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April 2, 2024

Kevin Hovey, Senior Environmental Planner-Anthropologist
Caltrans, District 11, Environmental Division
4050 Taylor Street
San Diego, CA 92110

Reference: Addendum to Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Natural Environment Study BRLS-5079(030) (RECON Number 7380)

Dear Mr. Hovey:

The Natural Environment Study (NES) for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project BRLS-5079(030) was approved by Caltrans in July of 2023. Subsequent to this approval, the preferred alternative has been chosen and minor changes were made to the Project Impact Area (PIA). The proposed project would replace the bridge immediately west of the existing alignment to maintain service on the existing roadway and bridge during construction, evaluated in the original NES as Alternative 2. On the north end of the proposed project, a roundabout would be constructed at the Monterey Drive/Coast Highway intersection. The roundabout would be designed according to the Federal Highway Administration roundabout design guidance. The proposed project would conform to the existing roadway. In addition, the construction access and staging areas underneath and both east and west of Interstate 5 were expanded. This addendum addresses revisions to the NES based on the additional project impacts to vegetation communities. Attachment A provides an updated set of NES figures that depicts the selected bridge alternative and the updated PIA. This addendum also documents changes to the Conceptual Mitigation Plan prepared as mitigation for impacts to sensitive vegetation communities.

Revised Project Area and Vegetation Communities

The revised PIA was established in October 2023. The western PIA boundary was increased slightly on the northside of the river to provide a consistent work area width for the construction of the new bridge; this increase now overlaps slightly with the eastern end of the Habitat Enhancement Area (HEA). The PIA underneath Interstate 5 was increased slightly towards the east along the north and south banks of the river to ensure there is sufficient construction access to the existing bridge and other work areas. The easternmost staging area was also expanded slightly to ensure a sufficient work area. Attachment A, Figure 2 of the NES has been revised to update the PIA boundary. The total revised project area is 21.05 acres and includes the PIA (permanent and temporary impact areas) and the adjacent HEA that would be restored as mitigation. The original project was 19.71 acres. Table 1 (created for this addendum) provides a breakdown of the revised vegetation community areas in the revised project area, as compared to the original project area in the NES. In total the PIA increased by 1.33 acres, with the increases in disturbed southern riparian scrub, non-native riparian, open water, disturbed Diegan coastal sage scrub, disturbed, and urban/developed.

The Biological Study Area originally evaluated for biological resources included the new areas added to the PIA, so no additional surveys were required. Attachment A, Figure 6 demonstrates that the revised PIA is within the original Biological Study Area evaluated for biological resources.

Table 1 Vegetation Communities		
Vegetation Community	New Total Project Area (acres)[1]	Original Project Area in NES (acres)[1]
Wetland Vegetation Communities		
Freshwater marsh	0.10	0.10
Disturbed southern riparian scrub	1.17	0.86
Non-native riparian	4.17	3.74
Open water	1.12	1.01
Subtotal Wetland	*6.56*	*5.71*
Upland Vegetation Communities		
Diegan coastal sage scrub	1.11	1.11
Disturbed Diegan coastal sage scrub	0.21	0.17
Eucalyptus woodland	0.74	0.74
Disturbed habitat	3.43	3.29
Urban/developed	9.00	8.70
Subtotal Upland	*14.49*	*14.01*
TOTAL	21.05	19.72
[1]Includes the PIA and adjacent HEA		

Revised Impact Analysis and Compensatory Mitigation

Table 2 provides a breakdown of the updated impact analysis and proposed mitigation required for the temporary and permanent impacts and replaces Table 4 from the original NES. The changes in the temporary impact boundaries resulted in an increase in impacts to the following vegetation communities: disturbed southern riparian scrub, non-native riparian, open water, disturbed Diegan coastal sage scrub, disturbed, and urban/developed. There is no change to the permanent impacts from the original NES.

Table 3 provides a breakdown of the updated impacts to jurisdictional wetlands and waters and replaces Table 5 from the original NES. The revised temporary impacts resulted in an increase to 1.00 acre to U.S. Army Corps of Engineers (USACE) wetlands and 0.90 acre of waters of the state. While the permanent impacts within the updated PIA did not increase, the permanent impact acreages presented in Table 3 for waters of the state and California Coastal Commission (CCC) jurisdiction are slightly different than presented in Table 5 in the original NES based on a data redundancy discovered during this update.

Based on the extent of potential impacts, the following permits are expected to be required for impacts to jurisdictional wetlands and waterways:

- USACE – as the project impacts exceed the threshold for a nationwide permit, the project would be required to obtain an individual permit under Section 404 of the Clean Water Act (CWA);
- California Department of Fish and Wildlife (CDFW) – Streambed Alteration Agreement under Section 1602 of the California Fish and Game Code; and
- Regional Water Quality Control Board (RWQCB) – water quality certification under Section 401 of the Clean Water Act.

Table 2 Updated Vegetation Community Temporary and Permanent Impacts and Mitigation						
				Proposed Mitigation		
Vegetation Community	Impacts in Acres	Mitigation Ratio	Mitigation Requirement in Acres	Creation[1]	Rehabilitation[2]	Restoration/ Re-establishment[3]
TEMPORARY IMPACTS						
Wetland Vegetation Communities						
Freshwater marsh	0.08	1:1	0.08	-	-	0.08
Disturbed southern riparian scrub	0.94	1:1	0.94	-	0.30	1.74[4]
Non-native riparian	1.10	1:1	1.10			
Open water	0.93	1:1	0.93	-	-	0.93
Subtotal Wetland	***3.05***		***3.05***	-	***0.30***	***2.75***
Upland Vegetation Communities						
Diegan coastal sage scrub	0.88	1:1	0.88	-	-	1.09
Disturbed Diegan coastal sage scrub	0.21	1:1	0.21			
Eucalyptus woodland	0.74	n/a	–	-	-	–
Disturbed habitat	2.85	n/a	–	-	-	–
Urban/developed	7.39	n/a	–	-	-	–
Subtotal Upland	***12.07***	–	***1.09***	-	-	***1.09***
TEMPORARY IMPACTS TOTAL	**15.12**	–	**4.14**	-	**0.30**	**3.84**
PERMANENT IMPACTS						
Wetland Vegetation Communities						
Freshwater marsh	0.02	3:1	0.06	0.02[1]	0.04	-
Disturbed southern riparian scrub	0.19	3:1	0.57	0.38[1]	2.90	-
Non-native riparian	0.19	3:1	0.57			
Open water	– [5]	–	–	-	-	-
Subtotal Wetland	***0.40***		***1.20***	***0.40***[1]	***2.94***	-
Upland Vegetation Communities						
Diegan coastal sage scrub	0.23	3:1	0.69	0.69	-	-
Disturbed Diegan coastal sage scrub	–	3:1	–			
Eucalyptus woodland	–	n/a	–	--	-	-
Disturbed habitat	0.58	n/a	–	--	-	-
Urban/developed	1.60	n/a	–	--	-	-
Subtotal Upland	***2.41***	–	***0.69***	***0.69***	-	-
PERMANENT IMPACTS TOTAL	**2.81**	–	**1.89**	**1.09**	**2.94**	-

[1]Wetland creation will comprise of purchase of off-site establishment/creation credits to achieve no-net loss.
[2]Rehabilitation will take place immediately adjacent to the project impact area within the Habitat Enhancement Area.
[3]Re-establishment/restoration includes revegetation of temporary impact areas to a higher quality version of the former habitat type.
[4]Non-native riparian habitat will be converted to southern riparian scrub habitat.
[5]In the worst-case-scenario, the replacement bridge will result in 110 square feet of permanent impacts to open water from installation of supports. However, removal of the existing bridge will entail removal of one bridge support (with an approximate footprint of 145 square feet) from the open water, resulting in a net decrease in the permanent footprint of the bridge within the open water of the river channel.

