeks before construction begins. If any nesting activity is found, these nests and nest trees shall be designated an ESA and protected (while occupied) with a minimum 250-foot buffer during Project construction unless otherwise agreed upon and approved in writing by DFG.

2.6.3. Prior to work commencing at any bridge, the bridge shall be surveyed for bats by a qualified bat biologist. Bats shall not be

disturbed without specific notice to and consultation with the Department. Impact minimization measures shall be implemented prior to project activities. If the bridge is being replaced, new bat habitat shall be incorporated in the design of the new bridge.

- 2.7. Vegetation: The disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations and shall only occur within the defined work area. Precautions shall be taken to avoid other damage to vegetation by people or equipment. Vegetation or material removed from the riparian area shall not be stockpiled in the streambed or on its banks without measures to ensure its stability, preventing accidental discharge into the stream.
- 2.7.1. The Permittee shall document the number and species of all riparian woody-stemmed plants greater than four (4) inches DBH that are removed or are damaged during construction. Riparian trees and shrubs with a DBH of four (4) inches or greater that are damaged or removed shall be replaced by replanting like species at a 3:1 ratio (replaced to lost). Mitigation for heritage trees 24-inches or greater shall require replanting of like species at a 10:1 ratio. This documentation shall be used as the basis for replacement mitigation. (See Revegetation under Compensation below.)
- 2.8. Vehicles and Equipment: Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily to prevent leaks of materials that, if introduced to water, could be deleterious to aquatic and terrestrial life.
- 2.8.1. Construction vehicle access to the stream's banks and bed shall be limited to periods when the channel is dry and to predetermined ingress and egress corridors on existing roads. All other areas adjacent to the work site shall be considered an ESA and shall remain off-limits to construction equipment. Vehicle corridors and the ESA shall be identified by the Permittee's resident engineer in consultation with the DFG representative.
- 2.9. Pollution: The Permittee and all contractors shall be subject to the water pollution regulations found in the FGC sections 5650 and 12015.
- 2.9.1. Raw cement, concrete or washings thereof, asphalt, drilling fluids or lubricants, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to fish or wildlife resulting from or disturbed by Project-related activities, shall be prevented from contaminating the soil and/or entering the "Waters of the State."

- 2.9.2. All Project-generated debris, building materials, and rubbish shall be removed from the stream and from areas where such materials could be washed into the stream.
- 2.9.3. In the event that a spill occurs, all Project activities shall immediately cease until cleanup of the spilled materials is completed. DFG shall be notified immediately by the Permittee of any spills and shall be consulted regarding cleanup procedures.
- 2.10. Staging and Storage Areas: Staging and storage areas for equipment, materials, fuels, lubricants, and solvents shall be located outside of the stream channel and banks, and on previously disturbed ground. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the stream, shall be positioned over drip-pans. Vehicles shall be moved away from the stream prior to refueling and lubrication.
- 2.11. Structures: The Permittee shall confirm that all structures are designed (i.e., size and alignment), constructed, and maintained such that they shall not cause long-term changes in water flows that adversely modify the existing upstream or downstream stream bed/bank contours or increase sediment deposition or cause significant new erosion.
- 2.12. Fill: Rock, gravel, and/or other materials shall not be imported into or moved within the stream, except as otherwise addressed in this Agreement. Only on-site materials and clean imported fill shall be used to complete the Project. Fill shall be limited to the minimal amount necessary to accomplish the agreed activities. Excess and temporary fill material shall be moved off-site at Project completion. If the quantity of fill required exceeds the spoil generated by the Project, then a **Borrow Site Map** shall be submitted to DFG before materials are received from that site.
- 2.13. Spoil: Spoil storage sites shall not be located within the stream, where spoil will be washed into the stream, or where it will cover aquatic or riparian vegetation. Rock, gravel, and/or other materials shall not be imported into or moved within the bed or banks of the stream, except as otherwise addressed in this Agreement.
- 2.14. Erosion: No work within the banks of the stream will be conducted during or immediately following large rainfall events. All disturbed soils within the Project site shall be stabilized to reduce erosion potential, both during and following construction. Temporary erosion control devices, such as straw bales, silt fencing, and sand bags, may be used as appropriate to prevent siltation of the stream. Any installation of non-erodible materials not described in the original Project description shall be coordinated with DFG. Coordination may include the negotiation of additional Agreement Provisions for this activity.

