
APPENDIX L3: SECTION 404 DUE DILIGENCE MEMO



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M E M O R A N D U M

To: Terrence Gaines, Kimley-Horn
From: Ruth Villalobos & Associates, Inc.
Date: August 5, 2025
Subject: Irwindale Brew Yard Project Section 404 Due Diligence

Purpose

The purpose of this memorandum is for Ruth Villalobos & Associates, Inc. (RVA) to document the results of an assessment of U.S. Army Corps of Engineers, Los Angeles District (USACE) Section 404 of the Clean Water Act (CWA) (codified at 40 CFR Part 230) requirements as part of the due diligence of the proposed Irwindale Brew Yard Project (Project) located in the City of Irwindale, California.

Findings

RVA participated in a meeting with Vanessa Navarro of USACE and Valarie Zara, Man Voong, and Snejana Toveva of the Los Angeles Regional Water Quality Control Board (RWQCB) on July 2, 2025. RVA was not made aware that there would be RWQCB staff included in the meeting. Regardless, the meeting was in regards to the Pre-Jurisdictional Delineation Report (PJD), in which the PJD concluded the Project does not support USACE jurisdictional wetlands and non-wetland waters of the U.S. (WoUS) under Section 404 of the CWA. During the meeting with USACE and RWQCB, the two (2) drainage features present at the Project site, Drainage Features 1 and 2, were discussed to be ephemeral drainages and therefore it was agreed to not be considered as WoUS under Section 404 of the CWA. RWQCB staff disclosed that while the drainages may not be jurisdictional under Section 401, the RWQCB would be taking jurisdiction of both drainage features under the Porter-Cologne Water Quality Control Act. Thus, the Project would likely require a RWQCB Waste Discharge Requirements (WDR) permit if there would be impacts to the drainage features. Additionally, because the on-site culverts associated with Drainage Feature 1 and Drainage Feature 2 convey on-site flows to the Santa Fe Dam Flood Control Basin where flows eventually reach and contribute to the jurisdictional San Gabriel River, the Project would require a Section 1602 Lake and Streambed Alteration Agreement (Agreement) from the California Department of Fish and Wildlife (CDFW) should any impacts occur within CDFW jurisdiction.

The meeting concluded with Vanessa Navarro of USACE requesting additional information to be submitted to USACE for review in order to concur with the findings of the PJD. These materials, including Streamflow Duration Assessment Method (SDAM) results and Antecedent Precipitation Tool (APT) results for both drainage features were provided to USACE as part of the updated PJD on July 10, 2025. An email response was received from Vanessa Navarro on July 31, 2025, where USACE concurrence with the findings of the PJD to the extent of the Project would not require a Section 404 permit. Per the email correspondence, ephemeral waterways are not considered relatively permanent waters and are therefore not considered WoUS. Discharges of dredged or fill material into non-WoUS are not regulated under Section 404 of the CWA. Therefore, the Project would not require a Section 404 permit from USACE.

If you have any questions, please feel free to contact me at (909) 685-5942 or rvillalobos@rvacorp.com.

Sincerely,



RUTH VILLALOBOS, PRESIDENT

Enclosures:

Attachment 1: RVA 7/31/2025 Email from USACE Regarding Section 404 Not Required for the Project

Attachment 2: PJD Report, July 10, 2025

Attachment 1

RVA 7/31/25 Email from USACE Regarding Section 404 Not Required for the Project

Delineation Concurrence: Irwindale Brew Yard (Corps File No. SPL-2025-00401)

From Navarro, Vanessa CIV USARMY CESPL (USA) <Vanessa.Navarro@usace.army.mil>
Date Thu 7/31/2025 3:25 PM
To Seve Villalobos <svillalobos@rvacorp.com>
Cc Justinne Manahan <jmanahan@rvacorp.com>; WB-RB4-401USACE <rb4-401usace@waterboards.ca.gov>

4 attachments (13 MB)

20250710_ARDR_updated_SPL-2025-00401.pdf; 20250710_figures_SPL-2025-00401.pdf; 20250707_SDAM_Report_Feature-2_SPL-2025-00401.pdf; 20250707_SDAM_Report_Feature-1_SPL-2025-00401.pdf;

Hello Seve,

Based on a review of the information you have submitted [*Preliminary Jurisdictional Delineation Report* (July 2025), *Streamflow Duration Assessment Methods* (July 7, 2025)], the conclusions are a reasonable representation of the aquatic features located onsite. Please note that this concurrence solely confirms the extent of aquatic resources onsite and does not represent an approved jurisdictional determination that evaluates the jurisdictional status of aquatic resources under existing regulations. This information is sufficient for planning and permitting purposes with our office. Unless otherwise requested, no further correspondence will be forthcoming regarding this request. Note that your proposed project may be regulated under other Federal, State, and local laws.

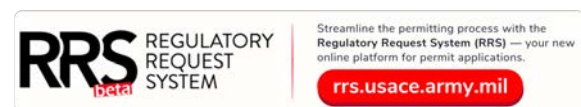
For your information, ephemeral waterways are not considered relatively permanent waters and therefore are not considered waters of the United States (WOTUS). Discharges of dredged or fill material into non-WOTUS would not be regulated under Section 404 of the Clean Water Act.

Best regards,

Vanessa Navarro Project Manager
Regulatory Division, North Coast Branch, Los Angeles & San Bernardino Counties Section
Los Angeles District, U.S. Army Corps of Engineers
Vanessa.Navarro@usace.army.mil

Government Mobile: (213) 219-0798
[Chat with me in MS Teams!](#)

We are paperless. New requests for a pre-application meeting, jurisdictional determination, or permit should be submitted through the Regulatory Request System (RRS) at rrs.usace.army.mil. You can also report a potential violation using the RRS. Other requests will continue to be accepted in digital format through the Los Angeles District Regulatory contacts listed at <https://www.spl.usace.army.mil/Missions/Regulatory/#ContactUs>. If files are over 15 megabytes, coordinate with the Los Angeles District staff to submit documentation via File Transfer Protocol (FTP) using the Department of Defense Secure Access File Exchange (DoD SAFE).



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<https://regulatory.ops.usace.army.mil/customer-service-survey/>.

You can visit our website at <https://www.spl.usace.army.mil/Missions/Regulatory/>.

7/31/2025 Email Attachments (from Vanessa Navarro, USACE)

Preliminary Jurisdictional Delineation Report

Irwindale Brew Yard Project

Irwindale, Los Angeles County, California

Prepared for:

Kimley-Horn

1100 Town and Country Road, Suite 700
Orange, CA 92868

Contact: Terrence Gaines
Terrence.gaines@kimley-horn.com

Prepared by:

Ruth Villalobos & Associates, Inc.

3602 Inland Empire Blvd, Suite C310
Ontario, CA 91764

Contact: Justinne Manahan
jmanahan@rvacorp.com



July 2025

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List of Acronyms / Abbreviations

APN	Assessor's Parcel Number
AMSL	Above Mean Sea Level
CDFW	California Department of Fish and Wildlife
CFGF	California Fish and Game Code
CFR	Code of Federal Regulations
CWA	Clean Water Act
°F	Fahrenheit
Ft.	Feet/foot
I-210	Interstate 210
MPH	Miles Per Hour
NGVD	National Geodetic Vertical Datum
NRCS	Natural Resources Conservation Service
OHWM	Ordinary High-water Mark
Project	Irwindale Brew Yard Project
RVA	Ruth Villalobos & Associates Inc.
RWQCB	Regional Water Quality Control Board
SWRCB	State Water Resources Control Board
USGS	United States Geological Survey
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United Fish and Wildlife Services
WSC	Waters of the State of California
WoUS	Waters of the United States

1.0 INTRODUCTION

The following technical report provides the results of the preliminary jurisdictional delineation conducted by Ruth Villalobos & Associates, Inc. (RVA) for the proposed Irwindale Brew Yard Project (Project). The preliminary jurisdictional delineation was performed to identify areas anticipated to be jurisdictional under the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act; the Regional Water Quality Control Board pursuant to Section 401 of the Clean Water Act and the Porter-Cologne Act; and under the California Department of Fish and Wildlife pursuant to California Fish and Game Code Section 1602. This information is necessary to evaluate potential jurisdictional impacts and permit requirements associated with the proposed Project and can be used by the agencies to assess the proposed Project's conformance with State and Federal regulations.

1.1 Project Location

The proposed Project is generally located to the northeast of the Santa Fe Dam Recreation area, south of the interstate 210 (I-210) freeway, and west of Irwindale Avenue within the City of Irwindale (see Figure 1 – Regional Map and Figure 2 – Site Vicinity Map). The Project site is within the *Azusa* and *Baldwin Park* United States Geological Survey (USGS) 7.5-minute quadrangles and in Township 1 north, Range 10 west of the Public Land Survey System, within the southern portions of Sections 32 and 33. The Project site is made up of six (6) parcels Assessor's Parcel Numbers (APN) 8533-009-025 through -029 and 8533-011-052 (see Figure 3 – Project Overview Map). The approximate middle of the proposed Project site is located at the latitude and longitude of 34.125080°, -117.940567°

1.2 Project Description

The Irwindale Brew Yard Project is located within the City of Irwindale at the street address: 15801 W 1st Street Irwindale, CA 91706. The street address would also provide site access for the Project. The Project proposes the filling of the two (2) abandoned historic pit mines to the grade of the surrounding undeveloped areas for future development/logistical purposes (see Figure 4 – Site Plan). The proposed development consists of the construction of three (3) warehouses and associated infrastructure on the areas around the existing Brew Yard facility, which is to remain in place.

The Project area exists at higher elevations than the maximum flood elevation of the Santa Fe Control Basin Dam (Dam). Ephemeral sheet flows from the unimproved portions of the site generally flow in the direction of the Dam reservoir and exit the site in two (2) locations via a pipe culvert and box culverts. The pipe culvert and box culverts allow flows to flow off site under the rail spur in the northwestern and southwestern corners, respectively, of parcel APN:8533-009-025. In the existing condition, approximately a quarter of all on-site sheet flows (51 of 220 acres) drain through the box culverts.

The Project seeks the ability to allow treated stormwater captured on site to flow from within the Project boundary to the Santa Fe Dam Reservoir area through the southwestern box culverts. Off-site flows in the northwestern corner of the Project site would continue to flow normally through the pipe culvert and off site. The Project's Preliminary Hydrology and Low Impact Development Plan states, "For proposed on-site flows, stormwater mitigation is needed to ensure the proposed flows do not negatively impact the existing downstream drainage facilities. The proposed mitigated flows are anticipated to match the existing flows." The storm drain design incorporates the necessary mitigation of stormwater runoff by implementing underground infiltration basins to capture stormwater. Discharge of stormwater would only occur when a storm event fills the infiltration basins and excess flows would then be conveyed off site. Stormwater would be discharged from a headwall to be installed north of the existing box culverts in the southwest corner of the Project area. The Project does not propose any development or modification that would

impact the existing pipe culvert or the box culverts. The report additionally states, the overflow of the entire site, a 25-year storm event, would ultimately discharge towards the southwest corner of the property towards the existing box culverts beneath the rail spur. The report further states, “Based on the basin routing for the 25-year storm event, the highest routed (mitigated) on-site outflows from the underground detention system result in proposed flows that are less than the existing on-site flows” (see Attachment 3 – Preliminary Hydrology and Low Impact Development Plan).

The Project previously submitted a Section 408 inquiry to the U.S. Army Corps of Engineers (USACE) and the Project was determined to be outside of the USACE owned land, easements, and infrastructure.

2.0 REGULATORY FRAMEWORK

2.1 Federal Regulations

2.1.1 Clean Water Act (33 U.S.C. 1344 ET SEQ.)

Pursuant to Section 404 of the Clean Water Act (CWA), the USACE is authorized to regulate any activity that would result in the discharge or dredged or fill within waters of the United States (WoUS), including wetlands, as listed in 33, Section (§) 327.3 of the Code of Federal Regulations (CFR). The United States Environmental Protection Agency (USEPA) promulgated Section 404(b)(1) guidelines (40 CFR Part 230) and provides oversight; however, the USACE Regulatory Program evaluates, and issues permits for proposed discharges into WoUS.

Section 401 of the CWA requires applicants for Federal permits or licenses provide certification from the State stating any discharges from the project will comply with State-established water quality standard requirements. Applicants/Requestors must obtain a Section 401 certification or waiver for the proposed action before the USACE can authorize a permit under Sections 404 or 408 of the CWA. Environmental Code (1165-2-220) specifies USACE as the regulatory agency who will coordinate internally to ensure Section 404 permits, and the Section 408 Permissions are consistent.