Table 3 Updated Jurisdiction Wetland/Waters Impacts				
	Updated		Original	
Jurisdictional Waters	Permanent Impacts	Temporary Impacts	Permanent Impacts	Temporary Impacts
USACE Jurisdiction				
Non-wetland Waters of the U.S.	–*	0.93	–*	0.83
Wetland	0.35	1.86	0.35	0.96
USACE Total Impacts	**0.35**	**2.79**	**0.35**	**1.79**
CDFW/RWQCB Jurisdiction†				
Streambed	–*	0.93	–*	0.83
State Wetlands (Riparian Habitat)	0.37	1.86	0.40	1.07
CDFW/RWQCB Total Impacts	**0.37**	**2.79**	**0.40**	**1.89**
CCC Jurisdiction				
Wetlands‡	0.37*	2.79	0.40*	1.89
CCC Total Impacts	**0.37**	**2.79**	**0.40**	**1.89**

*In the worst-case-scenario, the replacement bridge will result in approximately 110 square feet of permanent impact to non-wetland waters/streambed/CCC State wetlands from installation of supports. However, removal of the existing bridge will entail removal of one bridge support (with an approximate footprint of 145 square feet) from non-wetland waters/streambed/CCC State wetlands, resulting in a net decrease in the permanent footprint of the bridge within non-wetland waters/streambed.
†CDFW/RWQCB area of jurisdiction overlaps all USACE jurisdictional waters.
‡CCC Wetlands overlap all CDFW/RWQCB area of jurisdiction.

The revised project boundary will also increase the temporary impacts to CCC Environmentally Sensitive Habitat Areas from 2.94 acres to 4.14 acres. Direct permanent impacts to Environmentally Sensitive Habitat Areas will not change from 0.81 acre.

Attachment B depicts the updated conceptual mitigation plan based on the revised PIA. The primary change from the original NES is an increase in the proposed rehabilitation and restoration/re-establishment acreages to replace the additional areas temporarily impacted from construction access and staging. In addition, the temporary impacts were expanded to slightly overlap with the 3.24-acre HEA. Thus, the rehabilitation proposed within the HEA is now split between temporary impact mitigation (0.30 acre) and permanent impact mitigation (2.94 acre) (see Table 2).

Revised Avoidance and Minimization Measures

BIO-16 was removed from the Avoidance and Minimization measures as it was redundant with the language added to BIO-15 during Caltrans review. Both measures were included in Section 4.3.5 (Light-footed Ridgway's Rail Avoidance and Minimization Efforts) and related to construction activities with respect to the bird breeding season. The updated BIO-15 and the deleted BIO-16 are provided below for reference. Note that BIO-15 was written so that it could be referenced as an appropriate avoidance and minimization measure for the other sensitive bird species addressed in the NES.

BIO-15. All clearing/grubbing of vegetation, for both construction and implementation of the Conceptual Mitigation Plan (see Appendix B), shall take place between October 1 and December 31, outside the combined avian nesting season. Construction may occur during the bird breeding season.

a. A qualified biologist will be on-site during: a) initial vegetation clearing/grubbing; b) daily during project construction within the river corridor; and c) weekly during project construction outside of the river

corridor but within 500 feet of rail and vireo habitat, to monitor compliance with all measures. The qualified biologist will either hold a valid USFWS Section 10(a) permit and CDFW MOU for specific species and/or be approved as qualified by the regulatory agencies. The qualified biologist will perform the following duties: Outside the bird breeding season, perform a minimum of three focused pre-construction surveys, on separate days, to determine the presence of the species in the project impact footprint. Surveys will begin a maximum of 7 days prior to performing vegetation clearing/grubbing, and one survey will be conducted the day immediately prior to the initiation of vegetation clearing. If any individuals are found in the project impact footprint, the biological monitor will direct construction personnel to begin vegetation clearing/grubbing in an area away from the birds. During project construction within the river corridor, before each workday begins, check to see if the species has entered the active work area. If any individuals are found within the active work area, direct construction personnel to begin work in an area away from the species. It will be the responsibility of the Biological Monitor to implement measures (e.g., direct vegetation clearing away from individuals, flush birds out of the active work area, temporarily close or constrain the rail movement pathway as necessary) to avoid death and injury of the species from vegetation clearing/grubbing and construction work. The Biological Monitor will also record the number and location of individuals disturbed by vegetation clearing/grubbing and project construction. The project proponents will notify the USFWS at least 7 days prior to initiation of surveys and within 24 hours of locating any of the species within the project footprint.

b. During the bird breeding season, perform a minimum of three focused pre-construction surveys, on separate days, in and adjacent to suitable habitat for the species to determine the presence of the species in or within 500 feet of the project impact footprint. Surveys will begin a maximum of 7 days prior to performing construction within 500 feet of suitable habitat during the breeding season, and one survey will be conducted the day immediately prior to the initiation of construction within 500 feet of suitable habitat during the breeding season. Additional surveys will be done once a week during project construction within 500 feet of suitable habitat during the breeding season. These additional surveys may be suspended as approved by the USFWS.

c. Noise monitoring will occur during the breeding season and be reported daily to the regulatory agencies. If the qualified biologist suspects that avoidance and minimization measures are ineffective, and project activities may be adversely affecting more birds than anticipated, culpable activities will be suspended within 500 feet of active nests until nesting activity is completed and fledglings are no longer in the area or until effective avoidance and minimization measures can be identified, implemented, and demonstrated to be effective. If measures cannot be identified, implemented, and demonstrated to be effective to avoid adverse effects to the species, then project construction will stop until consultation has been completed with the regulatory agencies to address unanticipated impacts to the species.

~~BIO-16. A qualified biologist will be on-site during: a) initial vegetation clearing/grubbing; b) daily during project construction within the river corridor; and c) weekly during project construction outside of the river corridor but within 500 feet of suitable habitat, to monitor compliance with all measures. The qualified biologist will either hold a valid USFWS Section 10(a) permit and CDFW MOU for specific species and/or be approved as qualified by the regulatory agencies. The qualified biologist will perform the following duties:~~

~~a. Outside the bird breeding season, perform a minimum of three focused pre-construction surveys, on separate days, to determine the presence of the species in the project impact footprint. Surveys will~~

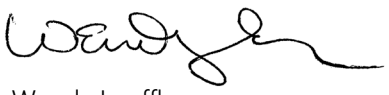
~~begin a maximum of 7 days prior to performing vegetation clearing/grubbing, and one survey will be conducted the day immediately prior to the initiation of vegetation clearing. If any individuals are found in the project impact footprint, the biological monitor will direct construction personnel to begin vegetation clearing/grubbing in an area away from the birds. During project construction within the river corridor, before each workday begins, check to see if the species has entered the active work area. If any individuals are found within the active work area, direct construction personnel to begin work in an area away from the species. It will be the responsibility of the Biological Monitor to implement measures (e.g., direct vegetation clearing away from individuals, flush birds out of the active work area, temporarily close or constrain the movement pathway as necessary) to avoid death and injury of the species from vegetation clearing/grubbing and construction work. The Biological Monitor will also record the number and location of individuals disturbed by vegetation clearing/grubbing and project construction. The project proponents will notify the USFWS at least 7 days prior to initiation of surveys and within 24 hours of locating any individuals within the project footprint.~~

b. ~~During the bird breeding season, perform a minimum of three focused pre-construction surveys, on separate days, in and adjacent to suitable habitat the rail or vireo to determine the presence of the species in or within 500 feet of the project impact footprint. Surveys will begin a maximum of 7 days prior to performing construction within 500 feet of suitable habitat during the breeding season, and one survey will be conducted the day immediately prior to the initiation of construction within 500 feet of suitable habitat during the breeding season. Additional surveys will be done once a week during project construction within 500 feet of suitable habitat during the breeding season. These additional surveys may be suspended as approved by the USFWS.~~

c. ~~Noise monitoring will occur during the breeding season and be reported daily to the regulatory agencies. If the qualified biologist suspects that avoidance and minimization measures are ineffective, and project activities may be adversely affecting more birds than anticipated, culpable activities will be suspended within 500 feet of active nests until nesting activity is completed and fledglings are no longer in the area or until effective avoidance and minimization measures can be identified, implemented, and demonstrated to be effective. If measures cannot be identified, implemented, and demonstrated to be effective to avoid adverse effects to the species, then project construction will stop until consultation has been completed with the regulatory agencies to address unanticipated impacts to the species.~~

Please let me know if you have any questions regarding this addendum. I can be reached at wloeffler@reconenvironmental.com of 619-308-9333.