- 2.15. Turbidity: Turbid water shall not be discharged into the stream, or created within the stream. The Permittee's ability to minimize siltation shall be the subject of preconstruction planning and feature implementation. Precautions to minimize siltation may require that the work site be isolated so that silt or other deleterious materials are not allowed to pass to downstream reaches. The placement of any structure or materials in the stream for this purpose, not included in the original Project description, shall be coordinated with DFG. If it is determined that silt levels resulting from Project-related activities constitute a threat to aquatic life, activities associated with the siltation shall be halted until effective DFG-approved control devices are installed, or abatement procedures are initiated.
- 2.16. Stream Diversion: If work, other than the CISS piles which will be installed while water is flowing, cannot be completed when the stream is dry, the Permittee shall develop a **Stream Diversion Plan**. This Stream Diversion Plan shall be completed and approved prior to commencement of any proposed diversion or activities within the wetted portion of the stream. The Plan shall include, at a minimum, the following: flow diversion shall be done in a manner that shall prevent pollution and/or siltation, and which shall provide flows to downstream reaches; flows to downstream reaches shall be provided during all times that the natural flow would have supported aquatic life; said flows shall be of sufficient quality and quantity, and of appropriate temperature to support aquatic life, both above and below the diversion; and normal flows shall be restored to the affected stream immediately upon completion of work at that location.
- 2.17. Restoration: Excess material must be removed from the Project site, pursuant to Department of Transportation Standard Specifications Section 7-1.13. All disturbed soils and new fill, including recontoured slopes and all other cleared areas, shall be revegetated with riparian vegetation or other plants, as appropriate to prevent erosion. If the Project causes any exposed slopes or exposed areas on the stream banks, these areas shall be seeded with a blend of a minimum of three (3) locally native grass species and covered with a protective layer of weed-free straw or mulch. One (1) or two (2) sterile non-native perennial grass species may be added to the seed mix provided that amount does not exceed 25 percent of the total seed mix by count. Locally native wildflower and/or shrub seeds may also be included in the seed mix. The seeding shall be completed as soon as possible, but no later than November 15 of the year construction ends. A **seed mixture** shall be submitted to DFG for approval prior to application. At the discretion of DFG, all exposed areas where seeding is considered unsuccessful after 90 days shall receive appropriate soil preparation and a second application of seeding, straw, or mulch as soon as is practical on a date mutually agreed upon.

3. Compensatory Measures

To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, Permittee shall implement each measure listed below.

- 3.1. Revegetation: As indicated in the Project description, Fremont's cottonwood, white alder, northern California black walnut, Gooddings black willow, MacKenzie's willow, sandbar willow, western sycamore, Oregon ash, and blue elderberry will be removed from the Project area, the Permittee therefore shall develop a **Revegetation Plan** for the site and submit it to DFG for approval prior to commencement of the proposed work. All Plans shall specifically address what, where, when and how replacement shrubs and trees will be planted.
- 3.1.1. What species and the number of trees both removed and to be planted should be identified. Native riparian trees and shrubs (e.g., cottonwood, willow, sycamore, valley oak, etc.) between four (4) to 25-inches DBH shall be replaced in-kind at a ratio of 3:1, and trees greater than 25-inches DBH shall be replaced at a ratio of 10:1.
- 3.1.2. Where should be on-site whenever possible.
- 3.1.3. When should be the first suitable season after construction is complete.
- 3.1.4. How should include layout, monitoring, and maintenance to ensure a minimum of 70 percent survival for the plantings after five (5) years.

4. Monitoring and Reporting Measures

Permittee shall meet each reporting and monitoring requirement described below.

- 4.1. Monitoring Obligations of the Permittee:
- 4.1.1. The Permittee shall have primary responsibility for monitoring compliance with all protective measures included as "Measures" in this Agreement. Protective measures must be implemented within the time periods indicated in the Agreement. DFG shall be notified immediately if monitoring reveals that any of the protective measures were not implemented during the period indicated in this program, or if it anticipates that measures will not be implemented within the time period specified.
- 4.1.2. The Permittee (or the Permittee's designee) shall ensure the implementation of the Measures of the Agreement, and shall monitor the effectiveness of these Measures. DFG shall be notified immediately if any of the protective measures are not providing the

level of protection that is appropriate for the impact that is occurring, and recommendations, if any, for alternative protective measures.

