Appendix D

Dale Evans / Lafayette Warehouse / Distribution Facility Project

Delineation of Jurisdictional Waters

Town of Yucca Valley
San Bernardino County, California

Prepared for

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August 2022

Dale Evans/Lafayette Warehouse/Distribution Facility Project

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Town of Yucca Valley
San Bernardino County, California

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ACRONYMS AND ABBREVIATIONS

AMSL	above mean sea level
CEQA	California Environmental Quality Act
CDFW	California Department of Fish and Wildlife
CWA	Clean Water Act
EPA	Environmental Protection Agency
FAC	facultative
FACU	facultative upland
FACW	facultative wetland
ft.	Feet
GIS	Geographic Information System
HUC	Hydrologic Cataloging Unit
IP	Individual Permit
M	Meters
NEPA	National Environmental Policy Act
NL	not listed
NWI	National Wetlands Inventory
NWP	Nationwide Permit
OBL	obligate
OHWM	ordinary high-water mark
PM	post mile
Rapanos	Rapanos v. U.S. and Carabell v. U.S.
RPW	relatively permanent waterway
RWQCB	Regional Water Quality Control Board
SWANCC	Solid Waste Agency of Northern Cook County v. USACE
TNW	traditionally navigable waterway
UPL	upland
USACE	U.S. Army Corps of Engineers
USDA	United States Department of Agriculture, Natural Resources Conservation Service
USFWS	United States Fish and Wildlife Service
USGS	U.S. Geological Survey
WSC	Waters of the State of California
WUS	Waters of the United States

1.0 INTRODUCTION

Wood Environment & Infrastructure Solutions, Inc. (Wood) was contracted by Terra Nova Planning and Research (Terra Nova) to conduct a jurisdictional delineation and report for the proposed Dale Evans/Lafayette Warehouse/Distribution Facility Project (project) in the Town of Apple Valley, San Bernardino County, California. This report presents regulatory framework, methods, and results of a delineation of jurisdictional waters, wetlands, and associated riparian habitat potentially impacted by the project.

1.1 Purpose

The purpose of the delineation is to determine the extent of state and federal jurisdiction within the project area potentially subject to regulation by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA and Porter Cologne Water Quality Control Act, and California Department of Fish and Wildlife (CDFW) under Section 1602 of the California Fish and Game Code.

1.2 Project Location

The project is entirely within the Town of Apple Valley, San Bernardino County, California (Appendix A: Figure 1). The project is located east of Interstate 15 and north of State Route 18. The boundaries of the project are Dale Evens Parkway to the west, Lafayette Street to the north, Burbank Avenue (which is an unimproved dirt road) to the south and an existing distribution center to the east. It is in Township 6 North, Range 3 West, Section 21of the 7.5-minute *Apple Valley North*, Calif. United States Geological Survey (USGS) quadrangle (Appendix A: Figure 2). Project topography is level overall at elevations ranging from approximately 3010 to 3030 feet (917-924 meters).

1.3 Project Description

The proposed project is a 1.2 million square foot warehouse/distribution facility. It is in the Town of Apple Valley east of Dale Evans Parkway, south of Lafayette Street, north of Burbank Avenue, and west of an existing warehouse/distribution facility on Navajo Road. The project site is undeveloped but served as a bombing practice site (Victorville Precision Bombing Target #1) by the Department of the Navy from 1943 to 1944 (Northgate Environmental Management, Inc. 2022). It is surrounded by similar undeveloped lands to the east and south and by existing warehouse/distribution facilities to the north and east.

2.0 METHODS

Prior to conducting delineation fieldwork, the following literature and materials were reviewed:

- Aerial photographs (2020) of the survey area at a scale of 1:1800 to determine the potential locations of jurisdictional waters or wetlands;
- USGS topographic map (Figure 2-Appendix A) to determine the presence of any "blue line" drainages or other mapped water features;
- USDA soil mapping data (Figure 3-Appendix A); and
- USFWS National Wetlands Inventory map to identify areas mapped as wetland features (Figure 4-Appendix A).

A field survey of the project site was conducted by Wood Senior Biologist Dale Hameister on 9 August 2022. The survey consisted of walking the entire survey area and identifying potentially jurisdictional water features. All portions of the survey area were walked to determine if the flows associated with the project site meet the minimum criteria to be considered jurisdictional by the USACE, RWQCB, and CDFW. Visual observations of vegetation types and changes in hydrology and soil, as well as culvert locations were used to locate areas for evaluation. Weather conditions during delineation fieldwork was conducive for surveying with cloudy skies, winds ranging from 1 to 5 miles per hour, and a temperature of 76° Fahrenheit.

USACE regulated Waters of the United States (WUS), including wetlands, and RWQCB Waters of the State of California (WSC) were delineated according to the methods outlined in *A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE, 2008a). The extent of WUS was determined based on indicators of an OHWM. The OHWM width was measured at points wherever clear changes in width occurred.

Potential Federally regulated wetlands were identified based on the *Wetlands Delineation Manual* (USACE, 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE, 2008b). Additional data was recorded to determine if an area fulfilled the wetland criteria parameters. Three criteria must be fulfilled to classify an area as a wetland under the jurisdiction of the USACE: 1) a predominance of hydrophytic vegetation, 2) the presence of hydric soils, and 3) the presence of wetland hydrology.

RWQCB jurisdictional areas identified as WSC were determined by the edge of the OHWM, like associated with USACE limits. CDFW jurisdiction is delineated by measuring the elevations of land that confine a stream to a definite course when its waters rise to their highest level and to the extent of associated riparian vegetation. This edge is identified as the clearly defined bed and bank feature and extends further to include any adjacent riparian habitat that clearly receives water resources associated with the drainage feature.

To determine jurisdictional boundaries, the surveyor walked the length of the drainage within the project area and recorded the centerline with a Trimble GeoXH global positioning system. The width of the drainage was determined by the OHWM and bankfull width measurements at locations where transitions were apparent. Other data recorded included bank height and morphology, substrate type, and all vegetation within the streambed and riparian vegetation adjacent to the streambed. Areas that lacked evidence of hydrophytic vegetation, lacked evidence of wetland hydrology, and had no recent disturbance, did not require a soil pit since the other wetland indicators were not present. Upon completion of fieldwork, all data collected in the field were incorporated into a Geographic Information System (GIS) along with basemap data. The GIS was then used to quantify the extent of jurisdictional waters and prepare graphical representations of that data.

3.0 ENVIRONMENTAL SETTING

3.1 Existing Conditions

The project site is currently undeveloped but served as a bombing practice site (Victorville Precision Bombing Target #1) by the Department of the Navy from 1943 to 1944 (Northgate Environmental Management, Inc. 2022). It is surrounded by similar undeveloped lands to the east and south and by existing warehouse/distribution facilities to the north and east. The survey area consists mostly of previously disturbed creosote scrub habitat.

