NATURAL RESOURCES ASSESSMENT, INC.

Delineation of Wetlands and Other Waters
Ethanac Motorcycle Park
Riverside County APNs 345-020-011 and 345-020-016
Perris, Riverside County, California
USGS 7.5-minute Steele Peak and Lake Elsinore Topographic Quadrangle Maps

Prepared For:

JS63 MX Inc.
12685 Holly Street
Riverside, California 92509

Contact:

Cheryl A. Tubbs, Vice President
Lilburn Corporation
1905 Business Center Drive
San Bernardino, California 92408

Prepared by:

Natural Resources Assessment, Inc.
3415 Valencia Hill Drive
Riverside, California 92507

September 11, 2020

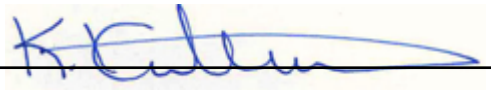
3415 Valencia Hill Drive
Riverside, California 92507

Telephone: 951 686 4483
Fax: 951 686 8418

www.naturalresourcesassessment.com

CERTIFICATION

I hereby certify that the statements furnished below and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.



Karen Kirtland

Natural Resources Assessment, Inc.

September 11, 2020

Table of Contents

Figures

Tables

Appendices

ACRONYMS AND ABBREVIATIONS

CEQA	California Environmental Quality Act
CDFW	California Department of Fish and Wildlife
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Data Base
CNPS	California Native Plant Society
Corps	U.S. Army Corps of Engineers
CWA	Clean Water Act
EPA	Environmental Protection Agency
FEMA	Federal Emergency Managemen Agency
LSA	Lake and Streambed Agreement
MND	Mitigated Negative Declaration
MOU	Memorandum of Understanding
MSHCP	Multiple Species Habitat Conservation Plan
NEPA	National Environmental Policy Act
NDPES	National Pollutant Discharge Elimination System
OEHHA	Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation
OHW	Ordingary High Water
OHWM	Ordinary High Water Mark
NWI	National Wetlands Inventory
RWQCB	Regional Water Quality Control Board
SWRCB	State Water Resources Control Board
TNW	Traditional Navigable Waters
US	United States
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
WQD	Water Quality Certification

1.0 Introduction

Natural Resources Assessment, Inc. (NRAI) was contacted by Lilburn Corporation on behalf of JS63 MX Inc. Inc. to conduct a general biological assessment of a proposed development project in Riverside County, California.

The purpose of the assessment was to identify the biological resources within the property boundaries and to determine what sensitive resources may be present.

1.1 Project Purpose

The proposed project is the development of a motorcycle park on largely undisturbed land. This delineation identifies jurisdictional wetlands and other waters affected by the action and elsewhere within the project site. It also provides maps that show where regulated waters and features occur on and adjacent to the property

1.2 Project Assessment

This delineation of potential jurisdictional waters of the U.S., including wetlands was prepared for the project proponent and the County of Riverside for their review and consideration of any impacts to regulated waters.

1.3 Project Location and Driving Directions

APN 345-020-011 and APN 345-020-016 are located in the Perris Area of Riverside County (Figure 1). County, at approximately six (6) miles of Interstate 215. It is mapped on the US Geological Survey's 7.5-minute Steele Peak and Lake Elsinore Quadrangles, northwest of Highway 74 and west of the San Jacinto River (Figures 2 and 3).

From the north, drive south on Interstate 215 and take Exit 18 for D Street. Continue onto North D Street. Turn right onto West San Jacinto Avenue and then left at the first cross street onto South C Street. Turn right onto West 1st Street and then left onto South A Street. Turn right onto California 74 West/West 4th Street. Continue west on Highway 74 for approximately four (4) miles and turn right onto Elmer Street/Ethanac Road. The site is located on the right at 0.5-mile on Ethanac Road.

1.4 Project Proponent (Applicant)

Project Proponent
Aaron Cooke
JS63 MX Inc.
12685 Holly Street
Riverside, California 92509

CEQA Contact
Cheryl A. Tubbs, Vice President
Lilburn Corporation
1905 Business Center Drive
San Bernardino, CA 92408

Applicant
Aaron Cooke
JS63 MX Inc.
12685 Holly Street
Riverside, CA 92509

Preparer
Natural Resources Assessment, Inc.
3415 Valencia Hill Drive
Riverside, California 92507

Figure 1. State and Regional Location of the JS63 MX Inc. Property.

Figure 2. Topography of the Property. Date Unknown.