4.2. Reporting Obligations of the Permittee:

4.2.1. The Permittee shall submit the following Reports described in the Measures above to DFG:

- Construction/work schedule (Measure 1.9).
- Employees and contractors training sign-in sheet (Measure 1.10).
- Results of focused SWHA surveys (Measure 2.3.1).
- Results of general wildlife surveys (Measure 2.6.1).
- Results of avian surveys if construction is scheduled during the nesting season (Measure 2.6.2).
- Borrow Site Map if fill material is needed (Measure 2.12)
- Stream Diversion Plan if work when water is present is required (Measure 2.16).
- The seed mixture to be used post Project for erosion control (Measure 2.17).
- If required, a Revegetation Plan (Measure 3.1).

4.2.2. A Final Project Report shall be submitted to DFG within 30 days after the Project is completed. The final report shall summarize the Project construction, including any problems relating to the protective measures of this Agreement and how the problems were resolved. "Before and after" photo documentation of the Project site shall be included.

VERIFICATION OF COMPLIANCE:

DFG may verify compliance with protective measures to ensure the accuracy of Permittee's monitoring and reporting efforts at any point in time it is deemed necessary. DFG may, at its sole discretion, review relevant Project documents maintained by the Permittee, interview Permittee employees and agents, inspect the Project area, and take other actions to assess compliance with or effectiveness of protective measures for the Project.

CONTACT INFORMATION

Any communication that Permittee or DFG submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by United States mail, fax, or e-mail, or to such other address as Permittee or DFG specifies by written notice to the other.

To Permittee:

California Department of Transportation (Caltrans)
District 6
Virginia Strohl
855 M Street, Suite 200
Fresno, California 93721
(559) 445-6456
Fax: (559) 445-6236
Virginia_Strohl@dot.ca.gov

To DFG:

Department of Fish and Game
Region 4 - Central Region
1234 East Shaw Avenue
Fresno, California 93710
Attn: Lake and Streambed Alteration Program – Laura Peterson-Diaz
Notification No. 1600-2011-0146-R4
Phone: (559) 243-4017, extension 225
Fax: (559) 243-4020
lpdiaz@dfg.ca.gov

LIABILITY

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the Project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute DFG's endorsement of, or require Permittee to proceed with the Project. The decision to proceed with the Project is Permittee's alone.

SUSPENSION AND REVOCATION

DFG may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before DFG suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before DFG suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused DFG to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes DFG from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects DFG's enforcement authority or that of its enforcement personnel.

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other Federal, State, or local laws or regulations before beginning the Project or an activity related to it.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 et seq. (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

DFG may amend the Agreement at any time during its term if DFG determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by DFG and Permittee. To request an amendment, Permittee shall submit to DFG a completed DFG "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter DFG approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to DFG a completed DFG "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

EXTENSIONS

In accordance with FGC section 1605(b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, Permittee shall submit to DFG a completed DFG "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). DFG shall process the extension request in accordance with FGC 1605(b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the Project the Agreement covers (Fish & G. Code, § 1605, subd. (f)).

EFFECTIVE DATE

The Agreement becomes effective on the date of DFG's signature, which shall be: 1) after Permittee's signature; 2) after DFG complies with all applicable requirements under CEQA; and 3) after payment of the applicable FGC section 711.4 filing fee listed at http://www.dfg.ca.gov/habcon/ceqa/ceqa_changes.html.

TERM

This Agreement shall remain in effect for five (5) years beginning on the date signed by DFG, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

CEQA COMPLIANCE

In approving this Agreement, DFG is independently required to assess the applicability of CEQA. The features of this Agreement shall be considered as part of the overall Project description. The Permittee's concurrence signature on this Agreement serves

as confirmation to DFG that the activities that shall be conducted under the terms of this Agreement are consistent with the Project described in Notification No. 2010-0187-R4. Caltrans, as CEQA Lead agency submitted an Initial Study with Proposed Mitigated Negative Declaration in April 2010, State Clearinghouse No. 2009061047, for the parent Project the SR 99 Island Park Six-Lane Project. A copy of the Notice of Determination for the Project was provided with the Section 1602 Notification. DFG, as a CEQA Responsible Agency, shall make findings and submit a Notice of Determination to the State Clearinghouse upon signing this Agreement.

EXHIBITS

The document(s) listed below is included as an exhibit to the Agreement and incorporated herein by reference.

