

Technical Appendix C3

Jurisdictional Delineation Report

Jurisdictional Delineation Report

**First Nandina Logistics Center
Riverside County, California**

Prepared for

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List of Abbreviated Terms

ac	Acre
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CFG Code	California Fish and Game Code
CFR	Code of Federal Regulations
CWA	Clean Water Act
CWC	California Water Code
EPA	U.S. Environmental Protection Agency
ft	Feet
GIS	Geographic Information System
GPS	Global Positioning System
HUC	Hydrologic Unit Code
lf	Linear Feet
LSAA	Lake and Streambed Alteration Agreement
NRCS	Natural Resources Conservation Service
OHWM	Ordinary High Water Mark
Project	First Nandina Logistic Center
Porter-Cologne	Porter-Cologne Water Quality Control Act
Rapanos Decision	John A. Rapanos v. United States; and June Carabell v. United States Army Corps of Engineers
RHA	Rivers and Harbor Act of 1899
RPW	Relatively Permanent Water
RWQCB	Regional Water Quality Control Board
Study area	The Project disturbance area and buffer
SWANCC	Solid Waste Agency of Northern Cook County vs. USACE
SWRCB	State Water Regional Control Board
TNW	Traditional Navigable Water
Trust	First Industrial Acquisitions, Inc. and First Industrial Realty Trust, Inc.
URS	URS Corporation
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
WDR	Report of Waste Discharge
WoUS	Waters of the United States
WoS	Waters of the State
WQC	Water Quality Certification Program

1.0 INTRODUCTION AND SUMMARY

First Industrial Acquisitions, Inc. and First Industrial Realty Trust, Inc. (Trust) proposes to construct an approximate 925,220 square ft commercial complex (Project) located south of Nandina Avenue, East of Heacock Street, and west of Indian Street in the City of Moreno Valley, CA (Figures 1 and 2). URS has been retained by the Trust to conduct a Jurisdictional Delineation for the Project. This Jurisdictional Delineation Report summarizes: (1) U.S. Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the Clean Water Act (CWA); (2) Regional Water Quality Control Board (RWQCB) jurisdiction pursuant to Section 401 of the CWA and Section 13050(e) (et seq.) of the California Water Code (CWC) via the Porter-Cologne Water Quality Control Act (Porter-Cologne); and (3) California Department of Fish and Game (CDFG) jurisdiction pursuant to Section 1602 of the California Fish and Game Code (CFG Code) for the Project. The Project is located within the Perris United States Geographical Survey (USGS) 7.5-Minute Series Topographic Quadrangle Map.

A total of 0.06 acres of potential USACE jurisdictional non-wetland waters were delineated in the buffer of study area within an unnamed drainage feature located west of Heacock Street. No USACE jurisdictional aquatic resources occur within the Project boundaries where proposed ground disturbance will occur. Potential Regional Water Quality Control Board (RWQCB) jurisdiction in the study area is equal to USACE jurisdiction; no potential Porter-Cologne jurisdiction is present. Potential CDFG jurisdiction totals 0.26 acres of upland vegetated, non-riparian habitat within the buffer of the study area. No potential CDFG jurisdictional is present within the proposed Project disturbance footprint.

CWA Section 404 and 401 permits and a Lake and Streambed Alteration Agreement (LSAA) may be required to implement the Project only if impacts will occur within the bed, bank, or channels of the unnamed drainage feature west of Heacock Street. If temporary and/or permanent impacts will occur in the unnamed feature, then the limits of potential jurisdictional aquatic resources will need to be verified by the agencies.

2.0 PROJECT DESCRIPTION

2.1 PROJECT DESCRIPTION AND LOCATION

The proposed Project consists of an approximate 1,367,000 square ft commercial complex located south of Nandina Avenue, East of Heacock Street, and west of Indian Street in the City of Moreno Valley, CA (Figures 1 and 2). The Project is located in the Perris 7.5-Minute Topographic Quadrangle within Section 31, Township 3 South, Range 3 West, at an approximate elevation of 1,470 feet above sea level. The longitude and latitude coordinates near the center of the study area are 33.8864532 and -117.239111. The Project lands are composed of undeveloped parcels that receive frequent weed abatement (i.e., disking) and developed parcels containing commercial and residential development. Land use surrounding the study area includes residential and commercial development, disturbed open areas, and public infrastructure.

3.0 REGULATORY OVERVIEW

3.1 REVIEW OF USACE JURISDICTION PURSUANT TO SECTION 404 OF THE CWA

3.1.1 Waters of the United States

The USACE regulates the discharge of dredged and/or fill material into Waters of the U.S. (WoUS) pursuant to Section 404 of the CWA. The USACE has authority to permit the discharge of dredged or fill material in WoUS under Section 404 of the CWA, and to permit work and the placement of structures in navigable WoUS under the Rivers and Harbors Act of 1899 (RHA).

Ordinary High Water Mark

In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, including intermittent streams, extend to the Ordinary High Water Mark (OHWM). The OHWM is defined as "that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed 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" (33 CFR 328.3[e]). In 2005, the USACE issued a Regulatory Guidance Letter (05-05) and added the following additional indicators of an OHWM: wracking, vegetation matted down, bent, or absent, sediment sorting, leaf litter disturbed or washed away, scour, deposition, multiple observed flow events, bed and banks, water staining, and changes in plant communities (USACE 2005).

USACE-Defined Wetlands

Wetlands are defined in 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 a prevalence of vegetation typically adapted for life in saturated soil conditions." The methods in the USACE Wetland Manual generally require that in order to be considered a wetland, the vegetation, soils, and hydrology of an area must exhibit minimal hydric characteristics (EL 1987). Although the manual provides great detail in methods and allows for varying special conditions, a wetland should normally meet each of the following three criteria:

- 50 percent or greater of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands [Lichvar and Kartesz 2009]);
- Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions). Such soils (i.e., hydric soils) have characteristics that indicate they were developed in conditions where soil oxygen is limited by the presence of saturated soil for long periods during the growing season; and
- Hydrologic characteristics must indicate that the ground is saturated to within 12 inches of the surface for at least 5 percent of the growing season during a normal rainfall year (approximately 18 days in southern California).