2.1.2 River and Harbors Act (33 U.S.C. 403)

Section 10 of the River and Harbors Act regulates the construction of structures in or over any navigable WoUS or outside the defined limits of navigable WoUS if the structure or work affects the course, location, or condition of the water body. The law regulates disposal of dredged or fill materials, dredging, excavation, filling, modification and recanalization of WoUS and pertains to the smallest to the largest of construction undertakings including without limitation any aerial or subaqueous power transmission lines, aids to navigation, artificial canal, bank protection (e.g., riprap, revetment, bulkhead), boat ramp, boom breakwater, dolphin, groin, intake or outfall pipes, jetty, mooring structures such as pilings, permanently moored floating vessel, riprap, revetment, tunnel, weir, wharf. This section applies to all construction whether permanent, semi-permanent, or temporary.

Section 14 of the Rivers and Harbors Act of 1899, as amended, and codified in 33 CFR 408 (Section 408) provides that the Secretary of the Army may, upon the recommendation of the USACE Chief of Engineers, grant permission to other entities for the permanent or temporary alteration or use of any USACE Civil Works project. This requires a determination by the Secretary that the requested alteration would not be injurious to the public interest and would not impair the usefulness of the USACE project. The purpose of the Section 408 review is to ensure that the Congressionally-authorized purpose and benefits of the Civil Works project are protected and maintained (e.g., flood risk management, navigation, coastal storm damage reduction) and to ensure that what is being proposed is not injurious to the public interest.

2.1.3 Definition: Waters of the United States

On August 29th, 2023, the USEPA and Department of the Army issued a final ruling to amend the final “Revised Definition of ‘Waters of the United States’” rule published in the *Federal Register* on January 18th, 2023. This final rule conforms the definition of “waters of the United States” to the US Supreme Court’s May 25th, 2023, decision in the case of *Sackett v. Environmental Protection Agency*. Parts of the January 2023 Rule are invalid under the Supreme Court’s interpretation of the CWA in the *Sackett* decision. Therefore, the USEPA and Department of the Army have amended key aspects of the regulatory text to conform it to the Court’s decision. The conforming rule, “Revised Definition of ‘Waters of the United States,’ Conforming,” became effective on September 8th, 2023, upon publication in the *Federal Register*. The USEPA’s regulatory definition of the term “waters of the United States” under the 2023 Rule 40 CFR 120 is as follows below. USACE’s identical definition is found under 33 CFR 328.3.

Per Title 40 CFR 120.2(a), “waters of the United States” means:

- (1) Waters which are:
 - i. 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;
 - ii. The territorial seas; or
 - iii. Interstate waters;
- (2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;
- (3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing, or continuously flowing bodies of water;
- (4) Wetlands adjacent to the following waters:
 - i. Waters identified in paragraph (a)(1) of this section; or
 - ii. Relatively permanent, standing, or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;
- (5) Intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing, or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

Additionally, 40 CFR 120(b) states that the following are not “waters of the United States” even where they otherwise meet the terms of paragraphs (a)(2) through (5) above:

- (1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;
- (2) Prior converted cropland designated by the Secretary of Agriculture;
- (3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;
- (4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;
- (5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
- (6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

- (7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and Swales, erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.

2.2 State Regulations

2.2.1 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Water Code Section 13000 et seq.) provides for Statewide coordination of water quality regulations. The State Water Resources Control Board was established as the statewide authority and nine separate Regional Water Quality Control Boards (RWQCB) were developed to oversee water quality on a day-to-day basis. The RWQCB is the primary agency responsible for protecting water quality in California. As discussed above, the RWQCB regulates discharges to surface waters under the Federal CWA. The RWQCB is additionally responsible for administering the Porter-Cologne Water Quality Control Act.

Pursuant to the Porter-Cologne Water Quality Control Act, the State is given authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge regardless of if CWA Section 404 is required for the activity. “Waste” is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

2.2.2 Regional Water Quality Control Board

The RWQCB regulates activities pursuant to Section 401(a)(1) of the CWA, specifically for the discharge of waste (dredged or fill material) into WoUS. Section 401 of the CWA specifies that certification from the State is required for any applicant requesting a Federal license or permit, including a Section 404 permit. Through the Porter Cologne Water Quality Control Act, the RWQCB asserts jurisdiction over all Waters of the State of California (WSC), which are generally the same as WoUS but may also include waters not in Federal jurisdiction.

2.2.3 California Department of Fish and Wildlife

California Department of Fish and Wildlife (CDFW) regulates water resources under Sections 1600-1616 of the CFGC. Section 1602 states: “An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake (CDFW, 2015).”

CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses (including dry washes) and lakes characterized by the presence of (1) definable bed and banks and (2) existing fish or wildlife resources. Furthermore, CDFW jurisdiction often extends to habitats adjacent to watercourses, such as oak woodlands in canyon bottoms or willow woodlands that support hydrologic functions within the riparian system. CDFW jurisdiction typically does not include features without a discernible bed and bank, such as swales.

2.2.4 Definition: Waters of The State

The California Water Code defines broadly to include “any surface water or groundwater, including saline waters, within the boundaries of the state.” WSC includes all WoUS but also includes waters not in Federal authority.

The following wetlands are waters of the state:

1. Natural wetlands
2. Wetlands created by modification of a surface water of the state, and
3. Artificial wetlands that meet any of the following criteria:
 - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
 - b. Specifically identified in a water quality control plan as a wetland or other water of the state;
 - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
 - d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):
 - i. Industrial or municipal wastewater treatment or disposal,
 - ii. Settling of sediment,
 - iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
 - iv. Treatment of surface waters,
 - v. Agricultural crop irrigation or stock watering,
 - vi. Fire suppression,
 - vii. Industrial processing or cooling,
 - viii. Active surface mining – even if the site is managed for interim wetlands functions and values,
 - ix. Log storage,
 - x. Treatment, storage, or distribution of recycled water,
 - xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits);
 - xii. Fields flooded for rice growing.

All artificial wetlands that are less than an acre in size and do not satisfy criteria set forth in 2, 3a, 3b, or 3c are not WSC.

2.2.5 Definition: Wetland of The State

The State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, was adopted in April 2020 and put into effect statewide on May 28, 2020 (State Water Resources Control Board, 2020). The State Water Resources Control Boards define an area as wetlands as follows:

An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

3.0 METHODS

3.1 Jurisdictional Features Literature Review

RVA biologists conducted a desktop literature review and records search to identify the presence of potentially jurisdictional hydrological features within the Project area and the surrounding areas. The desktop review investigated the potential presence of hydrological features conveying flows of water perennially or ephemerally, as well as potential wetland areas with water saturated soils. The desktop review included historical aerial imagery, electronic records databases, geographical maps, and field identification guides. The electronic database and records review included the following resources:

- **State Water Resources Control Board (SWRCB) Stream Classification Finder Map** is an online web hosted map which displays waterbodies and watercourses based on data provided by the United States Geological Survey National Hydrography Dataset and is one source of information used by Water Board Staff to evaluate past and present watercourse classifications.
- **USDA Natural Resources Conservation Service (NRCS) Soil Survey** is an online database which lists archived soil surveys. These soil surveys can be utilized for general farm, local, and wider area planning. In addition, a review of the local geological conditions and historical aerial photographs were conducted to assess the ecological changes the area has undergone.
- **U.S. Fish and Wildlife Service (USFW) Wetlands Mapper** is an online web hosted map which displays wetlands mapped consistent with a biological definition of an areas which ecologically function as wetlands.

All information used as source material during the literature review is cited in the *References* section of this report.

The SWRCB Stream Classification Finder and USGS topographical maps provided the preliminary basis of information for the presence of hydrological features. Historical aerial imagery was also utilized to locate and further inspect any potential drainage features and waterbodies historically existing in or around the Project area. The desktop literature review of the Project site also included prior Project reports and the Section 408 permit inquiry. The prior Project reports included the Biological Assessment and the Preliminary Hydrology and Low Impact Development Plan (see Attachments 3 and 4). All features suspected to exhibit flow or support riparian/riverine habitat would potentially fall under the jurisdiction of the respective Federal and State agencies: USACE, the RWQCB, and/or CDFW. Features appearing to meet these criteria were thoroughly analyzed and cross-referenced using all the preceding references. The information found during the desktop review was used as a basis of information to be fully investigated during the jurisdictional delineation field survey.

The Preliminary Hydrology and Low Impact Development Plan indicated the presence of four (4) potentially jurisdictional features: two (2) depleted mining pits currently self-retaining as sump sites (Mining Pit 1 and Mining Pit 2), one (1) drainage feature in the northwest portion of the site (Drainage Feature 1), and one (1) drainage feature in the southwest portion of the site (Drainage Feature 2). Upon further research and based on the information provided in the site's Preliminary Hydrology and Low Impact Development in addition to comparing the features of Mining Pit 1 and Mining Pit 2 to the

definitions of WoUS and WSC, neither pit were determined to be jurisdictional features. This was determined as the pits are excavated wholly in and draining only dry land and do not carry a relatively permanent flow of water (40 CFR 120(b)(3)); additionally, the pits were excavated in dry land for the purpose of obtaining fill, sand, or gravel and are now characterized by infrequent, short duration flows (40 CFR 120(b)(7)). As such, the focus of the field assessment was to examine Drainage Feature 1 and Drainage Feature 2 to determine if either or both features contain jurisdictional resources as well as to confirm no other potentially jurisdictional features are present within the Project site.

3.2 Jurisdictional Features Field Survey Assessment

RVA biologists Justinne Manahan and Zachary Jenson conducted a jurisdictional delineation of the proposed Project site on May 8th, 2025. The jurisdictional delineation was conducted four (4) days after a two (2) day rain event, occurring between May 4th and May 5th. Weather conditions on May 8th, 2025, were clear and warm, with a starting temperature of 66 degrees Fahrenheit (°F), 63 percent humidity, 0 percent precipitation, with 2 miles per hour (MPH) winds blowing to the north. No precipitation occurred on the day of the jurisdictional delineation and hydrologically normal conditions existed on the Project site. The survey area of the jurisdictional delineation included the area of the proposed Project site and a 100-foot survey buffer.

Potentially jurisdictional features were assessed in the field with a measuring tape when applicable and by mapping the limits, length, and width of the features with a Trimble Geo 7x submeter global positioning system. Lateral limits of potential non-wetland waters of the U.S./State under USACE and RWQCB purview were identified using field indicators of an ordinary high-water mark (OHWM) as described in A Field Guide to the Identification of the OHWM in the Arid West Region of the Western United States (USACE 2010). For each feature exhibiting the potential presence of an OHWM, RVA biologists completed a 2010 Arid West Ephemeral and Intermittent Streams OHWM Datasheet following the guidance provided in the Updated Datasheet for the Identification of the OHWM in the Arid West Region of the Western United States (USACE 2010). Potential lateral limits of non-wetland WoUS for USACE and RWQCB were examined using field indicators of an OHWM as described in A Field Guide to the Identification of the OHWM in the Arid West Region of the Western United States (USACE 2010).

CDFW potential jurisdictional boundaries were examined based on the presence of discernable streambed and associated riparian habitat and/or wetland areas. Streambeds with the potential to be considered under CDFW jurisdiction were delineated based on the definition of streambed as “a body of water flowing at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life. Including watercourses having a surface or subsurface flow supporting riparian vegetation” (Title 14, Section 1.72).

Following the site assessment, data collected during the field investigation for the features examined were entered into the web application for the Regional Streamflow Duration Assessment Methods (SDAMs). SDAMs are rapid field assessment methods that use hydrological, geomorphological, and/or biological indicators, observable in a single site visit, with or without geospatial indicators, to classify streamflow duration as perennial, intermittent, or ephemeral at the stream reach scale. Site data was additionally entered into the Antecedent Precipitation Tool (APT), which is a desktop tool commonly used by USACE to support decisions as to whether field data collection and other site-specific observations occurred under normal climatic conditions.

4.0 EXISTING CONDITIONS

4.1 Environmental Setting

The approximately 150.13-acre Project site is located in the City of Irwindale, south of the I-210 freeway, and abuts the northeast areas of the Santa Fe Dam Recreation Area. The surrounding land use primarily consists of the I-210 freeway to the north, commercial industrial buildings and associated infrastructure to the south and east, and alluvial fan sage scrub habitat within the Santa Fe Dam Recreation Area to the west.