- A. Figure 1. Project Location USGS Quad Map.
- B. SWHA Technical Advisory Committee May 31, 2000 protocol

AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

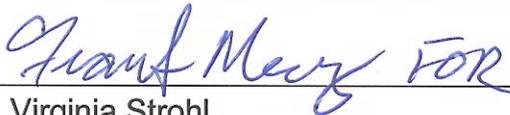
AUTHORIZATION

This Agreement authorizes only the Project described herein. If Permittee begins or completes a Project different from the Project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify DFG in accordance with FGC section 1602.

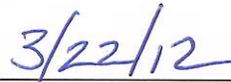
CONCURRENCE

The undersigned accepts and agrees to comply with all provisions contained herein.

FOR CALIFORNIA DEPARTMENT OF TRANSPORTATION



Virginia Strohl
Biology Branch Chief
Caltrans Central Region (Districts 5, 6, 9 and 10)



Date

FOR DEPARTMENT OF FISH AND GAME



Jeffrey R. Single, Ph.D.
Regional Manager



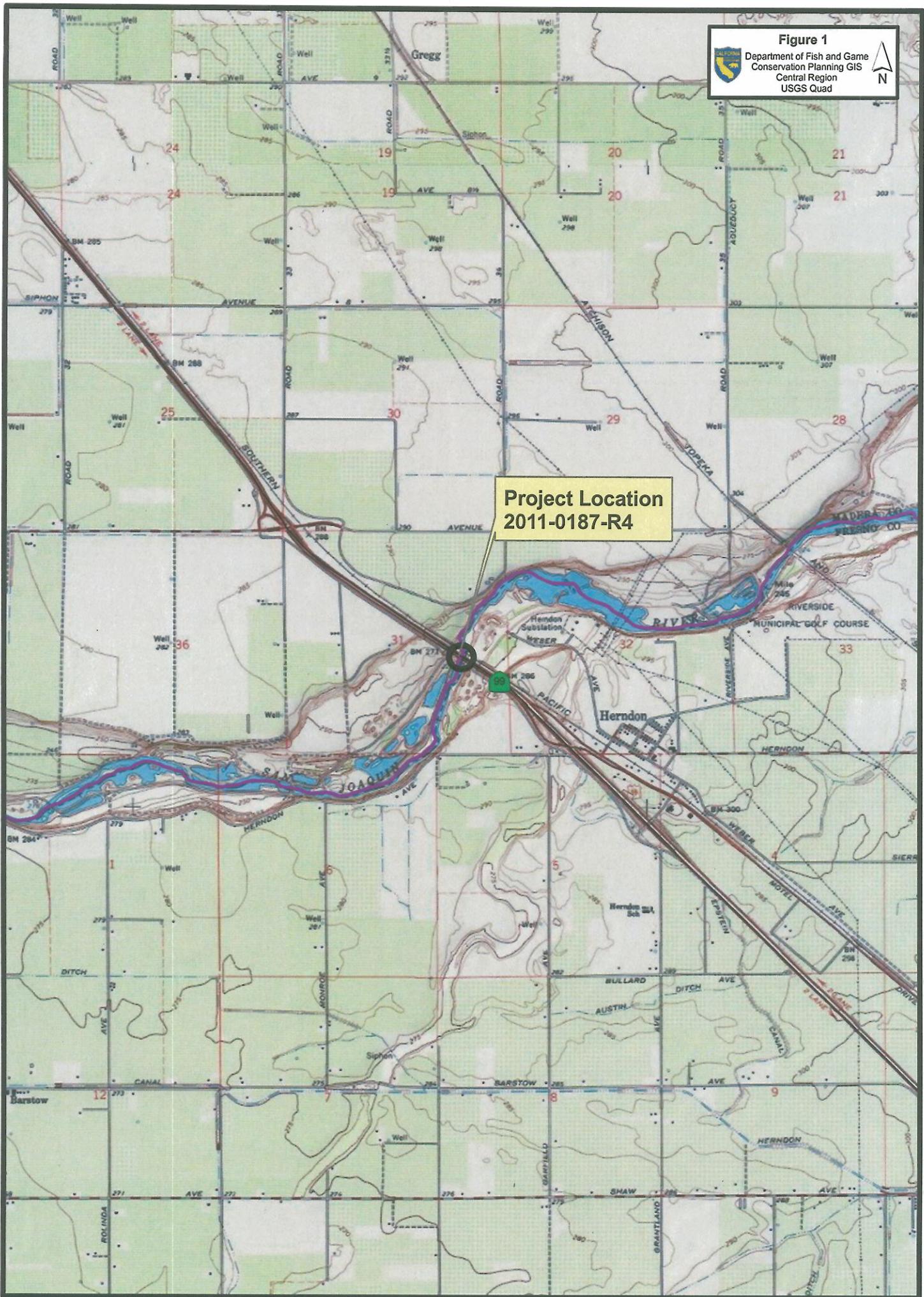
Date

Prepared by: Laura Peterson-Diaz
Environmental Scientist

Figure 1

Exhibit A

Figure 1
Department of Fish and Game
Conservation Planning GIS
Central Region
USGS Quad



**SWHA Technical
Advisory Committee
May 31, 2000 Protocol**

Exhibit B

RECOMMENDED TIMING AND METHODOLOGY FOR SWAINSON'S HAWK NESTING SURVEYS IN CALIFORNIA'S CENTRAL VALLEY

Swainson's Hawk Technical Advisory Committee
May 31, 2000

This set of survey recommendations was developed by the Swainson's Hawk Technical Advisory Committee (TAC) to maximize the potential for locating nesting Swainson's hawks, and thus reducing the potential for nest failures as a result of project activities/disturbances. The combination of appropriate surveys, risk analysis, and monitoring has been determined to be very effective in reducing the potential for project-induced nest failures. As with most species, when the surveyor is in the right place at the right time, Swainson's hawks may be easy to observe; but some nest sites may be very difficult to locate, and even the most experienced surveyors have missed nests, nesting pairs, mis-identified a hawk in a nest, or believed incorrectly that a nest had failed. There is no substitute for specific Swainson's hawk survey experience and acquiring the correct search image.

METHODOLOGY

Surveys should be conducted in a manner that maximizes the potential to observe the adult Swainson's hawks, as well as the nest/chicks second. To meet the California Department of Fish and Game's (CDFG) recommendations for mitigation and protection of Swainson's hawks, surveys should be conducted for a ½ mile radius around all project activities, and if active nesting is identified within the ½ mile radius, consultation is required. In general, the TAC recommends this approach as well.

Minimum Equipment

Minimum survey equipment includes a high-quality pair of binoculars and a high quality spotting scope. Surveying even the smallest project area will take hours, and poor optics often result in eye-strain and difficulty distinguishing details in vegetation and subject birds. Other equipment includes good maps, GPS units, flagging, and notebooks.

