ADDENDUM / ENVIRONMENTAL REEVALUATION

07-LA-405	0.02/0.03	07-32100 / E-FIS 0716000044
Dist.-Co.-Rte.	**P.M. / P.M.**	**E.A. / Project No.**

Interstate 405 at San Gabriel River Bridge Scour Mitigation Project | Addendum/Environmental Reevaluation to the Previously Approved Negative Declaration (ND)/Finding of No Significant Impact (FONSI)

2 March 2023

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2. ABSTRACT

The purpose of this Addendum/Reevaluation is to address design changes to the Interstate 405 at San Gabriel River Bridge Scour Project since the ND/FONSI was approved on June 7, 2020 (SCH No. 2020040064). This Addendum/Reevaluation will discuss changes in the scope of work for the aforementioned project (final design of temporary river diversion) and capture any update to environmental commitments as a result of related environmental reevaluations.

3. REGULATORY MANDATE

This Environmental Addendum/Reevaluation will identify project changes and reexamine topical categories found in the previous Mitigated Negative Declaration/Finding of No Significant Impact (MND/FONSI) that are relevant to final temporary river diversion plan as they relate to the proposed undertaking. Relevant/identified topical categories analyzed and discussed in this Addendum/Reevaluation are limited to Biological Resources and this Environmental Addendum/Reevaluation will ascertain if there are any changes that may affect the environmental setting or related regulatory changes.

Under NEPA, an Environmental Reevaluation (ER) is a reconsideration of the adequacy or validity of a Categorical Exclusion (CE) determination, a Finding of No Significant Impact (FONSI), or an Environmental Impact Statement (EIS). The purpose is to assess whether any factors would affect the validity of the CE determination or FONSI/EIS environmental document.

An addendum serves a similar purpose under CEQA. In accordance with Section 15164 of the CEQA guidelines, the Lead Agency or Responsible Agency must prepare an addendum to a previously certified Initial Study (IS) if some changes or additions are necessary.

An ER considers such factors as whether pursuant to 23 CFR 771.129:

- There have been changes in the project design or its surroundings and impacts
- Any new right-of-way issues have been identified
- There is new information in laws or regulations that apply to the project

4. EXISTING CONDITIONS

Interstate 405 (I-405, or the San Diego Freeway), is part of the National Highway System, and an essential link in both the Metropolitan Los Angeles and Orange County multi-modal transportation networks and is considered a bypass route to Interstate 5 (I-5). It is an Interstate-Interregional Freeway that originates at its most southerly point at the I-5 Junction in the City of Irvine (Orange County/Caltrans District 12), with its northerly terminus roughly 48.5 miles north at the I-5 Junction near Mission Hills in the City of Los Angeles (Los Angeles County/Caltrans District 7). I-405 primarily serves the major coastal cities in the Los Angeles Basin and Orange County and is a heavily used commuter and freight route that is considered one of the busiest and most congested freeways in the United States. The I-405 facilities are used for international, interstate, and interregional travel and shipping through a corridor that is highly urbanized. The facilities also serve the four major import-export terminals of Los Angeles International Airport, Long Beach Municipal Airport, and the Ports of Los Angeles and Long Beach, in addition to John Wayne Airport in Santa Ana (Orange County). Through Los Angeles County, I-405 functions as a major collector and distributor route that feeds State Routes 19, 47, 213, 107, 90, 187, 2, and 118, Interstates 710, 110, 105, and 10, and U.S. Highway 101.

Interstate 605 (I-605, or the San Gabriel River Freeway), is also part of the National Highway System, and is a major north-south highway that originates at I-405 in Long Beach/Seal Beach in the south and terminates roughly 27 miles north at Interstate 210 (I-210, or Foothill Freeway) in the City of Duarte. The facility runs parallel to the San Gabriel River and largely serves the Gateway Cities of the Los Angeles Basin before crossing the Whittier Narrows and providing a connection to the San Gabriel Valley. I-605 also functions as a major collector and distributor route that feeds State Routes 22, 91, and 60, in addition to Interstates 405, 105, 5, 10, and 210.

Within project limits, the I-405 highway facility and complex of bridge structures traverse the San Gabriel River approximately 3.6 miles upstream from Alamitos Bay/Pacific Ocean and 1.5 miles outside of the Coastal Zone Boundary as established by the California Coastal Act of 1976. The following table is a summary of historic and geometric information, and existing facility conditions for each bridge.

Table 1. Historic/Geometric Bridge Information and Existing Operational Conditions

Bridge No.	Year Built	No. of Lanes	Length (ft)	Minimum Curve Radius (ft)	Service Volume (vehicles per day)	Remarks
53-1185 Northbound/ Southbound I-405 Mainline Bridge	1964	10	399	2400	255,000 (5% trucks)	Continuous, 5-span, RC box girder bridge on solid RC piers, open-end, seated abutments on driven piles
53-1737H Southbound I-605 to Northbound I-405 Connector	1966	2	377	990	40,000 (4% trucks)	Continuous, 5-span, reinforced concrete (RC) box girder bridge on solid RC pier walls, open-end, seated abutments
55-0413F Southbound I-405 to Northbound I-605 Connector	1966	2	1,796	838	20,500 (3% trucks)	Continuous, 17-span RC box birder bridge on RC single-column bents with RC seated abutments

Figure 1. Proposed Project Location and Vicinity

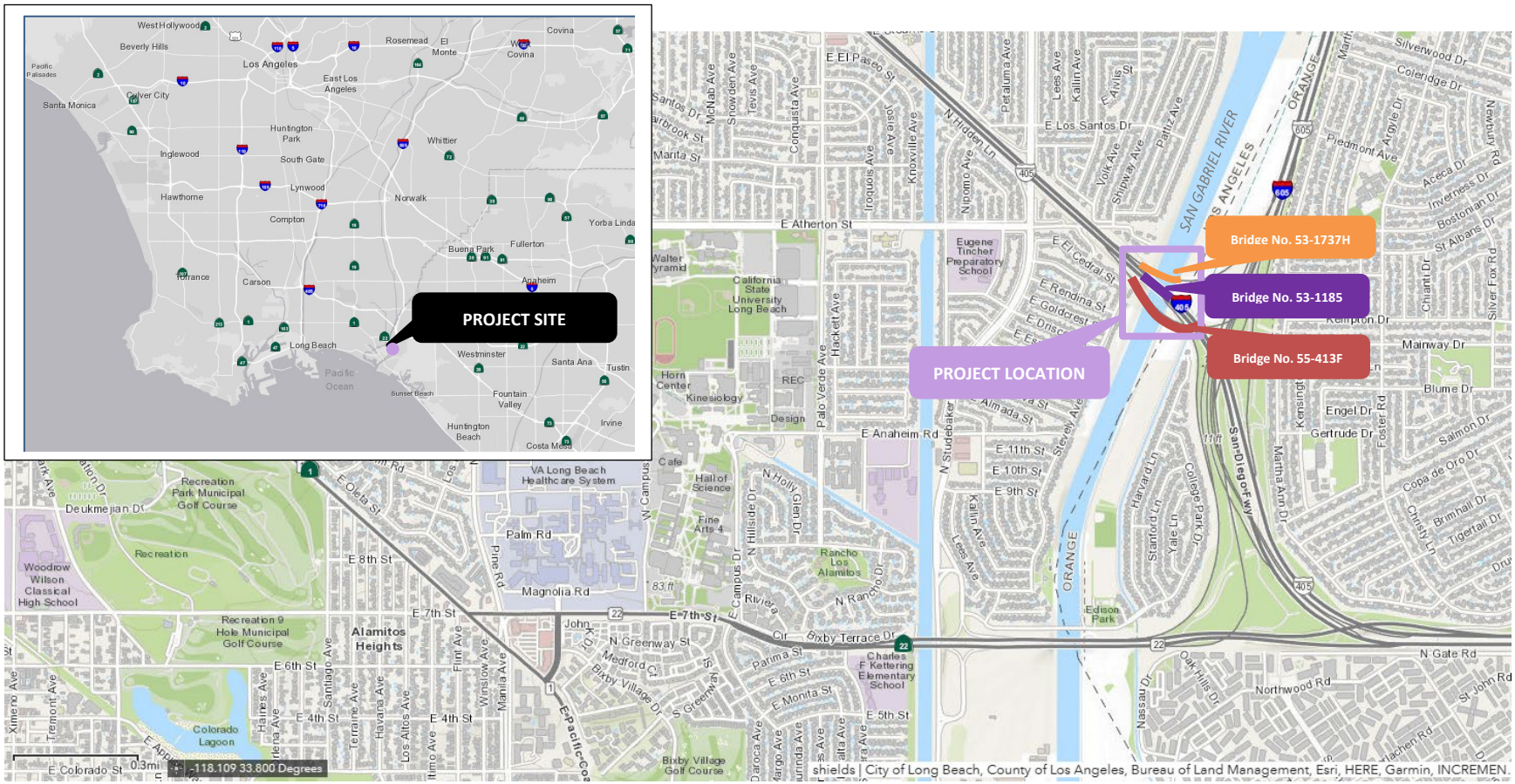


Table 2. Proposed Scope of Work

Proposed Improvements	Bridge No.		
	53-1185 Northbound/ Southbound I-405 Mainline Bridge	**53-1737H** Southbound I-605 to Northbound I-405 Connector	**55-0413F** Southbound I-405 to Northbound I-605 Connector
Retrofit of bridge substructure foundation by constructing pier footing extensions at Pier 3 and Pier 4	X	X	
Reinforcement of new footing extensions through placement of new Cast-In-Drilled-Hole (CIDH) piles	X	X	
Armoring of substructure retrofit through placement of rip-rap/rock protection around each pier	X	X	X