3.1.2 USACE Terminology

The following definitions are from Rapanos Guidance Memoranda (USACE 2007b, 2008b):

"Adjacent," as defined in USACE and Environmental Protection Agency (EPA) regulations, means "bordering, contiguous, or neighboring." Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes, and the like are "adjacent wetlands."

Wetlands that are not separated from a tributary by upland features, such as a berm or dike, are considered “abutting.”

A “tributary,” as defined in the Rapanos guidance memoranda, means a natural, man-altered, or man-made water body that carries flow directly or indirectly into traditional navigable waters. For purposes of determining “significant nexus” with a traditional navigable water, a “tributary” is the entire reach of the stream that is of the same order (i.e., from the point of confluence, where two lower order streams meet to form the tributary, downstream to the point where the tributary enters a higher order stream).

A water body is considered to have a “significant nexus” with a TNW if its flow characteristics and functions, in combination with the ecologic and hydrologic functions performed by all wetlands adjacent to such a tributary, affect the chemical, physical, and biological integrity of a downstream TNW. A “TNW” includes all of the navigable WoUS defined in 33 C.F.R. § 329 and by numerous decisions of the Federal courts, plus all other waters that are navigable-in-fact.

In the context of CWA jurisdiction following Rapanos, a water body is “relatively permanent (RPW)” if its flow is year round or its flow is continuous at least “seasonally,” (i.e., typically 3 months or longer). Wetlands adjacent to a “relatively permanent” tributary are also jurisdictional if those wetlands directly abut such a tributary.

3.2 REVIEW OF RWQCB JURISDICTION PURSUANT TO SECTION 401 OF THE CWA AND PORTER-COLOGNE

The RWQCB regulates fills to WoUS through CWA Section 401, which in most instances, is equivalent to CWA Section 404 jurisdiction. In the absence of CWA Section 404 jurisdiction over isolated waters or WoS, RWQCB jurisdiction is extended through Porter-Cologne. WoS are defined in Section 13050(e) of the California Water Code (CWC) and include “any surface water or groundwater, including saline waters, within the boundaries of the state”. Porter-Cologne provides a comprehensive framework to protect water quality in California. It requires that any entity who plans to discharge waste where it might adversely affect WoS must first notify the RWQCB, which may impose requirements to protect water quality.

The Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers (SWANCC) decision created “gaps” relating to isolated waters that are no longer subject to the CWA. In response, the State Water Regional Control Board (SWRCB) issued a 2004 Memorandum stating that RWQCBs should consider setting a higher regulatory priority on discharges to “isolated waters” than to similar discharges to federally-protected waters of similar value (SWRCB 2004). This memorandum further states that dredging, filling, or excavation of isolated waters constitutes a discharge of waste to WoS. Among the procedures recommended in the memorandum was that the RWQCB refer to the same regulatory considerations generally applied to the issuance of Section 401 permits (SWRCB 2004). According to the SWRCB, the SWANCC decision did not affect the authority of the state to regulate discharges to isolated, non-navigable waters of the state and had no impact upon the RWQCB’s authority to act under state law (SWRCB 2001).

3.3 REVIEW OF CDFG JURISDICTION PURSUANT TO SECTION 1602 (ET SEQ.) OF THE CFG CODE

Sections 1602 et seq. of the CFG Code regulates any proposed activity that may substantially modify, divert, obstruct, or any activity that causes changes to the flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. According to the 14 CCR 1.72, a “stream” (including creeks and rivers) is defined as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” CDFG’s definition of “lake” includes

"natural lakes or man-made reservoirs." CDFG jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and wildlife. For clarification, the CDFG Legal Advisor has prepared the following opinion (ESD-CDFG 1994):

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects, and riparian vegetation will be treated like natural waterways.
- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses should be treated by [CDFG] as natural waterways.
- Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions.

CDFG jurisdictional limits also include artificial stock ponds and irrigation ditches constructed within uplands, and outer drip line limits of adjacent riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal wetland status or its location beyond the defined bed, bank, or channel.

4.0 METHODS

4.1 LITERATURE REVIEW

Prior to conducting fieldwork, resource databases, aerial photos, USGS topographic maps, and other available and relevant data were reviewed to determine watershed characteristics and the locations/types of aquatic resources that may be present within the study area. These resources included the following:

- Perris USGS topographic quadrangle map
- Aerial photographs
- Historical aerial photographs
- Natural Resource Conservation Service Soil Survey Geographic (SSURGO) Database (USDA-NRCS 2013)
- U.S. Department of Agricultural, Natural Resource Conservation Service Geographic Information Systems (GIS) Watershed data
- National Wetlands Inventory (USFWS 2013)

The intent of the literature review was to determine the probability and locations where aquatic resources could occur within the study area.

4.2 CWA DATA COLLECTION METHODS

A routine on-site delineation of the study area was conducted by URS on March 12, 2013 in order to determine the presence/absence and boundaries of potential aquatic resources within the study area.

The study area included the proposed Project disturbance footprint, plus a 250 ft buffer. Total CWA jurisdictional limits were delineated for WoUS and WoS within the study area based on the presence of an OHWM and/or wetland boundaries. Aquatic resources were surveyed on foot using a Trimble GeoXH GPS unit with sub-meter accuracy. Identification and location of the OHWM followed guidance provided in Lichvar and Wakely (2004), Lichvar et al. (2006), and Lichvar and McColley (2008). The dimensions (linear length and area) of each feature were then calculated with GIS analysis in order to determine total potential CWA jurisdiction within the study area.

The evaluation process for USACE-defined wetlands, when present, considered vegetation, soils, and hydrological parameters of suspected wetland features within the study area using the methods for routine determinations from the USACE Wetland Delineation Manual (EL 1987) and the Arid West Regional Supplements (USACE 2006; USACE 2008a). Potential wetland and WoUS features were also evaluated using USACE and EPA CWA jurisdiction guidance documents following the U.S. Supreme Court's Decision in *Rapanos v. United States* and *Carabell v. United States* (USACE 2007a; USACE 2007b; USACE 2008b).