Walking vs Driving

Driving (car or boat) or "windshield surveys" are usually preferred to walking if an adequate roadway is available through or around the project site. While driving, the observer can typically approach much closer to a hawk without causing it to fly. Although it might appear that a flying bird is more visible, they often fly away from the observer using trees as screens; and it is difficult to determine from where a flying bird came. Walking surveys are useful in locating a nest after a nest territory is identified, or when driving is not an option.

Angle and Distance to the Tree

Surveying subject trees from multiple angles will greatly increase the observer's chance of detecting a nest or hawk, especially after trees are fully leafed and when surveying multiple trees

in close proximity. When surveying from an access road, survey in both directions. Maintaining a distance of 50 meters to 200 meters from subject trees is optimal for observing perched and flying hawks without greatly reducing the chance of detecting a nest/young: Once a nesting territory is identified, a closer inspection may be required to locate the nest.

Speed

Travel at a speed that allows for a thorough inspection of a potential nest site. Survey speeds should not exceed 5 miles per hour to the greatest extent possible. If the surveyor must travel faster than 5 miles per hour, stop frequently to scan subject trees.

Visual and Aural Ques

Surveys will be focused on both observations and vocalizations. Observations of nests, perched adults, displaying adults, and chicks during the nesting season are all indicators of nesting Swainson's hawks. In addition, vocalizations are extremely helpful in locating nesting territories. Vocal communication between hawks is frequent during territorial displays; during courtship and mating; through the nesting period as mates notify each other that food is available or that a threat exists; and as older chicks and fledglings beg for food.

Distractions

Minimize distractions while surveying. Although two pairs of eyes may be better than one pair at times, conversation may limit focus. Radios should be off, not only are they distracting, they may cover a hawk's call.

Notes and Species Observed

Take thorough field notes. Detailed notes and maps of the location of observed Swainson's hawk nests are essential for filling gaps in the Natural Diversity Data Base; please report all observed nest sites. Also document the occurrence of nesting great homed owls, red-tailed hawks, red-shouldered hawks and other potentially competitive species. These species will infrequently nest within 100 yards of each other, so the presence of one species will not necessarily exclude another.