Table 3. Permits and Approvals Needed

Agency	Permit/Approval
US Army Corps of Engineers (USACE)	Clean Water Act (CWA) Section 401/404, Section 408 for alteration of civil works
US Fish and Wildlife Services (USFWS) / National Marine Fisheries Service (NMFS)	Section 7(a)(2) consultation for endangered species
California Department of Fish and Wildlife (CDFW)	1602 Agreement for Streambed Alteration
California Water Resources Board	Section 401 Water Discharge Permit/Certification
Multiple Agencies	Right-of-Entry permitting for temporary construction easements and temporary access roads

5. PREVIOUS ENVIRONMENTAL DOCUMENTATION

CEQA/NEPA Initial Study/Environmental Assessment (IS/EA) with Negative Declaration (ND) / Finding of No Significant Impact (FONSI) (June 17, 2020). The IS/EA with ND/FONSI for the Interstate 405 at San Gabriel River Bridge Scour Mitigation Project was approved by Caltrans as assigned by the Federal Highway Administration (FHWA) on June 17, 2020 [SCH No. 2020040064]. Caltrans is the designated Lead Agency under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), and the project as proposed and presented in the IS/EA with ND/FONSI is subject to federal and state environmental review requirements. The Federal Highways Administration's (FHWA's) responsibility for environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327, and the EA was certified through the preparation of a FONSI for the proposed undertaking. Furthermore, the IS was certified under CEQA through the preparation and issuance of an ND.

The joint NEPA/CEQA environmental documentation found that the proposed undertaking would not have a significant effect on the environment. More specifically, it found that the proposed project would have no effect on Aesthetics, Agriculture, Forest Resources, Mineral Resources, Noise, Population and Housing, Recreation, Tribal Cultural Resources, Utilities and Service Systems, nor Wildfire. It found that the proposed project would have less than significant effects to Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Public Services and Transportation.

Revalidation for Reduction in Scope of Work and Reevaluations/Final Technical Studies Regarding Biological Resources, Geology/Soils, Hydrology/Water Quality, Noise, and Hazardous Waste/Materials (May 19, 2022). Revalidation of the aforementioned IS/EA with MND/FONSI was prepared in May 2022 to capture re-evaluations and final technical studies regarding Biology, Geology, Hydrology, Noise (construction), and Hazardous Waste/Materials. Final geology/geotechnical reporting (Foundation Report, approved November 3, 2021), in conjunction with the Final Hydraulic Report (approved October 13, 2021) provided new/updated total anticipated scour values, and in analysis of the capacity of Piers 3/4 at Bridge No. 55-0413F (Southbound I-405 to Northbound I-605 connector), the scope of work was reduced accordingly through the elimination of 1) pile cap enlargement work, and 2) installation of additional Cast-In-Drilled-Hole (CIDH) piles, through armoring of the existing substructure with rip-rap/rock protection was retained. This reduction in scope of work presented no change to the environmental impacts of the project, therefore, no additional updates to environmental studies were warranted at that time.

Concurrently, a preliminary proposal for temporary water diversion within the San Gabriel River during construction was presented to the Division of Environmental Planning, through methodology (sheet pile cofferdam versus super-sack cofferdam) and design of the temporary structure was not yet finalized, which is required for final biological determinations/consultation with NOAA Fisheries regarding Section 7 of the Endangered Species Act for the Green Sea Turtle (species and habitat present in the project study area).

6. CHANGES IN THE PROJECT SETTING

There are no substantial changes in the project environmental setting that would affect the previous analyses prepared for the MND/FONSI approved June 7, 2020, nor the previous environmental revalidation approved on May 19, 2022.

7. PROJECT CHANGES AND EFFECTS

Final Design of Temporary River Diversion. Temporary diversion of flow of the San Gabriel River is required to construct the improvements associated with the proposed undertaking. Since the last environmental evaluation, it has been determined that the duration of construction is estimated at 1 year, and that work will be restricted to the dry season, with construction planned from April 15 to October 15. To assure that the proposed undertaking does not reduce the current channel design conveyance capacity or introduce potentially unstable flow conditions during construction, maintenance of 33% of channel design flow [19,800 cubic feet per second (CFS)] will be required from April-May and for the period of September-October. For the summer period (June-August), maintenance of 5% channel design flow (3,000 cfs) is required during temporary river diversion.

Temporary river diversion during construction will be achieved through the installation of two 10-feet-high super-sack dams that will span the full width of the channel from the east-to-west banks. Two (2) 66-inch diameter High Density Polyethylene (HDPE) pipes will be installed parallel to the western bank of the channel to maintain water flow during diversion/construction. The following Figure 2 presents the location and profile of the super-sack dams within the San Gabriel River channel, and Figures 3 presents the profile of the temporary river diversion structure.

Figure 2. Temporary River Diversion Plan for San Gabriel River Channel During Construction