3.2 Hydrology

The average rainfall for the area is 5.52 inches per year (Western Regional Climate Center). Weather data was recorded in the adjacent city of Victorville. The delineation survey was conducted following a rain-year of above average rainfall in the 2021-2022 rain season. The annual rainfall to date within the survey area is 12.04 inches (Weather Underground KCACICTO027). The most recent recordable rainfall fell on16 February 2022 for a total of 0.04 inches. The most recent sizeable storm event occurred on 2 February 2022 for a total of 0.5 inches.

The project site is generally located within the South Lahontan hydrological region (USGS). It is more specifically located within the Upper Mohave hydrologic area within the Mohave hydrologic unit (Hydrologic Unit Code 18090208) (Appendix A – Figure 3).

There has been little to no disturbance since the recent storm events a few days before the survey, which provides clearly defined bed and bank features within the existing drainages. There was evidence of sheet flow and pooling waters within many areas of the project site due to recent thunderstorms, however those areas lack a defined bed and bank to be determined jurisdictional.

The natural flows and historic watershed of this drainage feature have been significant altered due to upstream development (Google Earth 2003). A Walmart Distribution Center was built in 2003 and has cut off or altered flows coming from the north.

3.3 Vegetation

The dominant vegetation community within the survey area is *Larrea tridentata* Shrubland Alliance (Creosote bush scrub) (Sawyer et. al 2009). Holland (1986) refers to these vegetation communities as “Mojave creosote bush scrub”. However, it should be noted that the habitat on-site has been previously removed and is considered highly disturbed. Since the project site is covered with a single vegetation community, which is highly disturbed, a separate vegetation map is not included. The drainages contain little or no vegetation within the OHMW. No hydrophytic plants, Facultative Wetland (FACW) or Obligate (OBL) were observed within the survey area.

3.4 Soils

Based on the on-line soil survey provided by United States Department of Agriculture (accessed 2022), the project site contains two soil series including Bryman Loamy Fine Sand and Mirage-Joshua Complex (Appendix A – Figure 5). Neither of these soils are considered hydric. Bryman Loamy Fine Sand is a well-drained alluvium derived from granite sources. The Joshua series consists of moderately deep, well drained soils that formed in material derived from mixed sources. Joshua soils are on old terraces. The Mirage series consist of deep, well drained soils that formed in mixed alluvium, dominantly from granitic sources. No hydric soils were observed on-site. Soil pits were dug periodically to determine the depth of the sandy soil. In all cases, soil pits dug to 25 inches contained the same soil profile with no evidence of any hydric soil conditions.

3.5 National Wetlands Inventory

The United States Fish and Wildlife Service (USFWS) is the principal Federal agency that provides information to the public on the extent and status of the Nation's wetlands. The USFWS has developed a series of maps, known as the National Wetlands Inventory (NWI) to show wetlands and deep-water habitat. This geospatial information is used by Federal, State, and local agencies, academic institutions, and private industry for management, research, policy development, education, and planning activities. The NWI program was neither designed nor intended to produce legal or regulatory products; therefore, wetlands identified by the NWI program are not the same as wetlands defined by the USACE.

The NWI Mapper (USFWS, 2022) was accessed on-line to review mapped wetlands or riverine areas within the project study areas. The NWI mapper has two recorded occurrences of any wetland or riverine areas identified within the project site and/or immediate vicinity. (Appendix A – Figure 4). The more western drainage shown was observed to be an area of sheet flow with no bed and bank, and the eastern drainage corresponds with Drainage 2 observed onsite.

4.0 RESULTS

Based on the field visit, two unnamed drainages run through the project site in a generally north to south direction, however the jurisdictional portions of the features do not fully traverse the site and lose defined bed and bank and begin to sheet flow without reaching the requirements to be considered jurisdictional which include a lack of a defined bed and bank, lack of OHWM and the absence of riparian or wetland vegegetaion. There is an additional roadside drainage along the eastern side of Dale Evens Parkway that flows south to north, but it would not be considered jurisdictional. The roadside ditch is within an upland area that has collected runoff from the road and created a temporary conveyance during a storm event. Due to the presence of ordinary high-water mark, recent evidence of flows, and a defined bed and bank, the two drainages may be considered jurisdictional by the California Department of Fish and Wildlife and the California Regional Water Quality Control Board. Because the drainages do not connect with any downstream traditionally navigable waters or relative permeant waters, the drainages on-site are considered isolated and subsequently would not be under USACE jurisdiction.

Site photos of representative portions of the on-site drainage as well as off-site areas upstream and downstream are included in Appendix B.

The Jurisdictional Delineation Map (Appendix A – Figure 6) identifies Drainage 1 averaging approximately 5 feet wide and 6 inches deep. The drainage collects sheet flow coming from the northwest portion of the site and conveys it for approximately 572 feet and then the flows connect with a wider sheet flow area and no longer had a defined bed and bank. Drainage 2 is a narrow channel which averages approximately 3 feet wide and between 6 inches and 1 foot deep. It collects sheet flow waters from the northeastern portion of the project. Based on aerial photo analysis, the feature is part of a braided system, which historically conveyed waters from the north of the project, but that flow regime has been altered by the construction of the Walmart Distribution Center to the north. The portions of Drainage 2 with defined bed and bank, and OHMW were mapped, but there was not a connection from Lafayette Street to the north or to the southern boundary of the project with a defined bed and bank. The CDFW jurisdictional area of the drainages is based on the extent of the top of the bank of the established bed and bank. The RWQCB jurisdictional area of the drainages is based on the extent of the OHWM observed onsite. Table 2 identifies the total jurisdictional area associated with the drainage features. Since no wetlands were identified, no wetland data forms are included in this report.

The USACE, in combination with the Environmental Protection Agency (EPA), when necessary, reserves the ultimate authority in making the final jurisdictional determination of WUS and the RWQCB reserves the ultimate authority in making the final jurisdictional determination of WSC. Additionally, CDFW has ultimate discretion in the determination of their jurisdiction. Based on our delineation, the two drainage meets the requirements to be considered jurisdictional by RWQCB and CDFW. The drainages on-site are considered ephemeral and only conveys flows during and immediately following a storm event. The site was visited within three days of a recordable storm event and flows had already stopped. The total amount of rainfall collected on-site during the last storm is not known as localized

thunderstorms were very sporadic and isolated and local rain data did not reflect the rainfall on the site.

Table 1. Survey Site Information

Drainage	Latitude	Longitude	Quad	Township	Range	Section
D1	34.592539	-117.204888	Apple Valley North	6N	3W	21
D2	34.591732	-117.201915	Apple Valley North	6N	3W	21

Table 2. Summary of Jurisdictional Areas

Drainage ID /Survey Area	Watershed	Waters of the US Length (feet)	Waters of the US (acre)	RWQCB Length (Feet)	RWQCB (acre)	CDFW Length (Feet)	CDFW (acre)	Cowardin Class	Class of Aquatic Resource
1	Upper Mojave	0	0	556	0.14	556	0.16	R4SBJ	non-section10-non wetland
2	Upper Mojave	0	0	1,061	0.11	1,061	0.18	R4SBJ	non-section10-non wetland

RWQCB – Regional Water Quality Control Board
CDFW – California Department of Fish and Wildlife
R4SBJ – Riverine, Intermittent, Streambed, Intermittent Flooded based on Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, et. al., 1979).