TIMING

To meet the **minimum** level of protection for the species, surveys should be completed for at least the two survey periods immediately prior to a project's initiation. For example, if a project is scheduled to begin on June 20, you should complete 3 surveys in Period III and 3 surveys in Period V. However, it is always recommended that surveys be completed in Periods II, III and V. **Surveys should not be conducted in Period IV.**

The survey periods are defined by the timing of migration, courtship, and nesting in a "typical" year for the majority of Swainson's hawks from San Joaquin County to Northern Yolo County. Dates should be adjusted in consideration of early and late nesting seasons, and geographic differences (northern nesters tend to nest slightly later, etc). If you are not sure, contact a TAC member or CDFG biologist.

Survey dates Justification and search image	Survey time	Number of Surveys
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I. <i>January-March 20 (recommended optional)</i>	<i>All day</i>	<i>1</i>
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Prior to Swainson's hawks returning, it may be helpful to survey the project site to determine potential nest locations. Most nests are easily observed from relatively long distances, giving the surveyor the opportunity to identify potential nest sites, as well as becoming familiar with the project area. It also gives the surveyor the opportunity to locate and map competing species nest sites such as great homed owls from February on, and red-tailed hawks from March on. After March 1, surveyors are likely to observe Swainson's hawks staging in traditional nest territories.

II. <i>March 20 to April 5</i>	<i>Sunrise to 1000 1600 to sunset</i>	<i>3</i>
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Most Central Valley Swainson's hawks return by April 1, and immediately begin occupying their traditional nest territories. For those few that do not return by April 1, there are often hawks ("floaters") that act as place-holders in traditional nest sites; they are birds that do not have mates, but temporarily attach themselves to traditional territories and/or one of the site's "owners." Floaters are usually displaced by the territories' owner(s) if the owner returns.

Most trees are leafless and are relatively transparent; it is easy to observe old nests, staging birds, and competing species. The hawks are usually in their territories during the survey hours, but typically soaring and foraging in the mid-day hours. Swainson's hawks may often be observed involved in territorial and courtship displays, and circling the nest territory. Potential nest sites identified by the observation of staging Swainson's hawks will usually be active territories during that season, although the pair may not successfully nest/reproduce that year.

III. <i>April 5 to April 20</i>	<i>Sunrise to 1200 1630 to Sunset</i>	<i>3</i>
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Although trees are much less transparent at this time, 'activity at the nest site increases significantly. Both males and females are actively nest building, visiting their selected site frequently. Territorial and courtship displays are increased, as is copulation. The birds tend to vocalize often, and nest locations are most easily identified. This period may require a great deal of "sit and watch" surveying.

IV. <i>April 21 to June 10</i>	<i>Monitoring known nest sites only Initiating Surveys is not recommended</i>	
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Nests are extremely difficult to locate this time of year, and even the most experienced surveyor will miss them, especially if the previous surveys have not been done. During this phase of nesting, the female Swainson's hawk is in brood position, very low in the nest, laying eggs, incubating, or protecting the newly hatched and vulnerable chicks; her head may or may not be visible. Nests are often well-hidden, built into heavily vegetated sections of trees or in clumps of mistletoe, making them all but invisible. Trees are usually not viewable from all angles, which may make nest observation impossible.

Following the male to the nest may be the only method to locate it, and the male will spend hours away from the nest foraging, soaring, and will generally avoid drawing attention to the nest site. Even if the observer is fortunate enough to see a male returning with food for the female, if the female determines it is not safe she will not call the male in, and he will not approach the nest; this may happen if the observer, or others, are too close to the nest or if other threats, such as rival hawks, are apparent to the female or male.

V. June 10 to July 30 (post-fledging)

Sunrise to 1200

3

1600 to sunset

Young are active and visible, and relatively safe without parental protection. Both adults make numerous trips to the nest and are often soaring above, or perched near or on the nest tree. The location and construction of the nest may still limit visibility of the nest, young, and adults.