4.2.1 Vegetation

Plant species were determined based on the *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012). Wetland indicator status of plant species was based on Lichvar (2012). During the field delineation, plants were categorized according to their probability to occur in wetlands versus non-wetlands using the categories listed in Table 1.

Table 1. Summary of Wetland Indicator Status

Category	Probability
Obligate Wetland (OBL)	Almost always is a hydrophyte, rarely in uplands
Facultative Wetland (FACW)	Usually is a hydrophyte but occasionally found in uplands
Facultative (FAC)	Commonly occurs as either a hydrophyte or non-hydrophyte
Facultative Upland (FACU)	Occasionally is a hydrophyte but usually occurs in uplands
Obligate Upland (UPL)	Rarely is a hydrophyte, almost always in uplands

The wetland vegetation criterion was assumed to be met if the Dominance Test using the 50/20 rule was satisfied (i.e., any species or group of species that contributed to a cumulative total of 50 percent of the total dominant coverage, plus any other individual species comprising at least 20 percent coverage) (USACE 2008a). Areas supporting a dominance of hydrophytes were further examined for indicators of hydric soils.

4.2.2 Soils

Soil texture, matrix, redoximorphic features, (e.g., mottles) and the presence of subsoil layers impervious to water infiltration were documented from soil pits. Soils were examined for positive hydric soil indicators (i.e., low chroma, mottles, and iron or manganese concretions), histic epipedons, organic layers, gleization, or sulfuric odor. Soil color and characteristics were determined from moist soil using Munsell Soil Color Charts (Munsell Color 2000). Soils were evaluated by digging pits to a depth of approximately 20 inches, where feasible, and GPS position data were collected at each soil pit. Paired upland and wetland soil pits were evaluated to determine wetland boundaries, where appropriate. Hydric soil assessments were predominantly based upon the guidance provided in the Field Indicators of Hydric Soils (USDA-NRCS 2010).

4.2.3 Hydrology

Hydrology was evaluated in areas suspected of being seasonally inundated and/or saturated to the surface during the growing season. Hydrological information for potentially jurisdictional features was determined by field indicators such as surface scour marks, vegetation matting, debris drift lines, sediment deposits, and watermarks.

Each drainage feature was classified as a RPW (i.e., flowing for greater than 3 months per year) or a non-RPW (i.e., seasonal, flowing less than or equal to 3 months). Non-RPWs include drainages with flow that is intermittent (i.e., water flows seasonally) or ephemeral (i.e., water flows only during and immediately following rain events).

4.2.4 Significant Nexus with a Traditional Navigable Water

The USACE will decide jurisdiction over the following waters based on a fact-specific analysis to determine if they have a significant nexus with a traditional navigable water (USACE 2008a):

- Non-navigable tributaries that are not relatively permanent;
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent; and
- Wetlands adjacent to, but that do not directly abut, a relatively permanent, non-navigable tributary.

In general, the USACE does not assert jurisdiction over the following features (USACE 2007a):

- *Ditches.* "Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water (greater than 3 months) generally are not

jurisdictional under the CWA, because they are not tributaries or they do not have a significant nexus to TNWs.”

- *Swales*. “Swales are generally shallow features in the landscape that may convey water across upland areas during and following storm events. Swales usually occur on relatively flat slopes and typically have grass or other low-lying vegetation throughout the swale. Swales are generally not waters of the U.S. because they are not tributaries or they do not have a significant nexus to TNWs.”

The USACE will apply the significant nexus standard as follows:

- A significant nexus analysis assesses the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of downstream traditional navigable waters. Significant nexus includes consideration of hydrologic and ecologic factors.

4.3 CDFG DATA COLLECTION METHODS

Suspected CDFG jurisdictional areas were assessed in the field for the presence of definable streambeds (i.e., bed, bank, and channel) and any associated riparian habitat. Streambeds and suspected riparian habitats were evaluated based on CDFG criteria from the CFG Code (Section 1602 et seq.) and guidance described in *A Field Guide to Lake and Streambed Alteration Agreements Sections 1600-1607* (ESD-CDFG 1994). Aquatic resources were mapped in the field with a Trimble GeoXH sub-meter GPS based on the top-of-bank or outer dripline of associated riparian vegetation, if present. Vegetation within and adjacent to jurisdictional features were recorded based on Baldwin et al. (2012).

5.0 RESULTS

This section presents the results of the delineation of USACE, RWQCB, and CDFG jurisdiction within the study area. A summary of potential agency jurisdiction within the study area is listed in Table 2.

5.1 VEGETATION COMMUNITIES

Vegetation communities/land cover types within, and adjacent to, jurisdictional resources include the following, each of which is described below (Figure 3):

- Ornamental/Disturbed/Developed
- Ruderal

5.1.1 Ornamental/Disturbed/Developed

Ornamental/Disturbed/Developed lands within the study area are the dominant lands present and include the cleared open areas, roadways, parking facilities, vacant lots, residences and other private/public infrastructure with ornamental plantings. Species composition in this community consisted mostly of ornamental trees including Peruvian pepper (*Schinus molle*) and blue gum (*Eucalyptus globulus*). A list of all species observed is provided in Appendix B.

5.1.2 Ruderal

Ruderal vegetation was found throughout a majority of the survey area and consisted of regularly disked areas dominated by non-native, weedy plant species. Dominant species composition included London rocket (*Sisymbrium irio*), brass-buttons (*Cotula coronopifolia*), cheeseweed (*Malva parviflora*), and hare barley (*Hordeum murinum* var. *leporinum*). A list of all species observed is provided in Appendix B.