5.0 IMPACTS TO JURISDICTIONAL AREAS

Based on the proposed site plan that was provided by Tera Nova, the entire project site is proposed for developed. It is assumed that both drainage features on-site will be impacted. The total calculated impact to the Drainage is 0.14 acre of Regional Water Quality Control Board jurisdiction and 0.16 acres of CDFW Jurisdiction with a total length of 556 linear feet. The total calculated impact to the Drainage is 0.11 acre of Regional Water Quality Control Board jurisdiction and 0.18 acres of CDFW Jurisdiction with a total length of 1,601 linear feet. Regulatory Framework can be found in Appendix D.

5.1 Permitting Requirements

The proposed project requires permanent impacts to the jurisdictional drainage and therefore, authorization from RWQCB and CDFW are required as described below.

5.1.1 U.S. Army Corps of Engineers

The drainage features on-site are classified as an unvegetated ephemeral stream. As of September 7, 2021, a recent Arizona court case vacated the June 22, 2020, Navigable Waters Protection Rule effectively reinstating the definition in effect prior to 2015. U.S. Environmental Protection Agency (EPA) and the USACE are currently rewriting a new Navigable Waters Protection Rule to define “waters of the United States” (WOTUS) and should be submitted for review by early to mid-2022. California has a history of litigation on these such rules, so we will be following the current USACE and EPA requirements and make any necessary changes to maintain the current requirements. The drainages on-site however do not connect downstream to any RPW or traditionally navigable waterway and should not be considered jurisdictional by USACE. The permit requirements below are for reference if chances to the jurisdictional limits of the USACE are revised to include isolated features.

The two most common types of permits issued by USACE under Section 404 of the CWA to authorize the discharge of dredged or fill material into WUS are: a nation-wide permit (NWP) or an individual permit (IP).

NWPs are general permits for specific categories of activities that result in minimal impacts to aquatic resources. A complete description of qualifications under NWP 29 are at: https://saw-reg.usace.army.mil/NWP2021/NWP29.pdf. The currently NWP program will be effect from 15 March 2021 to 15 March 2026.

Mitigation measures required under the NWP program typically includes replacement of temporary impacts at a 2:1 ratio and replacement of permanent impacts at a 3:1 ratio. Mitigation can be implemented through the purchase of mitigation credits through an approved in-lieu fee program or similar mitigation bank. Other options can include the purchase of off-site habitat and placed into a conservation easement. It should be noted that the mitigation ratios are based on in-kind habitat replacement and ratios may be reduced if higher quality habitat is purchased.

5.1.2 Regional Water Quality Control Board

The project areas occur in the Lahontan RWQCB (Region 6). The RWQCB regulates impacts to WSC under the Porter Cologne Water Quality Control Act through issuance of a Construction General Permit, State General Waste Discharge Order, or Waste Discharge Requirements, depending upon the level of impact and the properties of the waterway.

The project proponent would need to obtain a Water Quality Certification. In addition to the formal application materials and fee (based on area of impact), a copy of the appropriate California Environmental Quality Act (CEQA) documentation must be included with the application.

Mitigation measures anticipated for project related impacts include the replacement of permanent impacts at a 3:1 ratio.

5.1.3 California Department of Fish and Wildlife

A 1602 Streambed Alteration Agreement is required for all activities that alter streams and lakes and their associated riparian habitat, regardless of the extent of impacts. In addition to the formal application materials and fee (based on cost of the project), a copy of the appropriate CEQA documentation must be included with the application.

Mitigation measures anticipated for project related impacts include the replacement of permanent impacts at a 3:1 ratio.

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APPENDIX A – JURISDICTIONAL MAPS

APPENDIX B – SITE PHOTOGRAPHS

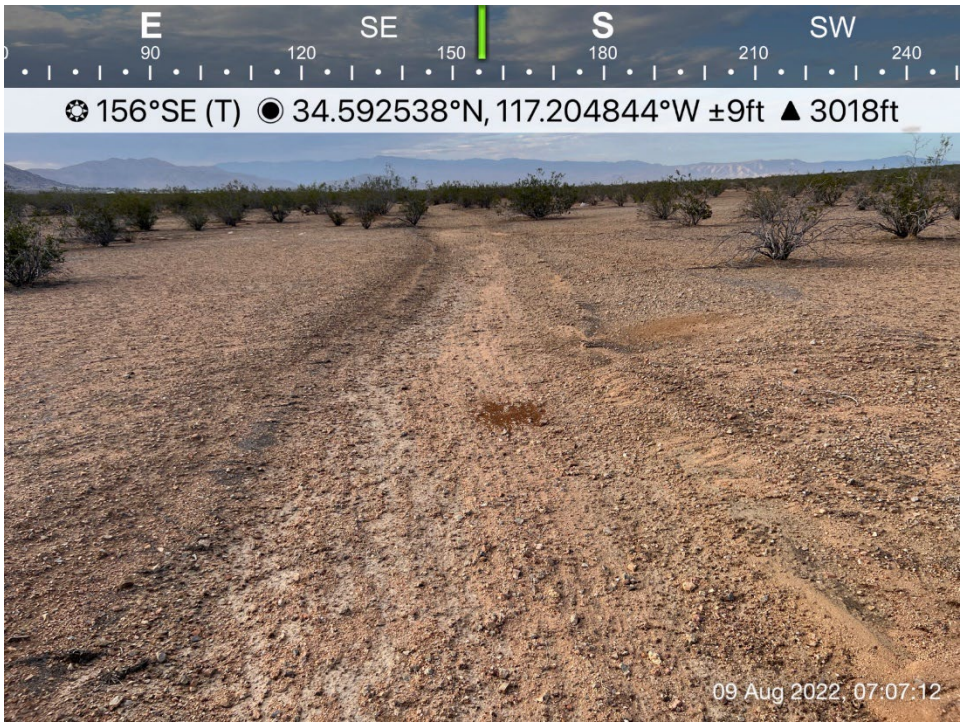

Photo 1. Drainage 1 looking downstream showing slight demarcation of bed and bank after recent rains.