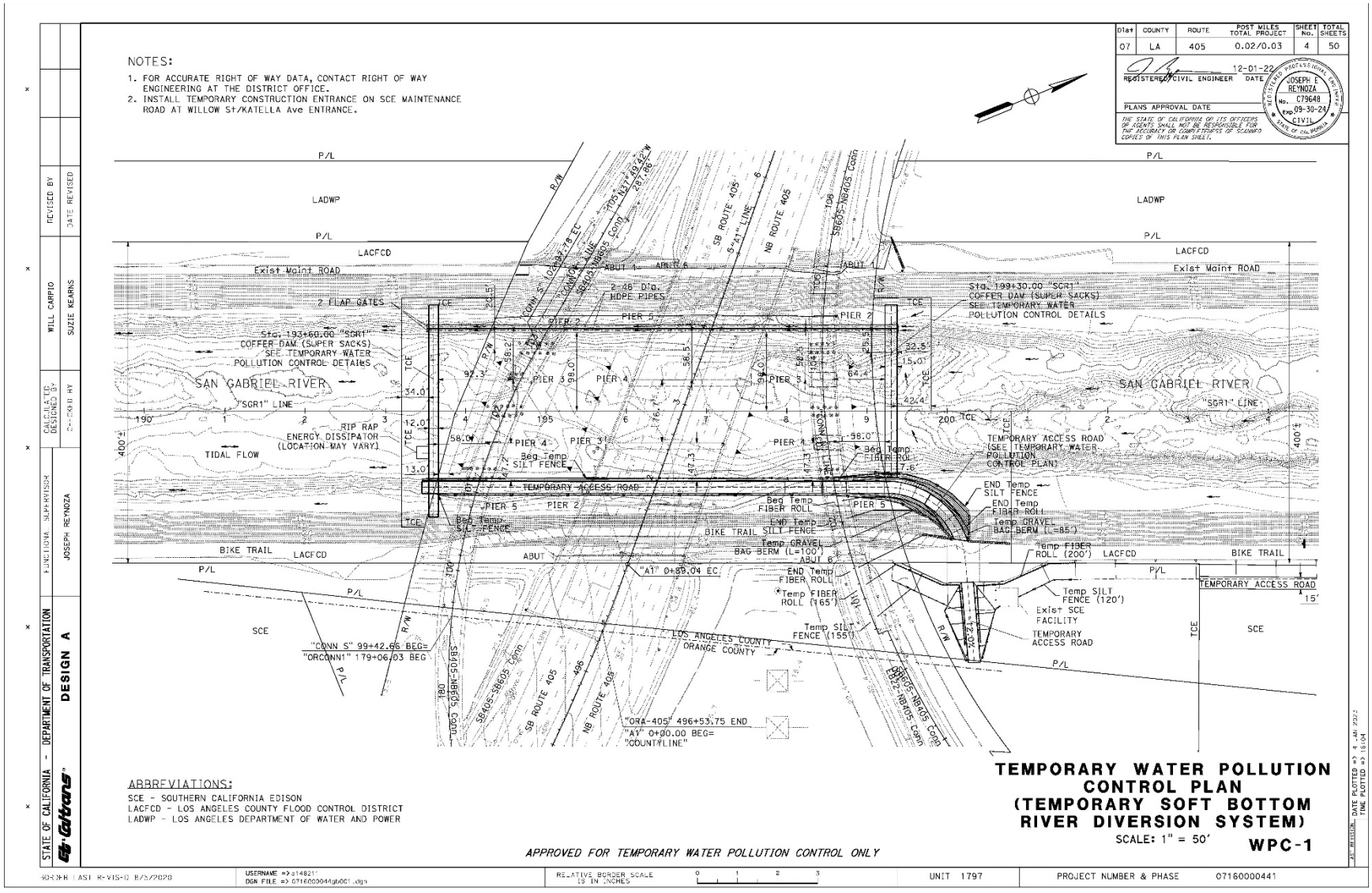
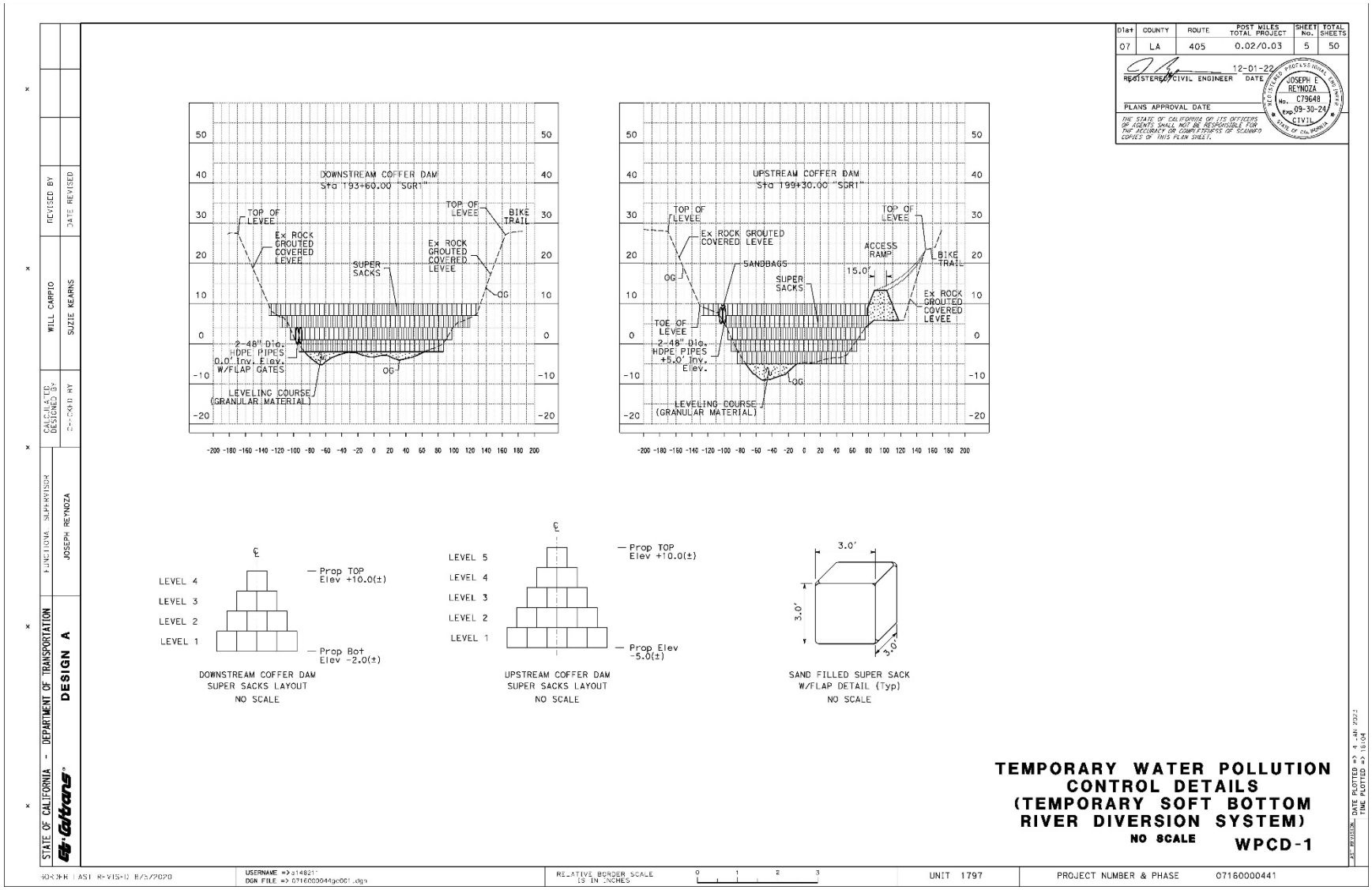


Figure 3. Profile of Upstream and Downstream Super-Sack Dams within the San Gabriel River Channel



8. ENVIRONMENTAL REEVALUATION

Environmental analyses were conducted to reevaluate the change in scope of work (final design of temporary river diversion). At this time, environmental reevaluation was limited to the topic of biological resources, deemed relevant in consideration of the aforementioned scope of work. An amendment (March 1, 2023) to the Natural Environment Study (NES) [previously approved February 16, 2022] was completed to determine the type and degree of impacts associated with the aforementioned project scope change, and the original NES, Amendment to the NES, and all other environmental documentation and supporting technical studies are available for review at the Caltrans District 7 Offices, Division of Environmental Planning, located at 100 S. Main Street, Los Angeles, California 90012.

8.1 Biological/Natural Environment

Reference NES Amendment for the Interstate 405 at San Gabriel River Bridge Scour Mitigation Project, March 1, 2023

8.1.1 Revisions Regarding Project Impacts to Plant Communities

Temporary impacts to marine tidal area within the project limits would occur when the cofferdams are installed and the area is de-watered. Temporary impacts would also occur to the confined upstream area between the upstream coffer dam and the drop structure separating the concrete lined channel and the soft bottom and would become predominantly fresh water due to lack of regular tidal flow. Temporary impact would also occur to the disturbed and ruderal areas within equipment lay-down and to developed areas during equipment movement. Once the coffer dams are removed and water flows naturally again, the marine tidal area is expected to recover within relatively short period due to tidal flow and regular flushing of impounded fresh water. Exposure to tidal flow will allow for establishment of algae and invertebrate marine organisms, which are known to initiate establishment within 12 weeks. Therefore, impacts to this area resulting from de-watering is considered temporary and less than substantial.

The coffer dams to be installed would be constructed using super-sacks filled with sand and gravel and placed in a linear pyramid fashion from one bank to the other. One dam would be placed downstream of the work area and one upstream with two 48” diameter pipes with tidal gates connecting to allow low flow to occur downstream at low tides. The placement of the cofferdams would create a temporary impact to the area of placement as they would be removed at the end of the project.

An impact would occur during the installation and removal of the temporary access road to the dewatered area. Installation of this road would require excavation at the top of slope and fill material placed at the bottom of slope to create the necessary grade for truck access. This disturbance of soil would occur after dewatering and therefore impact to natural resources would be minimized. This access road would require the temporary removal or fill of part of the slope, particularly the fill over rock and non-native plants at the toe of slope. Because the existing terrestrial plants are non-native, this impact should be considered beneficial to the natural environment. Rocks located at the toe of slope within the tidal area can provide structure, to some degree, for algae and marine invertebrates. This area would be covered during the project and would directly impact any marine algae or invertebrates occurring. However, this area would be returned to original conditions after the completion of the project so these impacts should be considered temporary.

A large area (1.6 acres) within the dewatered area, the location around all bridge piers and footings, would be excavated, soil removed, and filled with rock rip-rap for erosion protection. This action is to reduce the effects of erosion and is the main purpose of this proposed project, along with pier and footing enlargement. The soil within this area is clay due to high erosion of silt and sandy material and therefore has little, if any, biological value. During SCUBA site investigations, no algae, marine invertebrates, or Essential Fish Habitat was observed. Because there is little to no marine life within this area, the removal of this clay material should be considered less than substantial.

The placement of rock within this area as fill material to reduce erosion can be considered impactful in different ways. Clearly, the placement of rock in an area that has been historically silty-sand (currently silty-clay) is unnatural and should be considered a developed condition. However, the existing conditions of a channelized San Gabriel River is also unnatural, even with a soft bottom river. The channelizing of the river has created conditions that promote swift moving water and therefore higher erosion of natural soils. This is noted by a compacted hard clay bottom (pers. observation, Jeff Johnson and Andrew Johnstone), sand is washed away, and the erosion at the base of the bridge columns which is the very reason for the need for this proposed project. Many other locations within the area known as the greater San Pedro Bay Delta (including Los Angeles River, San Gabriel River, Santa Ana River, and smaller creeks and outlets) have natural silty sand at the river mouths and is

therefore suitable conditions for Essential Fish Habitat (eelgrass). The erosion within this channelized reach prevents sediment build-up necessary for eelgrass as is found for example in Alamitos Bay and Anaheim Bay.

Dr. Larry Allen in his study of reef fish assemblage of outer Long Beach breakwater describes the value of rocky coastline. The first few sentences of his introduction read, "Rocky reefs are among the most important but least abundant habitats within the southern California bight (Cross and Allen 1993). More than 125 species of fish have been documented in this habitat, more than 25% of the Californian marine total (Quast 1968b; Feder et al. 1974; Horn and Allen 1978). Artificial reefs have been constructed within the bight to augment natural reefs and to mitigate lost natural reefs through development or habitat degradation. (Ambrose 1994). Although not their primary purpose, breakwaters form artificial reefs and have been shown to be effective fish enhancement structures in urban areas (Stephens et al. 1994)." (The Reef Fish Assemblage of the Outer Los Angeles Federal Breakwater, 2002-2003 2005).