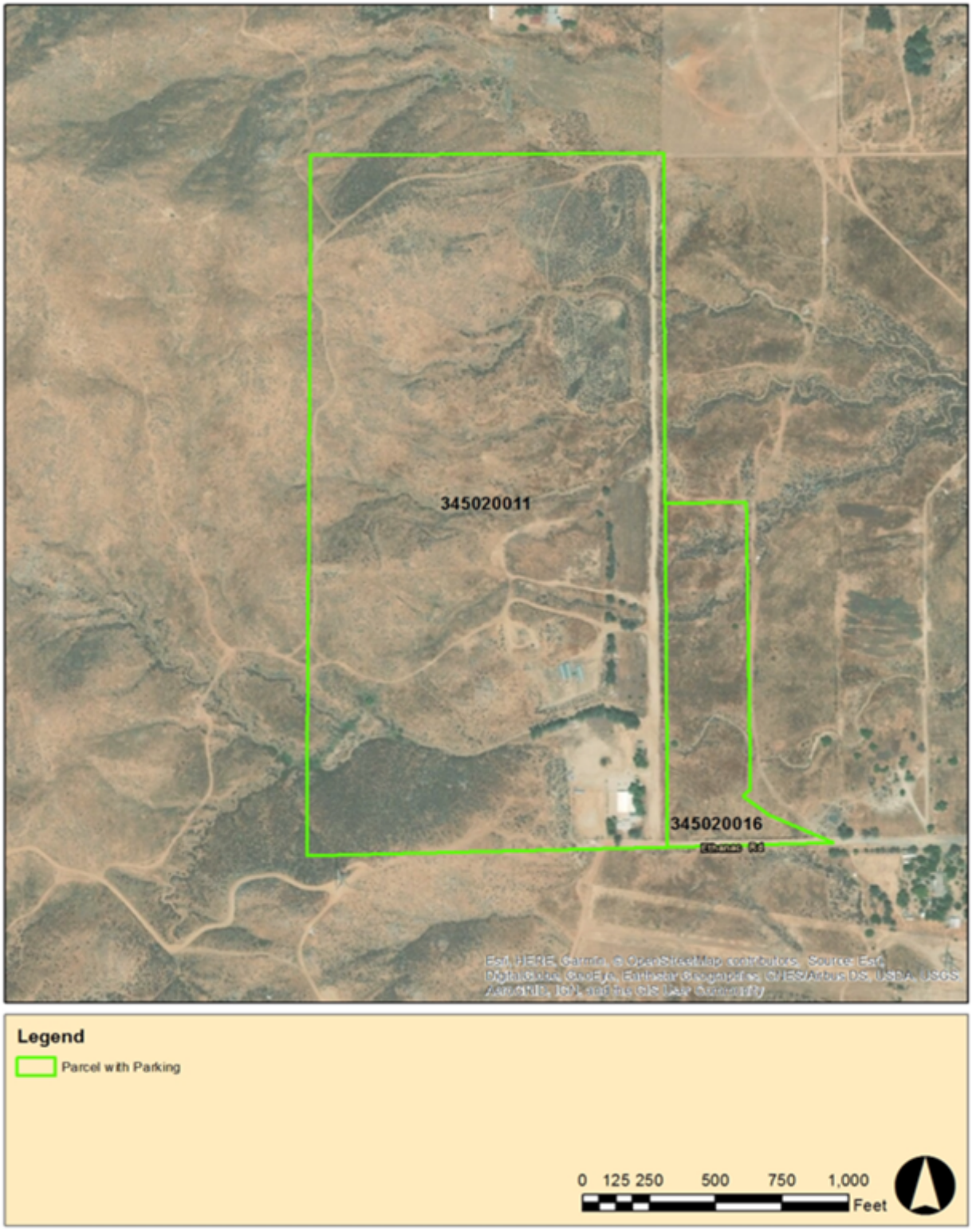


Figure 3. Aerial Showing the Condition of the Property. Date Unknown.

2.0 Regulatory Settings

Activities within inland streams, wetlands, and riparian areas in California are regulated by agencies at the federal, state, and regional levels. At the federal level, the U.S. Army Corps of Engineers (USACE) Regulatory Program regulates activities within wetlands and waters of the US pursuant to Section 404 of the Federal Clean Water Act (CWA).

At the state level, the California Department of Fish and Wildlife (CDFW) regulates activities within the bed, bank, and associated habitat of a stream under the Fish and Game Code §§ 1600–1616. The California State Water Resources Board (SWRB) delegates authority at the regional level to Regional Water Quality Control Boards (RWQCB) that are responsible for regulating discharge into waters of the US under Section 401 of the federal CWA and waters of the State under the California Porter-Cologne Water Quality Act.

2.1 Federal

2.1.1 Section 404 of the Clean Water Act

Activities within inland streams, wetlands, and riparian areas in California are regulated by agencies at the federal, state, and regional levels. At the federal level, the U.S. Army Corps of Engineers (USACE) Regulatory Program regulates activities within wetlands and waters of the US pursuant to Section 404 of the Federal Clean Water Act (CWA).