The Project site consists of developed commercial infrastructure, disturbed land, and remnant ruderal sage scrub habitat. These three (3) land use and vegetation types are intermixed across the Project site as a result of an extensive history of heavy anthropogenic use. Areas of developed commercial infrastructure on site include the Irwindale Brew Yard manufacturing plant, a warehouse, a rail spur, a truck yard, an abandoned solar field, and associated infrastructure with impervious surfaces. Disturbed areas of the site consist of two (2) historic pit mines in the northwest and southeast corners of the site, respectively, and the potentially graded and maintained field south of the truck yard. The undeveloped areas surrounding the pit mines support remnant ruderal sage scrub habitat left unmaintained since the conclusion of mining operations. The vegetation within the ruderal remnant upland habitat is similar to the alluvial fan sage scrub vegetation community within the Santa Fe Recreation Area and consists of laurel sumac (*Malosma laurina*), hollyleaf redberry (*Rhamnus ilicifolia*), brittlebush (*Encelia farinosa*), California sagebrush (*Artemisia californica*), yerba santa (*Eriodictyon crassifolium*), and chaparral yucca (*Hesperoyucca whipplei*).

4.2 Soils and Topography

A review of the USDA's Web Soil Survey indicates the Project area consists of three (3) soil types (see Figure 8 – Soils Map). Soil complexes provide basic characteristics of all habitats, establish fundamental abiotic conditions, abiotic resources for vegetation, topography, and hydrology. Soil characterization can indicate potential areas in which a hydrological feature(s) can occur, such as vernal pools, washes, and wetlands. The following soil types are documented to occur within the Project area and are further described in Table 1 – *Soils Documented to Occur Within the Project Area* below.

Table 1 – Soils Documented to Occur Within the Project Area		
Map symbology	Soil Unit Name	Description
1006	Urban Land-Soboba complex, 0 to 5 percent slopes	Urban land-Soboba soils classification is characterized by 45 percent urban land with a manufactured layer at the surface, 40 percent Soboba soils, and 15 percent minor components. This soils type occurs at elevations ranging between 310 and 2,080 feet (ft.) above mean sea level (AMSL) with typical slopes range between 0 and 5 percent. The depth to restrictive feature is 0 inches to manufactured layer. Urban land-Soboba soils have a runoff classification of very high and a flooding frequency of rare. Minor components of this soils type include 5 percent Palmview, 5 percent Tujunga, and 5 percent Typic xerorthents, very cobbly.

1106	Urban Land, Commercial-Soboba complex, 0 to 5 percent slopes	Urban land, Commercial-Soboba soils classification is characterized by 80 percent commercial urban land with a manufactured layer at the surface, 15 percent Soboba soils, and 5 percent minor components. This soils type occurs at elevations ranging between 210 and 980 ft. above AMSL with typical slopes range between 0 and 5 percent. The depth to restrictive feature is 0 inches to manufactured layer. Urban land-Soboba soils have a runoff classification of very high and a flooding frequency of rare. Minor components of this soils type include 3 percent Tujunga and 2 percent Palmview.
1180	Pits and Quarries	Pits and quarries are a land use classification characterized by the removal of soils and raw material.

The soils documented to occur on the Project site were reviewed with soils listed in *The Hydric Soils List of California* to determine if any on-site soils are considered hydric. None of the soils documented to occur on the Project site are listed on the hydric soils list of California and are considered non-hydric.

The Project site is at an average elevation of approximately 540 ft. above AMSL. The topography of the Project site is generally flat with the exception of the two mining pits in the northwest and southeast corners of the site. The areas with exposed soils have been heavily altered through grading, mining and anthropogenic use.

4.3 Watershed and Hydrology

The proposed Project site is located to the east of the San Gabriel River, which is a major river within Los Angeles County. The San Gabriel River conveys flows from the San Gabriel Mountain Range in the north through the San Gabriel Valley and the Los Angeles Coastal Plain, and empties into the Los Angeles/Long Beach Harbor to the Pacific Ocean. The major tributaries to the San Gabriel River are Walnut Creek, San Jose Creek, and Coyote Creek. The Rio Hondo branches from the San Gabriel River just below the Santa Fe Dam and flows west towards the Whittier Narrows area, which forms the southern boundary of the San Gabriel Valley. The segment of the San Gabriel River that is regulated within the USACE Los Angeles District as a traditionally navigable water (TNW) is within Orange County, to 7th Street Bridge, to 2.5 mean sea level (MSL).

The proposed Project site is within the hydrologic unit code 12, Santa Fe Flood Control Basin – San Gabriel River, 180-701-0606-01 (see Figure 9 – Watershed Map). Per Table 2-1 – Beneficial Uses of Inland Surface Waters of Los Angeles Regional Water Quality Control Board's (LARWQCB) Basin Plan, the Santa Fe Flood Control Basin – San Gabriel River watershed has the following associated beneficial uses:

- Municipal and Domestic Supply (MUN): uses of water for community, military, or individual water supply systems including, but limited to, drinking water supply.
- Ground Water Recharge (GWR): Uses of water for natural or artificial recharge of groundwater for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers.
- Warm Freshwater Habitat (WARM): Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

- **Wildlife Habitat (WILD):** Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

The Santa Fe Flood Control Basin – San Gabriel River watershed is a part of the larger Lower San Gabriel River and San Gabriel watersheds. The San Gabriel watershed is comprised of the San Gabriel River, which collects flows within the San Gabriel Mountain Range via the west fork San Gabriel River east to Mount Baldy including tributaries such as Bear Creek, Cold Brook Creek, Soldier Creek, Iron Fork, and Fish Fork. Flows from the San Gabriel River are collected within the San Gabriel Reservoir and the Morris Reservoir upstream of the Santa Fe Flood Control Basin. Controlled releases of water from these reservoirs contribute to Los Angeles County Flood Control District’s recharge of usable groundwaters via downstream recharge basins.

The Santa Fe Flood Control Basin is managed by the USACE as a civil works project, serving to protect the Los Angeles Valley from flood risks as well as managing hydrological resources throughout Los Angeles County. The Santa Fe Flood Control Basin has an elevational capacity to the top of the dam of 513 ft National Geodetic Vertical Datum of 1929 (NGVD) and a spillway crest of 496 NGVD (USACE 2011). The total gross capacity of the dam at top of dam and spillway crest is respectively at 51,334 ac-ft and 30,887 ac-ft. (USACE 2011).

5.0 RESULTS: State and Federal Jurisdictional Waters and Wetlands

5.1 Features Description

The Project area was assessed for evidence of potential jurisdictional features and to determine the extent of any potential USACE, RWQCB, and/or CDFW jurisdictional features. The potential features within the Project site as observed and assessed during the field investigation include Drainage Feature 1 and Drainage Feature 2 as no other potentially jurisdictional features were observed. These features are described further below.

Drainage Feature 1

Drainage Feature 1 has a total length of 718 ft. from the on-site headwall to its off-site terminus in the Santa Fe Dam Flood Control Basin (see Figure 10a – Site Features Map). The headwall contains a riprap area that is approximately 30 ft. wide by 16 ft. long and consists of large loose rock material. Flows continue from the riprap for approximately 200 ft. and are conveyed west through a cut channel with a bed approximately 6 ft wide. This segment of the feature exhibits a defined bed and bank for approximately 110 feet. After this point, the defined cut channel ends and flows spread out approximately 17 ft. and continue at this width for approximately 250 ft. west until reaching the pipe culvert associated with the rail spur to the west. The pipe culvert is preceded by large loose rock riprap and conveys flows under the rail spur. Flows from the culvert flow approximately another 20 ft. before exiting the Project area and entering the Santa Fe Dam Flood Control Basin. Once off-site, flows are discernible for approximately 100 feet within an area of artificially-created loose riprap channelization before the flow path opens into a flat area and loses discernible signs of channelization. Any flows from this point appear to sheet flow towards low points off site where flows likely dissipate.

Drainage Feature 1 was determined to be a non-historical, anthropogenically created drainage feature installed to convey stormwater/runoff into the Santa Fe Dam area. As described in the Project’s Preliminary Hydrology and Low Impact Development Plan and as confirmed via observations made during the field assessment, off-site I-210 freeway flows and off-site flows from the north side of the I-210 freeway enter the site through the headwall within the norther portion of the site. These runoff flows are conveyed from

east to west within the northern portion of the site until flows are discharged off site to the west via the pipe culvert running under the rail spur in the northwest portion of the site into the Santa Fe Dam Flood Control Basin area.

Drainage Feature 1 was observed to terminate approximately 700 ft. from the top of bank of the San Gabriel River. The area where Drainage Feature 1 terminates is contained within a topographical low point within the Santa Fe Dam Recreation area. The low area is surrounded by steep slopes along the south, east, and west that are approximately 4-6 ft. tall and exhibit steep inclines. Overall topography within this low point area is relatively flat and does not provide gradual upward sloping that would allow flows to continue up the steep slopes surrounding the area. The area does not exhibit signs of being a jurisdictional wetland as it consists of non-hydric soils and upland vegetation similar to what was observed on-site along Drainage Feature 1 and was devoid of surface water at the time of the assessment.

Per Project design discussed in the Preliminary Hydrology and Low Impact Development Plan, the existing culvert within the northwest portion of the site as well as the existing drainage feature would be preserved with proposed Project implementation and the area in which Drainage Feature 1 exists would not undergo any construction or development.

Drainage Feature 1 Vegetation

Drainage Feature 1 is primarily non-vegetated within the feature itself with evidence of routine vegetation clearing along the bed of the feature to maintain the pipe culvert. The vegetation around the feature consists of facultative upland and upland vegetation as well as non-native grasses/forbs. The facultative upland and upland species consisted of deerweed (*Acmispon glaber*), California sagebrush (*Artemisia californica*), black mustard (*Brassica geniculata*), short-pod mustard (*Hirschfeldia incana*), brittlebush (*Encelia farinosa*), horseweed (*Erigeron canadensis*), California buckwheat (*Eriogonum fasciculatum*), broadleaf filaree (*Erodium botrys*), common storksbill (*Erodium cicutarium*), eucalyptus (*Eucalyptus spp.*), bird's eye gilia (*Gilia tricolor*), prickly saltwort (*Salsola tragus*), California broomsage (*Lepidospartum squamatum*), Virginia pepperweed (*Lepidium virginicum*), Spanish clover (*Acmispon americanus*), laurel sumac (*Malosma laurina*), tree tobacco (*Nicotiana glauca*), narrowleaf evening primrose (*Oenothera deltoides*), annual fountain grass (*Pennisetum setaceum*), Jersey cudweed (*Pseudognaphalium biolettii*), California rabbit tobacco (*Pseudognaphalium californicum*), hollyleaf redberry (*Rhamnus ilicifolia*), lemonade berry (*Rhus integrifolia*), and castor bean (*Ricinus communis*). One facultative wetland species, mulefat (*Baccharis salicifolia*), was observed within the drainage. Only one individual of this species was observed on site and was located within the riprap near the headwall of the feature.

Drainage Feature 2

Drainage Feature 2 exhibits evidence of conveying developed site runoff and overland sheet flows from the southwest portion of the site underneath the rail spur via three (3) box culverts (see Figure 10b – Site Features Map). The overland area within the southern portion the site shows evidence of being routinely disturbed (e.g., disking) and is overall flat with sparse weedy vegetation species. This area of routine disturbance is bordered to the north and east by paved lots and remnant brewery structures. The ongoing disturbance within the southwest portion of the site has removed any discernible evidence of any pre-existing flow patterns (e.g., channelization), leaving only evidence that sheet flows flow off site into the Santa Fe Dam Flood Control Basin via the box culverts. Per the Project's Preliminary Hydrology and Low Impact Development Plan, a 25-year storm event would cause overflow of the site, which would convey flows to the southwest portion of the site and towards the box culverts underneath the railroad track. At the off-site terminus of the box culverts is an area of loose riprap approximately 15 ft. in diameter followed by a flat, bare path approximately 3-4 ft. in width, which suggests flows may sometimes continue past the

loose riprap area. The length from where sheet flows enter the box culverts, convey under the rail spur and enter the off-site Santa Fe Dam Flood Control Basin is approximately 248 ft.