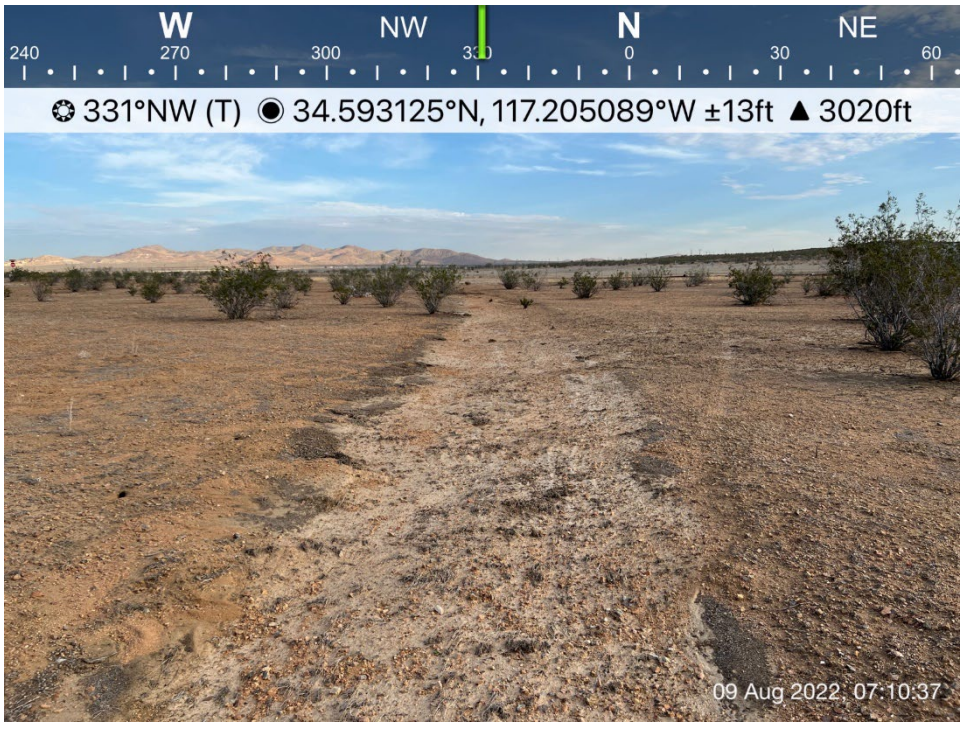

Photo 2. Drainage 1 looking upstream showing slight demarcation of bed and bank after recent rains.

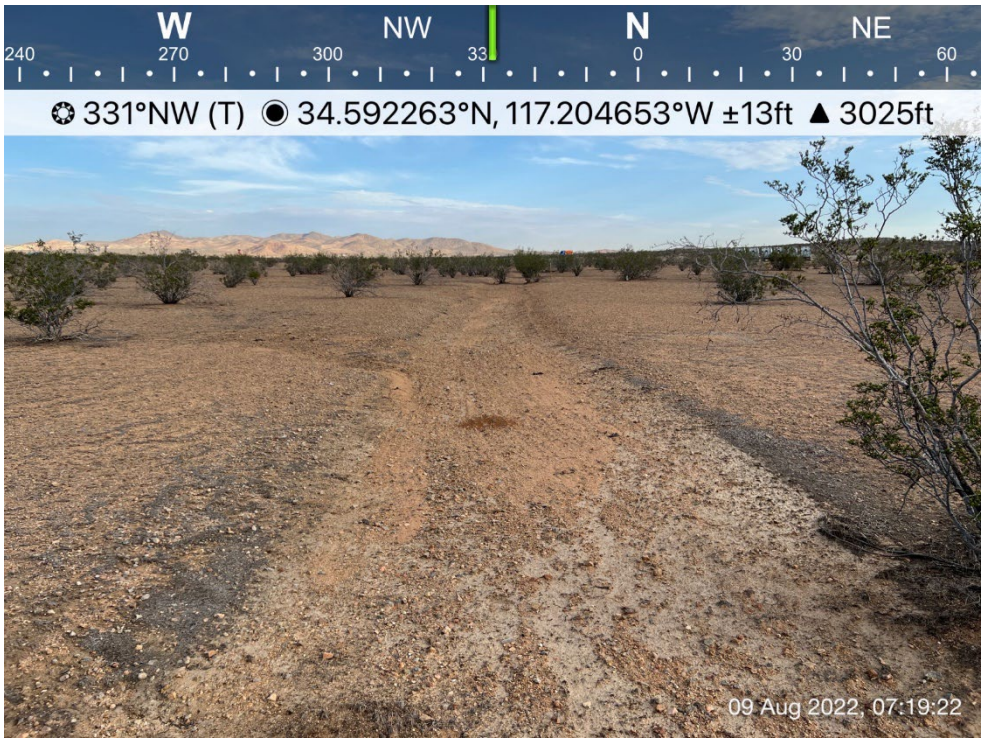

Photo 3. Looking upstream near the southern end of Drainage 1.

Photo 4. Looking southeast (downstream) at the southern end of Drainage 1 showing the lack of bed and bank and recent signs of sheet flow.

Photo 5. Looking east along the northern boundary showing no drainages flowing into the property.

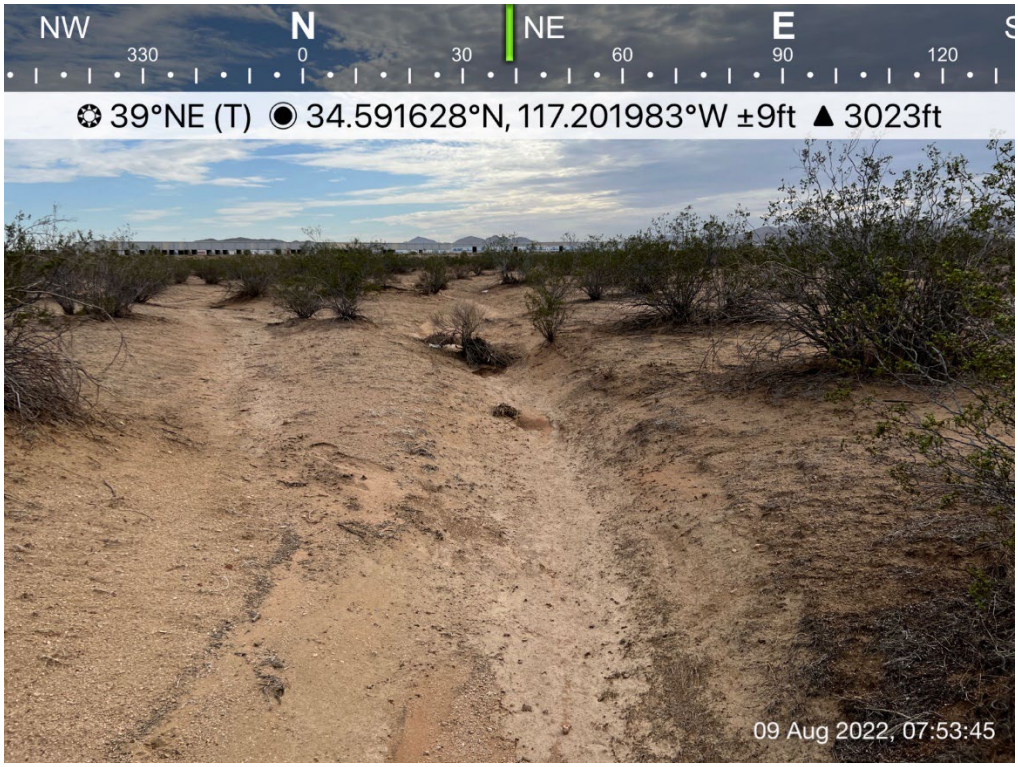

Photo 6. Looking northeast (upstream) at Drainage 2.

Photo 7. Looking southwest (downstream) at Drainage 2.

Photo 8. Looking north showing the roadside ditch along Dale Evans Parkway.

APPENDIX C – REGULATORY FRAMEWORK

REGULATORY FRAMEWORK

U.S. Army Corps of Engineers

The USACE regulates the discharge of dredged or fill material in waters of the United States (WUS) pursuant to Section 404 of the CWA.