5.2 SOILS

Five soil types occur within the study area, none of which are classified as hydric soils (Figure 4) (USDA-NRCS 2013):

- Exeter sandy loam, 0 to 2 percent slopes
- Exeter sandy loam, deep, 0 to 2 percent slopes
- Greenfield sandy loam, 0 to 2 percent slopes
- Hanford coarse sandy loam, 0 to 2 percent slopes
- Ramona sandy loam, 0 to 2 percent slopes

5.3 HYDROLOGY

The study area is located within the San Jacinto watershed (8-digit Hydrologic Unit Code 18070202), which drains a 489,378-acre watershed and contains the smaller 232,546-acre Lower San Jacinto River watershed (10-digit HUC 1807020203), and the 31,719-acre Perris Reservoir watershed (12-digit HUC 180702020305) (USDA-NRCS 1999; Figure 5). The study area is located at an elevation of approximately 1470 ft above msl within flat topography. Two small, isolated aquatic features are present on the USGS quadrangle map; however, these features are no longer present and appear to have been associated with agricultural activities. One unnamed drainage channel flows within the study area and localized watershed and drains south before emptying into a constructed blue-line drainage channel tributary to the Perris Valley Storm Drain. The Perris Valley Storm Drain drains the majority of flow through the regional watershed containing the study area. Upslope of the study area, the headwaters of Perris Valley Storm Drain originate primarily from developed portions of the City of Moreno Valley and flow to the west of the study area. The

Perris Valley Storm Drain drains approximately 38 square miles including the City of Perris, the City of Moreno Valley, and March Air Reserve Base. The Perris Valley Storm Drain flows south beyond the study area for approximately 4.0 miles before discharging into the San Jacinto River. The San Jacinto River then flows southwest for 7.6 miles and discharges into Canyon Lake, the first downstream TNW. Flows from Canyon Lake then enter Lake Elsinore.

5.4 USACE CWA SECTION 404 JURISDICTION

One unnamed drainage feature, Feature 1, occurs within the study area and is located along the west side of Heacock Street (Figure 6). Total potential jurisdiction is provided in Table 2. A detailed description of Feature 1 is provided below.

Table 2. Potential USACE, RWQCB, and CDFG Jurisdiction

Feature Name	Potential USACE Jurisdiction (acres)		Potential RWQCB Jurisdiction (acres)		Potential CDFG Jurisdiction (acres)	
	Wetland	Non-wetland	Wetland	Non-wetland	Riparian	Non-riparian
Feature 1	0.00	0.06	0.00	0.06	0.00	0.26
Totals	0.00	0.06	0.00	0.06	0.00	0.26

-- no jurisdiction assumed

5.4.1 Feature 1

Feature 1 is a constructed ditch composed of earthen bed and banks within the study area. It is located outside of the Project disturbance footprint within the buffer area. (Appendix A, photos 1 and 2). It is not identified as a blue line drainage on the Perris USGS topographic map (USGS 1988). Feature 1 is vegetated with upland grasses. No hydrophytic vegetation was observed within the study area.

Soils within Feature 1 are regionally identified as Exeter sandy loam, 0 to 2 percent slopes, which is a non-hydric soil (USDA-NRCS 2011a).

Hydrology within Feature 1 results from seasonal storm runoff from upslope disturbed open fields, roadways, commercial developments, and developed lands associated with March Air Reserve Base. It has a well-defined OHWM and is assumed to support non-relatively permanent (i.e., ephemeral) flow. Field indicators of hydrology include shelving, sediment deposits, water marks, and drift deposits. Flows exit the study area and drain south into Perris Valley Storm Drain and ultimately to Canyon Lake, which is the nearest TNW, located approximately 11.4 miles downstream from the study area.

Within the study area, no USACE-defined wetlands are present within Feature 1 and no wetlands are identified by the National Wetlands Inventory (USFWS, 2013).

Feature 1 contains an OHWM and is indirectly tributary to a TNW (i.e., Canyon Lake). However, this feature was constructed in uplands to convey upland flows and is not illustrated as a USGS blue line or other historical natural drainage. As a result, it is not likely to be subject to USACE jurisdiction pursuant to Section 404 of the CWA unless the USACE determines that the feature has a significant nexus with the receiving TNW. Only the USACE can determine the final jurisdictional status. Regardless, the Project will have no impacts on Feature 1.

5.5 RWQCB JURISDICTION PURSUANT TO SECTION 401 OF THE CWA AND PORTER-COLOGNE

RWQCB CWA Section 401 jurisdiction is equal to USACE CWA Section 404 jurisdiction (Table 2). No potential Porter-Cologne jurisdiction is likely present.

5.6 CDFG SECTION 1602 (ET SEQ.) JURISDICTION

A detailed description of Feature 1 within the study area that is subject of CDFG jurisdiction is provided above. Feature 1 contains a defined bed and bank and provides marginal habitat for wildlife. No riparian vegetation is present within, or adjacent to, Feature 1. Total CDFG jurisdiction within the study area is provided in Table 2.