Drainage Feature 2 Vegetation

Drainage Feature 2 is primarily non-vegetated from where the feature sheet flows into the box culverts until it reaches the riprap area at the terminus of the box culverts and potentially continues onto the bare path observed. Surrounding vegetation is similar to upland species observed around Drainage Feature 1 and within the Santa Fe Dam Recreation Area and includes castor bean (*Ricinus communis*), short-pod mustard, California sagebrush, and brittlebush.

5.4 USACE Jurisdiction

Drainage Feature 1

Based on the results of the desktop review and preliminary jurisdictional delineation, Drainage Feature 1 does not contain either wetland or non-wetland WoUS. subject to USACE jurisdiction. Per 40 CFR 120(b)(3), “ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water” as well as “swales, erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow” are not considered WoUS. Drainage Feature 1 is located wholly in and drains only dry land that does not carry a relatively permanent flow of water. As discussed, the feature conveys off-site stormwater from areas north of the I-210 freeway and runoff from the I-210 freeway, neither of which provide a relatively permanent flow of water to the feature. Additionally, flows conveyed by the feature sheet flow before dissipating off site; thus, the feature shows no evidence of downstream connectivity to a traditionally navigable water or to waters which would meet the definition of WoUS. Further, the results of the SDAM based on site data indicate the Regional SDAM classification for the feature is ephemeral, with the results of the APT indicating the assessment was performed under normal conditions. Therefore, Drainage Feature 1 is non-jurisdictional under Section 404 of the CWA and is thus not subject to USACE jurisdiction.

Drainage Feature 2

Similarly, based on the definitions of features and resources subject to USACE jurisdiction, Drainage Feature 2 would not be considered either a wetland or non-wetland WoUS jurisdictional resource under Section 404 of the CWA. The culverts are located wholly in and drain only dry land that does not carry a relatively permanent flow of water. Rather, the culverts appear to receive any remaining sheet flows from the southwest portion of the site as flows either terminate within the flat topography of the southwest portion of the site or sheet flow towards the rail spur. Drainage Feature 2 appears to aid flows in crossing beneath the rail spur; however, any flows would terminate and dissipate within the loose rock riprap at the other end of the rail spur or just beyond. Thus, the feature shows no evidence of downstream connectivity to a traditionally navigable water or to waters which would meet the definition of WoUS. Further, the results of the SDAM based on site data indicate the Regional SDAM classification for the feature is ephemeral. Therefore, Drainage Feature 2 is considered non-jurisdictional under USACE Section 404 regulations.

5.3 RWQCB Jurisdiction

Drainage Feature 1

Features under the jurisdiction of the RWQCB are generally the same as those considered WoUS but may also include waters not under Federal jurisdiction. As discussed, Drainage Feature 1 does not meet the

definition of WoUS and is considered non-jurisdictional under Section 404 of the CWA. As such, Drainage Feature 1 would similarly not be considered jurisdictional under Section 401 of the CWA. However, pursuant to the Porter-Cologne Water Quality Act, the State is given authority to regulate WSC, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. Therefore, because Drainage Feature 1 exhibits evidence of conveyance of surface water flows, regardless of being considered ephemeral, Drainage Feature 1 is subject to RWQCB jurisdiction under the Porter-Cologne Water Quality Act (see Figure 11a – RWQCB Jurisdiction).

Drainage Feature 2

Similarly, as discussed, the Drainage Feature 2 are not considered jurisdictional as a WoUS under Section 404 of the CWA and would not be considered jurisdictional as a WSC under Section 401 of the CWA. However, because the Drainage Feature 2 exhibit evidence of conveyance of surface flows, regardless of being considered ephemeral, Drainage Feature 2 would be subject to RWQCB jurisdiction under the Porter-Cologne Water Quality Act (see Figure 11b – RWQCB Jurisdiction).

5.2 CDFW Jurisdiction

Drainage Feature 1

Under Sections 1600-1616 of the CFGC, CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses (including dry washes) and lakes characterized by the presence of (1) definable bed and banks and (2) existing fish or wildlife resources. Furthermore, CDFW jurisdiction often extends to habitats adjacent to watercourses, such as oak woodlands in canyon bottoms or willow woodlands that support hydrologic functions within the riparian system.

As discussed, Drainage Feature 1 is an ephemeral feature conveying off-site stormwater from areas north of the I-210 freeway and runoff from the I-210 freeway through the northwest corner of the Project site to the Santa Fe Dam Flood Control Basin, through which a segment of the San Gabriel River flows. Therefore, Drainage Feature 1 would be subject to CDFW jurisdiction (see Figure 12a – CDFW Jurisdiction).

Drainage Feature 2

Drainage Feature 2 does not exhibit an associated hydrological drainage feature with a definable bed and bank. Rather, as discussed, sheet flows from the developed area of the southwest portion of the site either terminate within the flat topography of the southwest portion of the site or sheet flow towards the box culverts under the rail spur. Per the site's Preliminary Hydrology and Low Impact Development Plan, a 25-year storm event would cause overflow of the site and would ultimately convey flows to the southwest corner of the property and towards the box culverts underneath the rail spur. The undeveloped disturbed area over which flows convey from the developed area of the site shows signs of recent and routine disking. While there is a loose riprap area at the off-site terminus of the box culverts, there is evidence flows may continue past this point and contribute to surrounding upland vegetation within the Santa Fe Dam Flood Control Basin, including native species such as California buckwheat, California sagebrush, and brittlebush. Thus, Drainage Feature 2 would be subject to CDFW jurisdiction (see Figure 12b – CDFW Jurisdiction).

6.0 CONCLUSIONS: Impacts on State and Federal Jurisdictional Waters and Wetlands

6.1 USACE Jurisdictional Impacts

The Project study area does not support USACE jurisdictional wetland or non-wetland waters under Section 404 of the CWA. Thus, Project implementation would not result in permanent or temporary impacts to USACE jurisdictional wetland resources or non-wetland resources. Therefore, the Project as proposed would not require a Section 404 Nationwide Permit (NWP) from the USACE.

6.2 RWQCB Jurisdictional Impacts

The Project site does not contain features subject to RWQCB jurisdiction under Section 401 of the CWA; however, the site does contain two (2) features subject to RWQCB jurisdiction under the Porter-Cologne Water Quality Act: Drainage Feature 1 and Drainage Feature 2. Therefore, while the Project as proposed would not require a Section 401 Water Quality Certification Permit from the RWQCB, the Project would require Waste Discharge Requirements (WDR) from the RWQCB.

6.3 CDFW Jurisdictional Impacts

The Project site contains two (2) features subject to CDFW jurisdiction: Drainage Feature 1 and Drainage Feature 2. Therefore, the Project as proposed would require a Section 1602 Streambed Alteration Agreement from CDFW.