Waters of the U.S.

CWA regulations (33 CFR 328.3(a)) define WUS 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 WUS under the definition;
5. Tributaries of WUS;
6. The territorial seas;
7. Wetlands adjacent to WUS (other than waters that are themselves wetlands).

The USACE delineates non-wetland waters in the Arid West Region by identifying the ordinary high-water mark (OHWM) in ephemeral and intermittent channels (USACE 2008a). The OHWM is defined in 33 CFR 328.3(e) as:

> "…that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impresses on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."
>
> Identification of OHWM involves assessments of stream geomorphology and vegetation response to the dominant stream discharge. Determining whether any non-wetland water is a jurisdictional WUS involves further assessment in accordance with the regulations, case law, and clarifying guidance as discussed below.

Wetlands and Other Special Aquatic Sites

Wetlands are defined at 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in

saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

Special aquatic sites are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region. Special aquatic sites include sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes. They are defined in 40 CFR 230 Subpart E.

Supreme Court Decisions

Solid Waste Agency of Northern Cook County

On January 9, 2001, the Supreme Court of the United States issued a decision on Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al. with respect to whether the USACE could assert jurisdiction over isolated waters. The Solid Waste Agency of North Cook County (SWANCC) ruling stated that the USACE does not have jurisdiction over "non-navigable, isolated, intrastate" waters.

Rapanos/Carabell

In the Supreme Court cases of Rapanos v. United States and Carabell v. United States (herein referred to as Rapanos), the court attempted to clarify the extent of USACE jurisdiction under the CWA. The nine Supreme Court justices issued five separate opinions (one plurality opinion, two concurring opinions, and two dissenting opinions) with no single opinion commanding a majority of the Court. In light of the Rapanos decision, the USACE will assert jurisdiction over a traditional navigable waterway (TNW), wetlands adjacent to TNWs, non-navigable tributaries of TNWs that are a relatively permanent waterway (RPW) where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months) and wetlands that directly abut such tributaries. The USACE will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW: non-navigable tributaries that are not relatively permanent, wetlands adjacent to non-navigable tributaries that are not RPWs, and wetlands adjacent to but that do not directly abut a non-navigable RPW.

Flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary indicate whether they significantly affect the chemical, physical and biological integrity of downstream TNWs. Analysis of potentially jurisdictional streams includes consideration of hydrologic and ecologic factors. The consideration of hydrological factors includes volume, duration, and frequency of flow, proximity to traditional navigable waters, size of watershed, average annual rainfall, and average annual winter snow pack. The consideration of ecological factors also includes the ability for tributaries to carry pollutants and flood waters to a TNW, the ability of a tributary to provide aquatic habitat that supports a TNW, the ability of wetlands to trap and filter pollutants or store flood waters, and maintenance of water quality.

2015 Clean Water Rule

The federal government issued the Clean Water Rule in 2015 in order to resolve jurisdictional ambiguity resulting from previous Supreme Court decisions (i.e. SWANNC, Rapanos). On June 22, 2015, the USACE and EPA published the Clean Water Rule: Definition of ‘‘Waters of the United States’’; Final Rule (40 CFR Parts 110, 112, 116, 117, 122, 230, 232, 300, 302, and 401). The Clean Water Rule was put on hold by federal injunction in 2015 but was reinstated in California in August 2018. The Clean Water Rule was again put on hold by federal injunction in September 2019. The Clean Water Rule finds waters to be jurisdictional under the CWA as summarized below:

1. Jurisdictional by Rule: TNWs, Interstate Waters, Territorial Seas, and Impoundments of Jurisdictional Waters.

2. Tributaries: Waters characterized by the presence of physical indicators of flow, including bed and bank and OHWM, that contribute flow directly or indirectly to a waters listed in 1) above.

3. Connected Waters: Adjacent or neighboring waters that have a significant nexus to waters listed in 1) above.

4. Other Waters: waters that, individually or as a group, significantly affect the chemical, physical, or biological integrity of waters listed in 1) above.

2020 The Navigable Waters Protection Rule

On January 23, 2020, the Environmental Protection Agency (EPA) and the Department of the Army published a final rule called “The Navigable Water Protection Rule.”

In this final rule, the agencies interpret WUS to encompass:

- The territorial seas and traditional navigable waters;
- Perennial and intermittent tributaries that contribute surface water flow to such waters;
- Certain lakes, ponds, and impoundments of jurisdictional waters; and
- Wetlands adjacent to other jurisdictional waters.

The final rule excludes from the definition of WUS all waters or features not mentioned above, specifically clarifying that WUS do not include the following:

- groundwater, including groundwater drained through subsurface drainage systems;
- ephemeral features that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools;
- diffuse stormwater runoff and directional sheet flow over upland;
- ditches that are not traditional navigable waters, tributaries, or that are not constructed in adjacent wetlands, subject to certain limitations;
- prior converted cropland;
- artificially irrigated areas that would revert to upland if artificial irrigation ceases;

- artificial lakes and ponds that are not jurisdictional impoundments and that are constructed or excavated in upland or non-jurisdictional waters;
- water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
- stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off;
- groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and
- waste treatment systems.

This rule was published in the Federal Register on April 21, 2020 and went into effect 60 days after that date, on June 22, 2020.

2021 The Navigable Waters Protection Rule

On September 7, 2021, an Arizona court case vacated the June 22, 2020, Navigable Waters Protection Rule effectively reinstating the definition in effect prior to 2015. U.S. Environmental Protection Agency (EPA) and the USACE rewriting a new Navigable Waters Protection Rule to define “waters of the United States” (WOTUS) and should be submitted for review by early 2022.

Regional Water Quality Control Board

The RWQCB regulates activities pursuant to Section 401(a)(1) of the CWA. 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 Waters of the State of California (WSC) which is generally the same as WUS but may also include waters not in federal jurisdiction.

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 Water Boards define an area as wetland 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.

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

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, or
        xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or
        xii. Fields flooded for rice growing.

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

California Department of Fish and Wildlife

The CDFW regulates water resources under Section 1600-1616 of the California Fish and Game Code. 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).”

Evaluation of CDFW jurisdiction followed guidance in the Fish and Game Code and A Review of Stream Processes and Forms in Dryland Watersheds. In general, under 1602 of the Fish and Game Code, CDFW jurisdiction extends to the maximum extent or expression of a stream on the landscape (CDFW, 2010). It has been the practice of CDFW to define a stream as “a body of water that flows perennially or episodically and that is defined by the area in a channel which water currently flows or has flowed over a given course during the historic hydrologic course regime, and where the width of its course can reasonably be identified by physical or biological indicators” (Brady and Vyverberg, 2013). Thus, a channel is not defined by a specific flow event, nor by the path of surface water as this path might vary seasonally. Rather, it is CDFW's practice to define the channel based on the topography or elevations of land that confine the water to a definite course when the waters of a creek rise to their highest point.

