

# **Aquatic Resources Delineation for the San Diego Clean Fuels Facility LLC Project**

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## **National City, California**

### **Lead Agency:**

City of National City  
1243 National City Boulevard  
National City, California 91950

### **Prepared For:**

USD Clean Fuels  
811 Main, Suite 2800  
Houston, Texas 77002

### **Prepared By:**



ECORP Consulting, Inc.  
3838 Camino Del Rio North, Suite 370  
San Diego, California 92108

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**LIST OF ACRONYMS AND ABBREVIATIONS**

<b>Term</b>	<b>Description</b>
BNSF	Burlington Northern Santa Fe
CCA	California Coastal Act
CCC	California Coastal Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CFR	Code of Federal Regulations
CNPS	California Native Plant Society
CWA	Clean Water Act
DA	Delineation Area
ESHA	Environmentally Sensitive Habitat Areas
ESRI	Environmental Systems Research Institute Inc.
GIS	Geographic Information System
GPS	Global Positioning System
JD	Jurisdictional Determination
LCPs	Local Coastal Programs
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OHWM	Ordinary high water mark
Procedures	Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State
Project	USD Clean Fuels Transloading Facility
ROW	Right-of-way
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SWQB	Surface Water Quality Bureau
TNW	Traditional Navigable Waters
TOB	Top of bank
USACE	U.S. Army Corps of Engineers

**LIST OF ACRONYMS AND ABBREVIATIONS**

<b>Term</b>	<b>Description</b>
USC	U.S. Code
USD-CF	USD Clean Fuels
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

## 1.0 INTRODUCTION

USD Clean Fuels (USD-CF) proposes to construct a transloading facility on the Burlington Northern Santa Fe (BNSF) Railway railroad right-of-way (ROW) located between the existing buildings along Cleveland Avenue and the existing BNSF Railway tracks, and between Civic Center Drive and W. 19th Street in National City, California (Project). This document provides the results of a wetlands study, consisting of a jurisdictional delineation, depicting limits of waters of the state and waters of the U.S. at the Project location.

This report provides a summary of aquatic resources regulated pursuant to Section 401 and 404 of the Clean Water Act (CWA), Section 1600 et al. of the California Fish and Game Code, and the Porter-Cologne Water Quality Control Act that occur within the Delineation Area (DA). Because the Project is located within 1 mile of the Pacific Ocean coastline, this report also discusses aquatic resources pursuant to the definitions of the California Coastal Commission (CCC). The DA used in this report includes client-provided Project boundaries (Project Area) as well as a 50-foot buffer. The information presented in this report provides data required by the U.S. Army Corps of Engineers (USACE) Los Angeles District's *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports* (USACE 2017). All aquatic resources areas shown in exhibits in this report are for the purposes of the USACE, California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB) and the CCC and are subject to modification following agency verification.

### 1.1 Project Description

USD-CF proposes to construct a transloading facility on the BNSF Railway railroad ROW located between the existing buildings along Cleveland Avenue and the existing BNSF Railway tracks, and between Harbor Drive and W. 19th Street in National City, California. The new terminal facility will add nine rail spurs and five fixed truck loading spots to transload biodiesel fuel, renewable diesel fuel, and either ethanol or sustainable aviation fuel directly from rail cars into trucks. The Proposed Project consists of the following improvements: build tracks and turnouts/crossovers to facilitate car movement in/out and within the transload facility, install concrete slab pump pads at each transload spot, install truck load slabs sloped to a drain in the center at each transload spot, install pumps and piping to move fuels from rail cars to truck loading spots, provide a concrete-lined containment basin and pipe each load slab drain to the basin, provide track pans for containment at the rail transloading cars, provide a kiosk for driver check-in and Bill of Lading printing, provide temporary restroom facilities for driver use, provide all-weather (gravel) paving for the facility and circulation, and provide lighting for the site as needed.

### 1.2 Location and Setting

The Project Area is approximately 10.9 acres (473,075.7 square feet) and is disturbed by former uses for railroad and industrial purposes, but otherwise unimproved and undeveloped. A portion of the site contains four closed release cases and one open release case is located on the adjoining/adjacent properties (Remediation Area). The open remediation case is associated with the Pacific Steel, Inc. property located adjacent and east of the site. The Project Area is located in the Medium Industrial zone within the Coastal Zone overlay.

The Proposed Project is located entirely within the National City Municipal Boundary in San Diego County, California. As depicted on the U.S. Geological Survey (USGS) 7.5-minute National City, CA topographic quadrangle, the Project is located within an un-sectioned portion of the La Nacion Land Grant of Township 17 South, Range 2 West, San Bernardino Base and Meridian (Figure 1). The Proposed Project is located at the northeastern corner of the intersection of W. 19th Street and the existing BNSF double tracks, approximately 500 feet west of Interstate 5 and 2,000 feet east of the Pacific Ocean. A summary of geographic information is provided in Table 1.

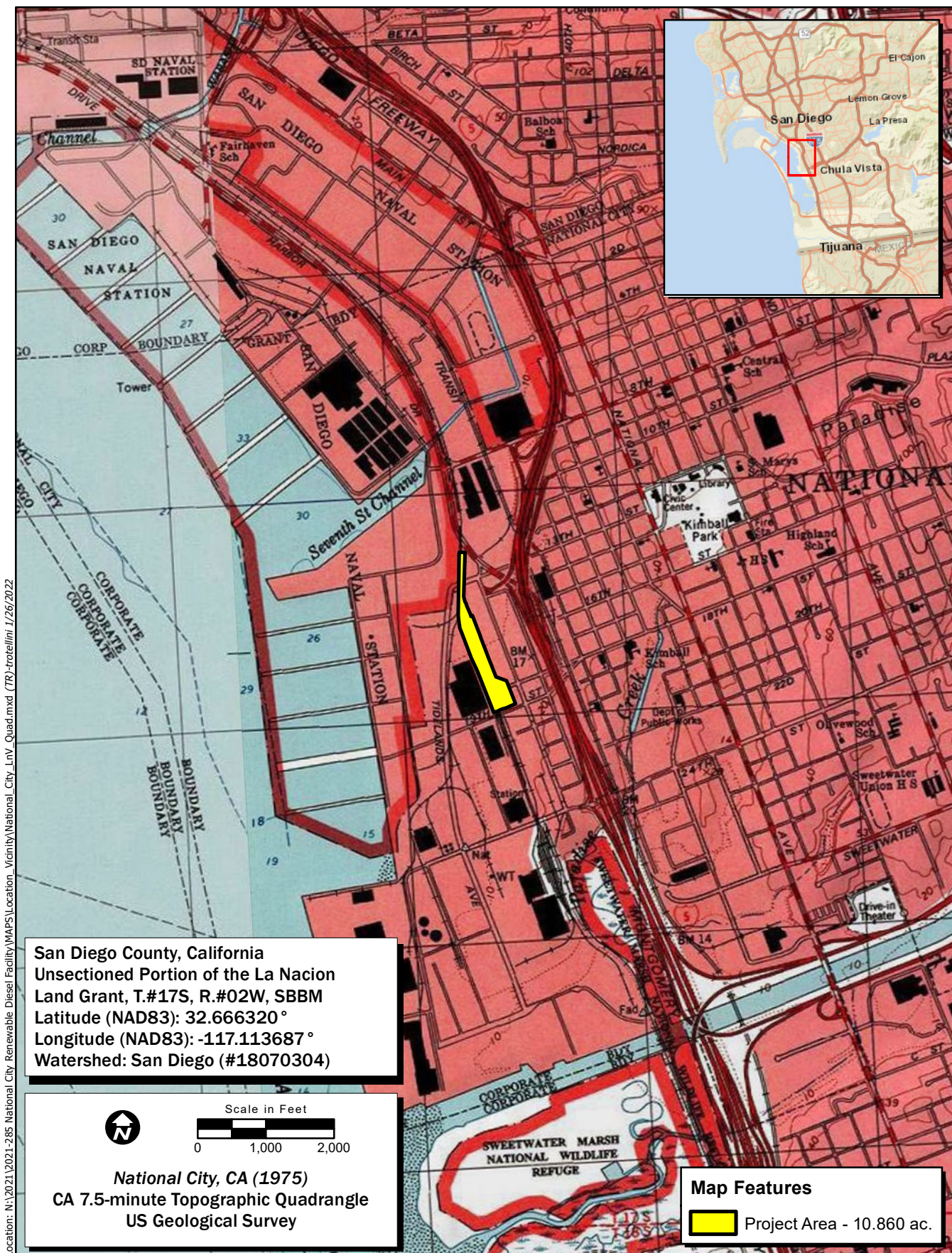
<b>Table 1. Project Area Location</b>						
<b>County</b>	<b>Delineation Area</b>	<b>Latitude (Decimal Degrees)</b>	<b>Longitude (Decimal Degrees)</b>	<b>Project Area Acreage</b>	<b>Delineation Area Acreage</b>	<b>Assessor Parcel Numbers within Project Area</b>
San Diego	Project Area plus 50-foot buffer	32.666320	-117.113687	10.86	17.13	5590405700, 5590404600, 5590400402, 5590760400, 5550900200, 5550900100, 5590760200, 5590760300, 5590911100, 5590910300, 5590405300, 5590511000, 5590911400, 5590403201, 5590101400, 5590101300, 5590100500, 5590100400, 5590100900, 5590560300, 5590405200, 5590403202, 5590511100, 5590404800, 5590510400, 5590404700, 5590760600, 5590100800, 5590405800, 5590710400, 5590400401, 5590760500, 5590760100