As stated previously, relatively little algae and few macroinvertebrates have been observed on rock and hard structures within the tidal areas of the project site, relative to the manmade rocky outer breakwaters of Los Angeles and Long Beach. General observations of rocky shoreline within other parts of Los Angeles, Long Beach and Anaheim Bay Inner Harbors (pers. observation Jeff Johnson and Andrew Johnstone), and without conducting a formal survey of abundance and diversity, observed marine life appears more similar to other inner harbor rocky areas than the outer breakwaters. This author is under no illusion that rock placed within a tidal reach of the San Gabriel River would compare well to the abundance and diversity of the outer breakwater reefs; however, it is reasonable to believe that these rocks would provide structure for algae and macroinvertebrates similar to those existing within the river and adjacent inner bays, which is greater than the existing conditions (pers. observation Jeff Johnson and Andrew Johnstone).

Ideally, restoring the San Gabriel River to its' natural condition would require removing the Army Corp of Engineers levee structure and allowing the river to flow as historically in a meandering fashion. Obviously, this is not possible. Installing un-grouted rock in a tidal area can be biologically beneficial.

Installation of the rock should be seriously considered as a net benefit to the biological resources when also considering the existing conditions. However, it should be noted the limits of benefit due to the highly urbanized location and potentially changing water conditions, although improving over time.

Table 4. Permanent/Temporary Impacts to Plant Communities/Land Cover

Plant Community/Land Cover	Permanent Impact (Acres)	Temporary Impact (Acres)
Open Water/Marine Tidal	1.60	13
Disturbed Non-native Trees and Shrubs	0.01	1
Ruderal	0	2.5
Developed	0	2.0
Total	**1.61**	**15.5**

Table 5. Permanent/Temporary Impacted Area by Bridge Structure

Structure		Permanent Impacted Area			Temporary Impacted Area (Structures Only)		
Bridge No.	**Pier No.**	**Length (FT)**	**Width (FT)**	**Area (SF)**	**Length (FT)**	**Width (FT)**	**Area (SF)**
53-1185	3	272	72	19,584	210	146	30,660
	4	269	72	19,368	210	146	30,660
53-1737H	3	155	72	11,160	210	146	30,660
	4	155	72	11,160	210	146	30,660
55-0413F	3	155	82	12,710	210	146	30,660
	4	155	82	12,710	210	146	30,660
Subtotal				86,692			183,960

Table 6. Excavation Impact by Bridge Structure

Structure		Excavation Impact (Footings)				
Bridge No.	**Pier No.**	**Length (FT)**	**Width (FT)**	**Net Area (SF)**	**Height (FT)**	**Volume (CY)**
53-1185	3	162	18	2,043	5	378
	4	159	18	2,010	5	372
53-1737H	3	45	20	699	5	130
	4	45	20	699	5	130
55-0413F	3	45	30	710	5	131
	4	45	30	710	5	131
Subtotal				6,872		1,273

Table 7. Excavation Impact (Placement of Rip-Rip) by Bridge Structure

Structure		Excavation Impact (Rip-Rap)				Backfill (Rip-Rap)			
Bridge No.	**Pier No.**	**Length (FT)**	**Width (FT)**	**Height (FT)**	**Volume (CF)**	**Length (FT)**	**Width (FT)**	**Height (FT)**	**Volume (CF)**
53-1185	3	272	72	17	12,331	272	72	17	12,331
	4	269	72	17	12,195	269	72	17	12,195
53-1737H	3	155	72	17	7,027	155	72	17	7,027
	4	155	72	17	7,027	155	72	17	7,027
55-0413F	3	155	82	17	8,003	155	82	17	8,003
	4	155	82	17	8,003	155	82	17	8,003
Subtotal					54,584				54,584

Table 8. Temporary Impacted Area – Temporary Construction Easements (TCEs)/Access

Temporary Impacted Area (TCE/Access)	
APN #	**Area (SF)**
7235-004-801	184,000
7238-030-800	40,000
086-501-18	50,000
7238-030-802	7,000
086-011-51	40,000
7238-030-906	59,000
7238-030-273	22,000
Subtotal	402,000

Total Permanent Impacted Area (SF):	86,692
Total Temporary Impacted Area (SF):	585,960
Total Excavation Volume (CY):	55,856

Compensatory Mitigation for Project Impacts to Plant Communities. Temporary and permanent impacts would occur to marine tidal areas. Approximately 13 acres will be temporarily impacted due to de-watering. It is expected that this area would return to original conditions within a relatively short time due to tidal influence. Caltrans is committed to restoring the temporary impact areas of the San Gabriel River to pre-project conditions. A detailed Habitat Mitigation and Monitoring Plan (HMMP) will be produced with the coordination and approval of resource agencies as part of their respective permitting. Details of the restoration plan will be included in the HMMP to be completed by the next project milestone.

Permanent impacts are expected from the increased size of the footings and placement of rock rip-rap at the base of each structure, which are 1.6 acres total. Mitigation related to this permanent conversion of soft bottom river to developed condition is described in Section 8.1.6 Jurisdictional Resources.

8.1.2 Revised Discussion Regarding Impacts to Special-Status Animal Species – Steelhead, Southern California DPS (*Oncorhynchus mykiss*)

Steelhead, Southern California Distinct Population Segments, is designated Endangered under the Endangered Species Act. No designation status under California Endangered Species Act is afforded this species. This species can be found in streams, creeks, and rivers of southern California. Adults will move from bays, upstream during fall/winter rainy periods to lay eggs. Juveniles will move downstream into the bays during the spring and summer months.

Survey Results. Steelhead are known to have occurred within the San Gabriel River historically and may be present in the future. No focused survey for presence was performed because it is assumed they could be present during any year (seasonally as described above) in the future.

Project Impacts. This project is not expected to impact individuals of this species because work will be limited to periods when individuals are not expected to be present. However, it is possible that an individual could try to pass through the diversion pipe of the site during the construction period. This individual, if present, could be impacted by the implementation of the proposed project but not likely to have an adverse effect.

Cumulative Effects. No cumulative effects are anticipated because there is no impact to this species as a result of this project.

Avoidance and Minimization Efforts. Work shall be conducted only during the dry season (May-September).

Compensatory Mitigation. There is no mitigation proposed at this time as this project is not expected to impact individual species and will result in a no-net loss of its habitat.

8.1.3 Revised Discussion Regarding Impacts to Special-Status Animal Species – Green turtle (*Chelonia mydas)*

Range of the green turtle is throughout tropical and sub-tropical waters worldwide, including southern California. These turtles move across three habitat types throughout their life, depending on stages. Mature turtles spend most time in shallow, coastal waters grazing on seagrass. Adults lay eggs on sandy beaches and young individuals spend several years in pelagic waters.

Survey Results. Green turtles have been observed within the San Gabriel River and one was observed during our study. Also, The Aquarium of the Pacific is known to be conducting a tracking study of 22 individuals and have tracked some into the San Gabriel River. The number of individuals that use the river and to what extent is unknown; however, due to Caltrans observations and those noted in public databases it is thought that although it is used from time to time, general observations by volunteers at the Long Beach Aquarium have observed numerous turtles congregating on the rock drop structure at the upper most tidal area where it meets warm freshwater input. Therefore, it is thought that individuals will continue to investigate this reach of the river.

Project Impacts. With the implementation of the above-described measures, this project is not expected to impact individuals of this species, with the exception of the temporary loss of potential foraging habitat. However, there is the likelihood that individual turtles would approach the project site in search of foraging habitat and be turned away. This could constitute an effect to an individual, although not an adverse effect. Work would be stopped should any individuals approach the project site.

Cumulative Effects. Since there is no impact to this species as a result of this project, no cumulative effects are anticipated.

Avoidance and Minimization Efforts. A biological monitor shall be present prior to start of construction on each day to survey the river and continually monitor for the presence of a turtle. Should one be observed swimming upstream and approaching the site, work shall be stopped until the turtle naturally moves away and toward the mouth of the river to avoid impacts resulting from noise. To help avoid stranding of turtles on the cofferdam supersack structure, panels will be installed on the marine side of the dam creating a smooth surface, eliminating the "shelfs" created by pyramid stacking of the sacks.

Compensatory Mitigation. Informal Section 7 consultation has been initiated with NMFS and a determination of "may affect/not likely to adversely affect" has been made regarding this species. Individuals of this species are not expected to be impacted substantially by this project and therefore no mitigation is proposed at this time.

8.1.4 Revised Discussion Regarding Impacts to Special-Status Animal Species – Western pond turtle (*Emys marmorata*)

Western pond turtles are designated as a species of special concern (SSC) by CDFW but are not listed under ESA or CESA. They are often found in slow-moving waterways where movement to upland habitat and presence of basking sites is necessary. Upland habitat is necessary as that is where egg laying occurs. They also burrow underground over winter. Basking occurs in the warmer months on logs and boulders. They are aquatic and require a perennial water source for breeding. Their carapace is dark brown to olive colored, with a lack of prominent markings.