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Attachment 1.
Figures

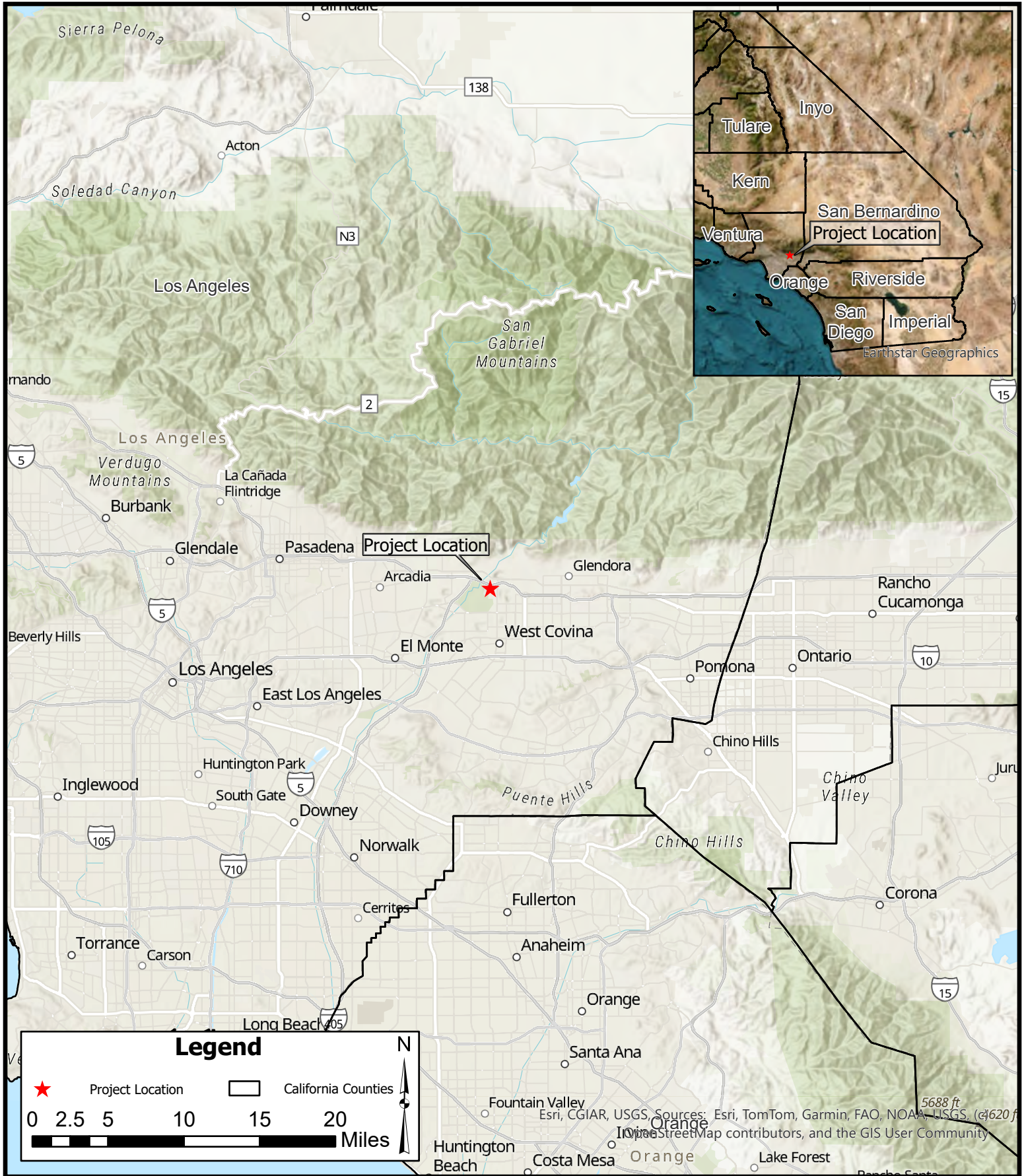
Attachment 2.
Section 408 Memo 4/4/2023

Attachment 3.
Preliminary Hydrology and Low Impact
Development Plan

Attachment 4.
Biological Resource Assessment

Attachment 5.
OHWL Datasheet

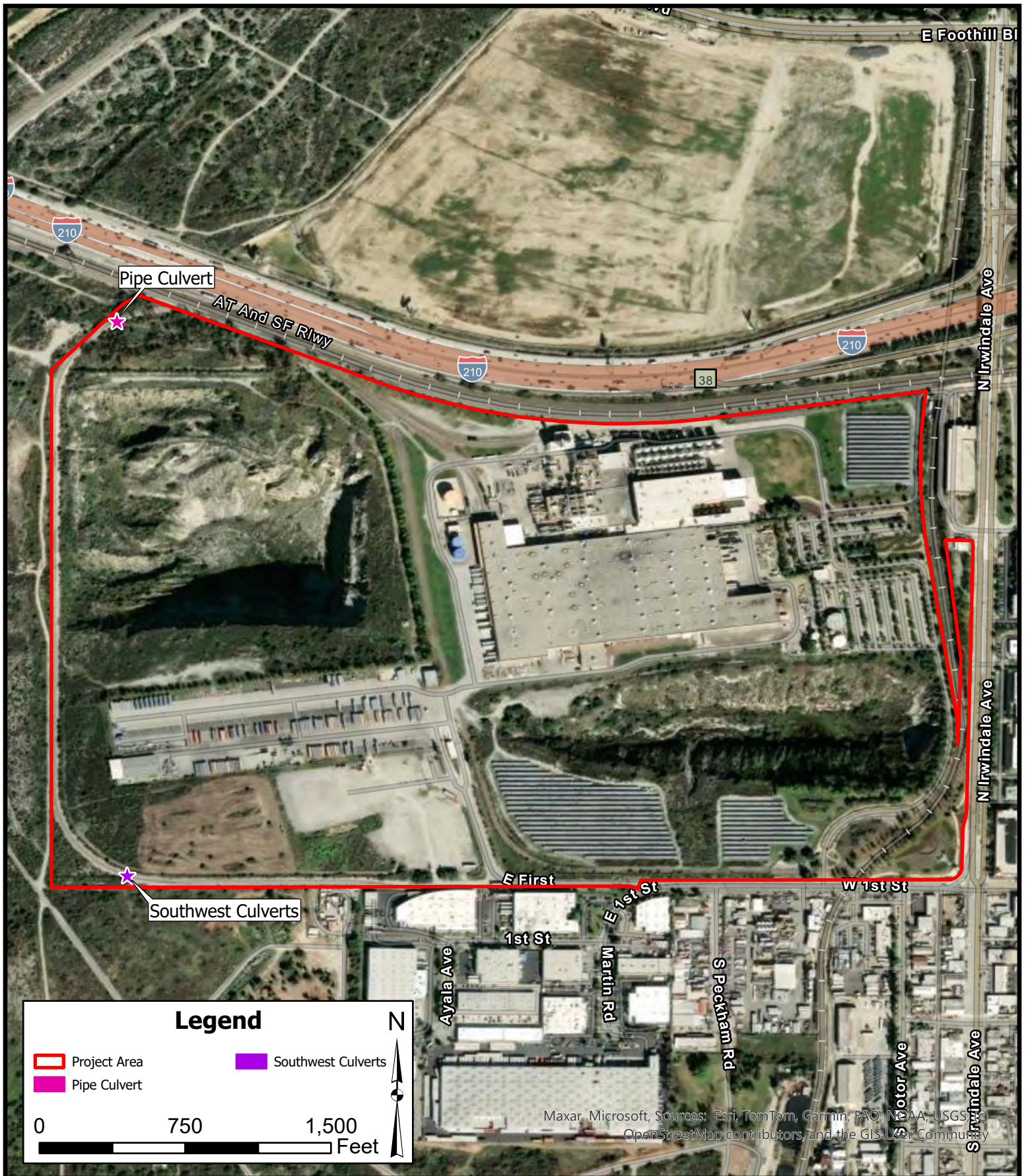
Attachment 6.
Site Photos



Irwindale Brew Yard Project

Regional Map



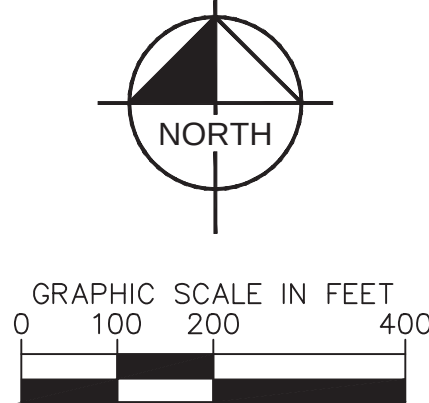


Irwindale Brew Yard Project

Project Overview Map



Figure 3



- ① INSTALL UNDERGROUND CMP INFILTRATION TANK.
- ② PROPOSED SITE STORM DRAIN SYSTEM. SEE STORM DRAIN PLAN FOR DESIGN INFORMATION

LEGEND

- | | |
|--|--|
| | RIGHT OF WAY/ PROPERTY LINE |
| | CENTERLINE |
| | EXISTING CONTOURS |
| | PROPOSED CONTOURS |
| | DMA BOUNDARY |
| | PROPOSED PRIVATE STORM DRAIN LATERAL |
| | PROPOSED PRIVATE MAIN STORM DRAIN LINE |
| | PROPOSED CATCH BASIN |
| | PROPOSED INLET |
| | PROPOSED STORM DRAIN MANHOLE |
| | DIRECTION OF WATER FLOW |
| | PROPOSED UNDERGROUND BMP SYSTEM |
| | PROPOSED UNDERGROUND BMP FOR OFFSITE DRAINAGE AREA |
| | DRAINAGE AREA LABEL |
| | LANDSCAPE |

GENERAL NOTES

1. ON-SITE OVERFLOWS ULTIMATELY DISCHARGE TO THE EXISTING BOX CULVERTS LOCATED AT THE SOUTHWEST PORTION OF THE SITE.
2. ANY CHANGES (TYPE, SIZE, LOCATION) TO APPROVED STORMWATER BEST MANAGEMENT PRACTICE(S) (BMPs) MUST OBTAIN WRITTEN APPROVAL FROM LOS ANGELES, DEPARTMENT OF PUBLIC WORKS, BUREAU OF SANITATION PRIOR TO CONSTRUCTION OF BMP(S).
3. HYDROLOGY CALCULATIONS COMPLETED USING LA COUNTY'S HYDROCALC CALCULATOR.
4. DETENTION CALCULATIONS COMPLETED USING PONDPACK SOFTWARE.
5. 50-YEAR RAINFALL DEPTH: 7.3 INCHES
6. SOIL TYPE: 8
7. TOTAL ALLOWABLE FLOW RATE: 225 CFS
8. OFFSITE 3 IS NOT A PART OF THIS IMPROVEMENT PLANS AND HYDROLOGY AND HYDRAULICS RESULTS SHOWN AS REFERENCE ONLY. ALTHOUGH THE BREWERY SITE IS NOT PART OF THIS DEVELOPMENT, ITS WATER QUALITY AND DETENTION CALCULATIONS HAVE BEEN INCLUDED IN THIS REPORT FOR REFERENCE PURPOSES. IT SHOULD BE NOTED THAT THE BREWERY SITE WILL BE SUBJECT TO A SEPARATE HYDROLOGY AND DEVELOPMENT PLAN.
9. SINCE IT IS NOT POSSIBLE, TO MITIGATE THE RUNOFF FROM OFFSITE 1 AND OFFSITE 2 WITHIN THEIR RESPECTIVE BOUNDARIES, THOSE OFFSITE AREAS WERE INCORPORATED INTO OUR PROJECT SITE TO FULFILL THE REQUIREMENTS FOR BOTH WATER QUALITY IMPROVEMENT AND DETENTION. OFFSITE 1 WILL BE INTEGRATED WITH THE PROPOSED DMA 1, WHILE OFFSITE 2 WILL BE COMBINED WITH DMA 2.

PROPOSED DETAINED FLOWS VS. ALLOWABLE FLOWS					
DMA NO	Area (SF)	Area (AC)	Allowable Flow (cfs)	BMP NO	Mitigated Flows (cfs)
DMA 1	2,084,501	47.85	47.70	BMP 1	45.48
OFFSITE 1	64,299	1.48	1.47		
DMA 2	1,944,790	44.65	44.50	BMP 2	40.97
OFFSITE 2	63,006	1.45	1.44		
DMA 3	1,340,357	30.77	30.67	BMP 3	30.62
DMA 4	899,898	20.66	20.59	BMP 4	18.07
DMA 5	270,043	6.20	6.18	BMP 5	***
OFFSITE 3**	3,166,095	72.68	72.45	OFFSITE BMP A	55.38
TOTAL	9,832,989	225.73	225.00	-	-

HYDROCALC RESULTS - Q25 PARAMETERS		
Subarea	Planning Area (Ac)	Unmitigated Peak Flow Rates (cfs)
DMA 1	47.85	113.7
DMA 2	44.65	106.08
DMA 3	30.77	80.33
DMA 4	20.66	53.94
DMA 5	6.20	16.18
OFFSITE 1	1.48	3.67
OFFSITE 2	1.45	3.6
OFFSITE 3	72.68	165.75
Total	225.73	

SHEET NUMBER 1	IRWINDALE BREW YARD	CA	PROPOSED DRAINAGE EXHIBIT	KHA PROJECT 194466001	LICENSED PROFESSIONAL	 © 2025 KIMLEY-HORN AND ASSOCIATES, INC. 1100 W TOWNSHIP AVE., SUITE 700, ORANGE, CA 92668 PHONE: 714-939-1030 FAX: 714-938-9488 WWW.KIMLEY-HORN.COM	No. REVISIONS DATE BY
				DATE 1/16/2025	TERRENCE GAINES		
				SCALE AS SHOWN	CA LICENSE NUMBER 89265		
				DESIGNED BY HD			
				DRAWN BY HD	TG DATE: 12/31/26		