DETERMINING A PROJECT'S POTENTIAL FOR IMPACTING SWAINSON'S HAWKS

LEVEL OF RISK	REPRODUCTIVE SUCCESS (Individuals)	LONGTERM SURVIVABILITY (Population)	NORMAL SITE CHARACTERISTICS (Daily Average)	NEST MONITORING
<p style="text-align: center;">HIGH</p>   <p style="text-align: center;">LOW</p>	<p>Direct physical contact with the nest tree while the birds are on eggs or protecting young. (Helicopters in close proximity)</p> <p>Loss of nest tree after nest building is begun prior to laying eggs.</p> <p>Personnel within 50 yards of nest tree (out of vehicles) for extended periods while birds are on eggs or protecting young that are < 10 days old.</p> <p>Initiating construction activities (machinery and personnel) within 200 yards of the nest after eggs are laid and before young are > 10 days old.</p> <p>Heavy machinery only working within 50 yards of nest.</p> <p>Initiating construction activities within 200 yards of nest before nest building begins or after young > 10 days old.</p> <p>All project activities (personnel and machinery) greater than 200 yards from nest.</p>	<p>Loss of available foraging area.</p> <p>Loss of nest trees.</p> <p>Loss of potential nest trees.</p> <p>Cumulative: Multi-year, multi-site projects with substantial noise/personnel disturbance.</p> <p>Cumulative: Single-season projects with substantial noise/personnel disturbance that is greater than or significantly different from the daily norm.</p> <p>Cumulative: Single-season projects with activities that "blend" well with site's "normal" activities.</p>	<p>Little human-created noise, little human use: nest is well away from dwellings, equipment yards, human access areas, etc.</p> <p><i>Do not include general cultivation practices in evaluation.</i></p> <p>Substantial human-created noise and occurrence: nest is near roadways, well-used waterways, active airstrips, areas that have high human use.</p> <p><i>Do not include general cultivation practices in evaluation.</i></p>	<p style="text-align: center;">MORE</p>   <p style="text-align: center;">LESS</p>

STATE OF CALIFORNIA
THE RESOURCES AGENCY
THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 18714 BD

This Permit is issued to:

Caltrans
2015 E. Shields Avenue
Suite 100
Fresno, California 93726

To widen Highway 99 at bridge number 41-0008 over the San Joaquin River (the new bridge will be numbered 41-0090). The proposed work will consist of removing the existing four-lane, 877-foot long truss bridge and replacing it with a six-lane cast-in-place, post-tensioned concrete box girder bridge. The bridge will be widened to the west. The demolition of the existing structure and construction of the new bridge will be performed in two stages to allow traffic to use the bridge during construction. The new bridge will be supported by six-foot diameter concrete columns. This project is located at the State Route 99 crossing of the San Joaquin River, northwest of the city of Fresno. The new bridge will follow the existing alignment and cross the river at the same location. It is located in Caltrans District 6.

(Section , T , R , MDB&M, San Joaquin River, Fresno/Madera County).

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

(SEAL)

Dated: MAR 26 2012


Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 18714 BD

THIRTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

FOURTEEN: There shall be no plantings within the project area under this permit, except that of native grasses, which may be required for slope protection.

FIFTEEN: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California; including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion

SIXTEEN: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Central Valley Flood Protection Board's

approval of this permit, including but not limited to claims filed pursuant to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

SEVENTEEN: The mitigation measures approved by the CEQA lead agency and the permittee are found in its Mitigation and Monitoring Reporting Program (MMRP) adopted by the CEQA lead agency. The permittee shall implement all such mitigation measures.

EIGHTEEN: The Central Valley Flood Protection Board and Department of Water Resources shall not be held liable for damages to the permitted encroachment(s) resulting from releases of water from reservoirs, flood fight, operation, maintenance, inspection, or emergency repair.

NINETEEN: No construction work of any kind shall be done during the flood season from November 1 to July 15 without prior approval of the Central Valley Flood Protection Board.

TWENTY: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources or any other agency responsible for maintenance.

TWENTY-ONE: The permittee shall contact the Department of Water Resources by telephone, (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

TWENTY-TWO: Temporary staging, formwork, stockpiled material, equipment, and structures shall not remain in the floodway during the flood season from November 1 to July 15.

TWENTY-THREE: Prior to start of any demolition and/or construction activities within the floodway, the applicant shall provide the Central Valley Flood Protection Board with two sets of layout plans for any and all temporary, in channel cofferdam(s), gravel work pad(s), work trestle(s), scaffolding, piles, and/or other appurtenances that are to remain in the floodway during the flood season from November 1 through July 15.