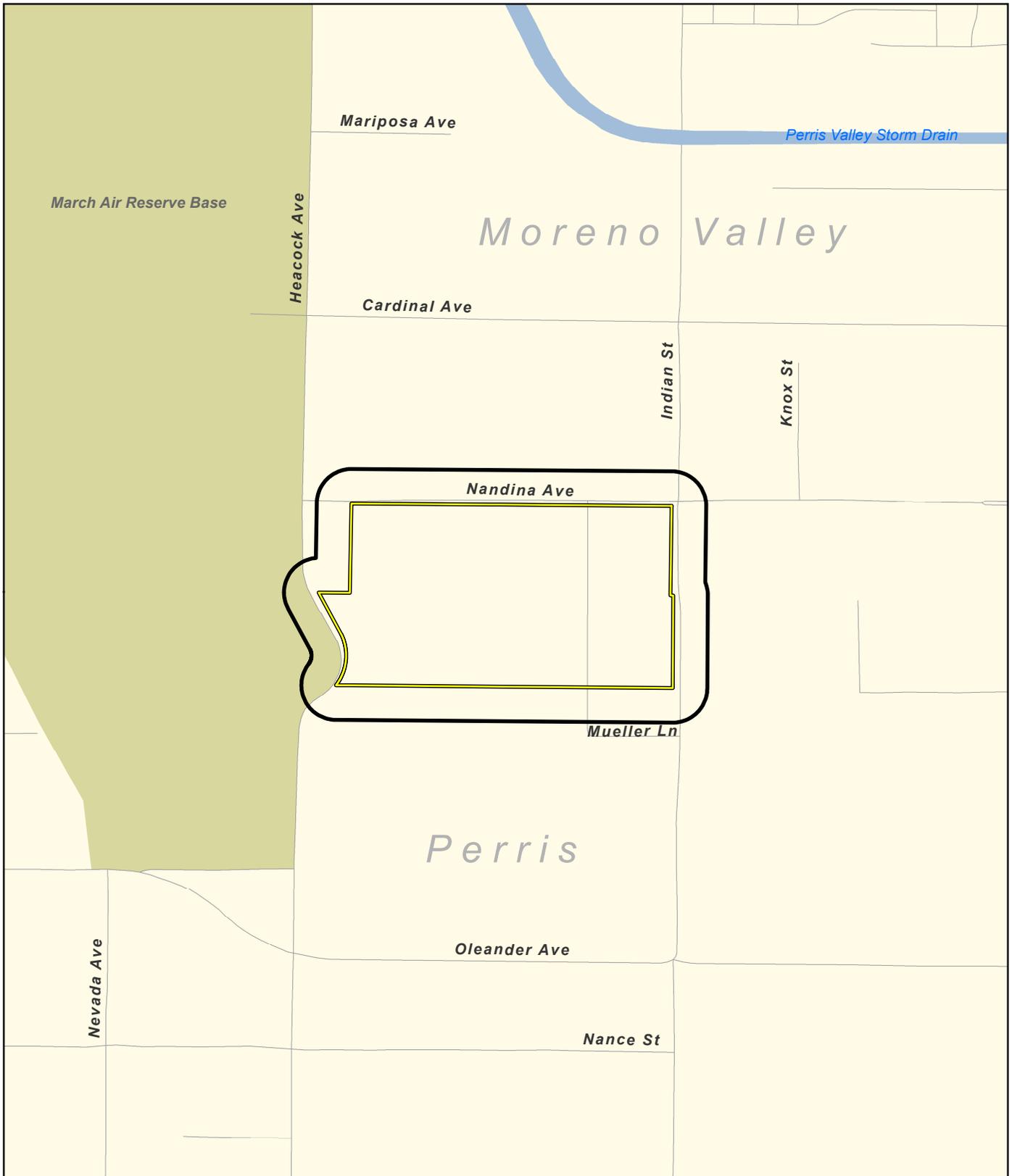
6.0 CONCLUSION

Feature 1 is located to the west of Heacock Street and is the only potential jurisdictional aquatic resource within the study area. However, it is located beyond the proposed Project disturbance footprint limits and is separated from the project by Heacock Street. No impacts to Feature 1 are anticipated and no aquatic resource permitting is required provided that no impacts will occur to the feature.

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<URL: <http://wetlandsfws.er.usgs.gov/NWI/download.html>>



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-  First Nandina Project Site
-  Jurisdictional Delineation Survey Area (250-ft Buffer)



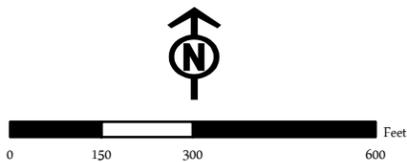
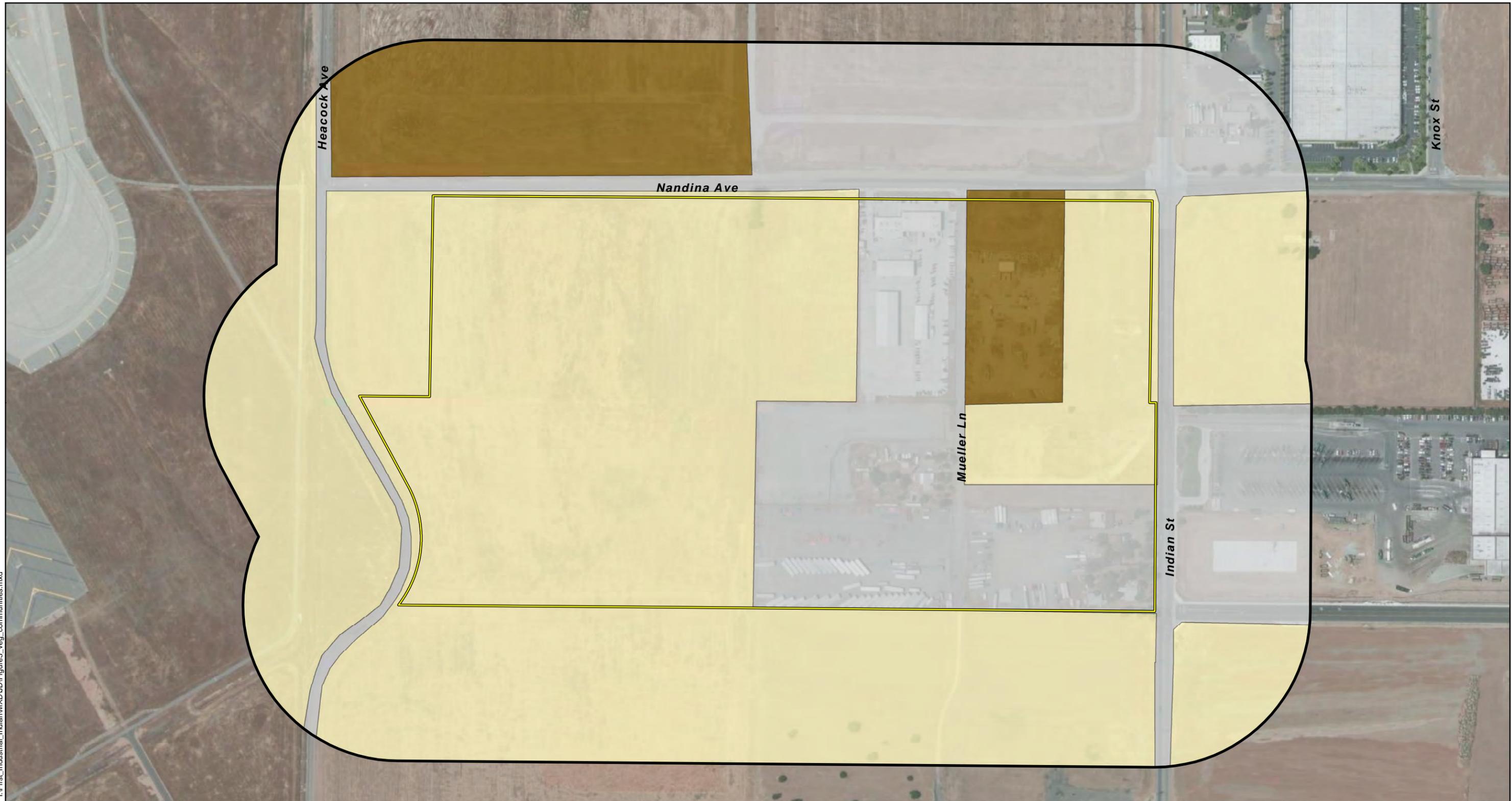
0 1,200 Feet