## **2.0 REGULATORY SETTING**


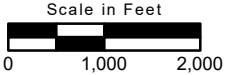
### **2.1 Clean Water Act**

The USACE regulates discharge of dredged or fill material into waters of the U.S. under Section 404 of the CWA. *Discharges of fill material* is defined as the addition of fill material into waters of the U.S., including, but not limited to the following: placement of fill necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes, and subaqueous utility lines [33 Code of Federal Regulations (CFR) § 328.2(f)]. In addition, Section 401 of the CWA (33 U.S. Code [USC] 1341) is regulated by the RWQCB and requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards. Section 401 Certification “gives states and authorized






**San Diego County, California**  
 Unsectioned Portion of the La Nacion  
 Land Grant, T.#17S, R.#02W, SBBM  
 Latitude (NAD83): 32.666320°  
 Longitude (NAD83): -117.113687°  
 Watershed: San Diego (#18070304)

**National City, CA (1975)**  
 CA 7.5-minute Topographic Quadrangle  
 US Geological Survey

**Map Features**  
 Project Area - 10.860 ac.

Location: N:\2021\2021-285 National City Renewable Diesel Facility\WAPS\Location\_Vicinity\National\_City\_Lnv\_Quad.mxd (7R)-trivellini\_1/26/2022

Map Date: 1/26/2022  
 Services Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Copyright © 2013 National Geographic Society, i-cubed

**Figure 1. Project Location and Vicinity**  
 2021-285 San Diego Clean Fuels Facility LLC Project

tribes the authority to grant or waive certification of proposed federal licenses or permits that may discharge into waters of the US” (33 USC 1251).

On June 22, 2020, the Navigable Waters Protection Rule, published by the U.S. Environmental Protection Agency (USEPA) and the USACE, became the effective definition of waters of the United States. However this rule was vacated in August 2021. On December 7, 2021, the USEPA and USACE announced a proposed rule to revise the definition of “waters of the United States.” This proposal would return to the pre-2015 definitions of waters of the U.S. The proposed rule was open for public comment until February 7, 2022. The final rule has not yet been issued.

In the 2015 USACE/USEPA CWA regulations (33 CFR 328.3[a]), the term “waters of the U.S.” is defined as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (iii) Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the U.S. under the definition;
5. Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;
6. The territorial seas;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in 1-6 above

## **2.2 Porter-Cologne Water Quality Control Act**

The Porter-Cologne Water Quality Control Act requires “any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the State to file a report of discharge” with the RWQCB through State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures) (California Code of Regulations [CCR], title 23, § 3855) (State Water Resources Control Board 2021). *Waters of the State* is defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code § 13050[e]). Pollution is defined as an alteration of the quality of the waters of the State by waste to a degree that unreasonably affects its beneficial uses (California Water Code § 13050) and includes filling in waters of the State. Note that CCR, title 23, § 3855 applies only to individual water quality certifications, but the new Procedures



extend the application of § 3855 to individual waste discharge requirements for discharges of dredged or fill material to waters of the State and waivers thereof.

A permit for impacts to waters of the State would likely be required under the CWA and/or Porter-Cologne Water Quality Control Act. To determine whether a project should be regulated pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB considers whether project activities could impact the quality of waters of the State.

### **2.3 California Fish and Game Code Section 1602**

Pursuant to Section 1602 of the California Fish and Game Code, a Streambed Alteration Agreement (SAA) application must be submitted for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake” (CDFW 2021). In Title 14 of the CCR, Section 1.72, the CDFW defines a *stream* (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation.”

The CDFW’s jurisdiction includes drainages with a definable bed, bank, or channel with the jurisdictional limit being the top of bank (TOB). It also includes areas that support intermittent, perennial, or subsurface flows; supports fish or other aquatic life; or supports riparian or hydrophytic vegetation. It also includes areas that have a hydrologic source.

The CDFW will determine if the proposed actions will result in diversion, obstruction, or change of the natural flow, bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. The CDFW will submit a SAA that includes measures to protect affected fish and wildlife resources; this SAA is the final proposal agreed upon by the CDFW and the applicant.

### **2.4 Coastal Zone Management Act**

The Coastal Zone Management Act was passed in 1972 to provide incentives for states and local governments to create diverse planning and protection of coastal natural resources through laws and management programs as stated:

*...to encourage and assist the states to exercise effectively their responsibilities in the coastal zone through the development and implementation of the land and water resources of the coastal zone, giving full consideration to ecological, cultural, historic, and esthetic values as well and the needs for compatible economic development programs (16 USC 1452(2)).*

### **2.5 California Coastal Act**

The California Coastal Act of 1976 (CCA) is administered by the CCC and was created with guidance from the California Coastal Plan to protect natural coastal resources, enhance public access to the coast, and balance conservation and development. The CCA applies to the government, businesses, and private individuals and regulates all land and water uses from the high tide line of the California coastal out to 3 nautical miles inland, except for the San Francisco Bay. Local governments serve as the regulatory agency

within the boundaries of their jurisdiction and are also responsible for creating Local Coastal Programs (LCPs) to guide coastal planning, development, and conservation as well as issuing permits. The CCC operates under the federal Coastal Zone Management Act and reviews LCPs for approval.