Survey Results. No western pond turtle individuals were observed within the project limits or BSA. However, individual occurrences were noted in the public agency databases of being at the confluence of the San Gabriel River and Coyote Creek and at the mouth of the river. Individuals are also known to occur at the nearby El Dorado East Regional Park in the City of Long Beach, located upstream. Breeding habitat does not currently occur for this species within the project limits.

Project Impacts. This project is not expected to impact individuals of this species. However, there is a possibility that individuals could approach the project site in search of foraging habitat and be turned away. This could constitute an effect to an individual, although not an adverse effect. Work would be stopped should any individuals approach the project site.

Cumulative Effects. Since there is no impact to this species as a result of this project, no cumulative effects are anticipated.

Compensatory Mitigation. There is no mitigation proposed at this time as this project is not expected to impact individual species.

8.1.5 Revised Discussion Regarding Impacts to Special-Status Animal Species – California least tern (*Sterna antillarum browni*)

California least tern is a migratory bird spending breeding season, March through July, in southern California. Winter months are spent in central and south America. This species is a ground nesting bird on open sandy beaches. It feeds on small fishes along the coastal area and calm back bay areas, including some tidal areas of the San Gabriel River.

Survey Results. Suitable hunting habitat for this species occurs within the BSA and individuals were noted within the river during site visits, although down-stream. Also, occurrences of this species are in the resource agencies public databases. No suitable nesting habitat is present within the project limits.

Project Impacts. As stated above, California least terns are known to hunt within one mile of harbors, bays, and shore. Because the proposed project site is several miles upstream, terns are not expected to forage within project limits. Although unlikely given what is known about local tern behavior, it is possible that an individual California least tern could fly upstream an unexpected distance in search of food. If this were to occur, several acres of potential hunting area would be temporarily removed for the individual. The total of temporarily impacted hunting area when compared to what is available in the greater foraging area is unappreciable. However, an individual tern could be impacted if hunting further inland near the project site, although this impact would not likely be an adverse impact.

Cumulative Effects. No cumulative effects are anticipated.

Avoidance and Minimization Efforts. A biological monitor shall be present prior to start of construction on each day to survey the river and continually monitor for the presence of hunting terns. Should one be observed hunting within the adjacent water, work shall be stopped until the tern naturally moves away. It should be noted that terns are not expected to forage this far up-stream as they are known to forage within approximately one mile of harbors, bays and shore.

Compensatory Mitigation. There is no mitigation proposed at this time as this project is not expected to impact individuals and will result in a no-net loss of its habitat. It should be noted that USFWS consultation is ongoing and informal Section 7 consultation may be required regarding this species.

8.1.6 Revised Discussion Regarding Impacts to Jurisdictional Waters

This reach of the San Gabriel River is tidal influenced and can be about six to twelve feet deep in the middle of the channel, depending on tide. Therefore, this reach of the river is under the USACE jurisdiction as waters of the U.S., and under the jurisdiction of the SWRCB and CDFW as waters of the state. As such, a Section 404 Individual Permit (USACE), Section 401 Certification (SWRCB), and 1602 Lake and Streambed Alteration Agreement (CDFW) will be obtained prior to any impacts to jurisdictional resources.

Survey Results. A jurisdictional delineation was conducted in August 2019 and its detailed results can be viewed in Appendix F: Jurisdictional Delineation. Acreage calculations should be considered preliminary until designs are finalized and jurisdiction is verified by USACE, SWRCB, and CDFW.

USACE, SWRCB, and CDFW Jurisdiction. The project limits include areas of the tidal influenced San Gabriel River. ACOE jurisdiction is considered bank to bank at the mean high tide mark, State jurisdictional boundaries also are bank to bank but include the banks to top of slope.

Project Impacts. Temporary and permanent impacts to jurisdictional resources will occur with the implementation of this proposed project. The following table summarizes the permanent and temporary impacts to jurisdictional waters within the project limits.

Table 9. Permanent/Temporary Impacts to Jurisdictional Waters

Plant Community/Land Cover	Permanent Impact (Acres)	Temporary Impact (Acres)
Army Corps of Engineers	1.6	13
California Fish and Wildlife	2.0	15
California State Water Board	2.0	15

Project Impacts. The placement of the coffer dams will affect the tidal waters within and upstream of the proposed project site. These dams shall be placed as close to the downstream side of the bridge structures as possible to allow equipment to move safely, but no further to minimize the de-watered area. Placement of permanent rock rip-rap is designed to be as small as necessary, impacting as little an area as possible yet still meet project needs.

To further reduce impacts to jurisdictional waters, the following avoidance and minimization measures will be implemented:

1. All work within San Gabriel River will be conducted outside of the rainy season (November 1st- April 1st).
2. Temporary construction staging areas and access roads will be strategically placed to avoid and/or minimize impacts to USACE, RWQCB, and CDFW jurisdictional waters to the extent feasible and are expected to be enhanced to pre-project conditions.

Compensatory Mitigation. Coordination with USACE, RWQCB, and CDFW is ongoing to determine the level of on-site restoration and off-site mitigation, if any, within the appropriate watershed. Since this project has the potential for substantial amounts of temporary and permanent impacts within San Gabriel River, off-site mitigation could be challenging.

Caltrans is committed to restoring the temporary impact areas of the San Gabriel River to pre-project conditions. A detailed Habitat Mitigation and Monitoring Plan will be produced with the coordination and approval of resource agencies as part of their respective permitting. Details of the restoration plan will be included in the HMMP. Caltrans is committed to implementing all mitigation measures within all resource agency permits. Typical measures for this type of project would include both on-site restoration and off-site in-lieu.

9. ENVIRONMENTAL DETERMINATION

Analysis of the proposed project's relationship to the surrounding environment, the final approved environmental document and its impacts, and the ensuing environmental reevaluation provide the basis for the following determinations:

a. The circumstances surrounding the project remain essentially the same as they were when the final IS/EA was considered and approved.
b. The area's social, economic, and environmental setting remains essentially the same as when the IS/EA for the Interstate 405 at San Gabriel River Bridge Scour Mitigation Project was written.

In addition, the environmental review, consultation, and any other action required in accordance with applicable Federal Laws for this project is being, or has been, carried out by the State of California Department of Transportation under its assumption of responsibility pursuant to 23 U.S.C. 327.

This Addendum/Environmental Reevaluation to the Negative Declaration is hereby approved pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15164 which limits its use to minor technical changes or additions in the project scope, impacts, and mitigation measures identified in the preceding pages.

E Aguilar 03/02/2023

EDUARDO AGUILAR **Date**
Senior Environmental Planner/Branch Chief
Caltrans District 7 Division of Environmental Planning

NEPA/CEQA RE-VALIDATION FORM

DIST-CO-RTE: 07-LA-405
PM/PM: PM 0.02/0.03
EA or Fed-Aid Project No.: EA 07-32100
Other Project No. (specify): E-FIS 0716000044
Project Title: Interstate 405 at San Gabriel River Bridge Scour Mitigation Project
Environmental Approval Type: IS/EA w/ND/FONSI
Date Approved: June 7, 2020
Reason for Consultation (23 CFR 771.129), check one: ☐ Project proceeding to next major federal approval ☒ Change in scope, setting, effects, mitigation measures, requirements ☐ 3-year timeline (EIS only) ☐ **N/A** (Re-Validation for CEQA only)
Description of Changed Conditions: *Revalidation for change in scope of work (final design of temporary river diversion) and environmental reevaluation limited to Biological Resources*

NEPA CONCLUSION - VALIDITY

Based on an examination of the changed conditions and supporting information: (*Check ONE of the three statements below, regarding the validity of the original document/determination (23 CFR 771.129). If document is no longer valid, indicate whether additional public review is warranted and whether the type of environmental document will be elevated.*)

☐ **The original environmental document or CE remains valid. No further documentation will be prepared.**

☒ **The original environmental document or CE is in need of updating; further documentation has been prepared and ☐ is included on the continuation sheet(s) or ☒ is attached. With this additional documentation, the original ED or CE remains valid.**

Additional public review is warranted (23 CFR 771.111(h)(3)) ☐ Yes ☒ No

☐ **The original document or CE is no longer valid.**

Additional public review is warranted (23 CFR 771.111(h)(3)) ☐ Yes ☐ No

Supplemental environmental document is needed. ☐ Yes ☐ No

New environmental document is needed. ☐ Yes ☐ No (If "Yes," specify type:)

CONCURRENCE WITH NEPA CONCLUSION

I concur with the NEPA conclusion above.