Irwindale Brew Yard Project

Blueline Stream Map

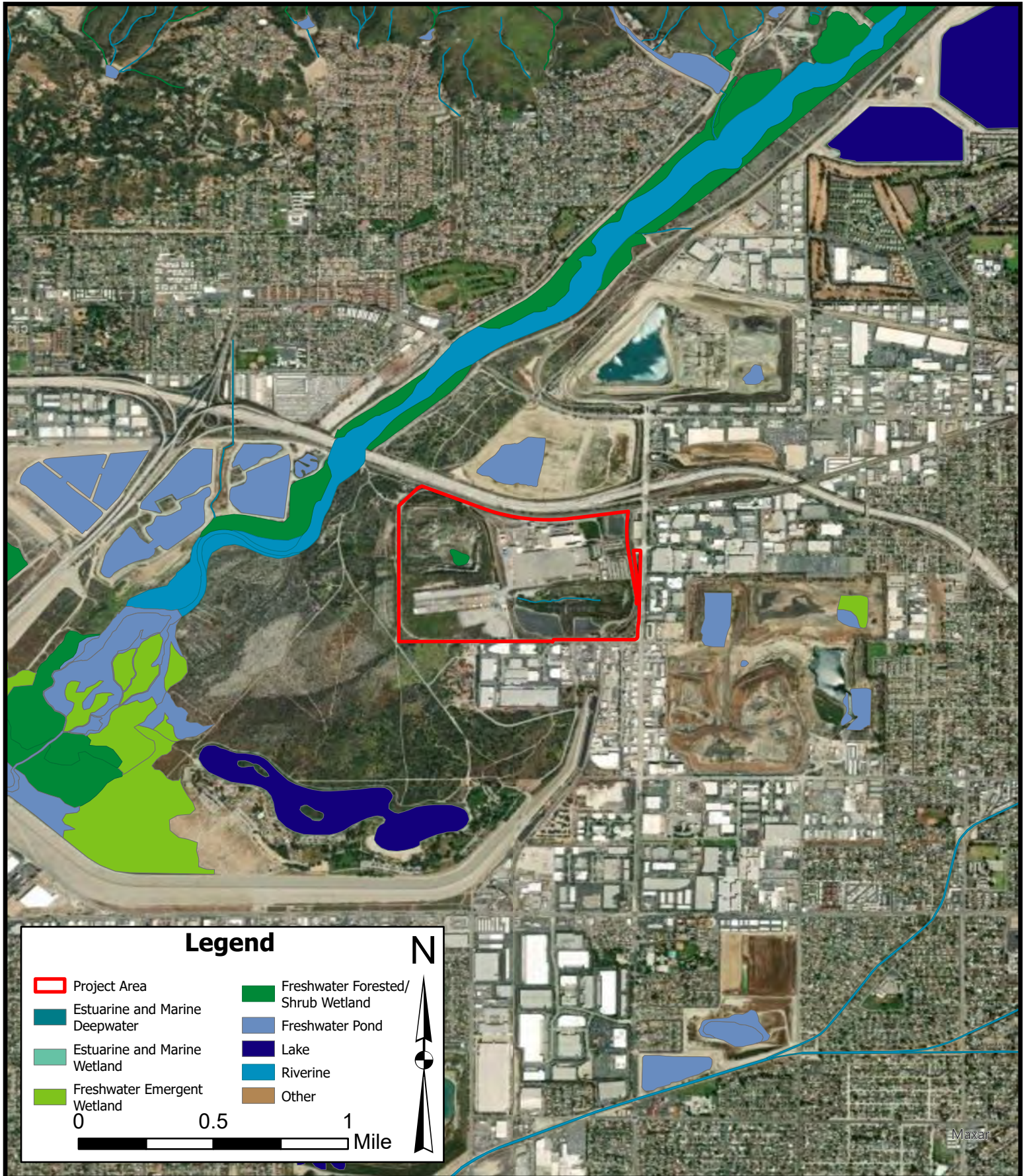


Irwindale Brew Yard Project

SWRCB Stream Finder Map

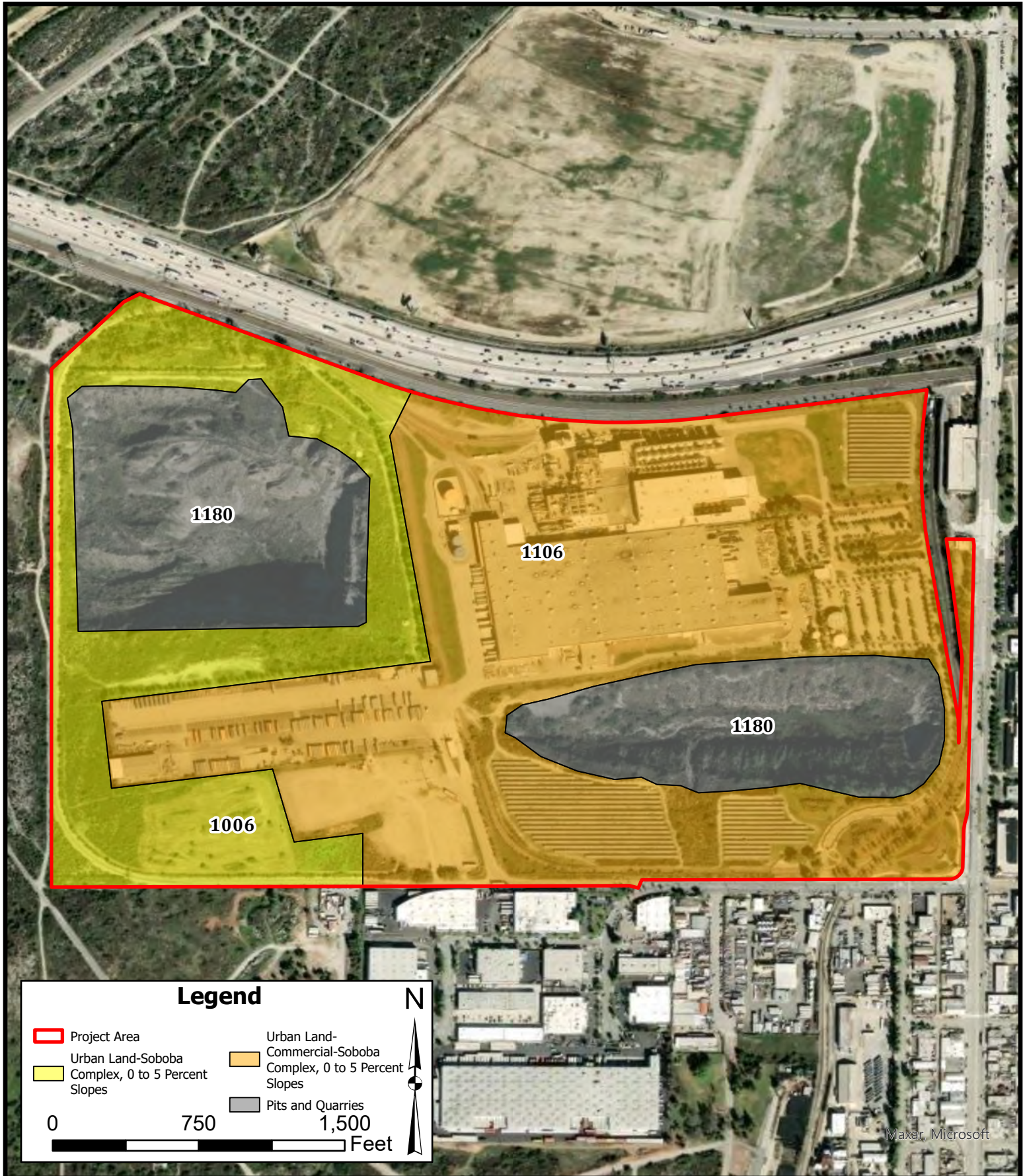


Figure 6



Irwindale Brew Yard Project

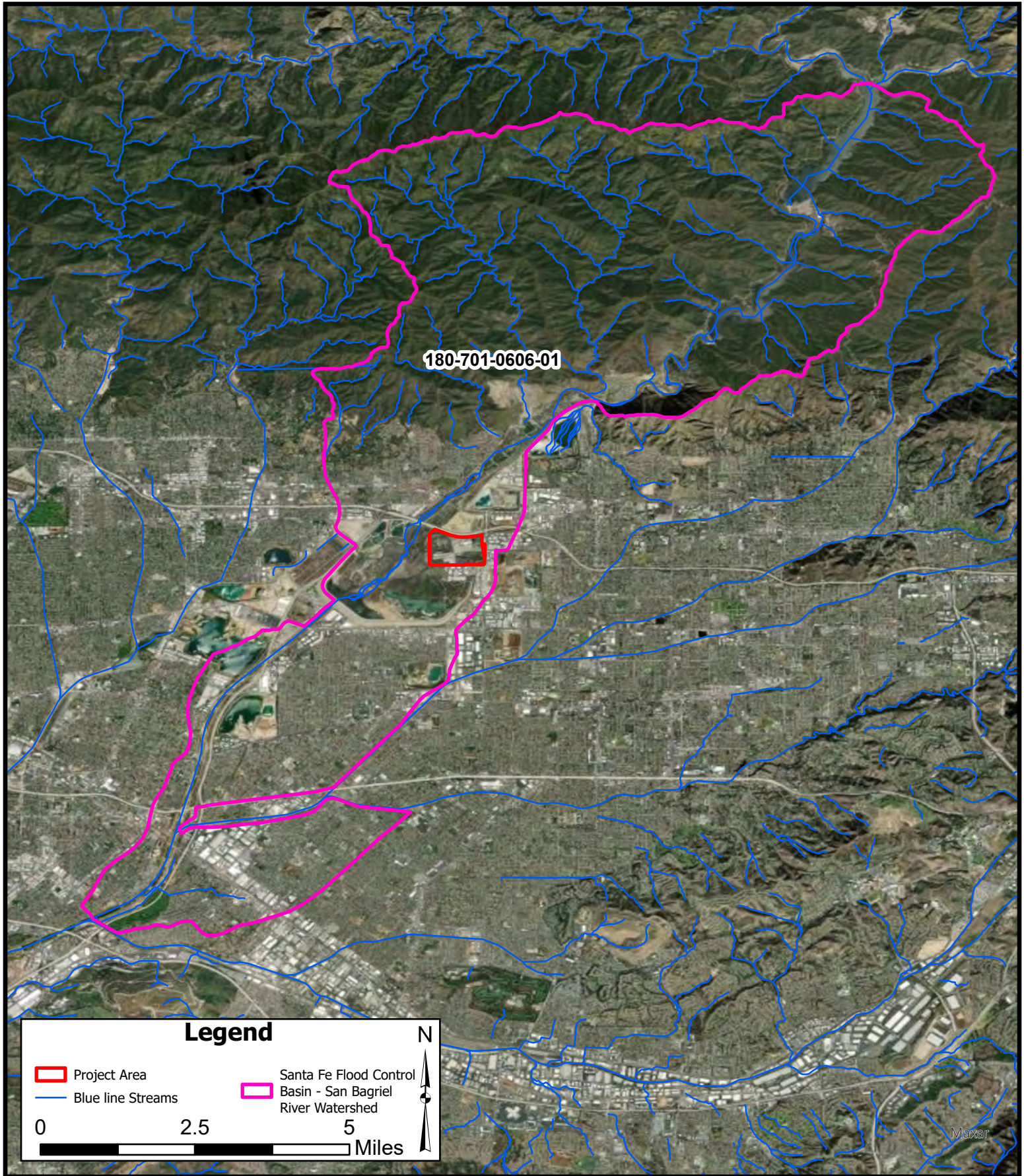
USFW National Wetlands Map



Irwindale Brew Yard Project

Soils Map

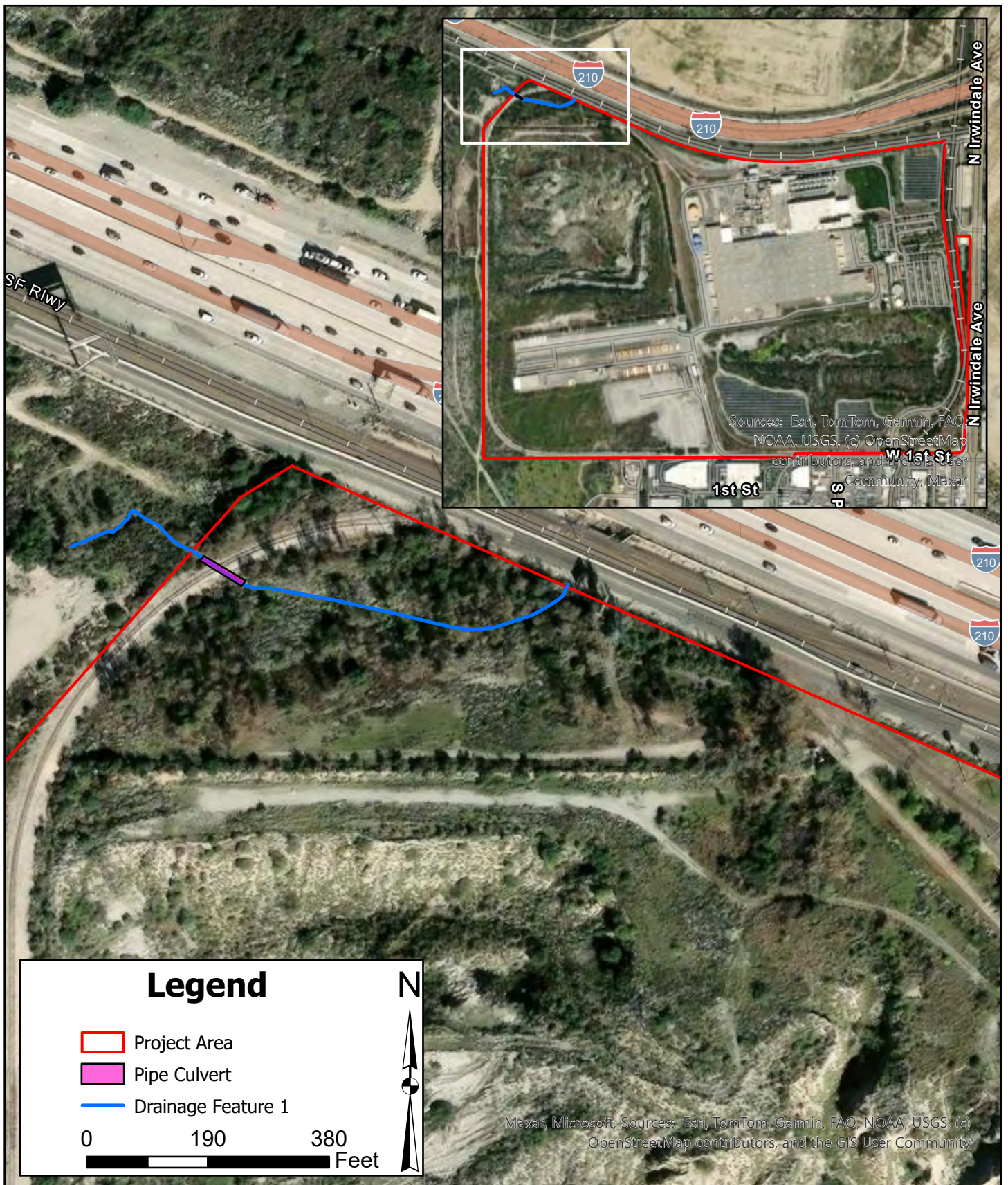
Figure 8



Irwindale Brew Yard Project

Watershed Map





Irwindale Brew Yard Project

Site Features Map

Figure 10.A

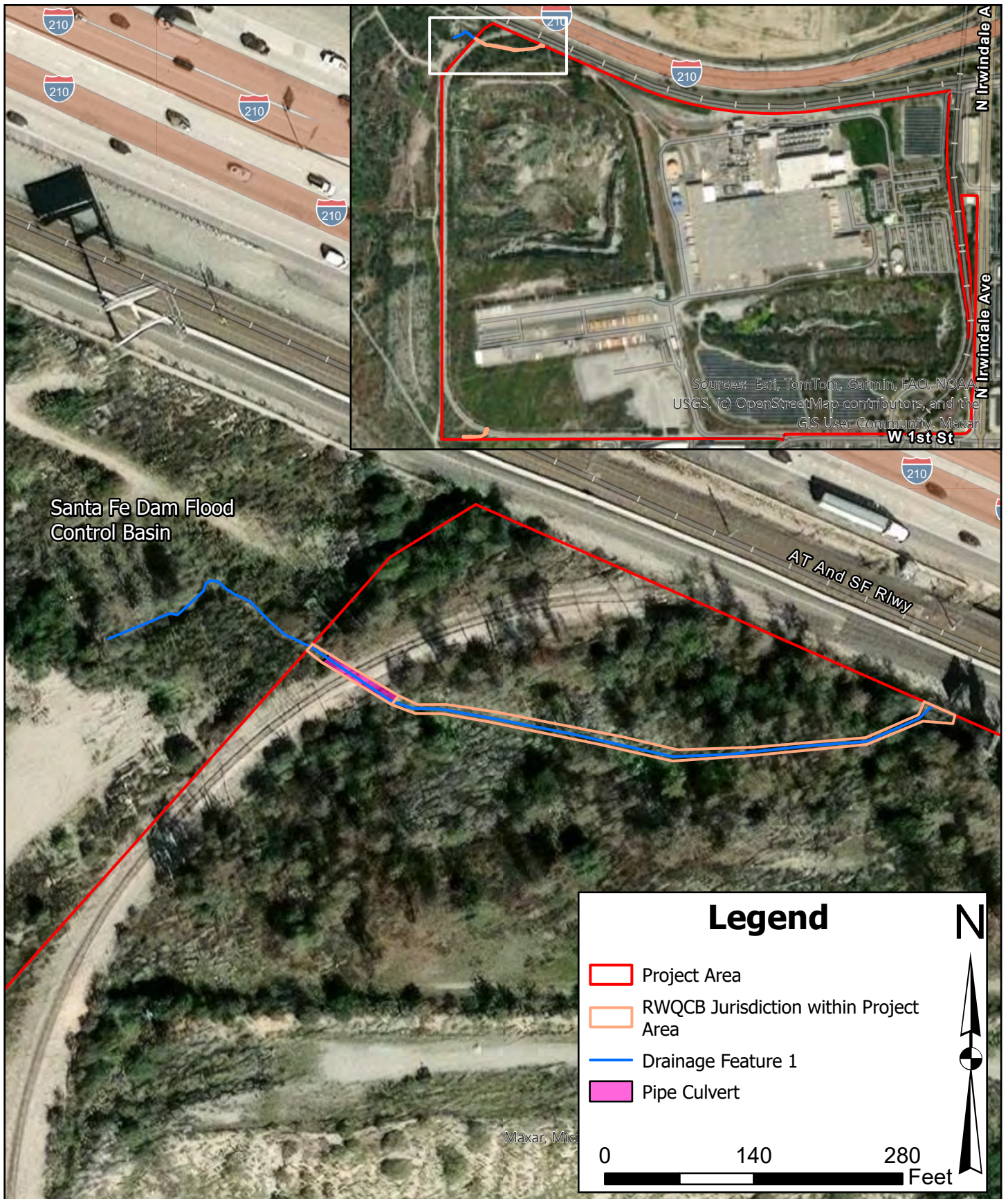




Irwindale Brew Yard Project

Site Features Map

Figure 10.B



Irwindale Brew Yard Project

Potential RWQCB Jurisdiction

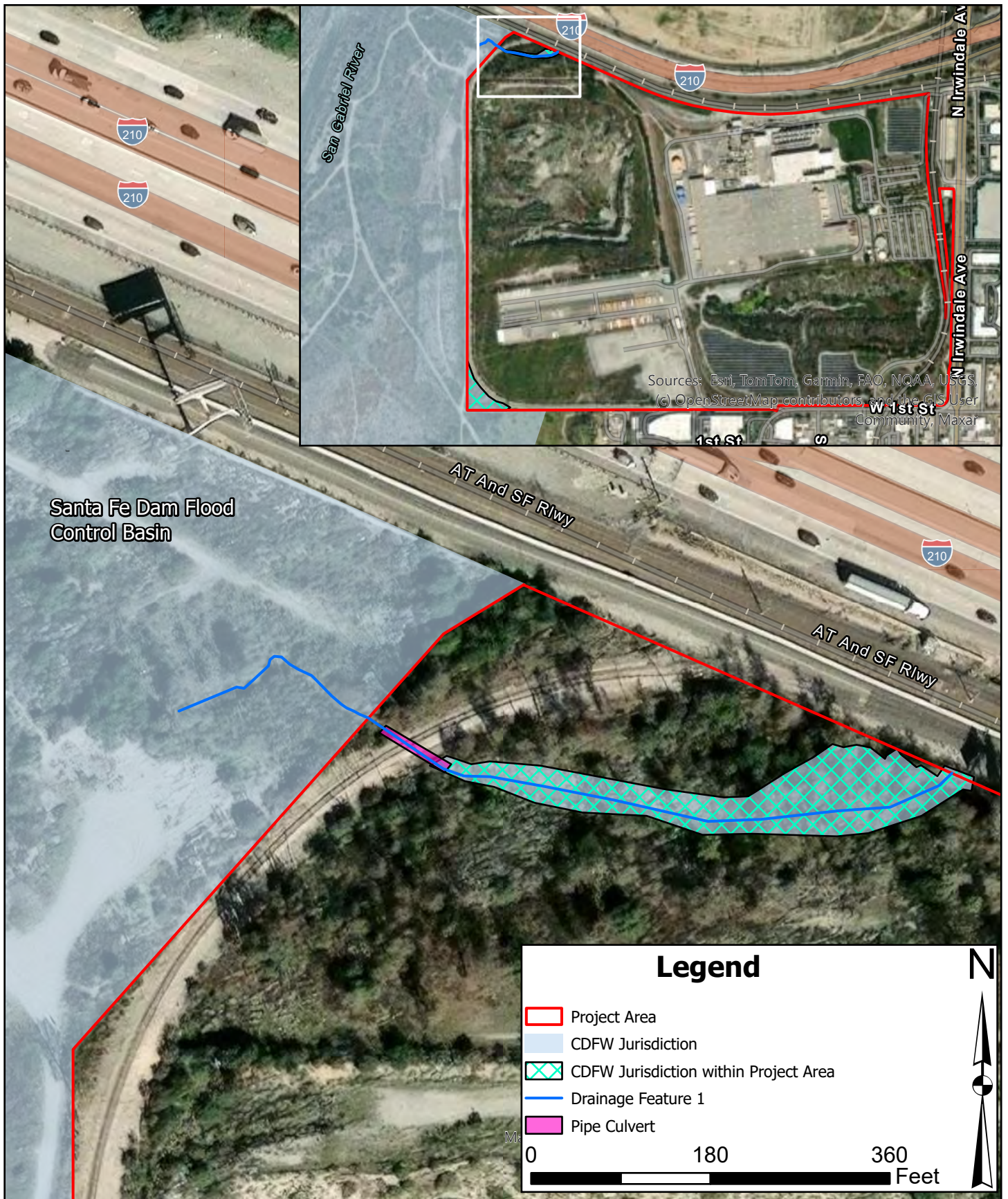
Figure 11.A



Irwindale Brew Yard Project

Potential RWQCB Jurisdiction

Figure 11.B





Irwindale Brew Yard Project

Potential CDFW Jurisdiction

Figure 12.B