The CCA protects important coastal biological resources including wetlands, riparian habitats and other areas defined as Environmentally Sensitive Habitat Areas (ESHA) by the CCC in accordance with the CCA. The Coastal Act Section 30107.5 defines an ESHA as:

*...any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.*

Designation as ESHA is determined on a site by site basis by the CCC. Some nonwetland riparian areas may be so limited in size, degraded, or isolated that they do not meet the minimum threshold under the CCA.

It is also important to note, the CCC criteria for wetlands varies from USACE and CDFW. The CCC's wetland definition, taken from the California Code of Regulations Title 14, states:

*Wetlands are lands where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salt or other substance in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deepwater habitats (14 CCR Section 13577).*

The presence of any one of three wetland indicators (hydrology, hydrophytes, or hydric soils) potentially qualifies an area as a wetland, pursuant to the CCC's definition. Furthermore, the CCC establishes the upland limit of a wetland as:

*(1) the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover*

*(2) the boundary between soil that is predominantly hydric and soil that is predominantly non-hydric; or*

*(3) in the case of wetlands without vegetation or soils, the boundary between land that is flooded or saturated at some time during years of normal precipitation, and land that is not (14 CCR Section 13577).*

The CCC's determination of the presence of a "One Parameter Wetland" typically follows the methods contained USACE 1987 Wetland Delineation Manual and, more recently, the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, which for federal wetlands requires the presence of wetlands hydrology, hydric soils, and a predominance of hydrophytic vegetation. As noted, while the CCC relies on the federal manuals to establish the presence of any of the three

parameters, typically the presence of a single parameter (e.g., a predominance of wetland vegetation) is sufficient for the CCC to make a presumptive finding for the presence of wetlands.

The 1981 CCC Statewide Interpretive Guidelines define riparian habitat as follows:

*A “riparian habitat” is an area of riparian vegetation. This vegetation is an association of plant species which grows adjacent to freshwater watercourses, including perennial and intermittent streams, lakes, and other bodies of freshwater.*

## 3.0 METHODS

### 3.1 Pre-Survey Investigations

The following resources were reviewed prior to conducting a portion of the field delineations to identify potentially jurisdictional areas: aerial imagery (Environmental Systems Research Institute Inc. [ESRI] 2022; Google Earth 2021), topographic maps, the National Wetlands Database, the online Web Soil Survey (Natural Resources Conservation Service [NRCS] 2022a), and a hydric soils list for the area. The aerial imagery was used to digitize potential aquatic features using ArcGIS™. The imagery was analyzed during a preliminary desktop delineation effort to identify differences in vegetative cover, the presence of breaks in a slope, and other areas of potential water disturbance. The aerial imagery, combined with these other resources, was used to create a map with features that required further study during the field investigation. Field maps were produced at a scale of 1:1000. A data dictionary was developed using the criteria in the datasheet for the identification of the ordinary high-water mark (OHWM) in arid west regions and identification of State-regulated habitat using the ArcGIS suite software.

### 3.2 Field Survey Investigation

This Aquatic Resources Delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008a), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (OHWM Guide; USACE 2008b), the *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2010), and the State of New Mexico’s *Hydrology Protocol for the Determination of Ephemeral, Intermittent, and Perennial Waters* (Surface Water Quality Bureau [SWQB] 2010). Environmental Systems Research Institute Inc. (ESRI®) and Google Earth aerial imagery were used to assist with mapping and ground-truthing (ESRI 2021; Google Earth 2021). The Web Soil Survey (NRCS 2022a) was used to aid in identifying hydric soils. The Jepson Manual, 2nd Edition (Baldwin et al. 2012) and the USACE National Wetland Plant List (USACE 2018) were used for plant nomenclature and identification.

ECORP Consulting, Inc. delineation specialists Christina Torres, Caroline Garcia, and Kirsten Zornado conducted the field survey on March 17, 2022 by visually surveying the entire DA. As previously mentioned, the DA used for this study is the location of all proposed culvert improvements plus a 50-foot buffer. Where jurisdictional features were present, the extent of potential waters of the U.S. limits were delineated using the OHWM in accordance with the OHWM Guide (USACE 2008b). The OHWM Guide is

intended for delineating ephemeral/intermittent channels. OHWM indicators commonly found in the Arid West include a clear natural scour line impressed on the bank, recent bank erosion, destruction of native terrestrial vegetation, and the presence of litter and debris. Resources needed to delineate OHWM include aerial photography and other imagery, topographic maps and other maps (e.g., geological, soil, vegetation), rainfall data, stream gage data, and existing delineations (if present). Field identification of the OHWM includes noting general impression of the vegetation species and distribution, geomorphic features present, surrounding upland land use, and hydrologic alterations and instream and floodplain structures. In the field, the process of delineating the OHWM includes the identification of a low-flow channel (if present), a transition to an active floodplain, and an active floodplain through the presence of geomorphic features (e.g., presence of an active floodplain, benches, break in bank slope, staining of rocks, litter, or drift) and vegetation indicators (e.g., presence of sparse/low vegetation, annual herbs, hydromesic ruderals, pioneer tree seedlings and saplings, xeroriparian species).

In addition, stream conditions were assessed based on the USACE-recommended protocol (SWQB 2010) to properly classify features as ephemeral, intermittent, or perennial waters. A combination of hydrological, geomorphic and biological indicators was used to determine the hydrologic nature of each drainage. In addition, each drainage was evaluated for the presence or absence of bed and bank, a natural line impressed in the bank, sediment deposits, changes in the character of soil, destruction of terrestrial vegetation, litter/debris (wrack), leaf litter disturbance, water stains, soil shelving, and exposed roots indicating active hydrology within the channel. Feature characteristics and measurements were recorded directly into the data dictionary in the Global Positioning System (GPS) unit. Characteristics of all mapped features were also documented in photographs.

Where wetlands were suspected, paired locations were sampled to evaluate whether or not the vegetation, hydrology, and soils data supported a wetland aquatic resource delineation when possible. At each paired location, one point was located such that it was within the estimated aquatic resource area, and the other point was situated outside the limits of the estimated aquatic resource area. An additional non-paired location was sampled to document a marginal area that was determined to be upland; it lacked hydrophytic vegetation, hydric soils, and/or wetland hydrology. Field data were recorded on Wetland Determination Data Forms - Arid West Region.

Section 401 of the CWA identifies jurisdictional limits as any "surface water or groundwater, including saline waters, within the boundaries of the state." For the purposes of this delineation, the limits of RWQCB jurisdiction generally follow those of the USACE jurisdiction under Section 404. Limits of CDFW-regulated areas include the bank-to-bank width measures for each feature and the extent of associated riparian habitat and riparian tree species based on the canopy of the riparian community or tree, to the limits of the dripline, within or directly adjacent to the streambed. Riparian habitat was defined as plant species that are likely dependent on the hydrology of the streambed.

The observed features were mapped using a postprocessing capable GPS unit with submeter accuracy (e.g., Juniper Geode™). The location, species, number, and diameter at breast height (DBH) of riparian trees within the DA were also recorded using a GPS unit.

### 3.4 Post-Processing

The data collected in the field utilized ArcGIS™ Collector on a device (smartphone or tablet) connected to a submeter external receiver (i.e., Juniper Geode™). The submeter receiver applies differential correction instantaneously in the field using the Satellite Based Augmentation System. The data were then viewed and analyzed for verification, edited, and compiled in Geographic Information System format at the time of download. ArcGIS™ software was used to develop the geodatabase and the shapefiles depicted on the figures included in this report.