Sincerely,



Wendy Loeffler
Senior Project Manager/Biologist

WEL:sh:jg

ATTACHMENT A

Updated NES Figures

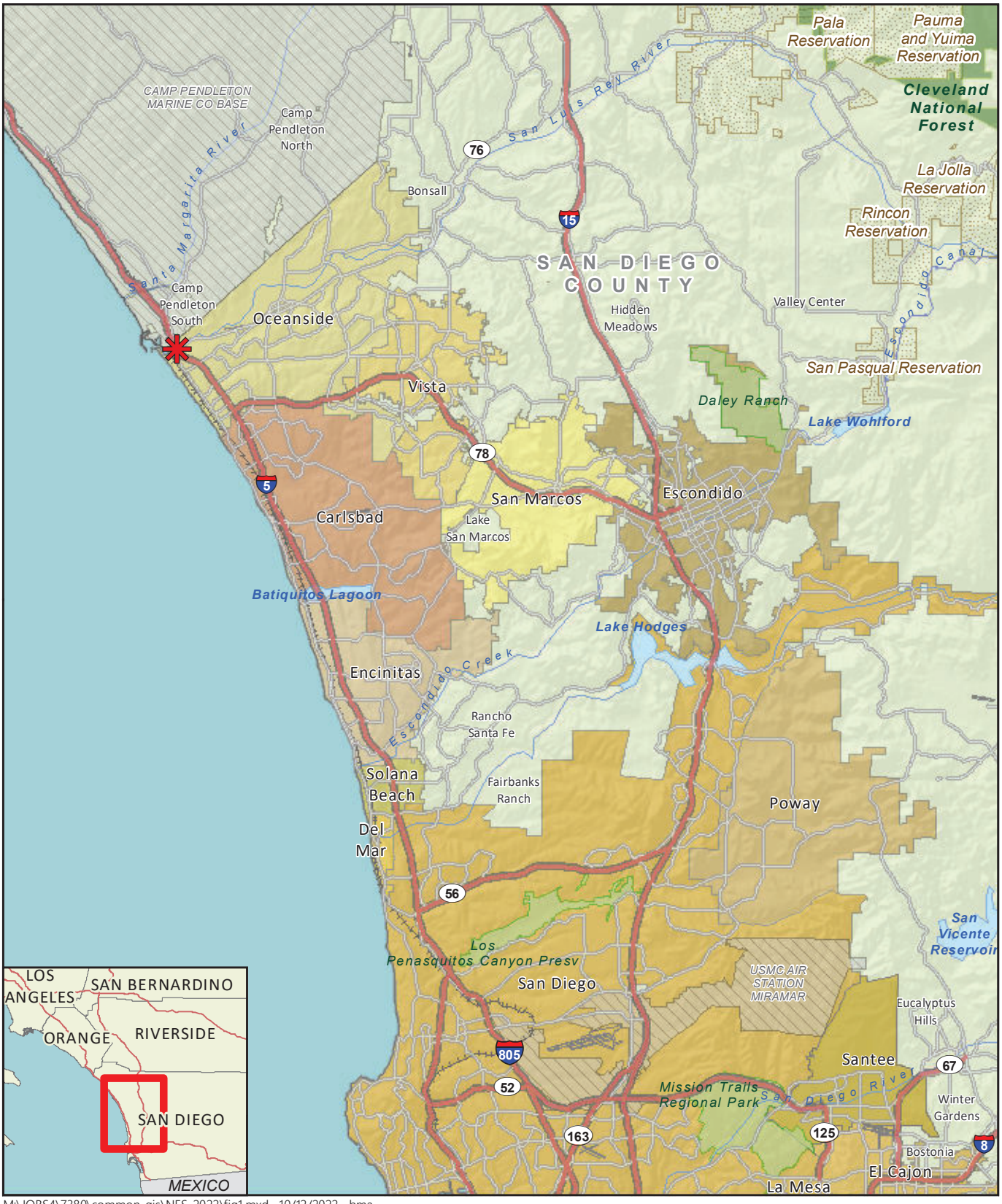
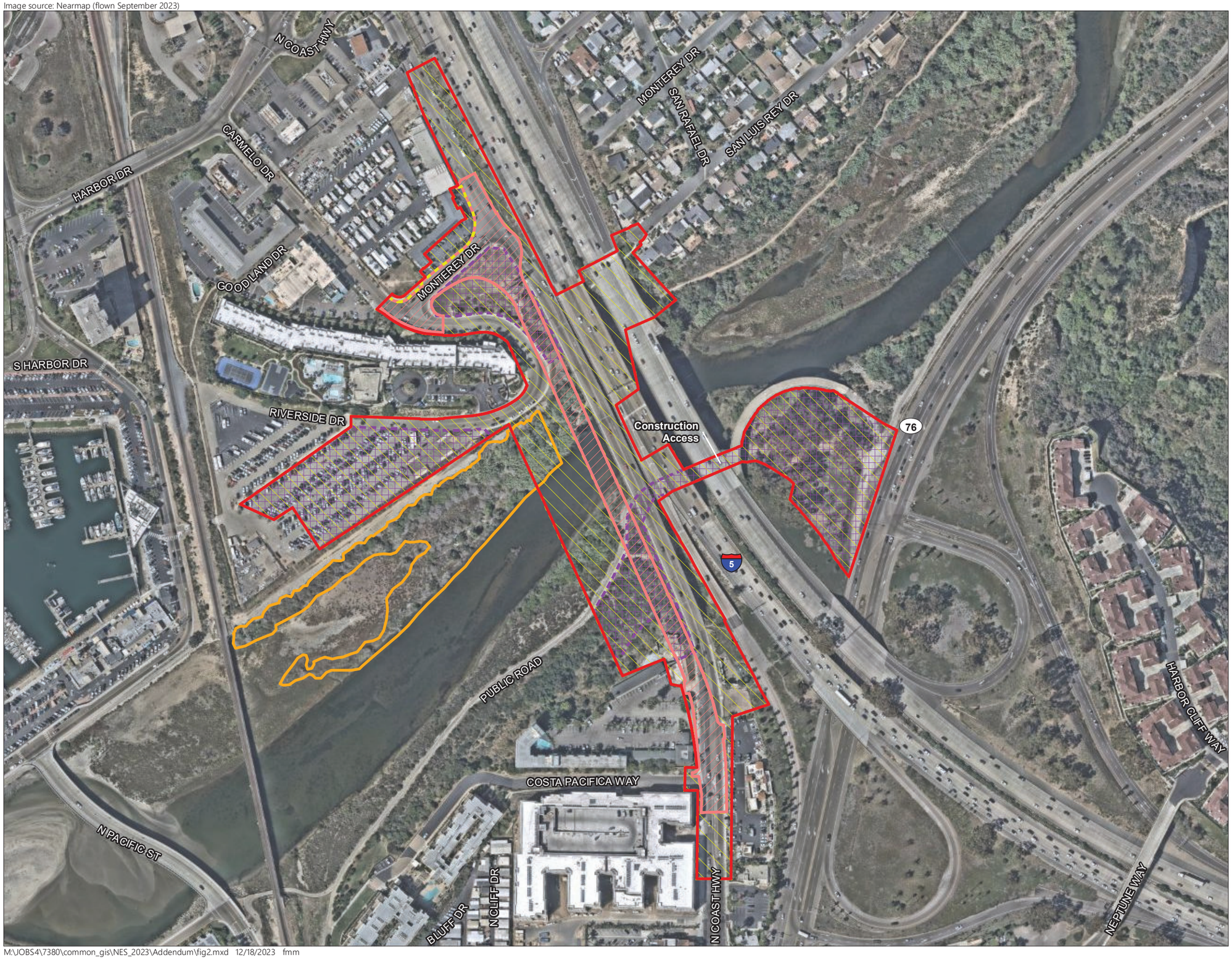


FIGURE 1
Regional Location

Image source: Nearmap (flown September 2023)



Project Impact Area

Habitat Enhancement Area (Project Mitigation)