E Aguilar — 03/02/2023

Signature: Eduardo Aguilar, Environmental Branch Chief — Date

Gabe Hamidi — 03/02/2023

Signature: Gabe Hamidi, Project Manager — Date

CEQA CONCLUSION (Only mandated for projects on the State Highway System.)
Based on an examination of the changed conditions and supporting information, the following conclusion has been reached regarding appropriate CEQA documentation: (*Check ONE of the five statements below, indicating whether any additional documentation will be prepared, and if so, what kind. If additional documentation is prepared, attach a copy of this signed form and any continuation sheets.*)

☐ **Original document remains valid. No further documentation is necessary.**

☒ **Only minor technical changes or additions to the previous document are necessary. ☒ An addendum has been or will be prepared and is ☐ included on the continuation sheets or ☒ will be attached. It need not be circulated for public review. (CEQA Guidelines, §15164)**

☐ **Changes are substantial, but only minor additions or changes are necessary to make the previous document adequate. A Supplemental environmental document will be prepared, and it will be circulated for public review. (CEQA Guidelines, §15163)**

☐ **Changes are substantial, and major revisions to the current document are necessary. A Subsequent environmental document will be prepared, and it will be circulated for public review. (CEQA Guidelines, §15162)**
(Specify type of subsequent document, e.g., Subsequent FEIR):

☐ **The CE is no longer valid. New CE is needed. ☐ Yes ☐ No**

CONCURRENCE WITH CEQA CONCLUSION
I concur with the CEQA conclusion above.

E Aguilar — 03/02/2023
Signature: Eduardo Aguilar, Environmental Branch Chief — Date

Gabe Hamidi — 03/02/2023
Signature: Gabe Hamidi, Project Manager — Date

CONTINUATION SHEET(S)

Changes in project design, e.g., scope change; a new alternative; change in project alignment.

Final Design of Temporary River Diversion. Temporary diversion of flow of the San Gabriel River is required to construct the improvements associated with the proposed undertaking. Since the last environmental evaluation, it has been determined that the duration of construction is estimated at 1 year, and that work will be restricted to the dry season, with construction planned from April 15 to October 15. To assure that the proposed undertaking does not reduce the current channel design conveyance capacity or introduce potentially unstable flow conditions during construction, maintenance of 33% of channel design flow [19,800 cubic feet per second (CFS)] will be required from April-May and for the period of September-October. For the summer period (June-August), maintenance of 5% channel design flow (3,000 cfs) is required during temporary river diversion.

Temporary river diversion during construction will be achieved through the installation of two 10-feet-high super-sack dams that will span the full width of the channel from the east-to-west banks. Two (2) 66-inch diameter High Density Polyethylene (HDPE) pipes will be installed parallel to the western bank of the channel to maintain water flow during diversion/construction.

Changes in environmental setting, e.g., new development affecting traffic or air quality.
N/A

Changes in environmental circumstances, e.g., a new law or regulation; change in the status of a listed species.
N/A

Changes to environmental impacts of the project, e.g., a new type of impact, or a change in the magnitude of an existing impact.

An amendment (March 1, 2023) to the Natural Environment Study (NES) [previously approved February 16, 2022] was completed to determine the type and degree of impacts associated with the aforementioned project scope change, revisions/changes were made regarding the following:

- Plant Communities
- Special-Status Animal Species – Steelhead, Southern California DPS (*Oncorhynchus mykiss*)
- Special-Status Animal Species – Green turtle (*Chelonia mydas*)
- Special-Status Animal Species – Western pond turtle (*Emys marmorata*)
- Special-Status Animal Species – California least tern (*Sterna antillarum browni*)
- Impacts to Jurisdictional Waters

Reference the attached Project Addendum/Environmental Reevaluation for a detailed discussion of revisions/changes regarding the aforementioned biological resources topics.

Changes to avoidance, minimization, and/or mitigation measures since the environmental document was approved.

N/A

Changes to environmental commitments since the environmental document was approved, e.g., the addition of new conditions in permits or approvals. When this applies, append a revised Environmental Commitments Record (ECR) as one of the Continuation Sheets.

A revision was made to the ECR to include the completion of a Habitat Monitoring and Mitigation Plan (HMMP) upon completion of coordination with resource agencies as part of their respective permitting.

ANIMAL SPECIES

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
ANI-01	Biological Monitoring (Green Sea Turtle/Western Pond Turtle)	Project Biologist/ Resident Engineer		Construction		NESR (2/10/2022)	A biological monitor shall be present prior to start of construction on each day to survey the river and continually monitor for the presence of the Green Sea Turtle.
ANI-02	Presence of Green Sea Turtle/Western Pond Turtle and Work Stoppage	Resident Engineer/ Project Biologist		Construction		NESR (2/10/2022)	Should a turtle be observed swimming upstream and approaching the construction site, work shall be stopped until the turtle naturally moves away and toward the mouth of the river to avoid impacts resulting from noise.
ANI-03	Biological Monitoring (California least tern)	Project Biologist/ Resident Engineer		Construction		NESR (2/10/2022)	A biological monitor shall be present prior to start of construction on each day to survey the river and continually monitor for the presence of foraging terns.
ANI-04	Presence of California Least Tern and Work Stoppage	Resident Engineer/ Project Biologist		Construction		NESR (2/10/2022)	Should a tern be observed foraging within the adjacent water, work shall be stopped until the tern naturally moves away.
ANI-05	Burrowing Owl Protocol Surveys	Project Biologist/ Resident Engineer		Construction		NESR (2/10/2022)	A protocol burrowing owl survey shall be conducted within one year prior to start of construction. If individuals are noted, consultation with California Fish and Wildlife shall occur prior to start of construction.

CULTURAL RESOURCES

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
CUL-01	Review of Project PS&E by Architectural Historian	Design Engineer, Architectural Historian, ECL, Generalist		Pre-Construction		IS/EA, SOIS Action Plan for Protection of the Los Angeles County Flood Control Historic District (LACFCHD).	The Caltrans Architectural Historian will review for approval the Project, Specifications & Estimates Packages at 65%, 95% and 100% stages to ensure that proposed project work conforms to the SOIS Action Plan.
CUL-02	Inclusion of SOIS Action Plan and *Operation, Maintenance, Repair, Replacement, and Rehabilitation Manual for the Los Angeles County Drainage Area, California* are included in ECR	Architectural Historian, ECL, Generalist		Pre-Construction		IS/EA, SOIS Action Plan for Protection of the Los Angeles County Flood Control Historic District (LACFCHD).	The Caltrans Architectural Historian, Generalist, and ECL will ensure the SOIS Action Plan as well as the *Operation, Maintenance, Repair, Replacement, and Rehabilitation Manual for the Los Angeles County Drainage Area, California* are included in the Environmental Commitments Record (ECR).
CUL-03	Inclusion of SOIS Action Plan and *Operation, Maintenance, Repair, Replacement, and Rehabilitation Manual for the Los Angeles County Drainage Area, California* are included in final PS&E	Design Engineer, Architectural Historian, ECL, Generalist		Pre-Construction		IS/EA, SOIS Action Plan for Protection of the Los Angeles County Flood Control Historic District (LACFCHD).	The Caltrans Design Manager and Design Engineer will ensure the necessary and relevant sections and pages from the *Operation, Maintenance, Repair, Replacement, and Rehabilitation Manual for the Los Angeles County Drainage Area, California* are included in the final plans. This should, at a minimum, include the Standard Plans and Data Sheets for San Gabriel River Channels within the project area (SGR-A-2, SGR-1-3, and SGR-C-1).
CUL-04	Invitation of Architectural Historian and Environmental Construction Liaison (ECL) to Pre-Construction Meeting	Resident Engineer, Architectural Historian, ECL, Generalist, Contractor		Pre-Construction		IS/EA, SOIS Action Plan for Protection of the Los Angeles County Flood Control Historic District (LACFCHD).	The Caltrans Architectural Historian and the ECL will provide information related to the preservation of the LACFCD to the other responsible parties at the pre-construction meeting. This discussion will include describing the LACFCD and how it will be protected during construction by using the SOIS Action Plan and the *Operation, Maintenance, Repair, Replacement, and Rehabilitation Manual for the Los Angeles County Drainage Area, California.* Training can be provided to the contractor and their staff should it be deemed necessary by the Caltrans Resident Engineer and the Caltrans Architectural Historian.

CULTURAL RESOURCES (continued)

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
CUL-05	Construction Monitoring by Architectural Historian	Architectural Historian, ECL, Resident Engineer		Construction		IS/EA, SOIS Action Plan for Protection of the Los Angeles County Flood Control Historic District (LACFCHD).	The Caltrans Architectural Historian and Caltrans ECL will periodically monitor the progress of the construction to ensure the work conforms to the SOIS Action Plan. Should any work not conform to the SOIS, the Caltrans Architectural Historian and ECL shall inform the Caltrans Resident Engineer. Construction will stop, and a plan will be developed to correct the work to comply with the SOIS Action Plan. Only then will work resume.
CUL-06	Restrictions on Unforeseen Reconstruction of the Los Angeles County Flood Control Historic District (LACFCHD)	Resident Engineer, Contractor		Construction		IS/EA, SOIS Action Plan for Protection of the Los Angeles County Flood Control Historic District (LACFCHD).	Should any portion of the LACFD need reconstruction during construction of this project, the contractor will reconstruct the subject portions in accordance to the guidance found in the *Operation, Maintenance, Repair, Replacement, and Rehabilitation Manual for the Los Angeles County Drainage Area, California.* This includes but is not limited to Appendix VI, Project Data Sheets (SGR-A-2, SGR-1-3, and SGR-C-1), and any subsequent or related applicable guidance.
CUL-07	Confirmation of Tasks Associated with SOIS Action Plan	Architectural Historian, ECL		Post-Construction		IS/EA, SOIS Action Plan for Protection of the Los Angeles County Flood Control Historic District (LACFCHD).	Ensure that all above listed tasks have been completed and logged on the SOIS Action Plan.