## 4.0 RESULTS

### 4.1 Existing Site Conditions

Topography for this site is generally flat, and it has been disturbed since at least 1904. The elevation is at 8 to 13 feet above mean sea level throughout the entire the Project Area. Average annual precipitation for National City is 12.34 inches, which falls as rain. In the 2020-2021 rain year, the Mid City San Diego weather station recorded 7.25 inches of rain approximately 12 kilometers from the Project Area (National Oceanic and Atmospheric Administration [NOAA] 2022). The average precipitation per event that year was 0.345 inch. Rainfall data summary is provided in Table 2.

<b>Table 2. Rainfall Data Summary</b>			
<b>Season</b>	<b>Station</b>	<b>Total Precipitation (inches)</b>	<b>Average Precipitation per Event (inches)</b>
2018-2019 <sup>1</sup>	Mid City San Diego 0.5W, CA US	24.38	3.04
2019-2020 <sup>1</sup>	Mid City San Diego 0.5W, CA US	17.03	2.84
2020-2021 <sup>1</sup>	Mid City San Diego 0.5W, CA US	7.6	1.27

<sup>1</sup> Rainfall Data from October 1- May 31 (NOAA 2022)

#### 4.1.1 Soils

The soil map units identified within the DA by NRCS are listed in Table 3 and on Figure 2, along with their major drainage characteristic and NRCS hydric soil status (NRCS 2022b, 2022c). Soil characteristics observed in the field were generally consistent with what has been identified for these soil units and their official series descriptions.





**Figure 2. Natural Resources Conservation Service Soil Types**

**Map Content**

- Project Area
- Remediation Area
- Delineation Area

**Series Designation - Series Description**

- HuC - Huerhuero-Urban land complex, 2 to 9 percent slopes

Location: N:\2021\2021-285 National City Renewable Diesel Facility\MAPS\Soils\_and\_Geology\National\_City\_Soils\_ARC.mxd 0-trotellm 6/2/2022





<b>Table 3. Natural Resources Conservation Service Soil Types</b>					
<b>Map Unit Symbol</b>	<b>Map Unit Name</b>	<b>Taxonomic Class</b>	<b>Taxonomic Order</b>	<b>Drainage Class</b>	<b>Hydric Rating</b>
HuC	Huerhuero-Urban land complex, 2 to 9 percent slopes.	Fine, montmorillonitic, thermic Typic Natrixeralfs	Alfisols	Moderately well drained	No

#### **4.1.2 National Wetland Inventory**

According to the National Wetlands Inventory (USFWS 2022), there are no features mapped within the DA. The nearest mapped feature is approximately 600 feet to the southeast (Figure 3).

#### **4.1.3 Vegetation Communities**

The habitat and vegetation community mapping follow the classifications described in *A Manual of California Vegetation* (Sawyer et al. 2009) and *A Manual of California Vegetation Online* (California Native Plant Society [CNPS] 2022). Vegetation within the DA is composed of disturbed mulefat thickets and ornamental vegetation. Two additional land cover types occur within the DA and include developed and disturbed.

##### **4.1.3.1 Disturbed Mulefat Thickets (*Disturbed Baccharis salicifolia Shrubland Alliance*)**

Mulefat thickets are characterized as having mulefat dominant or codominant in the shrub canopy, typically with other native plant species. Within the DA, mulefat thickets are disturbed with sparse cover of mulefat and broom baccharis (*Baccharis sarothroides*) intermixed with nonnative and ornamental species such as red brome (*Bromus madritensis ssp. rubens*) and golden wattle (*Acacia pycnantha*). This vegetation community was not associated with any drainages and is present within an upland area of disturbed soils within the Remediation Area. Mulefat is known to be a colonizer of disturbed sites and is not considered a sensitive vegetation community for this Project, nor is it considered to be an ESHA under the CCA.

##### **4.1.3.2 Ornamental**

The ornamental classification consists of vegetation that has been landscaped. The ornamental area of the DA is at the southern end of the Remediation Area and is comprised primarily of golden wattle intermixed with nonnative species such as red brome and sweet fennel (*Foeniculum vulgare*).





**Figure 3. National Wetlands Inventory**

**Map Content**

- Project Area
- Remediation Area

Wetland Type

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

Location: N:\2021\2021-285 National City Renewable Diesel Facility\MAPS\Hydro\National\_City\_NWI.mxd 0-trotellini 5/5/2022





### **4.1.3.3 Other Land Cover Types**

#### **Disturbed**

The Disturbed classification includes areas where the native vegetation community has been heavily influenced by human actions, such as grading, trash dumping, and dirt roads, but lacks development. Disturbed is not a vegetation classification, but rather a land cover type and is not typically restricted to a known elevation. Disturbed areas of the DA included a large portion of the Remediation Area and a majority of the Project Area situated between the railroad and parking lot. An active dump site and a homeless encampment were observed within the disturbed areas. In areas classified as Disturbed, vegetation was absent or consisted primarily of nonnative species, such as tamarisk (*Tamarix* sp.), foxtail barely (*Hordeum murinum*), Russian thistle (*Salsola tragus*), smilo grass (*Stipa miliacea*), yellow sweet clover (*Melilotus indicus*), and crown daisy (*Glebionis coronaria*).

#### **Developed/Urban Lands**

Developed lands are those that are heavily affected by human use, including landscaping, residential homes, commercial or industrial buildings and associated infrastructure, and transportation corridors. Within the Project Area this included the parking lot, materials storage yard, and railroad tracks. Within the larger DA, this included surrounding commercial buildings and roads. Landscaped areas consisted primarily of ornamental species Mexican fan palm (*Washingtonia robusta*) and sea lavender (*Limonium perezii*) as well as nonnative species including tree tobacco (*Nicotiana glauca*), rabbitsfoot grass (*Polypogon monspeliensis*), and crown daisy.

## **4.2 Aquatic Resources**

No potential waters of the U.S./State have been mapped within the DA; these results are subject to agency verification. Aquatic resources that fall within the Project boundaries are summarized by feature in Table 4 and depicted on Figure 4. The OHWM data forms are included as Attachment B, and representative site photographs are included as Attachment C.

### **4.2.1 Wetlands**

No wetlands were identified within the DA.

### **4.2.2 Other Waters of the U.S. (Non-Wetlands)**

No other waters of the U.S. were identified within the DA.

### **3.2.1 Wetlands Defined in Accordance with the California Coastal Act**

Under the CCA, the presence of a single criteria/parameter (i.e., wetland vegetation or hydric soils or wetland hydrology) is sufficient to make a presumptive finding for the presence of wetlands. As such, wetlands defined under the CCA are more extensive in the DA as compared to USACE wetlands. Under the

CCA, potential wetlands defined by the CCC total 0.144 acre and are depicted on Figure 4 and summarized in Table 4. The feature is a depressional feature and is described below.

<b>Table 4. Potential CCC Wetlands</b>		
<b>Classification</b>	<b>Acreage<sup>1</sup></b>	<b>Linear Feet</b>
Depressional Feature	0.144	-
<b>Total:</b>	<b>0.144</b>	-

Acreages in this table represent a calculated estimation and are subject to modification following the CCC verification process. Waters areas are measured in State Plane (NAD83) coordinates. All measurements are in the defined units for this coordinate system (feet) and all calculations and summations are calculated in square feet. Results are converted to acreages for ease of use. However, this conversion may lead to minor rounding errors in the reporting of acreage summaries.