**Figure 2
Vicinity Map**

First Nandina Logistics Center



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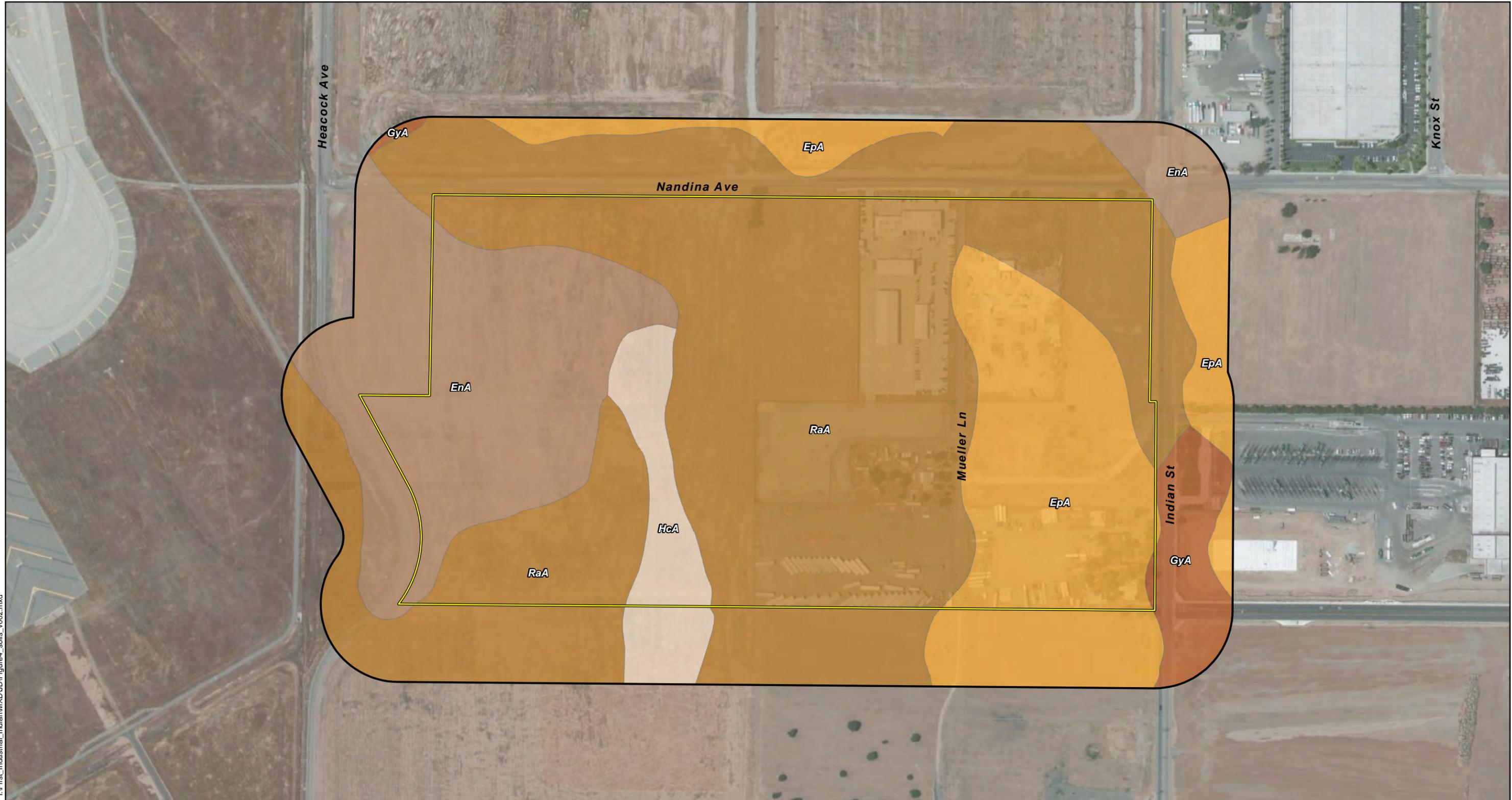


- | | |
|--|-------------------------------|
| Project Site | Vegetation Communities |
| Biological Survey Area (500-Ft Buffer) | Ruderal |
| | Disturbed |
| | Developed |

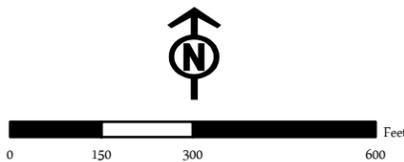
FIGURE 3
Vegetation Communities

First Nandina Logistics Center





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 Jurisdictional Delineation Survey Area (250-ft Buffer)
 Project Site