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1 inch = 4 miles

0 2 4 Miles

Project Boundary

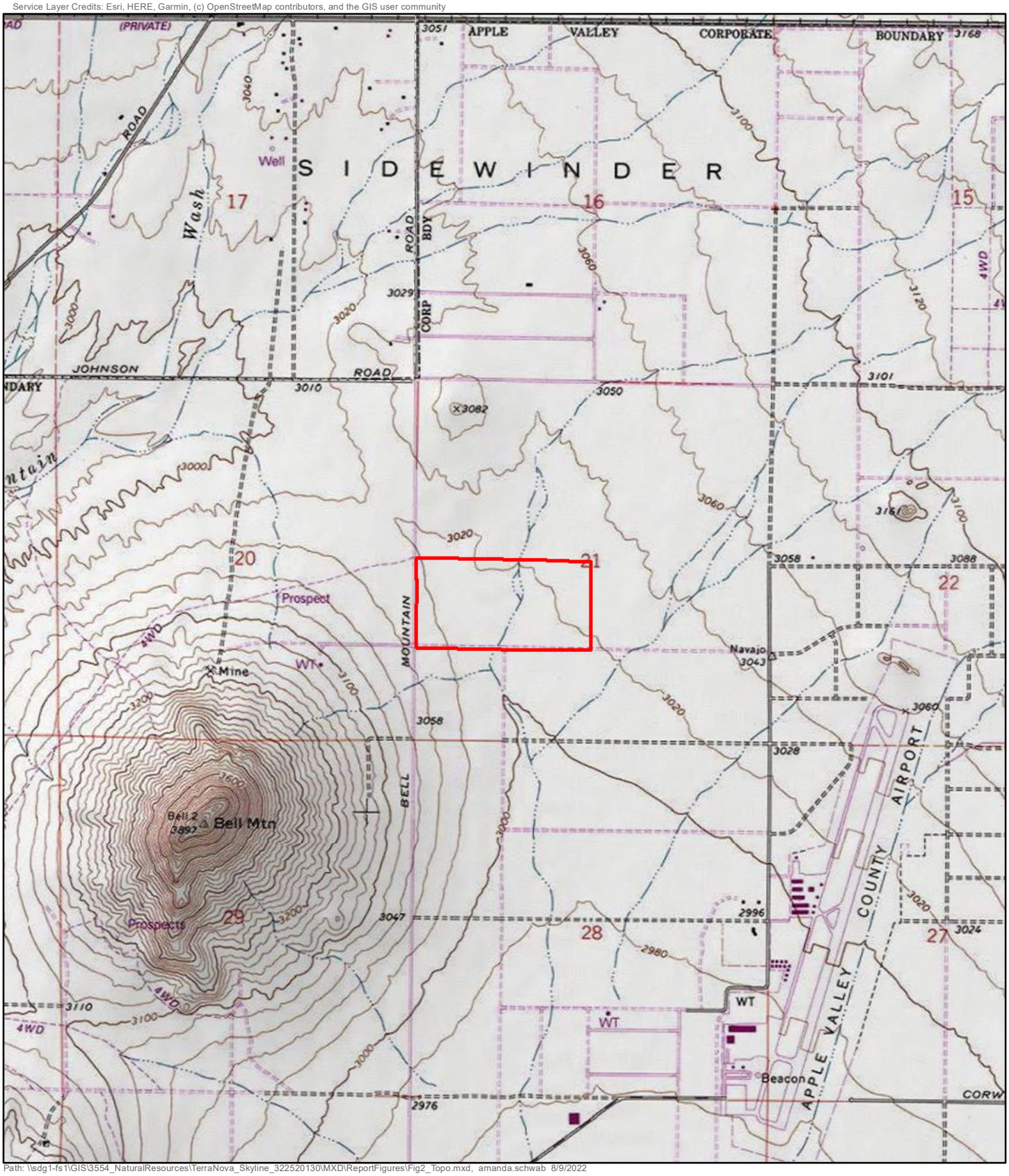
MSHCP/NCCP Area

wood.

FIGURE 1

Project Vicinity
Jurisdictional Delineation
Dale Evans/Lafayette Warehouse/Distribution Facility Project
Town of Apple Valley, San Bernardino County, CA

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community



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1 inch = 2,000 feet
0 1,000 2,000 Feet

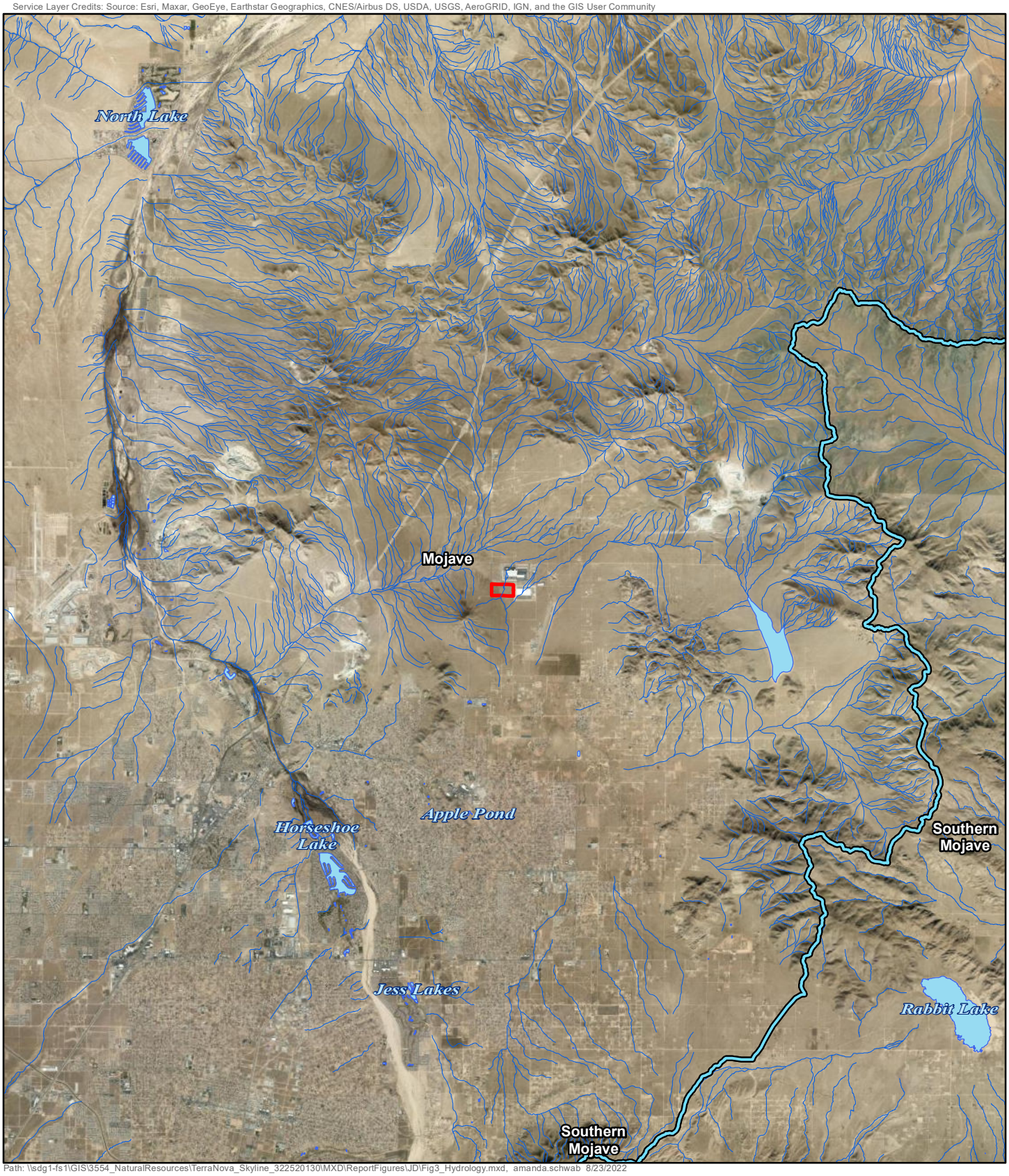
wood.