### **3.2.1.1 Depressional Feature**

One depressional feature currently exists within the southwest portion of the DA (Feature 3). According to aerial imagery (Google Earth 2021), the location of the current depression used to have partial overlap with Harrison Avenue (compacted road base) and the other half was covered by a concrete lot that was removed in approximately 2018. Review of aerial imagery for 2018 reveals that after the concrete lot was removed, OHV use occurred with some regularity and multiple tracks through the depression are evident as well as mud splatter marks in all directions indicating vehicles were repeatedly driving through the depression. During field work deep tire ruts were visible in the depression. The elevation of the depression was likely at or near that of Harrison Avenue in 2018, however OHV activities likely lowered the elevation of the depression. At the time of the survey this depression did not have standing water but there were dried algal mats present.

### **3.2.2 Stormwater Conveyance Systems**

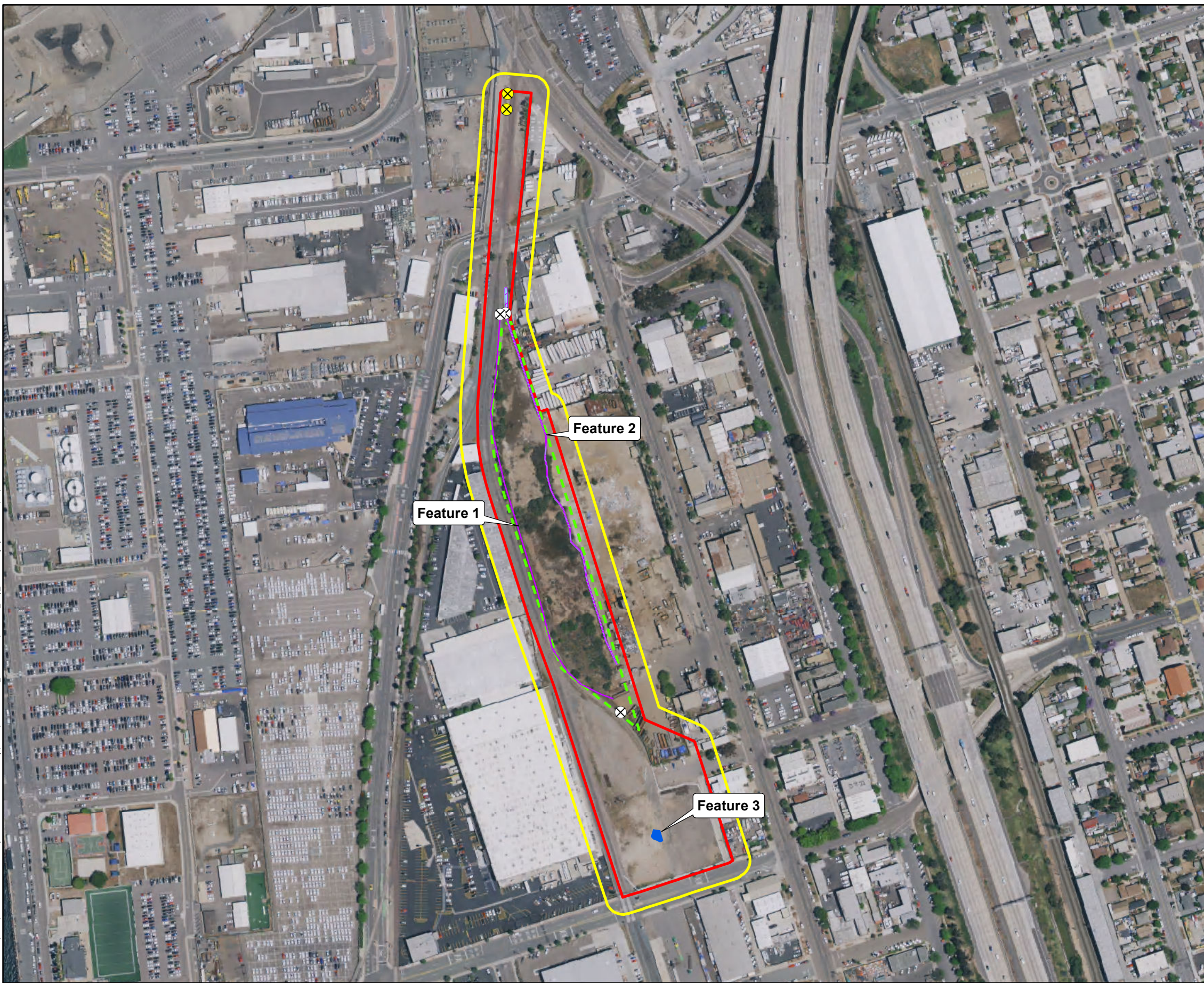
Stormwater conveyance systems are manufactured features constructed for the purpose of channeling stormwater and urban runoff to a desired location. The following stormwater control features were constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff. Within the DA, these include both ephemeral stormwater conveyance features, as well as simple concrete culverts that lack vegetation and a defined bed-and-bank. These areas are considered non-jurisdictional to the regulatory agencies.

#### **3.2.2.1 Ditches**

Two brow-ditches functioning as stormwater conveyance systems displayed ephemeral characteristics (Features 1 and 2). These features daylight within the Project Area but enter and exit culverts that underground. These features are dry or mostly dry, with straight, confined channels. There is minimal or no compositional difference between upland and riparian corridors along these channels and the soil particle size inside the channels are the same or roughly the same as the soil particle size outside of the








Location: N:\2021\2021-285 National City Renewable Diesel Facility\Map\Jurisdictional\_Delineation\National\_City\_ARO.mxd (TP)-tracellm 6/27/2022




**Figure 4. Aquatic Resources Delineation**



**Map Content**

-  Project Area
-  Remediation Area
-  Delineation Area
-  Culverts
-  Storm Drain Inlets

**Potential Coastal California Commission Jurisdiction**

-  Depressional Feature

**Non-Jurisdictional**

-  Ditch - Top-of-Bank
-  Ditch - OHWM



channels. These features contain rooted upland plants within the streambed. These features are summarized in Table 5.

<b>Table 5. Non-Jurisdictional Features</b>					
<b>Classification</b>	<b>OHWB Acreage<sup>1</sup></b>	<b>TOB Acreage<sup>1</sup></b>	<b>OHWB Width (feet)</b>	<b>TOB Width (feet)</b>	<b>Linear Feet</b>
Stormwater Conveyance Systems:					
Feature 1	0.057	0.069	2	2.5	1243.566
Feature 2	0.087	0.143	4	10	1166.010
<b>Total:</b>	0.144	0.212	-	-	2409.576

Acreages in this table represent a calculated estimation and are subject to modification following the Corps' verification process. Waters areas are measured in State Plane (NAD83) coordinates. All measurements are in the defined units for this coordinate system (feet) and all calculations and summations are calculated in square feet. Results are converted to acreages for ease of use. However, this conversion may lead to minor rounding errors in the reporting of acreage summaries.

### 3.2.2.2 Culverts and Associated Features

There are three manufactured drainage culverts and two storm drain inlets that generally serve the purpose of conveying stormwater and urban runoff underneath local roads, the railroad, and surrounding developed areas. These consist mostly of concrete features with metal drainage pipes that range from approximately 1 to 2 feet in diameter. They are largely unvegetated and lack a natural bed and bank. These features are likely associated with municipal storm sewer systems.