TWENTY-FOUR: Debris that may accumulate on the permitted encroachment(s) and related facilities shall be cleared off and disposed of outside the floodway after each period of high water.

TWENTY-FIVE: All debris generated by this project shall be disposed of outside the floodway.

TWENTY-SIX: Cleared trees and brush shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1 to July 15.

TWENTY-SEVEN: Fill material shall be placed only within the area indicated on the approved plans.

TWENTY-EIGHT: Backfill material for excavations shall be placed in 4- to 6-inch layers and compacted to at least the density of the adjacent, firm, undisturbed material.

TWENTY-NINE: Density tests by a certified materials laboratory will be required to verify compaction of backfill within the regulated channel.

THIRTY: The soffit of the bridges shall be no lower than that of the existing bridges.

THIRTY-ONE: In the event existing revetment on the channel bank or levee slope is disturbed or displaced, it shall be restored to its original condition upon completion of the proposed installation.

THIRTY-TWO: The work area shall be restored to the condition that existed prior to start of work.

THIRTY-THREE: The permittee shall provide supervision and inspection services acceptable to the Central Valley Flood Protection Board.

THIRTY-FOUR: The permittee shall submit as-built drawings to the Department of Water Resources' Flood Project Inspection Section upon completion of the project.

THIRTY-FIVE: In the event that levee or bank erosion injurious to the adopted plan of flood control occurs at or adjacent to the permitted encroachment(s), the permittee shall repair the eroded area and propose measures, to be approved by the Central Valley Flood Protection Board, to prevent further erosion.

THIRTY-SIX: The permitted encroachment(s) shall not interfere with operation and maintenance of the present or future flood control project. If the permitted encroachment(s) are determined by any agency responsible for operation or maintenance of the flood control project to interfere, the permittee shall be required, at permittee's cost and expense, to modify or remove the permitted encroachment(s) under direction of the Central Valley Flood Protection Board or Department of Water Resources. If the permittee does not comply, the Central Valley Flood Protection Board may modify or remove the encroachment(s) at the permittee's expense.

THIRTY-SEVEN: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if damaged by any cause. If the permittee does not comply, the Central Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

THIRTY-EIGHT: If the project, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project under direction of the Central Valley Flood Protection Board and Department of Water Resources, at the permittee's or successor's cost and expense.

THIRTY-NINE: The permittee shall be responsible for securing any necessary permits incidental to habitat manipulation and restoration work completed in the flood control project, and will provide any biological surveying, monitoring, and reporting needed to satisfy those permits.

FORTY: The permittee should contact the U.S. Army Corps of Engineers, Sacramento District, Regulatory Branch, 1325 J Street, Sacramento, California 95814, telephone (916) 557-5250, as compliance with Section 10 of the Rivers and Harbors Act and/or Section 404 of the Clean Water Act may be required.

FORTY-ONE: The U.S. Army Corps of Engineers District Office has no comments or recommendations regarding flood control because the proposed work does not affect a federally

constructed project, as stated in their letter dated February 13, 2012, which is attached to this permit as Exhibit A and is incorporated by reference.

FORTY-TWO: This permit shall run with the land and all conditions are binding on permittee's successors and assigns.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. Army Engineer District, Sacramento
Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

Flood Protection and Navigation Section (18714)

FEB 13 2012

Mr. Jay Punia, Executive Officer
Central Valley Flood Protection Board
3310 El Camino Avenue, Room 151
Sacramento, California 95821

Dear Mr. Punia:

We have reviewed a permit application by Caltrans (application number 18714). This project includes replacing the existing State Route 99 Bridge over the San Joaquin River in Fresno. The bridge will be widened to 3 lanes in each direction and will follow the existing alignment. The mitigation shown in the application, in the French Camp Conservation Bank, will be addressed in a separate permit application. The project is located northwest of Fresno, at 36.8433°N 119.9328°W NAD83, Fresno and Madera Counties, California.

The District Engineer has no comments or recommendations regarding flood control because the proposed work does not affect a federally constructed project.

A Section 404 permit (2011-1172) has been issued for this work.

A copy of this letter is being furnished to Mr. Don Rasmussen, Chief, Flood Project Integrity and Inspection Branch, 3310 El Camino Avenue, Suite LL30, Sacramento, CA 95821.

Sincerely,

A handwritten signature in black ink, appearing to read "Meegan G. Nagy".

Meegan G. Nagy, P.E.
Chief, Flood Protection and Navigation Section