Alternative 2 Alignment

Temporary Impacts

Staging Areas

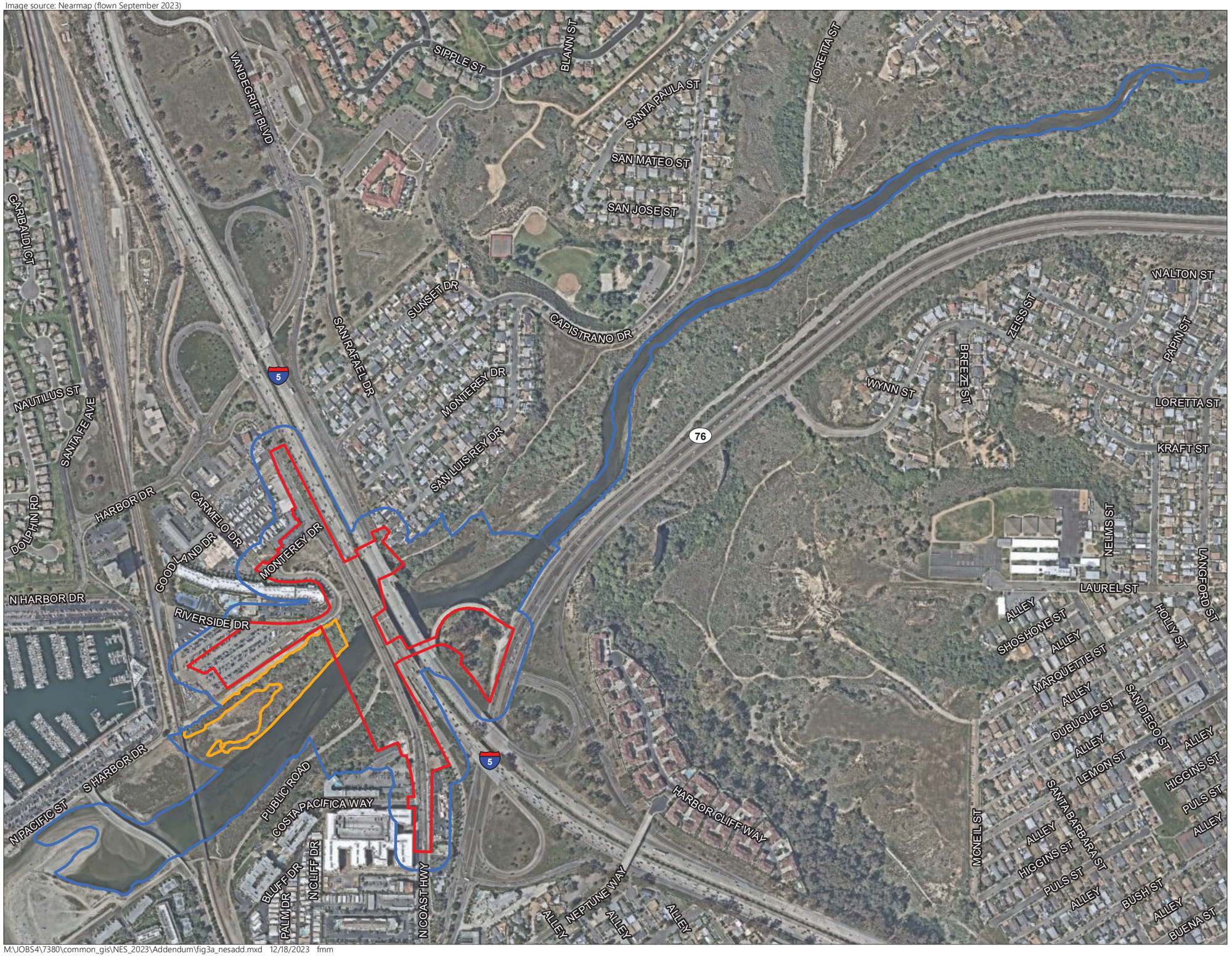
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FIGURE 2

Project Impact Area

Image source: Nearmap (flown September 2023)



Project Impact Area

Biological Study Area

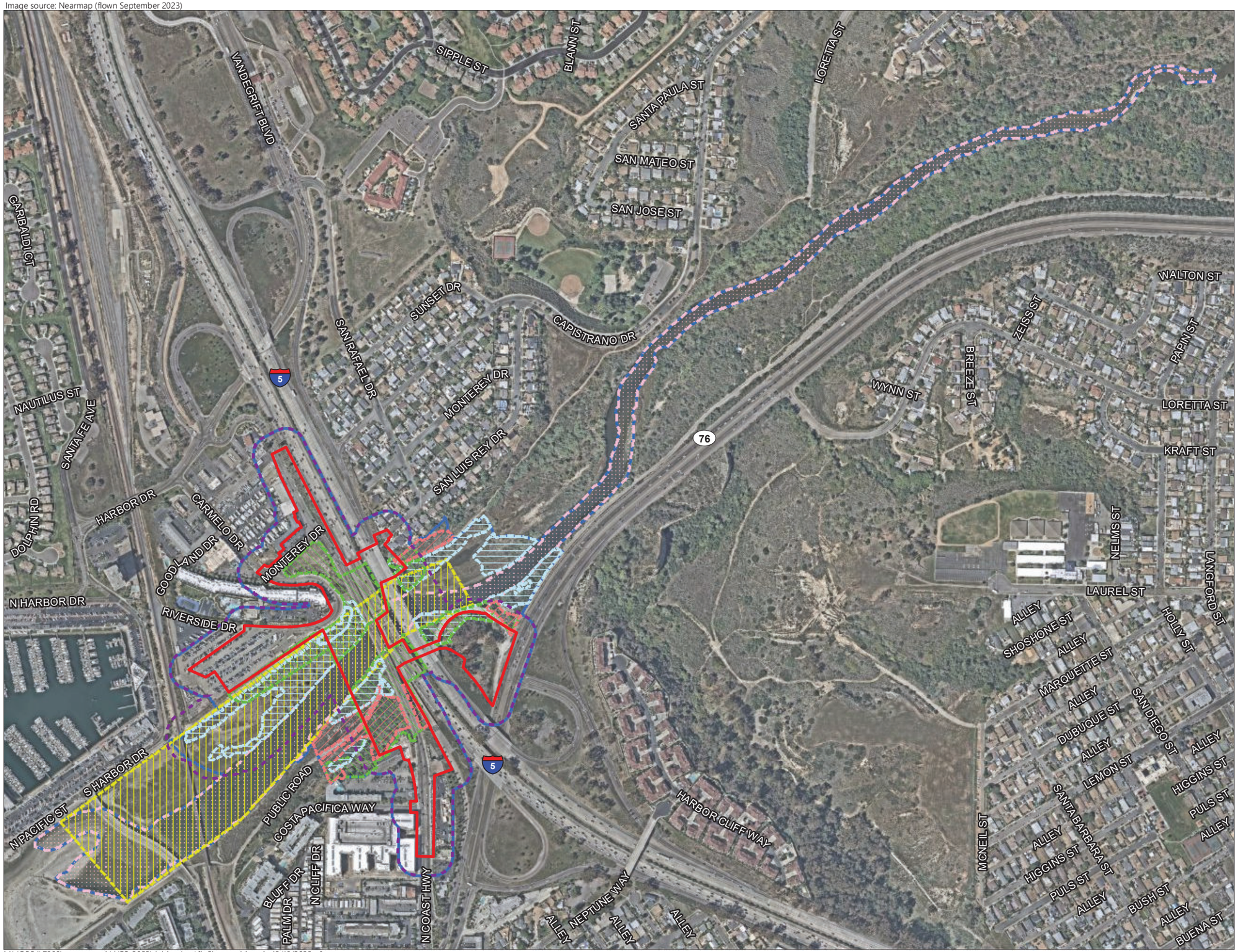
Habitat Enhancement Area (Project Mitigation)

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FIGURE 3a
Biological Study Area and Project Impact Area on Aerial Photograph

Image source: Nearmap (flown September 2023)