## 5.0 JURISDICTIONAL ASSESSMENT

The features observed and/or mapped within the DA do not appear to be tributary to Traditional Navigable Waters (TNW) or connected to interstate waters based on the field assessment and an assessment of aerial photographs, but rather the various features located in the DA are considered isolated. If the drainages recorded within the DA do not connect downstream to TNW or to Interstate Waters, as determined by the USACE, then these aquatic resources may not be subject to regulation under the CWA. However, a depressional feature located within the DA is considered to be potentially jurisdictional under the CCA.

According to Regulatory Guidance Letter (08-02), an Applicant "may elect to use a preliminary [Jurisdictional Determination] JD to voluntarily waive or set aside questions regarding CWA/Rivers and Harbors Act of 1899 (RHA) jurisdiction over a particular site, usually in the interest of allowing the landowner or other 'affected party' to move ahead expeditiously to obtain a Corps permit authorization where the party determines that it is in his or her best interest to do so" (USACE 2008c). A significant nexus evaluation is not necessary to obtain a preliminary JD. An approved JD by the USACE would be necessary to determine if jurisdictional waters of the U.S. are absent.



For impacts to CCA areas, the Project would require consistency with the LCP and concurrence with the City, who presides over the LCP.

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## **6.0 CONCLUSION**

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No resources waters of the U.S./State have been mapped within the DA. However, a single depressional feature that is likely jurisdictional under the CCA has been mapped. This acreage and extent represent a calculated estimation of the jurisdictional area within the Proposed Project and is subject to modification during the agency verification process. Fill within jurisdictional features to the CCA would require City concurrence pursuant to the LCP.

## 7.0 REFERENCES

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## **LIST OF ATTACHMENTS**

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Attachment A – Driving Directions to Delineation Area

Attachment B – OHWM and Wetland Determination Data Forms - Arid West

Attachment C – Representative Site Photographs

## **ATTACHMENT A**

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Driving Directions to Delineation Area

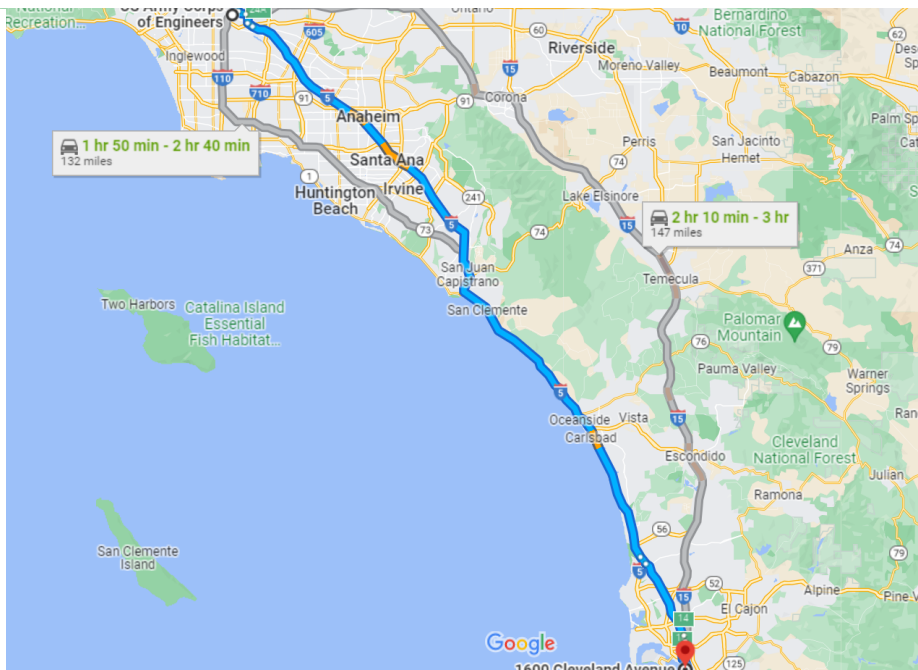
US Army Corps of Engineers  
915 Wilshire Blvd, Los Angeles, CA 90017

Get on CA-110 N/Harbor Fwy from S Figueroa St

- ↑ 1. Head southeast on Wilshire Blvd toward S Figueroa St 2 min (0.5 mi)
- ↶ 2. Turn left at the 1st cross street onto S Figueroa St 417 ft
- ↶ 3. Turn left at the 3rd cross street onto W 5th St 0.2 mi
- ↷ 4. Keep right at the fork, follow signs for Harbor Fwy/CA-110 N and merge onto CA-110 N/Harbor Fwy 174 ft
- 0.2 mi

Follow I-5 S and I-805 S to Cleveland Ave in National City.  
Take exit 11A from I-5 S

- ↗ 5. Merge onto CA-110 N/Harbor Fwy 1 hr 59 min (125 mi)
- ↘ 6. Take exit 24A toward I-5 S/I-10 E 0.5 mi
- ↗ 7. Use the left lane to merge onto US-101 S 0.5 mi
- ↶ 8. Keep left to stay on US-101 S 453 ft
- ↷ 9. Keep right at the fork to stay on US-101 S 1.2 mi