Streamflow Duration Assessment Methods

SDAM Version 3.0.0 Release Date: June 2025

<https://www.epa.gov/streamflow-duration-assessment>

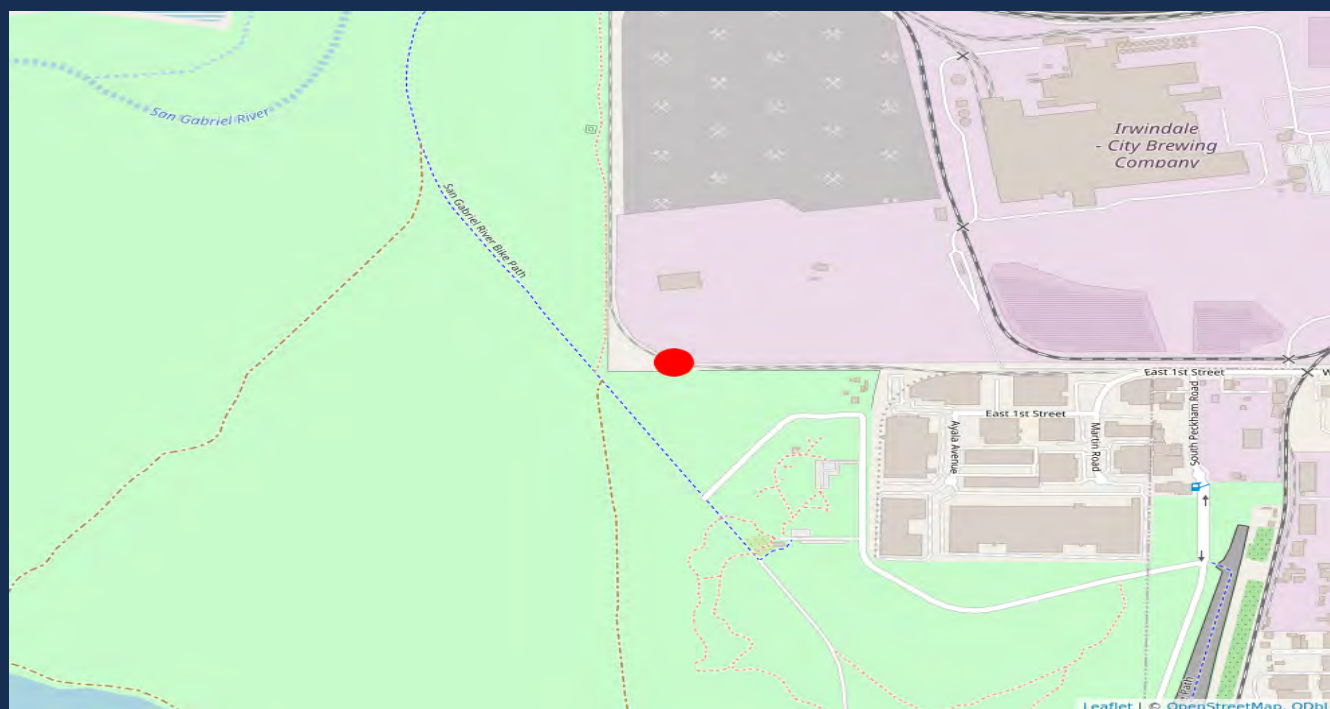
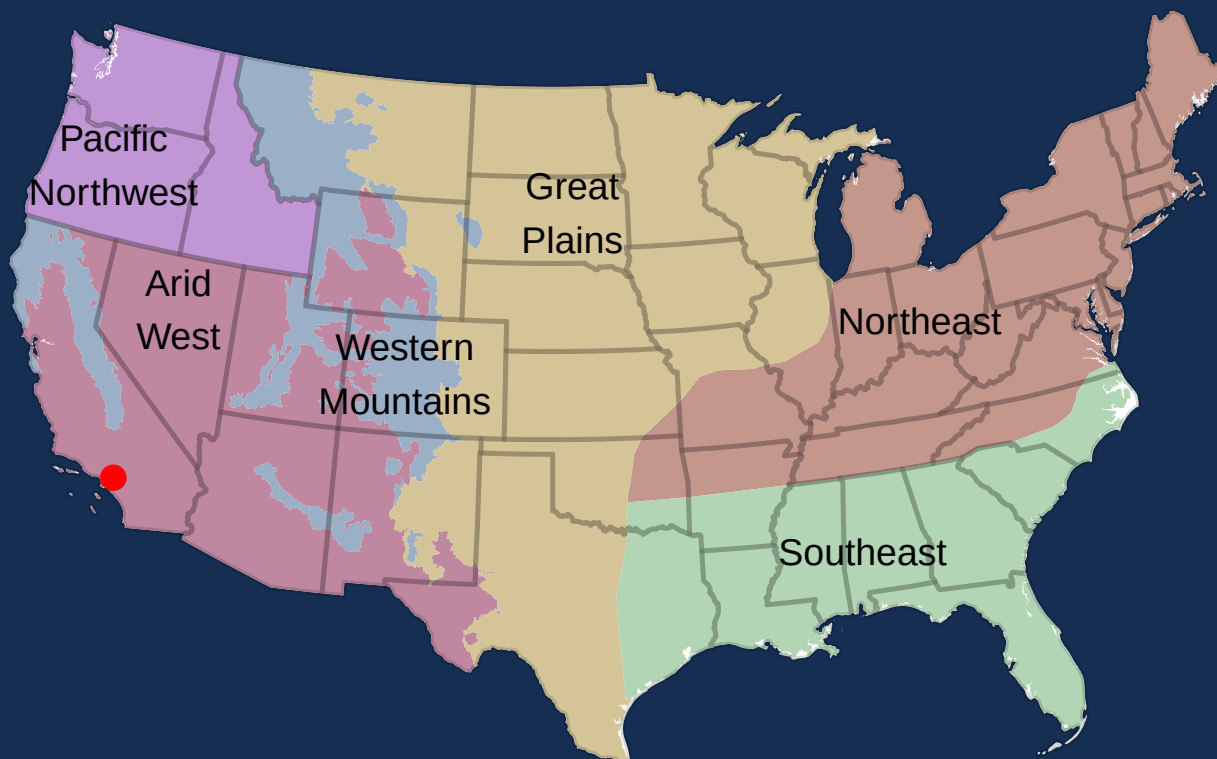
Visit date: 2025-05-08

Report generated date: 2025-07-07

Project name: Irwindale Brew Yard Project

Site code:

Regional SDAM classification: EPHEMERAL



General site information

Project name or number: Irwindale Brew Yard Project

Site code or identifier:

SDAM Region: Arid West

Adjacent SDAM Regions within 10 miles: None

Assessor(s): Zach Jenson, Justinne Manahan

Waterway name: Unnamed; southwest culverts

Visit date: 2025-05-08

Current weather conditions: Clear/Sunny

Notes on current or recent weather conditions: Site assessment took place approximately 3 days after the most recent rain event in the area, which had a total precipitation level of 0.20 mm.