Project Impact Area

Biological Study Area

Survey Areas

Coastal California Gnatcatcher

Least Bell's Vireo/
Southwestern Willow Flycatcher

Light-footed Ridgway's Rail

Rare Plants

Fish

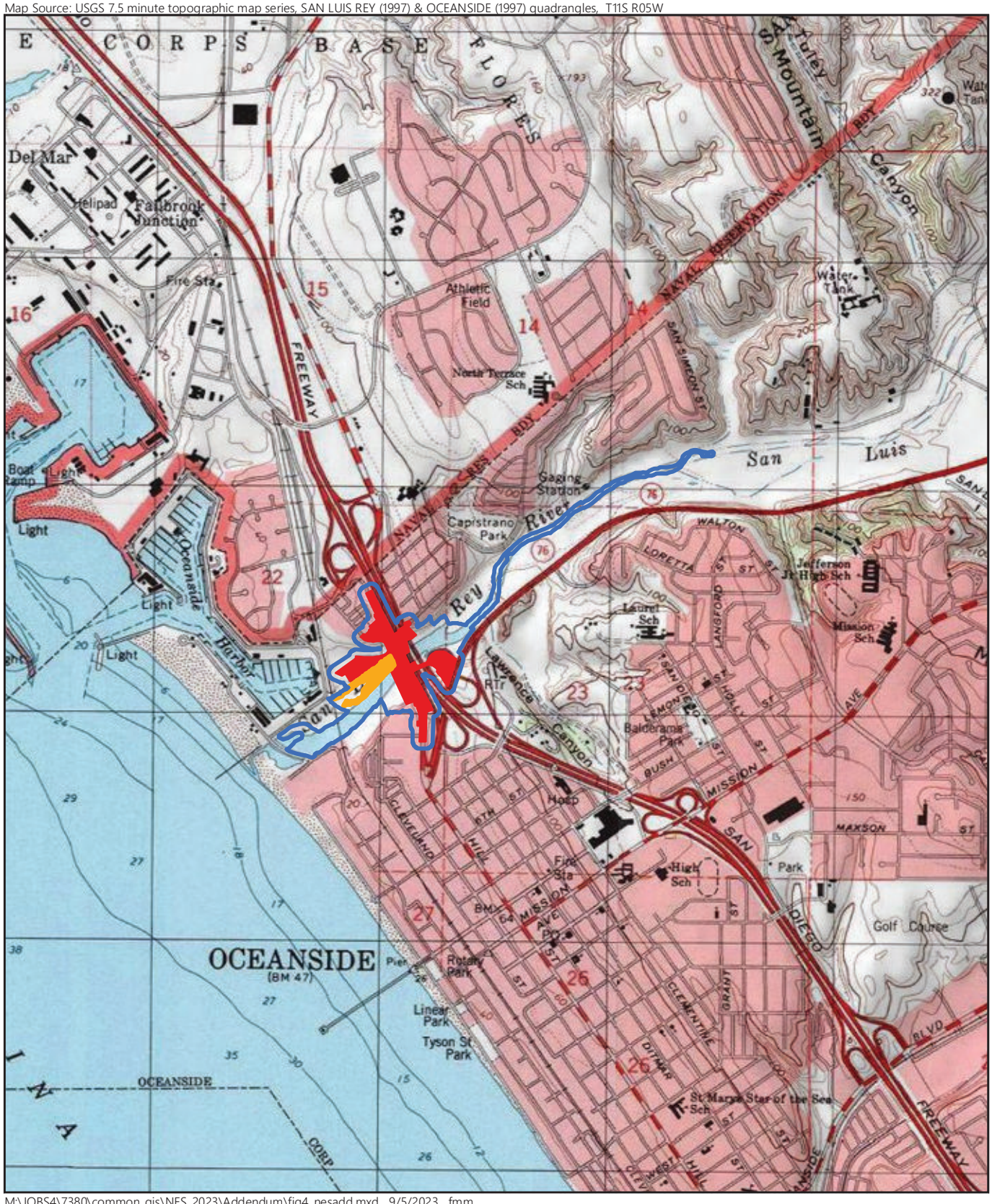
Jurisdictional Wetland/Waters
Review Area

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FIGURE 3b
Biological Survey Areas

Map Source: USGS 7.5 minute topographic map series, SAN LUIS REY (1997) & OCEANSIDE (1997) quadrangles, T11S R05W



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Project Impact Area

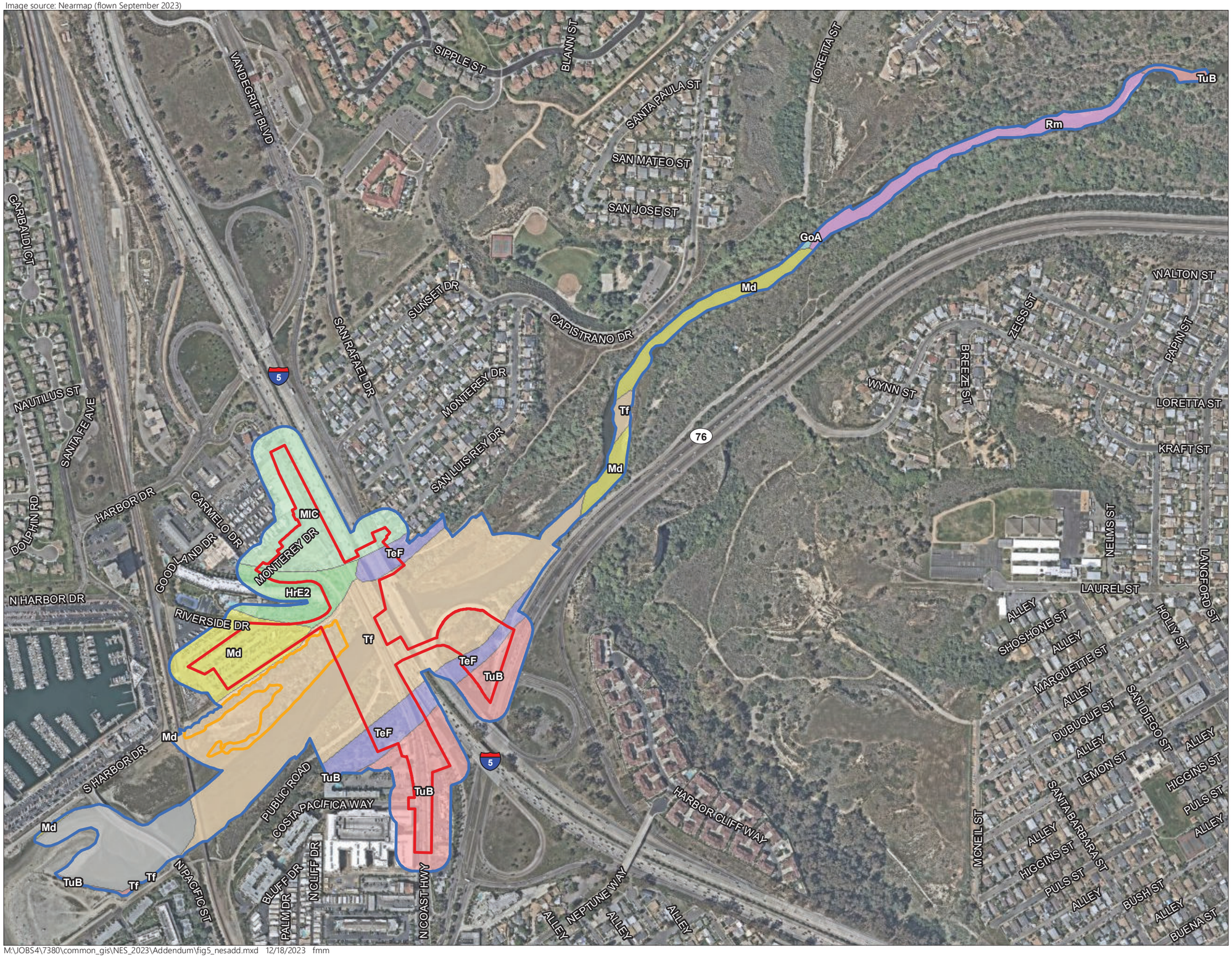
Habitat Enhancement Area (Project Mitigation)

Biological Study Area

FIGURE 4

Biological Study Area and Project Impact Area on USGS Map

Image source: Nearmap (flown September 2023)



Project Impact Area

Biological Study Area

Habitat Enhancement Area (Project Mitigation)