Project Boundary

FIGURE 2

USGS 7.5' Quad: Apple Valley North
Jurisdictional Delineation
Dale Evans/Lafayette Warehouse/Distribution Facility Project
Town of Apple Valley, San Bernardino County, CA

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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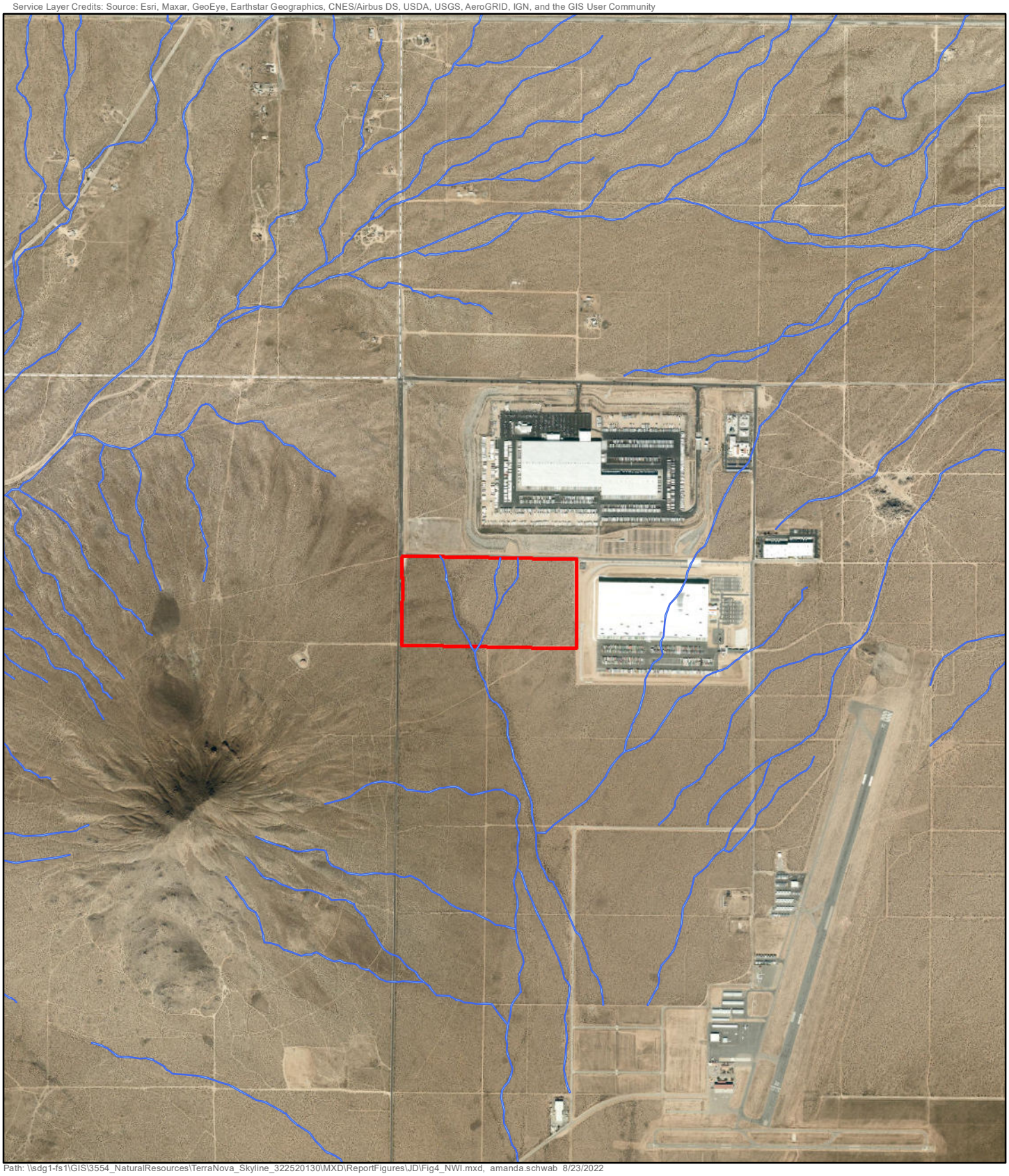
1 inch = 3 miles
0 1.5 3 Miles

wood.

- Project Boundary
- Stream/River (NHD)
- Watershed (HU8)
- Waterbody (NHD)

FIGURE 3

Hydrology
Jurisdictional Delineation
Dale Evans/Lafayette Warehouse/Distribution Facility Project
Town of Apple Valley, San Bernardino County, CA



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1 inch = 2,000 feet

0 1,000 2,000 Feet

wood.