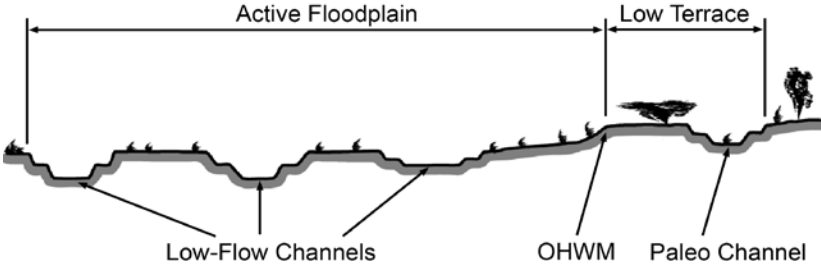


Map data ©2022 Google, INEGI 10 mi



OHWM and Wetland Determination Data Forms – Arid West Region

## Arid West Ephemeral and Intermittent Streams OHWM Datasheet

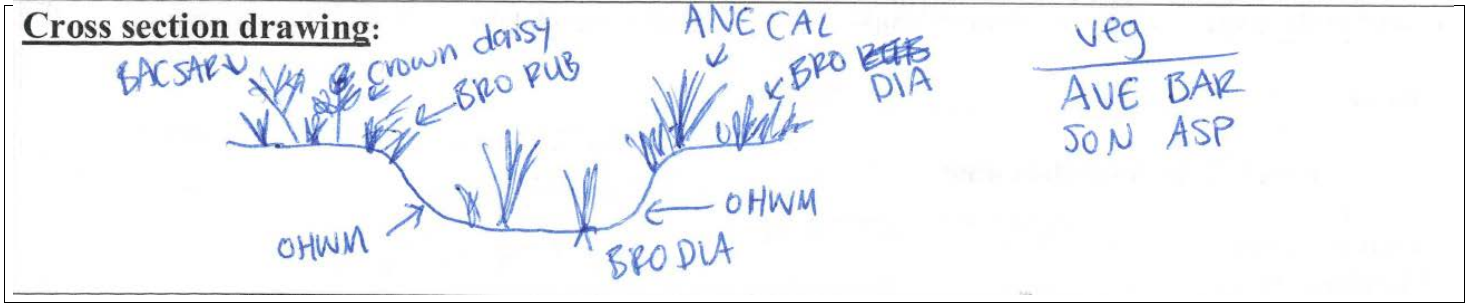
<b>Project:</b> National City <b>Project Number:</b> 2021-285 <b>Stream:</b> 1 <b>Investigator(s):</b> C. Torres, C. Garcia, K. Zornado	<b>Date:</b> 3/17 <b>Town:</b> National City <b>Photo begin file#:</b>	<b>Time:</b> <b>State:</b> CA <b>Photo end file#:</b>				
Y <input checked="" type="checkbox"/> / N <input type="checkbox"/> Do normal circumstances exist on the site?  Y <input checked="" type="checkbox"/> / N <input type="checkbox"/> Is the site significantly disturbed?	<b>Location Details:</b> Located east of active BNSF railroad.  <b>Projection:</b> _____ <b>Datum:</b> _____ <b>Coordinates:</b> _____					
<b>Potential anthropogenic influences on the channel system:</b> Reclamation site with toxic pollutants, active railroad, homeless encampments, dump site.						
<b>Brief site description:</b> East of active BNSF tracks within reclamation site,						
<b>Checklist of resources (if available):</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <input checked="" type="checkbox"/> Aerial photography            Dates:  <input checked="" type="checkbox"/> Topographic maps  <input type="checkbox"/> Geologic maps  <input type="checkbox"/> Vegetation maps  <input checked="" type="checkbox"/> Soils maps  <input checked="" type="checkbox"/> Rainfall/precipitation maps  <input type="checkbox"/> Existing delineation(s) for site  <input checked="" type="checkbox"/> Global positioning system (GPS)  <input type="checkbox"/> Other studies         </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Stream gage data            Gage number:            Period of record:  <input type="checkbox"/> History of recent effective discharges  <input type="checkbox"/> Results of flood frequency analysis  <input type="checkbox"/> Most recent shift-adjusted rating  <input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event         </td> </tr> </table>			<input checked="" type="checkbox"/> Aerial photography Dates: <input checked="" type="checkbox"/> Topographic maps <input type="checkbox"/> Geologic maps <input type="checkbox"/> Vegetation maps <input checked="" type="checkbox"/> Soils maps <input checked="" type="checkbox"/> Rainfall/precipitation maps <input type="checkbox"/> Existing delineation(s) for site <input checked="" type="checkbox"/> Global positioning system (GPS) <input type="checkbox"/> Other studies	<input type="checkbox"/> Stream gage data Gage number: Period of record: <input type="checkbox"/> History of recent effective discharges <input type="checkbox"/> Results of flood frequency analysis <input type="checkbox"/> Most recent shift-adjusted rating <input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event		
<input checked="" type="checkbox"/> Aerial photography Dates: <input checked="" type="checkbox"/> Topographic maps <input type="checkbox"/> Geologic maps <input type="checkbox"/> Vegetation maps <input checked="" type="checkbox"/> Soils maps <input checked="" type="checkbox"/> Rainfall/precipitation maps <input type="checkbox"/> Existing delineation(s) for site <input checked="" type="checkbox"/> Global positioning system (GPS) <input type="checkbox"/> Other studies	<input type="checkbox"/> Stream gage data Gage number: Period of record: <input type="checkbox"/> History of recent effective discharges <input type="checkbox"/> Results of flood frequency analysis <input type="checkbox"/> Most recent shift-adjusted rating <input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event					
<b>Hydrogeomorphic Floodplain Units</b> 						
<b>Procedure for identifying and characterizing the floodplain units to assist in identifying the OHW:</b> <ol style="list-style-type: none"> <li>1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.</li> <li>2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.</li> <li>3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.           <ol style="list-style-type: none"> <li>a) Record the floodplain unit and GPS position.</li> <li>b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.</li> <li>c) Identify any indicators present at the location.</li> </ol> </li> <li>4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.</li> <li>5. Identify the OHW and record the indicators. Record the OHW position via:           <table style="width: 100%; border: none; margin-top: 5px;"> <tr> <td style="width: 50%;"><input type="checkbox"/> Mapping on aerial photograph</td> <td style="width: 50%;"><input checked="" type="checkbox"/> GPS</td> </tr> <tr> <td><input type="checkbox"/> Digitized on computer</td> <td><input type="checkbox"/> Other:</td> </tr> </table> </li> </ol>			<input type="checkbox"/> Mapping on aerial photograph	<input checked="" type="checkbox"/> GPS	<input type="checkbox"/> Digitized on computer	<input type="checkbox"/> Other:
<input type="checkbox"/> Mapping on aerial photograph	<input checked="" type="checkbox"/> GPS					
<input type="checkbox"/> Digitized on computer	<input type="checkbox"/> Other:					

Project ID:

Cross section ID:

Date:

Time:



**OHWM**

GPS point: 32.665325 N, -117.113147 W

**Indicators:**

- Change in average sediment texture
- Change in vegetation species
- Change in vegetation cover
- Break in bank slope
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_

**Comments:**

Ditch fed from culvert approximately 1.5' upstream  
 OHWM width: 2'  
 B2B width: 2.5'

**Floodplain unit:**     Low-Flow Channel     Active Floodplain     Low Terrace

GPS point: " \_\_\_\_\_ "

**Characteristics of the floodplain unit:**

Average sediment texture: Medium silt  
 Total veg cover: 17 %    Tree: 0 %    Shrub: 0 %    Herb: 17 %  
 Community successional stage:

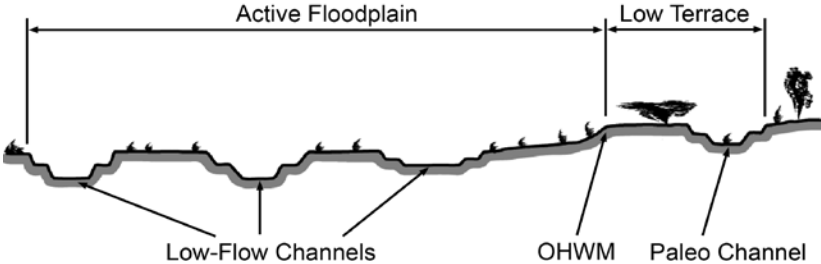
- NA
- Early (herbaceous & seedlings)
- Mid (herbaceous, shrubs, saplings)
- Late (herbaceous, shrubs, mature trees)

**Indicators:**

- Mudcracks
- Ripples
- Drift and/or debris
- Presence of bed and bank
- Benches
- Soil development
- Surface relief
- Other: vegetation matted down
- Other: change in veg color
- Other: \_\_\_\_\_