Soil Classification

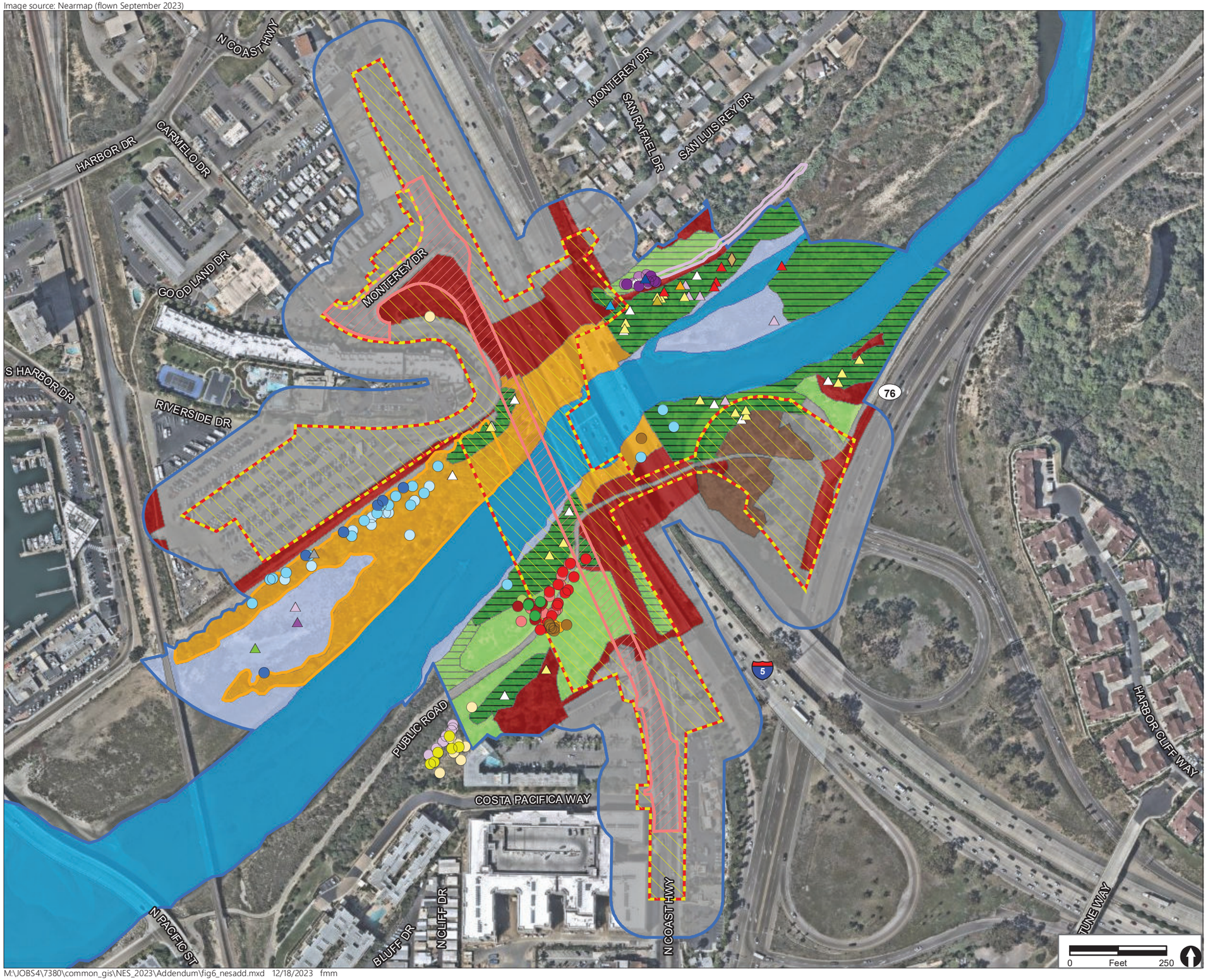
- GoA - Grangeville fine sandy loam, 0-2% slopes
- HrE2 - Huerhuero loam, 15-30% slopes, eroded
- Md - Made land
- MIC - Marina loamy coarse sand, 2-9% slopes
- Rm - Riverwash
- TeF - Terrace escarpments
- Tf - Tidal flats
- TuB - Tujunga sand, 0-5% slopes
- NO DATA/Water

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FIGURE 5
Soil Types Mapped
within Biological Study Area

Image source: Nearmap (flown September 2023)



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Project Impact Area
Biological Study Area
Habitat Enhancement Area (Project Mitigation)
Permanent Impacts
Temporary Impacts

Species Observations

Sensitive Plant Species

2015	2017	2021	
		●	Lewis' Evening-primrose
●			San Diego Ambrosia
	●	●	San Diego Marsh-elder
	●	●	Southwestern Spiny Rush
●	●	●	Sticky Dudleya
	●	●	Nuttall's Acmispon
		○	Variegated Dudleya

Sensitive Avian Species

△	▲		Clark's Marsh Wren
	▲		Light-footed Ridgway's Rail
	▲		Olive-sided Flycatcher
	▲		Western Least Bittern
△	▲	▲	Yellow Warbler
	▲		Yellow-breasted Chat
	▲		Least Bell's Vireo
		▲	Coastal California Gnatcatcher

Avian Parasite

◆ Brown-headed Cowbird

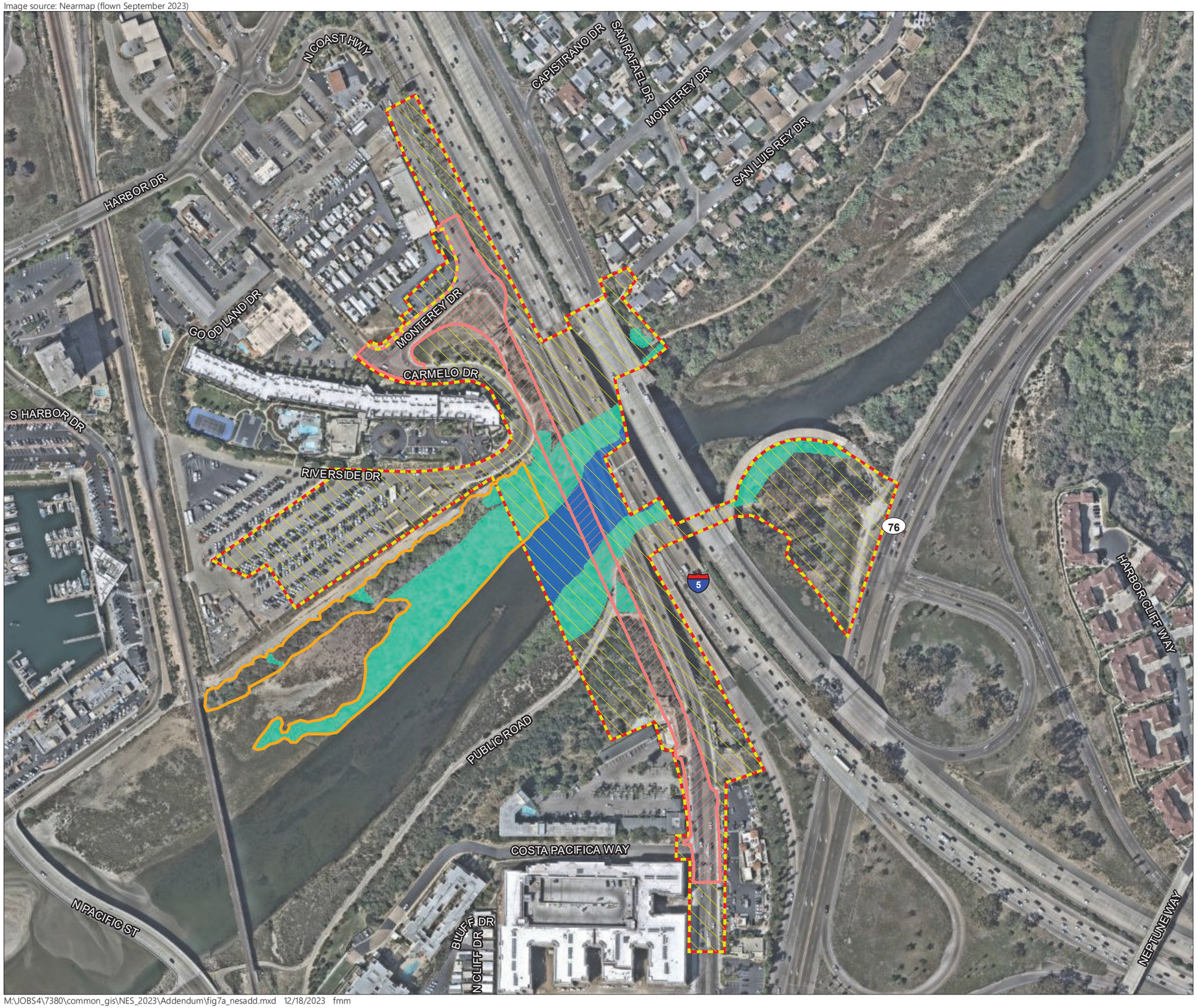
Vegetation Communities and Land Cover Types

- Diegan Coastal Sage Scrub
- Disturbed Diegan Coastal Sage Scrub
- Disturbed Southern Riparian Scrub
- Freshwater Marsh
- Open Water
- Non-native Riparian
- Eucalyptus Woodland
- Disturbed Habitat
- Urban/Developed

FIGURE 6

Biological Resources within the Biological Study Area and Project Impact Area

Image source: Nearmap (flown September 2023)



Project Impact Area

Permanent Impacts

Temporary Impacts

Habitat Enhancement Area (Project Mitigation)

Waters of the U.S.