Soil Types

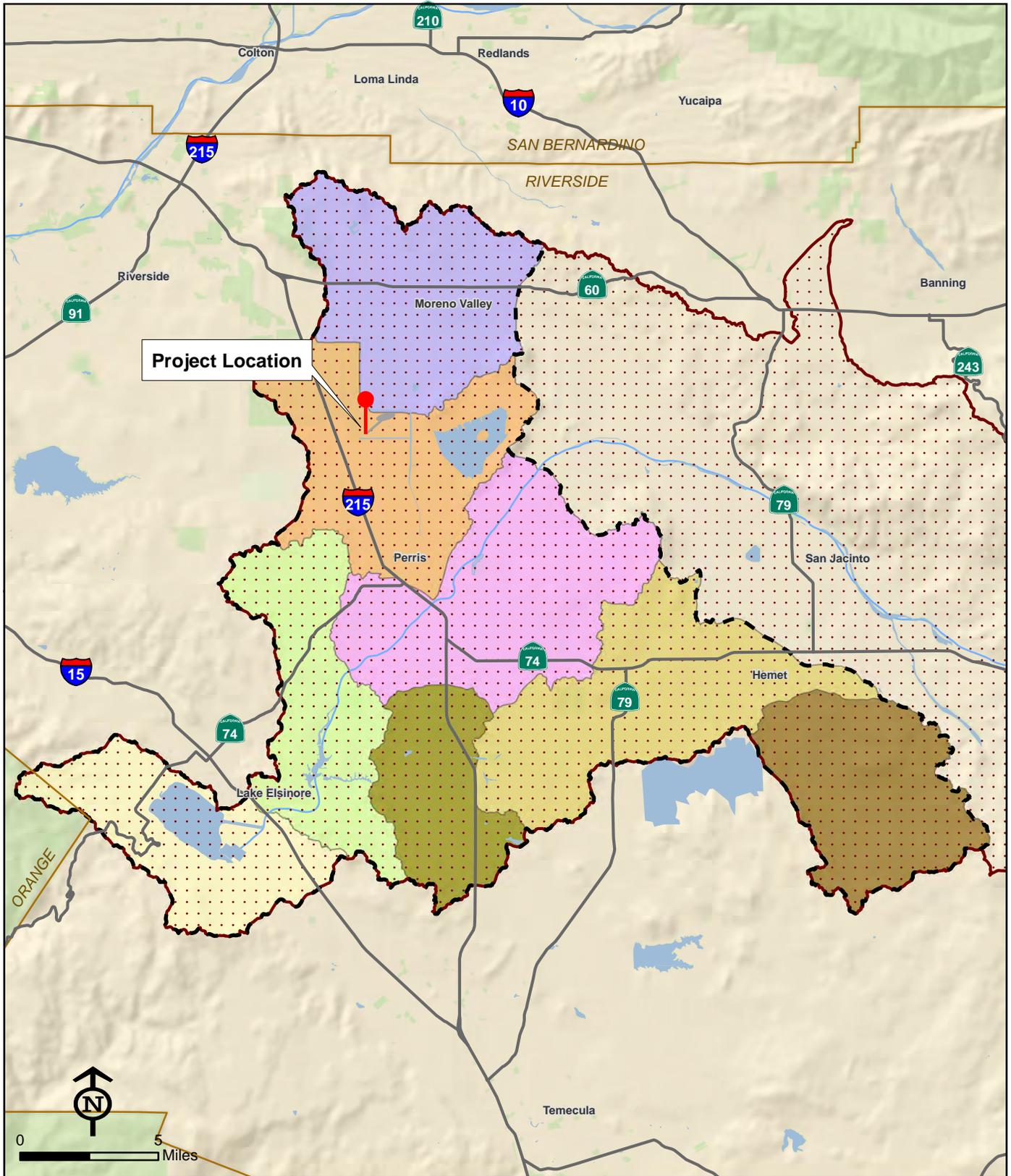
-  EnA - Exeter sandy loam, 0 to 2 percent slopes
-  EpA - Exeter sandy loam, deep, 0 to 2 percent slopes
-  GyA - Greenfield sandy loam, 0 to 2 percent slopes
-  HcA - Hanford coarse sandy loam, 0 to 2 percent slopes
-  RaA - Ramona sandy loam, 0 to 2 percent slopes

**FIGURE 4
Soils**

First Nandina Logistics Center



Path: I:\First_Industrial_Indan\MXD\UD\Figure5_watersheds.mxd



HUC 8

San Jacinto (489,378 Acres)

HUC 10

Lower San Jacinto River (232,546 Acres)

HUC 12

Lake Elsinore (24,784 Acres)

Menifee Valley (17,850 Acres)

Moreno Valley (31,342 Acres)

Perris Reservoir (31,791 Acres)

Perris Valley-San Jacinto River (37,888 Acres)

Railroad Canyon Reservoir-San Jacinto River (26,033 Acres)

Saint Johns Canyon (26,271 Acres)

San Jacinto Valley (36,583 Acres)