**Comments:**

## Arid West Ephemeral and Intermittent Streams OHWM Datasheet

<b>Project:</b> National City <b>Project Number:</b> 2021-285 <b>Stream:</b> 2 <b>Investigator(s):</b> C. Torres, C. Garcia, K. Zornado	<b>Date:</b> 3/17/22 <b>Town:</b> National City <b>Photo begin file#:</b>	<b>Time:</b> <b>State:</b> CA <b>Photo end file#:</b>				
Y <input checked="" type="checkbox"/> / N <input type="checkbox"/> Do normal circumstances exist on the site?  Y <input checked="" type="checkbox"/> / N <input type="checkbox"/> Is the site significantly disturbed?	<b>Location Details:</b> Located east of active BNSF railroad.  <b>Projection:</b> _____ <b>Datum:</b> _____ <b>Coordinates:</b> _____					
<b>Potential anthropogenic influences on the channel system:</b> Railroad (active) nearby - 15' away. Litter observed in channel						
<b>Brief site description:</b> Channel right next to active railroad.						
<b>Checklist of resources (if available):</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <input checked="" type="checkbox"/> Aerial photography            Dates:  <input type="checkbox"/> Topographic maps  <input type="checkbox"/> Geologic maps  <input type="checkbox"/> Vegetation maps  <input checked="" type="checkbox"/> Soils maps  <input checked="" type="checkbox"/> Rainfall/precipitation maps  <input type="checkbox"/> Existing delineation(s) for site  <input checked="" type="checkbox"/> Global positioning system (GPS)  <input type="checkbox"/> Other studies         </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Stream gage data            Gage number:            Period of record:  <input type="checkbox"/> History of recent effective discharges  <input type="checkbox"/> Results of flood frequency analysis  <input type="checkbox"/> Most recent shift-adjusted rating  <input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event         </td> </tr> </table>			<input checked="" type="checkbox"/> Aerial photography Dates: <input type="checkbox"/> Topographic maps <input type="checkbox"/> Geologic maps <input type="checkbox"/> Vegetation maps <input checked="" type="checkbox"/> Soils maps <input checked="" type="checkbox"/> Rainfall/precipitation maps <input type="checkbox"/> Existing delineation(s) for site <input checked="" type="checkbox"/> Global positioning system (GPS) <input type="checkbox"/> Other studies	<input type="checkbox"/> Stream gage data Gage number: Period of record: <input type="checkbox"/> History of recent effective discharges <input type="checkbox"/> Results of flood frequency analysis <input type="checkbox"/> Most recent shift-adjusted rating <input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event		
<input checked="" type="checkbox"/> Aerial photography Dates: <input type="checkbox"/> Topographic maps <input type="checkbox"/> Geologic maps <input type="checkbox"/> Vegetation maps <input checked="" type="checkbox"/> Soils maps <input checked="" type="checkbox"/> Rainfall/precipitation maps <input type="checkbox"/> Existing delineation(s) for site <input checked="" type="checkbox"/> Global positioning system (GPS) <input type="checkbox"/> Other studies	<input type="checkbox"/> Stream gage data Gage number: Period of record: <input type="checkbox"/> History of recent effective discharges <input type="checkbox"/> Results of flood frequency analysis <input type="checkbox"/> Most recent shift-adjusted rating <input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event					
<b>Hydrogeomorphic Floodplain Units</b> 						
<b>Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:</b> <ol style="list-style-type: none"> <li>1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.</li> <li>2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.</li> <li>3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.             <ol style="list-style-type: none"> <li>a) Record the floodplain unit and GPS position.</li> <li>b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.</li> <li>c) Identify any indicators present at the location.</li> </ol> </li> <li>4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.</li> <li>5. Identify the OHWM and record the indicators. Record the OHWM position via:             <table style="width: 100%; border: none; margin-top: 5px;"> <tr> <td style="width: 50%;"><input type="checkbox"/> Mapping on aerial photograph</td> <td style="width: 50%;"><input checked="" type="checkbox"/> GPS</td> </tr> <tr> <td><input type="checkbox"/> Digitized on computer</td> <td><input type="checkbox"/> Other:</td> </tr> </table> </li> </ol>			<input type="checkbox"/> Mapping on aerial photograph	<input checked="" type="checkbox"/> GPS	<input type="checkbox"/> Digitized on computer	<input type="checkbox"/> Other:
<input type="checkbox"/> Mapping on aerial photograph	<input checked="" type="checkbox"/> GPS					
<input type="checkbox"/> Digitized on computer	<input type="checkbox"/> Other:					

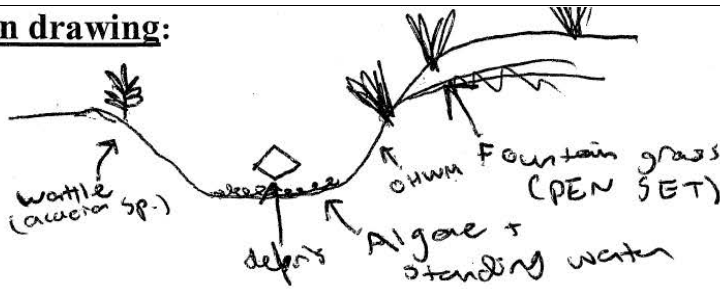
Project ID:

Cross section ID:

Date:

Time:

**Cross section drawing:**



**OHWM**

GPS point: 32.668621 N, -117.114198 W

**Indicators:**

- |   |  |
|---|--|
| <input type="checkbox"/> Change in average sediment texture | <input checked="" type="checkbox"/> Break in bank slope          |
| <input type="checkbox"/> Change in vegetation species       | <input checked="" type="checkbox"/> Other: <u>Standing water</u> |
| <input type="checkbox"/> Change in vegetation cover         | <input checked="" type="checkbox"/> Other: <u>Water line</u>     |

**Comments:**

Natural bottomed channel fed by brow ditches  
 OHWM: 4'  
 B2B: 10'

**Floodplain unit:**     Low-Flow Channel     Active Floodplain     Low Terrace

GPS point: " "

**Characteristics of the floodplain unit:**

Average sediment texture: Medium silt

Total veg cover: 0 %    Tree: 0 %    Shrub: 0 %    Herb: 0 %

Community successional stage:

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> NA                  | <input type="checkbox"/> Mid (herbaceous, shrubs, saplings)      |
| <input type="checkbox"/> Early (herbaceous & seedlings) | <input type="checkbox"/> Late (herbaceous, shrubs, mature trees) |

**Indicators:**

- |  |   |
|--|---|
| <input type="checkbox"/> Mudcracks                           | <input type="checkbox"/> Soil development |
| <input type="checkbox"/> Ripples                             | <input type="checkbox"/> Surface relief   |
| <input checked="" type="checkbox"/> Drift and/or debris      | <input type="checkbox"/> Other: _____     |
| <input checked="" type="checkbox"/> Presence of bed and bank | <input type="checkbox"/> Other: _____     |
| <input checked="" type="checkbox"/> Benches (small)          | <input type="checkbox"/> Other: _____     |

**Comments:**

**ATTACHMENT C**

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Representative Site Photographs

Attachment C. Representative Site Photographs



**Photo 1. Depressional feature (Feature 3) with dried algal mats present. March 17, 2022.**



**Photo 2. Feature 1 - Manmade brow-ditch, facing north. March 17, 2022.**



Attachment C. Representative Site Photographs



**Photo 3. Drainage pipe that undergrounds and leads into daylight portion of Feature 1. March 17, 2022.**



**Photo 4. Feature 1 - Manmade brow-ditch, facing south. March 17, 2022.**



Attachment C. Representative Site Photographs



**Photo 5. Feature 1 culvert within Remediation Area. March 17, 2022.**



**Photo 6. Feature 2 – Culvert adjacent to railroad tracks. March 17, 2022.**



Attachment C. Representative Site Photographs



**Photo 7. Feature 2 – Manmade brow-ditch upstream of underground crossing, south of Civic Center Dr. and Tidelands Ave. March 17, 2022.**



**Photo 8. Feature 2 – Manmade brow-ditch south of Civic Center Dr. and Tidelands Ave, underground crossing pictured. March 17, 2022.**