Project Boundary

Riverine

FIGURE 4

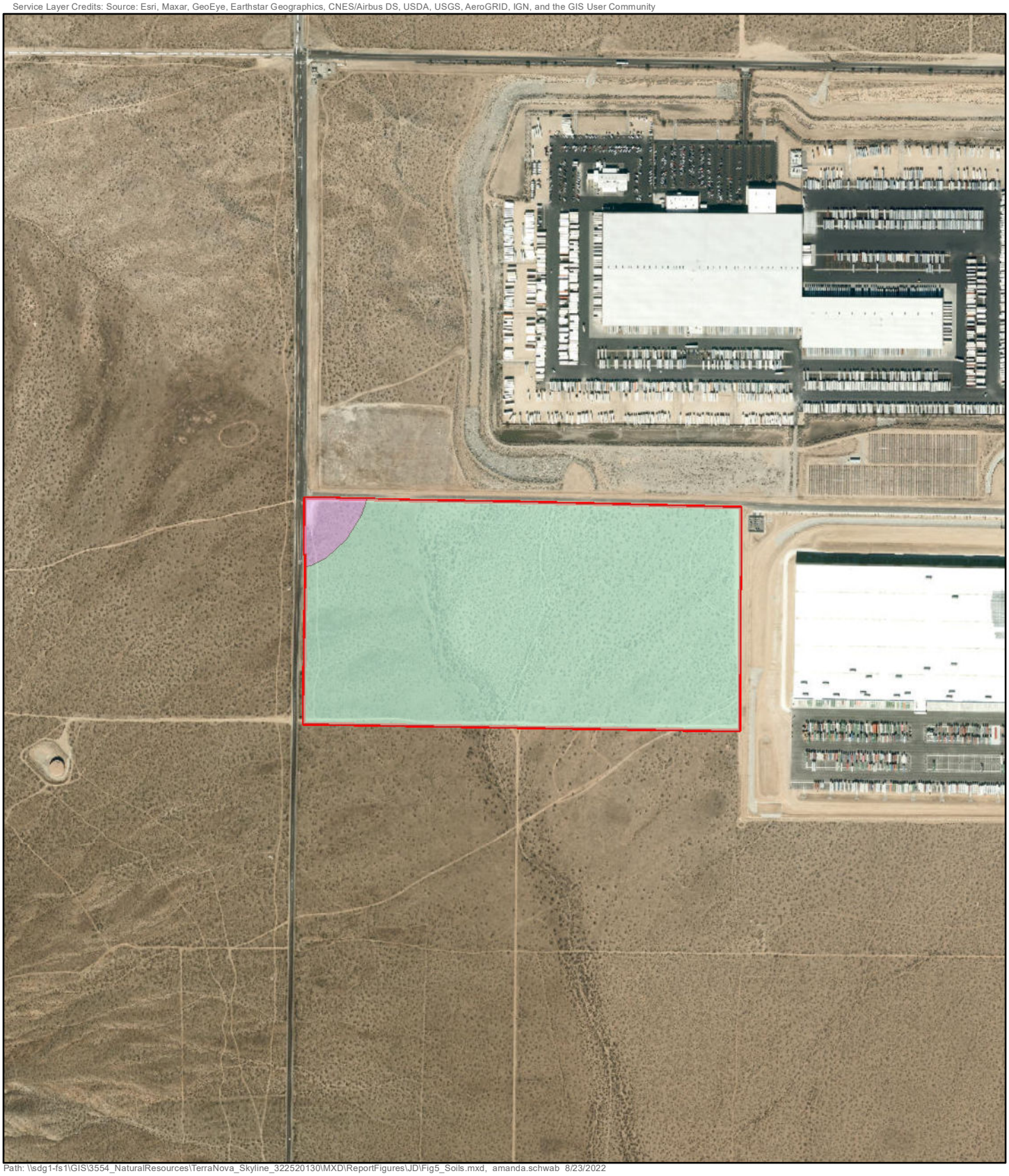
National Wetlands Inventory

Jurisdictional Delineation

Dale Evans/Lafayette Warehouse/Distribution Facility Project

Town of Apple Valley, San Bernardino County, CA

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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1 inch = 800 feet

0 400 800 Feet

Project Boundary

Helendale-Bryman Lomay Sands, 2 to 5 percent slopes

Mirage-Joshua Complex, 2 to 4 percent slopes

wood.

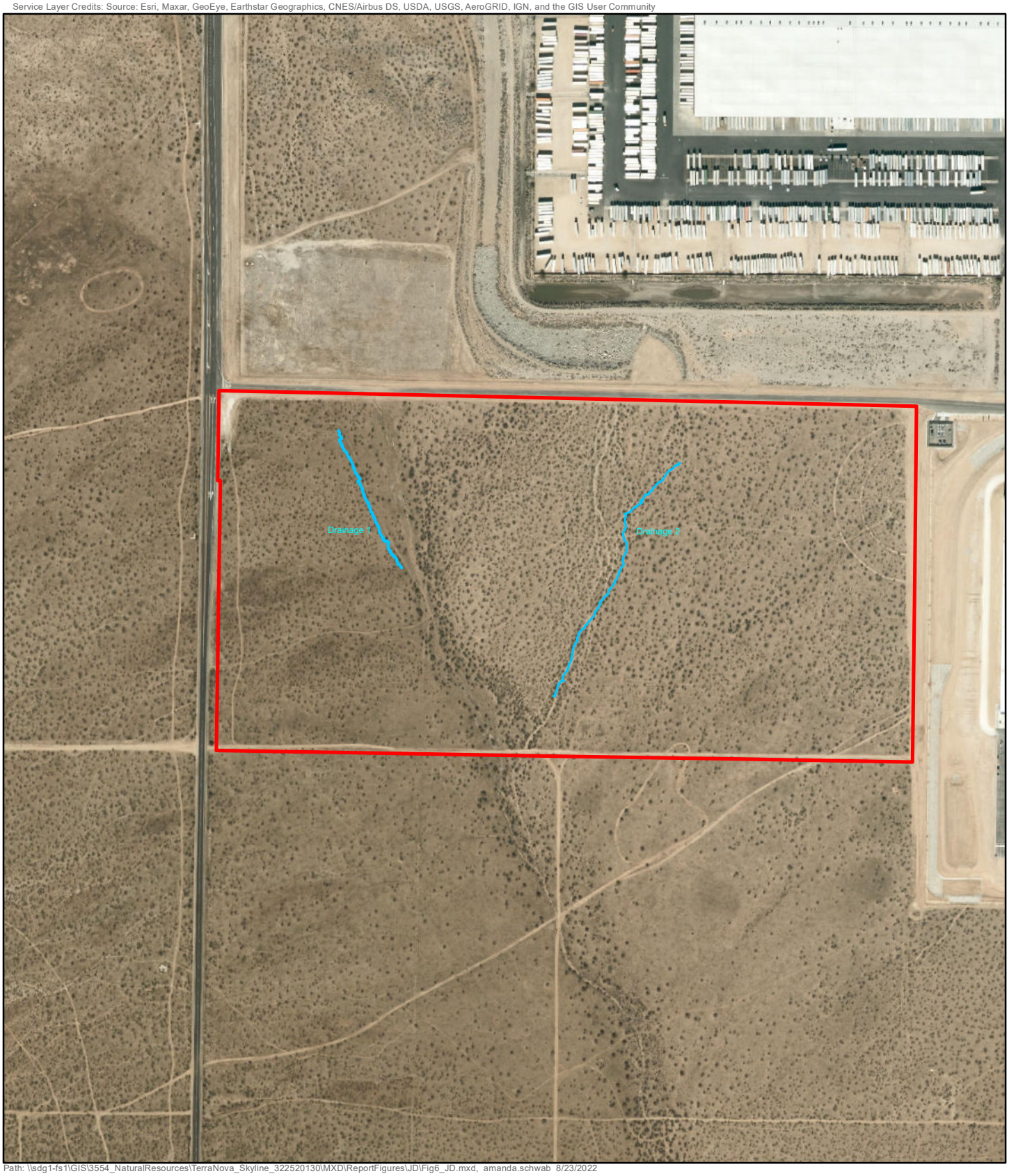
FIGURE 5

Soils

Jurisdictional Delineation

Dale Evans/Lafayette Warehouse/Distribution Facility Project

Town of Apple Valley, San Bernardino County, CA



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Project Boundary

California Department of Fish and Wildlife/California Regional Water Quality Control Board JD

1 inch = 500 feet

0 250 500 Feet

wood.

FIGURE 6

Potential Jurisdictional Waters
Jurisdictional Delineation
Dale Evans/Lafayette Warehouse/Distribution Facility Project
Town of Apple Valley, San Bernardino County, CA