GEOLOGY

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
GEO-01	Minimization of Effects of Groundwater and Soil Excavation During Construction	Geotechnical Engineer, Design Engineer, Resident Engineer		Construction		IS/EA	It is recommended that remedial measures be taken to minimize the effect of groundwater and soil excavation during construction. Shoring and a dewatering system may be required during footing construction and the stability of these excavations is dependent on the total time the excavation is exposed, groundwater conditions, granular nature of the soil, and contractor operations.
GEO-02	Preferred Deep Foundation Type	Structures Design, Design Engineer		Pre-Construction		Foundation Report for Bridge No. 53-1185 (11/2/2021) and Foundation Report for Bridge No. 53-1737H (11/3/2021)	The Office of Bridge Design South, Structure Design recommend/propose 42-inch CIDH piles as the preferred deep foundation type for Piers 3/4 on Bridges No. 53-1185 and 53-1737H.

GHG EMISSIONS REDUCTION

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
GHG-01	Use of Alternative Fuels for Construction Equipment	Resident Engineer, Contractor		Pre-Construction, Construction		IS/EA	The contractor shall make attempt to use alternative fuels such as renewable diesel for construction equipment, as feasible.
GHG-02	Limits on Idling of Construction Equipment	Resident Engineer, Contractor		Pre-Construction, Construction		IS/EA	The contractor shall attempt to limit idling of delivery, dump trucks, and other diesel-powered equipment to 5 minutes (with reasonable exception).
GHG-03	Limited Truck Trip Commute Windows	Resident Engineer, Contractor		Pre-Construction, Construction		IS/EA	The contractor shall attempt to schedule truck trips outside of peak morning and evening commute hours, as feasible.

GHG EMISSIONS REDUCTION (continued)

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
GHG-04	Encourage Improved Fuel Efficiency from Construction Equipment	Resident Engineer, Contractor		Pre-Construction, Construction		IS/EA	The contractor shall attempt to encourage fuel efficiency from construction equipment by maintaining equipment in proper working conditions, specifying appropriate size equipment for work, and using equipment with new technologies, as feasible.
GHG-05	Maintenance of Adjacent Facilities for Alternate Transportation Modes	Design Engineer, Resident Engineer, Contractor		Pre-Construction, Construction		IS/EA	Detour routes shall be provided during construction and short-term/intermittent/temporary closure of the San Gabriel River Trail and Coyote Creek Bikeway to enable continued use.

HAZARDOUS WASTE/MATERIALS

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
HWM-01	Preparation of a Lead Compliance Plan	Resident Engineer		Pre-Construction/ Construction		Site Investigation Report (10/6/2020)	Resident Engineer shall ensure that a site-specific Lead Compliance Plan (LCP) is prepared in accordance with Caltrans requirements. The LCP is required to prevent or minimize any worker exposure to lead while handling any soils with the potential of contamination by Aerially Deposited Lead (ADL). During PS&E, the appropriate Standard Special Provisions (SSP) and/or Non-Standard Special Provisions (NSSP) shall be provided for final PS&E.
HWM-02	Preparation of a Health and Safety Plan	Resident Engineer		Pre-Construction/ Construction		Site Investigation Report (10/6/2020)	Resident Engineer shall ensure that a site-specific Health and Safety Plan (HaSP) is prepared in accordance with Caltrans requirements. The HaSP shall include identification of key personnel; summary of risk management assessment for workers, the community, and the environment; air monitoring plan; and emergency response plan.

HAZARDOUS WASTE/MATERIALS (continued)

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
HWM-03	Handling of Asbestos Containing Materials (ACM)/South Coast Air Quality Management District (SCAQMD) Regulations and Notification	Resident Engineer		Pre-Construction/ Construction		Asbestos and Lead Containing Paint Survey Report (September 2020)	SCAQMD regulations require that asbestos-containing sheet packing (a SCAQMD Class II non-friable material) identified during the survey be removed prior to renovation or demolition. If the sheet packing is removed in a substantially intact state, the ACM does not need to be treated as hazardous waste. The sheet packing may also be reused by Caltrans or stored for subsequent use. However, activities causing disturbance of the sheet packing matrix (i.e., cutting, abrading, sanding, grinding, etc.) would require compliance with the Cal/OSHA asbestos standard (Title 8, CCR §1529). Contractors are responsible for segregating and characterizing waste streams prior to disposal. Contractors are responsible for informing the landfill of the contractor's intent to dispose of asbestos waste. Some landfills may require additional waste characterization. All asbestos waste must be transported to an appropriate landfill by a licensed waste hauler. Written notification to SCAQMD is required ten working days prior to commencement of any demolition activity (whether asbestos is present or not).
HWM-04	Lead-Containing Paint Removal and Qualified/Certified Personnel	Resident Engineer		Pre-Construction/ Construction		Asbestos and Lead Containing Paint Survey Report (September 2020)	It is recommended that the contractor performing any removal of Lead-Containing Paint be required to use personnel who have lead-related construction certification for removal work from the California DPH. Category I waste is low lead waste (typically non-hazardous) such as construction materials, filtered wash water, and plastic sheeting. Contractors are responsible for informing landfills and recycling facilities of the contractor's intent to dispose of components containing intact LCP. Some landfills and recycling facilities may require additional waste characterization. Contractors are responsible for segregating and characterizing waste streams prior to disposal.

HYDROLOGY AND FLOODPLAIN

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
HYF-01	Rock Slope Protection (RSP)	Structures Hydraulics, Structures Design, Design Engineer		Pre-Construction/ Construction		Final Hydraulics Report (10/13/2021)	A Rock Slope Protection (RSP) layer shall be installed for the channel bed for the entire area under all three bridges and their connecting areas (Bridges No. 53-1737H, 53-1185, and 55-0413F).
HYF-02	Augmentation of Existing Pile Caps	Structures Hydraulics, Structures Design, Design Engineer		Pre-Construction/ Construction		Final Hydraulics Report (10/13/2021)	For Bridges No. 53-1737H and No. 53-1185, the foundation retrofits at Pier 3 (P3) and Pier 4 (P4) require augmentation of the existing pile caps and installation of 42-inch diameter CIDH piles adjacent to existing piles. Each existing pile cap at P3/P4 of Bridge No. 53-1737H shall be enlarged with two additional rows of four (4) 42-inch diameter CIDH piles on the outer edges of the existing piles – to be surrounded by the proposed layer of Rock Slope Protection (RSP).

INVASIVE SPECIES

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
INV-01	Equipment Cleaning	Resident Engineer, Contractor		Pre-Construction, Construction		IS/EA	During construction, the construction contractor shall inspect and clean construction equipment at the beginning and end of each day and prior to transporting equipment from one project location to another.
INV-02	Vegetation/Soil Disturbance	Resident Engineer, Contractor		Pre-Construction, Construction		IS/EA	During construction, soil and vegetation disturbance will be minimized to the greatest extent feasible.
INV-03	Fugitive Dust Control	Resident Engineer, Contractor		Pre-Construction, Construction		IS/EA	During construction, the contractor shall ensure that all active portions of the construction site are watered a minimum of twice daily or more often when needed due to dry or windy conditions to prevent excessive amounts of dust.

INVASIVE SPECIES (continued)

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
INV-04	Stockpile Dust Control	Resident Engineer, Contractor		Pre-Construction, Construction		IS/EA	During construction, the contractor shall ensure that all active portions of the construction site are watered a minimum of twice daily or more often when needed due to dry or windy conditions to prevent excessive amounts of dust.
INV-05	Materials Sourcing	Resident Engineer, Contractor		Pre-Construction, Construction		IS/EA	During construction, soil/gravel/rock will be obtained from weed-free sources. Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control.
INV-06	Revegetation Efforts	Design Engineer, Project Biologist, Contractor		Pre-Construction, Construction, Post-Construction		IS/EA	After construction, affected areas adjacent to native vegetation will be revegetated with plant species approved by the District Biologist that are native to the vicinity. All revegetated areas will avoid the use of species listed on Cal-IPC's California Invasive Plant Inventory.
INV-07	Post Project Monitoring	Project Biologist		Post-Construction		IS/EA	Erosion control and revegetation sites will be monitored for 2 to 3 years after construction to detect and control the introduction/invasion of nonnative species.
INV-08	Eradication Procedures	Resident Engineer, Project Biologist, Contractor		Construction		IS/EA	Eradication procedures (e.g., spraying and/or hand weeding) will be outlined should an infestation occur; the use of herbicides will be prohibited within and adjacent to native vegetation, except as specifically authorized and monitored by the District Biologist and Landscape Architect.

NOISE

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
NOI-01	Public Outreach	External Affairs, Resident Engineer, Generalist		Pre-Construction		Technical Construction Noise Memorandum (February 2022)	Prior to construction, all residences within 1000 feet of the construction site shall be individually notified of the project's construction schedule.