Non-wetland Waters

Wetland

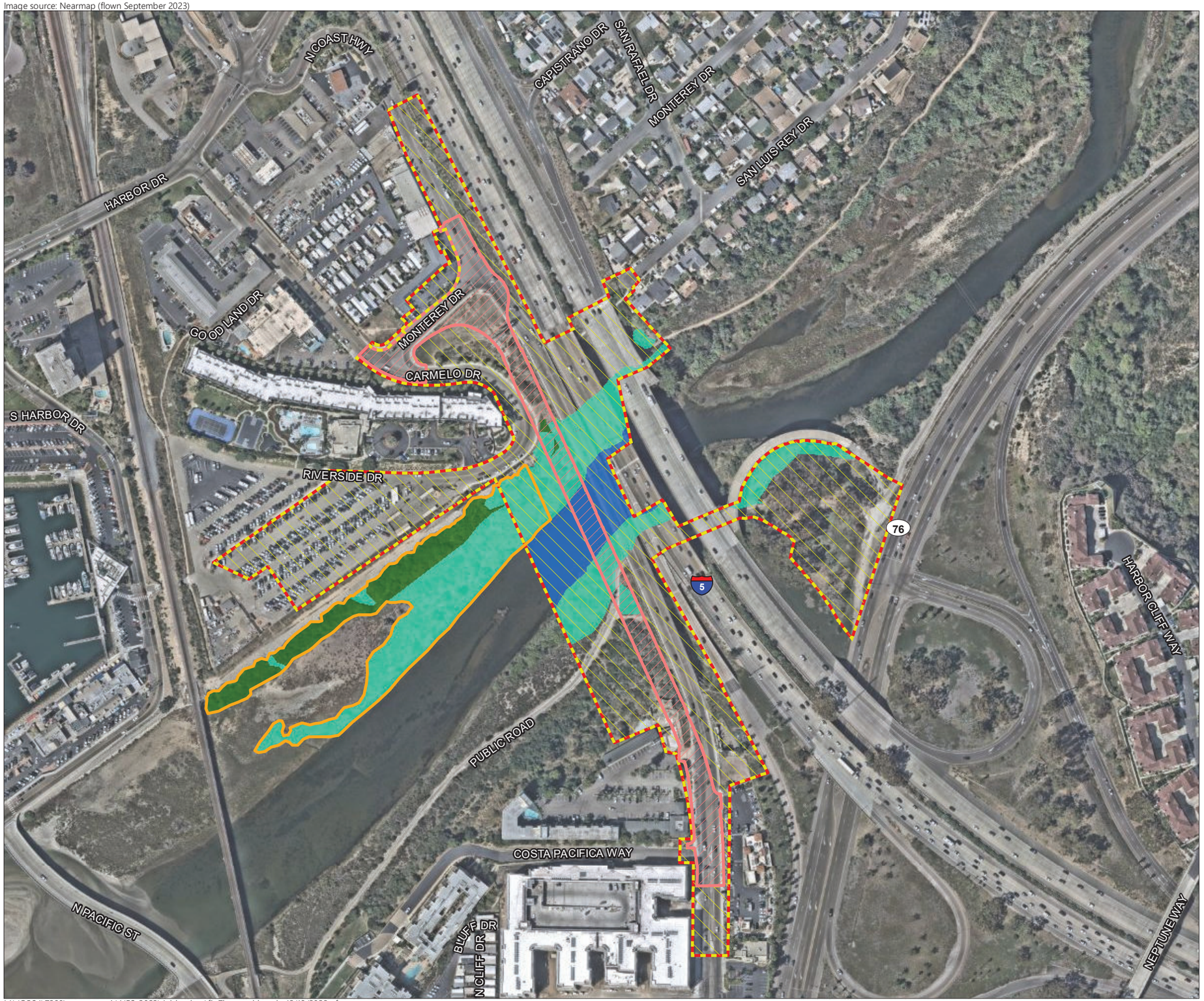
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FIGURE 7a

Location of Waters of the U.S.

Image source: Nearmap (flown September 2023)



- Project Impact Area
- Permanent Impacts
- Temporary Impacts
- Habitat Enhancement Area (Project Mitigation)

Waters of the State

- Streambed
- Wetland
- Riparian

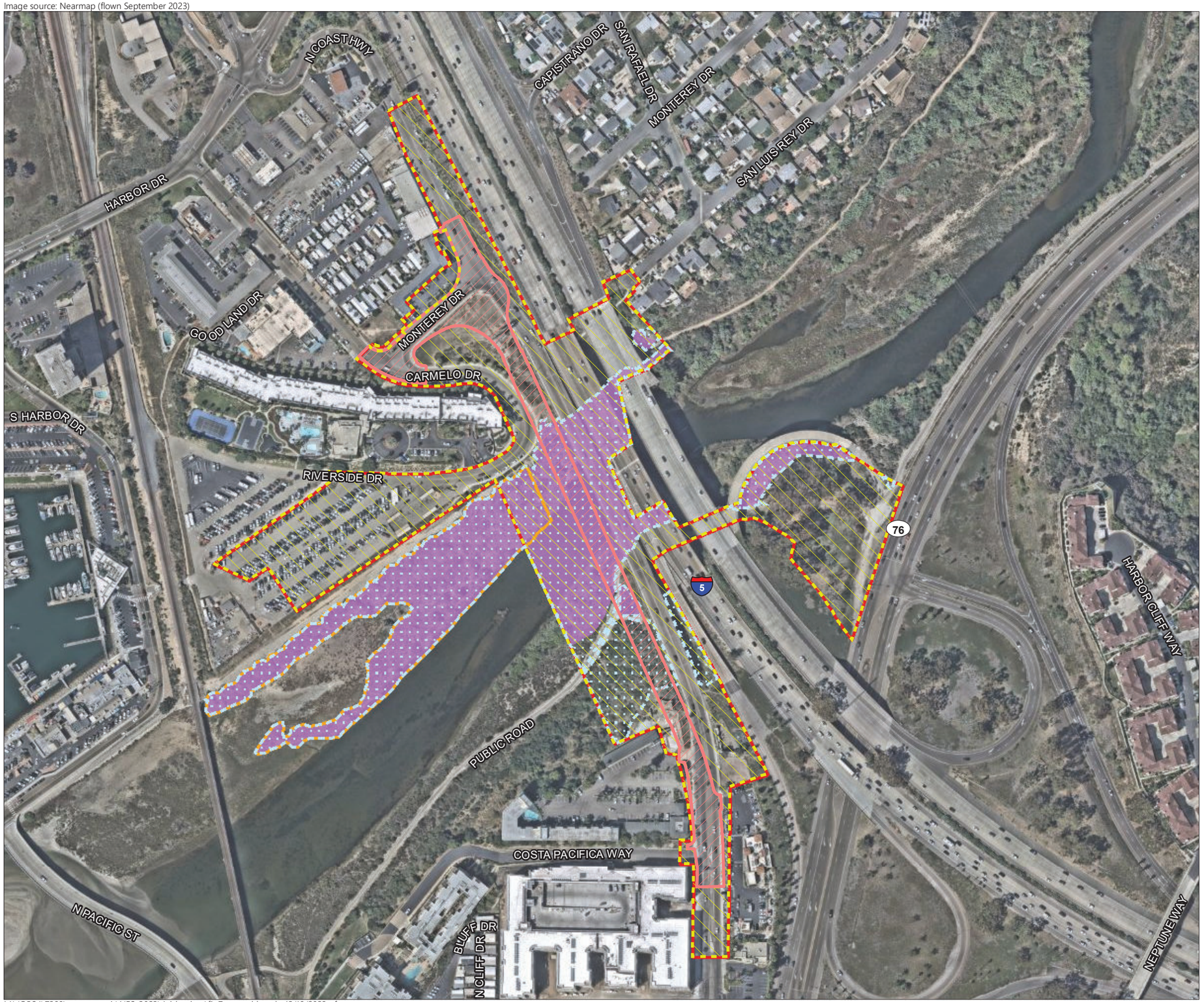
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FIGURE 7b

Location of Waters of the State

Image source: Nearmap (flown September 2023)



Project Impact Area

Permanent Impacts

Temporary Impacts

Habitat Enhancement Area (Project Mitigation)