Figure 5
Regional Watersheds

First Nandina Logistics Center

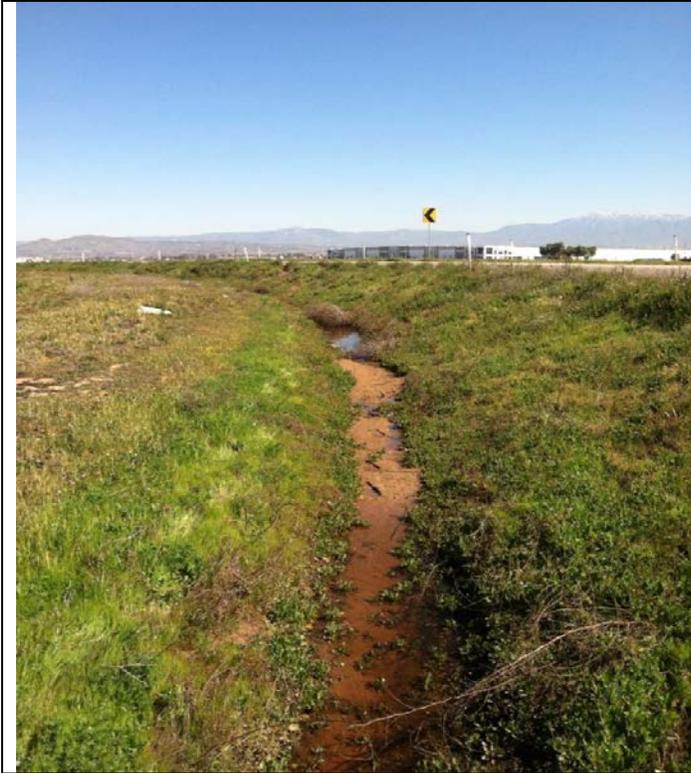




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	<p>Potential Jurisdiction</p> <p> █ ACOE Jurisdiction Project Site CDFW Jurisdiction Jurisdictional Delineation Survey Area (250-ft Buffer) </p>		<p>FIGURE 6 Aquatic Resource Jurisdiction Map</p>
			<p>First Nandina Logistics Center</p>

Appendix A. Site Photographs



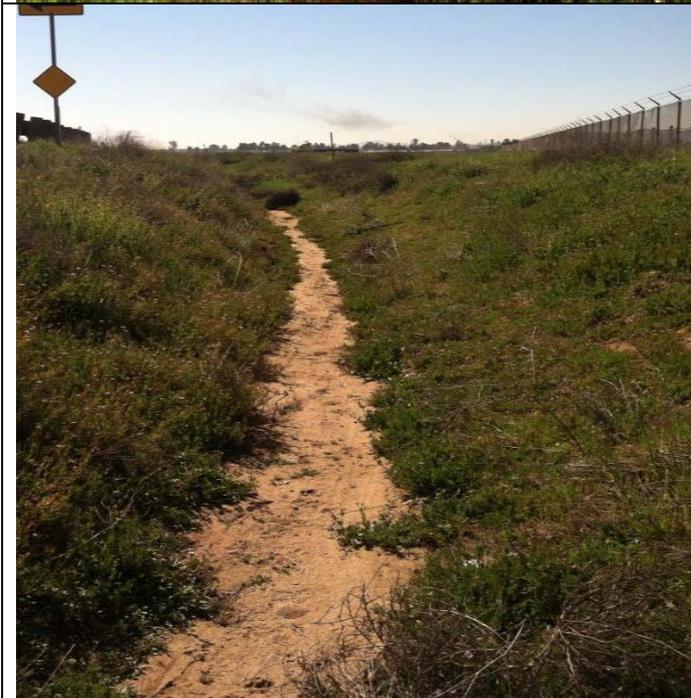
Photograph: 1

Date: 12 Mar, 2013

Feature: 1

Direction: North

Description: Representative photograph of Feature 1 facing upslope, west of Heacock Street.



Photograph: 2

Date: 12 Mar, 2013

Feature: 1

Direction: South

Description: Representative photograph of Feature 1 facing downslope.

Appendix B. Plant Species Observed

ANGIOSPERMAE - FLOWERING PLANTS	
DICOTYLEDONES	
<i>AMARANTHACEAE</i> - AMARANTH FAMILY	
<i>Amaranthus albus</i> *	tumbleweed
<i>ANACARDIACEAE</i> - SUMAC FAMILY	
<i>Schinus molle</i> *	pepper tree
<i>ASTERACEAE (COMPOSITAE)</i> - SUNFLOWER FAMILY	
<i>Centaurea melitensis</i> *	tocalote/Maltese star thistle
<i>Corethrogyne filaginifolia</i> [<i>Lessingia filaginifolia</i>]	California-aster
<i>Cotula coronopifolia</i> *	brass-buttons
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Lasthenia californica</i>	California goldfields
<i>BORAGINACEAE</i> - BORAGE FAMILY	
<i>Amsinckia intermedia</i>	common fiddleneck
<i>Cryptantha</i> sp.	cryptantha
<i>BRASSICACEAE (CRUCIFERAE)</i> - MUSTARD FAMILY	
<i>Brassica nigra</i> *	black mustard
<i>Raphanus sativus</i> *	radish
<i>Sisymbrium irio</i> *	London rocket
<i>CHENOPODIACEAE</i> - GOOSEFOOT FAMILY	
<i>Chenopodium album</i> *	lamb's quarters
<i>Salsola tragus</i> *	Russian thistle
<i>FABACEAE (LEGUMINOSAE)</i> - LEGUME FAMILY	
<i>Acmispon americanus</i>	Spanish lotus
<i>Lupinus bicolor</i>	miniature lupine
<i>Medicago polymorpha</i> *	California burclover
<i>GERANIACEAE</i> - GERANIUM FAMILY	
<i>Erodium botrys</i> *	long-beaked filaree
<i>Erodium cicutarium</i> *	red-stemmed filaree
<i>LAMIACEAE (LABIATAE)</i> - MINT FAMILY	
<i>Marrubium vulgare</i> *	common horehound
<i>MALVACEAE</i> - MALLOW FAMILY	
<i>Malva parviflora</i> *	cheeseweed
<i>MYRTACEAE</i> - MYRTLE FAMILY	
<i>Eucalyptus globulus</i> *	blue gum
<i>SOLANACEAE</i> - NIGHTSHADE FAMILY	

<i>Nicotiana glauca</i> *	tree tobacco
MONOCOTYLEDONES - MONOCOTS	
<i>POACEAE [GRAMINEAE] - GRASS FAMILY</i>	
<i>Bromus diandrus</i> *	ripgut grass
<i>Bromus tectorum</i> *	cheat grass
<i>Hordeum murinum</i> var. <i>leporinum</i> *	hare barley
<i>Schismus barbatus</i> *	Mediterranean schismus

* non-native species