NOISE (continued)

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
NOI-02	Project Information Signage and Appointment of a Noise Control Coordinator	Design Engineer, Resident Engineer		Pre-Construction, Construction		Technical Construction Noise Memorandum (February 2022)	Prior to construction, project information signage shall be posted on site that is legible from at least 50 feet and shall include a telephone number that residents can call to inquire about the construction process and to register any complaints. The contractor or Caltrans Resident Engineer shall designate a "noise control coordinator" who will reply to all construction noise-related questions and complaints.
NOI-3	Equipment Noise Control	Resident Engineer		Construction		Technical Construction Noise Memorandum (February 2022)	The resident engineer or contractor shall consider using equipment noise control BMPs by mandating a specified noise level for design of new equipment, updating old equipment with new noise control devices, and other general noise control techniques.
NOI-3	Site Noise Restrictions/Reduction Techniques	Resident Engineer		Construction		Technical Construction Noise Memorandum (February 2022)	Site restrictions should be applied to achieve noise reduction through different methods, resulting in an immediate reduction of noise emitted to the community without requiring any modification to the source noise emissions. The methods include shielding with barriers for equipment and site, truck rerouting and traffic control, time scheduling, and equipment relocation.
NOI-4	Construction Noise Impact Education of Contractors	Resident Engineer		Pre-Construction/ Construction		Technical Construction Noise Memorandum (February 2022)	The resident engineer or contractor shall educate contractors and their employees to be sensitive to noise impact issues and noise control methods, shall be knowledgeable about the details of Section 8.80.202 of the City of Long Beach Municipal Code and noise control requirements included in project PS&E, and conform to its requirements at all times.

PLANT COMMUNITIES

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
PLT-01	Limits on Disturbance of Plant Communities	Design Engineer, Project Biologist		Pre-Construction/ Construction		NESR (2/10/2022)	The Project Biologist shall recommend approved limits of disturbance to plant communities, including installation of upstream/downstream cofferdams, construction staging areas, and access routes, to minimize impacts to marine habitat.

PLANT COMMUNITIES (continued)

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
PLT-02	Limits (Construction Window) on Clearing and Grubbing of Vegetation	Design Engineer, Project Biologist, Resident Engineer		Pre-Construction/ Construction		NESR (2/10/2022)	Clearing and grubbing of vegetation shall be conducted outside of the bird-nesting season (February 15 – September 1). If clearing and grubbing of vegetation needs to be conducted during the bird nesting season, the Project Biologist shall be present to monitor construction during clearing, grading, and/or trenching activities for any occurrence of birds nesting.
PLT-03	Nesting Bird Work Stoppage and Delineation of Environmentally Sensitive Area (ESA)	Project Biologist, Resident Engineer		Construction		NESR (2/10/2022)	In the event that birds are observed nesting, construction shall stop until it is determined that the fledglings have left their nests. If this is not possible, coordination with the Project Biologist shall take place to minimize risk of violating the Migratory Bird Treaty Act (MBTA), and an ESA fencing buffer shall be maintained during all phases of construction (150 feet buffer for Songbirds and 500 feet buffer for Raptors).
PLT-04	Pre-Construction Surveys and Monitoring (Clearing and Grubbing Activities)	Project Biologist, Resident Engineer		Construction		NESR (2/10/2022)	The Project Biologist shall be present a minimum of one week prior to clearing and grubbing activities to survey proposed areas to be cleared and grubbed, and to monitor/dispel any animals that have the ability to flee.
PLT-05	Habitat Mitigation and Monitoring Plan	Project Biologist, Design Engineer, Landscape Architect		Pre-Construction/ Construction		NESR Amendment (3/1/2023)	A detailed Habitat Mitigation and Monitoring Plan (HMMP) will be produced with the coordination and approval of resource agencies as part of their respective permitting.

THREATENED AND ENDANGERED SPECIES

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
TES-01	Biological Monitoring (California Least Tern)	Design Engineer, Project Biologist, Resident Engineer		Pre-Construction, Construction		IS/EA	A biological monitor shall be present prior to start of construction on each day to survey the river and continually monitor for the presence of foraging terns. Should one be observed foraging within the adjacent water, work shall be stopped until the tern naturally moves away.
TES-02	Biological Monitoring (Green Sea Turtle)	Design Engineer, Project Biologist, Resident Engineer		Pre-Construction, Construction		IS/EA	All work within San Gabriel River shall be conducted outside of the rainy season (November 1st- April 1st).

UTILITIES, EMERGENCY SERVICES, AND TRANSPORTATION MANAGEMENT

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
UTL-01	Early and Continuing Coordination with Utility Providers	Project Engineer, Resident Engineer		Design, Construction		IS/EA	Early communication and planning with affected utility providers before and during construction will ensure that all affected infrastructure will be relocated with consideration, and to minimize any disruption of services and any effects as much as possible.
TMP-01	Transportation Management Plan (TMP)	Design Engineer, Resident Engineer		Design, Construction		IS/EA	A Transportation Management Plan (TMP) shall be implemented to provide detailed access and detour strategies that would minimize any effects on response times for fire, police, and emergency services. Caltrans shall maintain close coordination with local agencies and jurisdictions, including fire protection services, police, schools, and park agencies via a public outreach campaign during the construction phase of the proposed project.
TMP-02	Early and Continuing TMP Coordination with the City of Long Beach	Design Engineer, Resident Engineer		Design, Construction		IS/EA	Caltrans shall initiate early coordination with the City of Long Beach to achieve consensus and obtain concurrence on traffic management strategies during construction, and to ensure public access and availability of emergency and public services during the construction period.

WATER QUALITY AND STORM WATER RUNOFF

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
WQS-01	Development of Water Diversion Plan with Caltrans Project Biologist, NOAA, CDFW, USFWS, and RWQCB	Design Engineer, Project Biologist		Pre-Construction		IS/EA, Section 404 of CWA	A Water Diversion Plan shall be developed and implemented in consultation with the National Oceanic and Atmospheric Administration (NOAA), California Department of Fish and Wildlife (CDFW), United States Fish and Wildlife Service (USFWS), and the Regional Water Quality Control Board (RWQCB) to divert water through the project site to reduce turbidity and prevent sediments from entering areas downstream of the project site.
WQS-02	Development of Stream Restoration Plan with Qualified Hydraulic Engineer	Design Engineer, Hydraulic Engineer, Project Biologist		Pre-Construction		IS/EA, Section 404 of CWA	A Stream Restoration Plan will be developed by Caltrans in conjunction with a qualified hydraulic engineer and the appropriate resource agencies to address the need to clean dewatered areas to reduce or eliminate potential contaminants from entering the water when temporary sheet-pile cofferdams are removed.
WQS-03	Development of Stormwater Pollution Prevention Plan (SWPPP)	Design Engineer, Hydraulic Engineer, Resident Engineer		Pre-Construction, Construction		IS/EA, Section 404 of CWA	A SWPPP shall be developed and implemented to improve construction site water quality practices and control the impacts of stormwater pollution through Best Management Practices.

WETLANDS/JURISDICTIONAL WATERS AND OTHER WATERS

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
WET-01	Cofferdam Placement for Water Diversion	Design Engineer, Resident Engineer		Pre-Construction/ Construction		NESR (2/10/2022)	Placement of the cofferdams will affect the tidal waters within and upstream of the proposed project site and diversion of fresh-water flow within the river will affect this jurisdictional area as well. These dams shall be placed as close to the downstream side of the bridge structures as possible to allow equipment to move safely, but no further to minimize the de-watered area. Placement of permanent rock rip-rap shall be designed to be as small as necessary, impacting as little an area as possible yet still meet project needs.

WETLANDS/JURISDICTIONAL WATERS AND OTHER WATERS (continued)

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP#/ NSSP#	Env Doc/ Permits/Specs/ Plans/ Estimates REFERENCE	Commitment Measure
WET-02	Construction Work Window	Design Engineer, Resident Engineer		Pre-Construction/ Construction		NESR (2/10/2022)	All work within San Gabriel River will be conducted outside of the rainy season (November 1st- April 1st).
WET-03	Minimization of Jurisdictional Water Impacts in Construction Staging Areas	Design Engineer, Resident Engineer		Pre-Construction/ Construction		NESR (2/10/2022)	Temporary construction staging areas and access roads will be strategically placed to avoid and/or minimize impacts to USACE, RWQCB, and CDFW jurisdictional waters to the extent feasible and are expected to be enhanced to pre-project conditions.
WET-04	Compensatory Mitigation for Impacts to Jurisdictional Waters	Project Biologist, Design Engineer, Project Manager		Pre-Construction		NESR (2/10/2022)	Compensatory mitigation for impacts to jurisdictional waters shall be determined in coordination with the USACE, RWQCB, and CDFW. A detailed Habitat Mitigation and Monitoring Plan (HMMP) will be produced with the coordination and approval of resource agencies as part of their respective permitting.
WET-05	Restoration of temporary Impact Areas	Design Engineer, Project Biologist, Resident Engineer		Pre-construction, Construction		IS/EA	A detailed Habitat Mitigation and Monitoring Plan will be produced with the coordination and approval of resource agencies as part of their respective permitting. Details of the restoration plan will be included in the HMMP.