State Coastal Wetlands

Environmentally Sensitive Habitat Areas

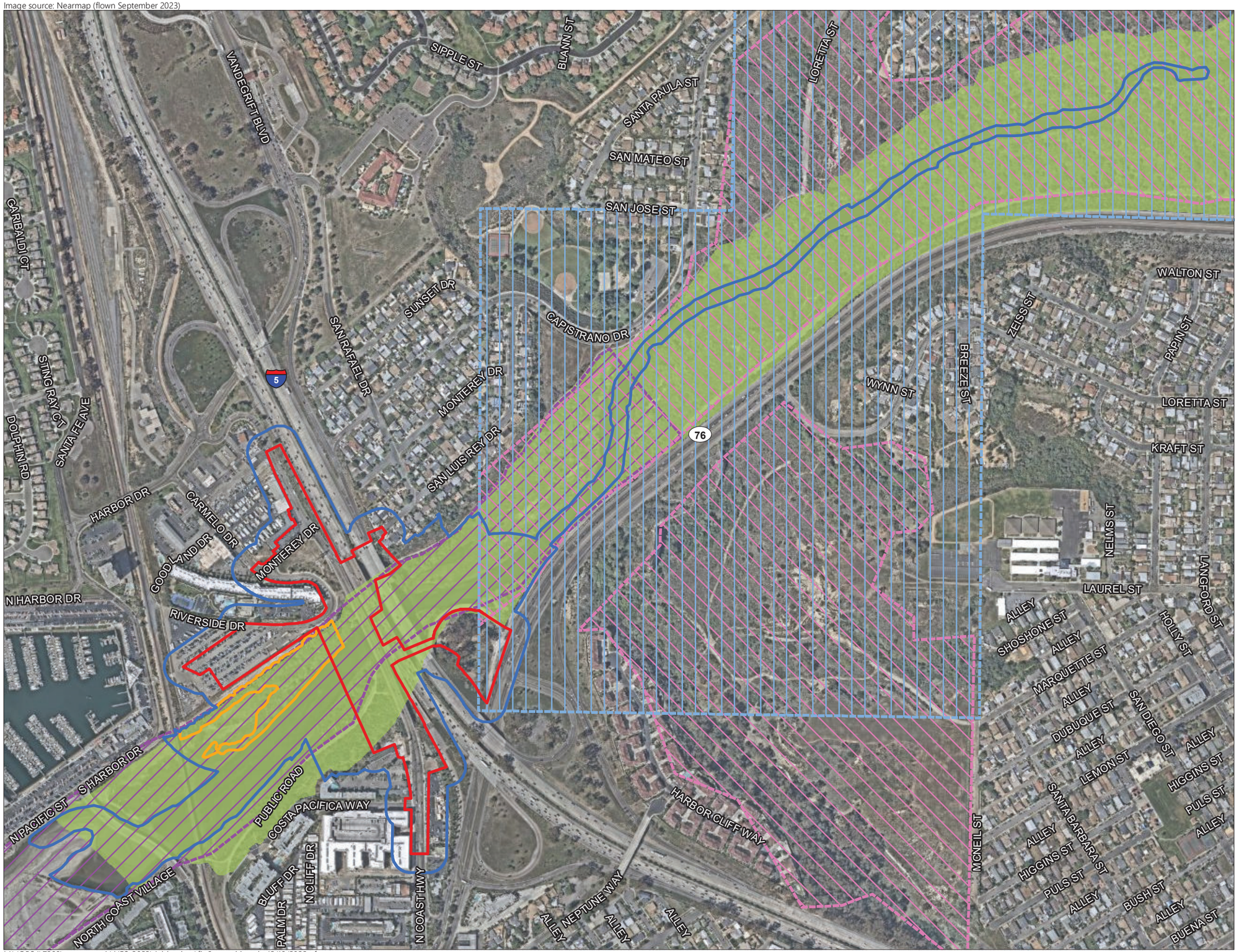
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FIGURE 7c

Location of California Coastal Commission Wetlands and Environmentally Sensitive Habitat Areas (ESHA)

Image source: Nearmap (flown September 2023)



Project Impact Area

Biological Study Area

Habitat Enhancement Area (Project Mitigation)

Tidewater Goby FCH

Least Bell's Vireo FCH

Coastal California Gnatcatcher FCH

Southwestern Willow Flycatcher FCH

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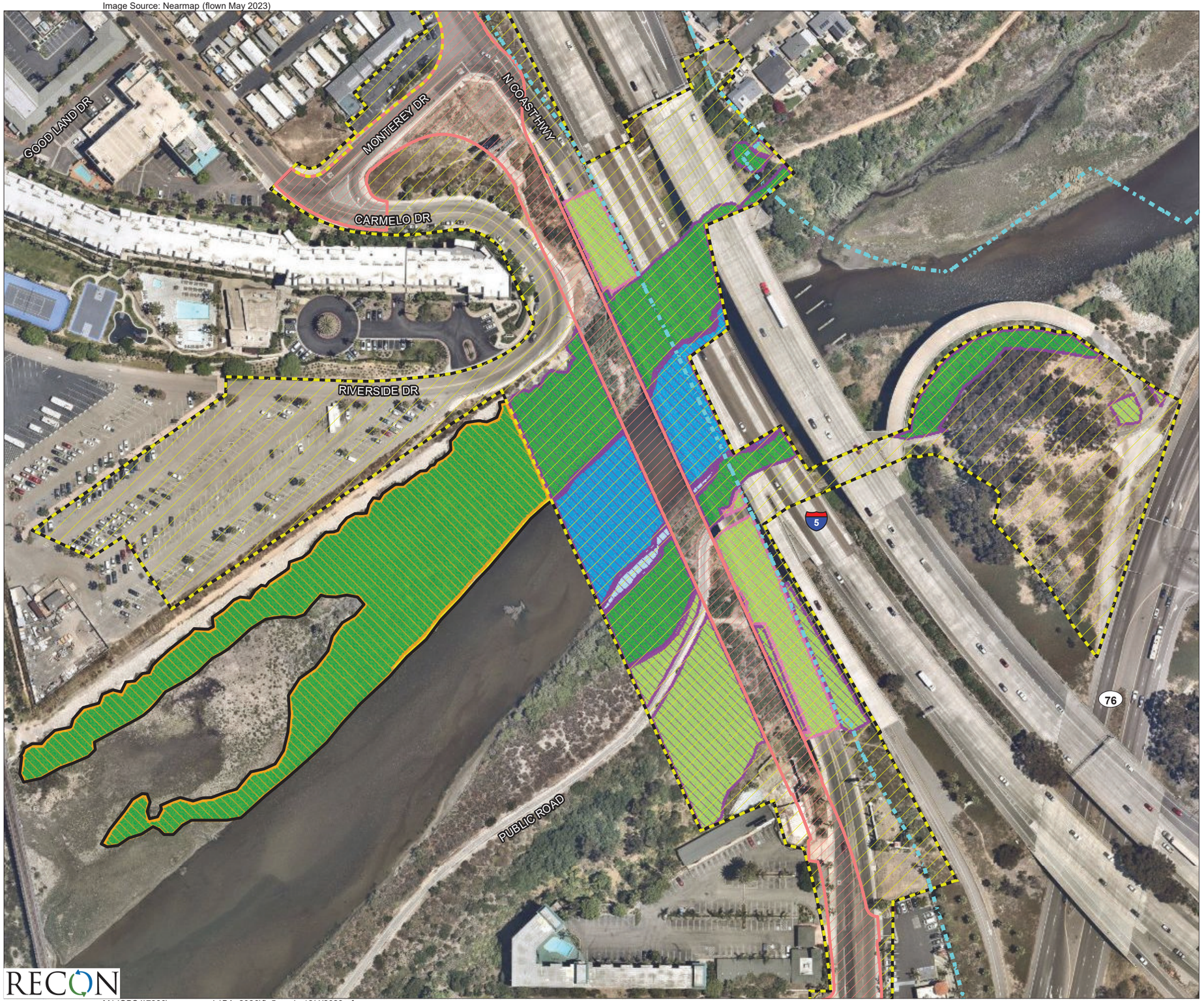
FIGURE 8

USFWS Critical Habitats near the Biological Study Area and Project Impact Area

ATTACHMENT B

Updated Conceptual Mitigation Plan

Image Source: Nearmap (flown May 2023)



Action Area

Bridge Replacement Alignment

Temporary Impacts

Caltrans ROW

Temporary Impacts Restoration

Diegan Coastal Sage Scrub, Restoration (1.09 ac)

Freshwater Marsh, Restoration (0.08 ac)

Southern Riparian Scrub, Restoration (2.04 ac)

Open Water, Restoration* (0.93 ac)

Potential Mitigation

Diegan Coastal Sage Scrub, Creation (0.69 ac)

Southern Riparian Scrub, Rehabilitation (2.88 ac)

Freshwater Marsh, Re-establishment (0.04 ac)

* Approximate location, entire area will not be restored.

0 Feet 150

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FIGURE 5

Proposed Project Compensation