Location: 34.12178 N, -117.945835 E

Surrounding land use within 100 m: Urban, industrial, or residential, Other

Notes on land use: Site has been previously used for mining operations and brew yard operations. Site is adjacent to major freeway to the north and open-space recreational uses to the west. The feature includes a culvert that goes beneath a rail spur.

Description of reach boundaries: Reach appears to collect sheet flows from a flat, on-site disturbed area within the southwest portion of the project site that appears to be regularly maintained/disked. Sheet flows enter culvert associated with the feature that help channel flows under the adjacent rail spur. Flows terminate on the other side of the rail spur into an area of loose rock riprap. No further evidence of the reach or flows are discernible after this point.

Assessment reach length (m): 14

Disturbed or difficult conditions: Other (explain in notes)

Notes on disturbances or difficult site conditions: The reach begins on the edge of a disturbed, regularly maintained portion of the site that contains very little vegetation.

Observed hydrology

Percent of reach with surface flow: 0

Percent of reach with surface and sub-surface flows: 0

Number of isolated pools: 0

Notes on observed hydrology: No active hydrology present during time of site assessment.

Site photos

Top of reach looking downstream:

Middle of reach looking upstream:

Middle of reach looking downstream:

Bottom of reach looking upstream:

Site sketch

Indicators

Mean bankfull channel width (m): 2

Notes on mean bankfull channel width: "Channel" consists of culvert approximately 4 meters wide that goes beneath the adjacent rail spur.

Mean bankfull channel width photos and descriptions:

Perennial indicator taxa: No perennial indicator taxa detected

Aquatic macroinvertebrates in assessment area: Aquatic macroinvertebrates absent

Notes on aquatic macroinvertebrates:

Macroinvertebrate photos and photo descriptions:

Slope (to the nearest half-percent): 0

Notes about slope:

N/A; no discernible slope and area is relatively flat.

Slope photos and descriptions:

Number of hydrophytic plant species: 0

Vegetation in assessment area: vegetation present

Notes on hydrophytic plants:

No hydrophytic vegetation is present in or in the immediate vicinity of the feature.

Hydrophyte photos and photo descriptions:

Prevalence of upland rooted plants in streambed: 0.5

Notes about upland rooted plants:

No upland plants are rooted within the feature. The bottom of the feature is mostly bare with some gravel.

Upland rooted plants photos and descriptions:

Algal cover: Not Detected

Check here if algae exclusively appears to have been deposited from an upstream source, and no local growth is evident: Not checked

Notes about algal cover:

No algal cover.

Algal cover photos and descriptions:

Differences in vegetation: 0.5

Notes about differences in vegetation:

N/A.

Vegetation differences photos and descriptions:

Riffle-pool sequence: 0 (Poor) No riffle-pool sequences observed.

Notes about riffle-pool sequence:

No riffle-pool sequences.

Riffle-pool photos and descriptions:

Supplemental information

Additional notes about the assessment:

N/A.

Supplemental information photos and descriptions:

Arid West Regional SDAM classification

EPHEMERAL

[SDAM resources](#)

End of Report

Streamflow Duration Assessment Methods

SDAM Version 3.0.0 Release Date: June 2025

<https://www.epa.gov/streamflow-duration-assessment>

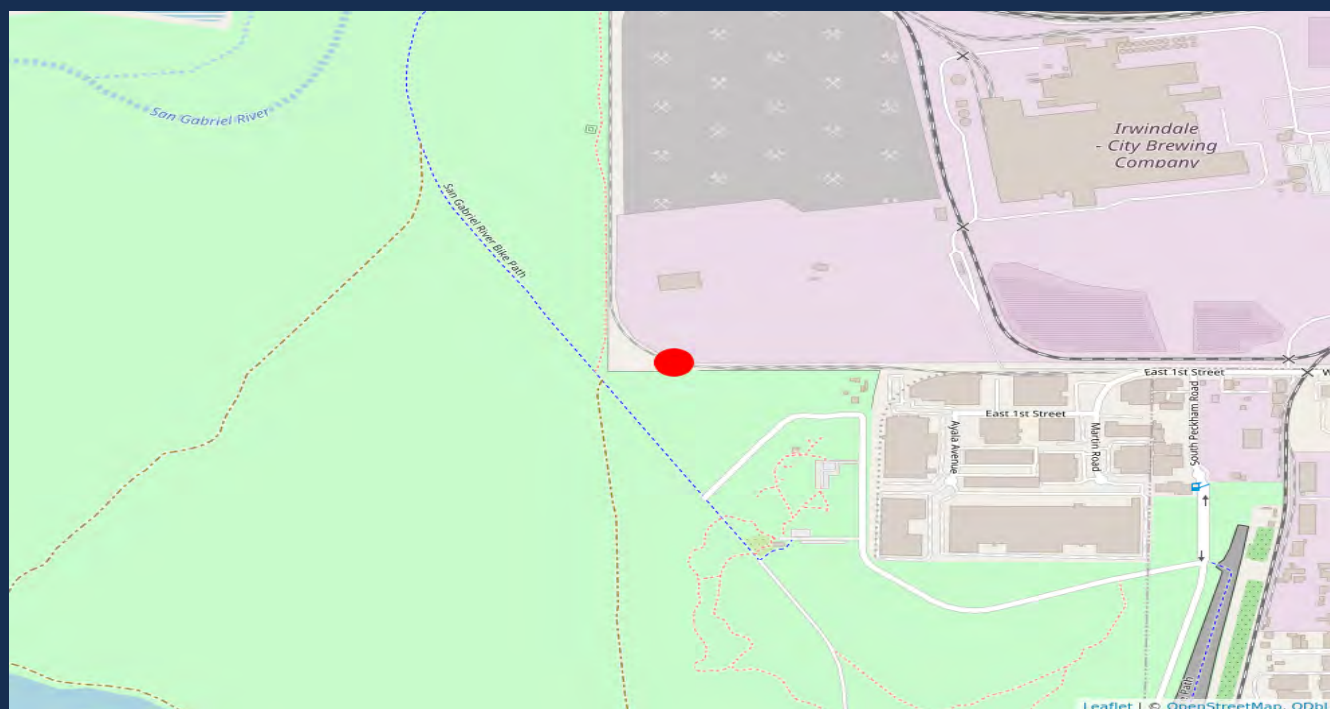
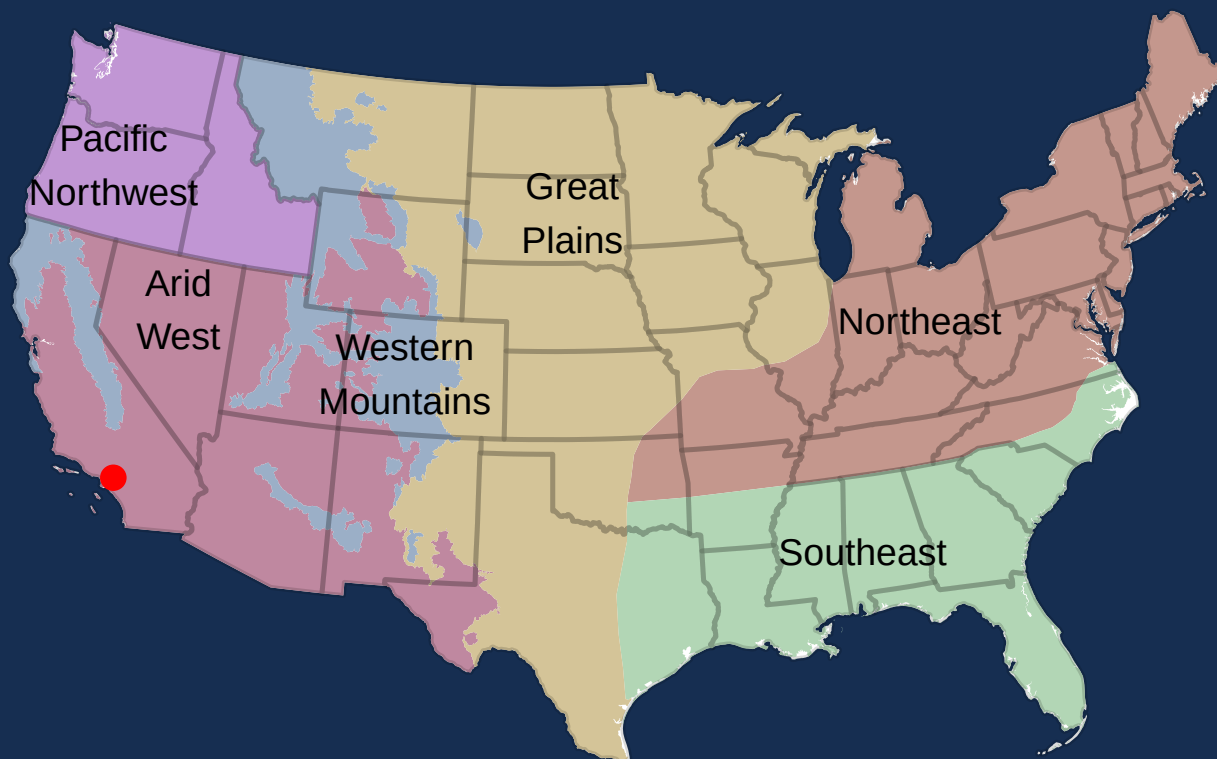
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General site information

Project name or number: Irwindale Brew Yard Project

Site code or identifier:

SDAM Region: Arid West

Adjacent SDAM Regions within 10 miles: None

Assessor(s): Zach Jenson, Justinne Manahan

Waterway name: Unnamed; southwest culverts

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Location: 34.12178 N, -117.945835 E

Surrounding land use within 100 m: Urban, industrial, or residential, Other

Notes on land use: Site has been previously used for mining operations and brew yard operations. Site is adjacent to major freeway to the north and open-space recreational uses to the west. The feature includes a culvert that goes beneath a rail spur.

Description of reach boundaries: Reach appears to collect sheet flows from a flat, on-site disturbed area within the southeast portion of the project site that appears to be regularly maintained/disked. Sheet flows enter culvert associated with the feature that help channel flows under the adjacent rail spur. Flows terminate on the other side of the rail spur into an area of loose rock riprap. No further evidence of the reach or flows are discernible after this point.

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Notes about slope:

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Check here if algae exclusively appears to have been deposited from an upstream source, and no local growth is evident: Not checked

Notes about algal cover:

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Algal cover photos and descriptions:

Differences in vegetation: 0.5

Notes about differences in vegetation:

N/A.

Vegetation differences photos and descriptions:

Riffle-pool sequence: 0 (Poor) No riffle-pool sequences observed.

Notes about riffle-pool sequence:

No riffle-pool sequences.

Riffle-pool photos and descriptions:

Supplemental information

Additional notes about the assessment:

N/A.

Supplemental information photos and descriptions:

Arid West Regional SDAM classification

EPHEMERAL

[SDAM resources](#)

End of Report