At the state level, the California Department of Fish and Wildlife (CDFW) regulates activities within the bed, bank, and associated habitat of a stream under the Fish and Game Code §§ 1600–1616. The California State Water Resources Board (SWRB) delegates authority at the regional level to Regional Water Quality Control Boards (RWQCB) that are responsible for regulating discharge into waters of the US under Section 401 of the federal CWA and waters of the State under the California Porter-Cologne Water Quality Act.

The CWA was implemented to maintain and restore the chemical, physical, and biological integrity of the Waters of the United States (33 Code of Federal Regulations [CFR] Part 328 Section 328.3). "Waters of the US" are defined as follows (taken directly from the text of the 2020 rule):

(a) *Jurisdictional waters.* For purposes of the Clean Water Act, 33 U.S.C. 1251 *et seq.* and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term ''waters of the United States'' means:

(1) The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide;
(2) Tributaries;
(3) Lakes and ponds, and impoundments of jurisdictional waters; and
(4) Adjacent wetlands.

(b) *Non-jurisdictional waters.* The following are not ''waters of the United States'':

(1) Waters or water features that are not identified in paragraph (a)(1), (2), (3), or (4) of this section;

(2) Groundwater, including groundwater drained through subsurface drainage systems;
(3) Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools;
(4) Diffuse stormwater run-off and directional sheet flow over upland;
(5) Ditches that are not waters identified in paragraph (a)(1) or (2) of this section, and those portions of ditches constructed in waters identified in paragraph (a)(4) of this section that do not satisfy the conditions of paragraph (c)(1) of this section;
(6) Prior converted cropland;
(7) Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease; artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters that meet the conditions of paragraph (c)(6) of this section;
(8) 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 nonjurisdictional waters for the purpose of obtaining fill, sand, or gravel;
(9) Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff;
(10) Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters; and
(11) Waste treatment systems.

(c) *Definitions.* In this section, the following definitions apply:

(1) *Adjacent wetlands.* The term *adjacent wetlands* means wetlands that:
(i) Abut, meaning to touch at least at one point or side of, a water identified in paragraph (a)(1), (2), or (3) of this section;
(ii) Are inundated by flooding from a water identified in paragraph (a)(1), (2), or (3) of this section in a typical year;
(iii) Are physically separated from a water identified in paragraph (a)(1), (2), or (3) of this section only by a natural berm, bank, dune, or similar natural feature; or
(iv) Are physically separated from a water identified in paragraph (a)(1), (2), or (3) of this section only by an artificial dike, barrier, or similar artificial structure so long as that structure allows for a direct hydrologic surface connection between the wetlands and the water identified in paragraph (a)(1), (2), or (3) of this section in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature. An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.
(2) *Ditch.* The term *ditch* means a constructed or excavated channel used to convey water.

(3) *Ephemeral*. The term *ephemeral* means surface water flowing or pooling only in direct response to precipitation (e.g., rain or snow fall).

(4) *High tide line*. The term *high tide line* means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds, such as those accompanying a hurricane or other intense storm.

(5) *Intermittent*. The term *intermittent* means surface water flowing continuously during certain times of the year and more than in direct response to precipitation (e.g., seasonally when the groundwater table is elevated or when snowpack melts).

(6) *Lakes and ponds, and impoundments of jurisdictional waters*. The term *lakes and ponds, and impoundments of jurisdictional water*s means standing bodies of open water that contribute surface water flow to a water identified in paragraph (a)(1) of this section in a typical year either directly or through one or more waters identified in paragraph (a)(2), (3), or (4) of this section. A lake, pond, or impoundment of a jurisdictional water does not lose its jurisdictional status if it contributes surface water flow to a downstream jurisdictional water in a typical year through a channelized non-jurisdictional surface water feature, through a culvert, dike, spillway, or similar artificial feature, or through a debris pile, boulder field, or similar natural feature. A lake or pond, or impoundment of a jurisdictional water Start Printed Page 22339is also jurisdictional if it is inundated by flooding from a water identified in paragraph (a)(1), (2), or (3) of this section in a typical year.

(7) *Ordinary high water mark*. The term *ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a 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.

(8) *Perennial*. The term *perennial* means surface water flowing continuously year-round.

(9) *Prior converted cropland*. The term prior *converted cropland* means any area that, prior to December 23, 1985, was drained or otherwise manipulated for the purpose, or having the effect, of making production of an agricultural product possible. EPA and the Corps will recognize designations of prior converted cropland made by the Secretary of Agriculture. An area is no longer considered prior converted cropland for purposes of the Clean Water Act when the area is abandoned and has reverted to wetlands, as defined in paragraph (c)(16) of this section. Abandonment occurs when prior converted cropland is not used for, or in support of, agricultural purposes at least once in the immediately preceding five years. For the purposes of

the Clean Water Act, the EPA Administrator shall have the final authority to determine whether prior converted cropland has been abandoned.

(10) *Snowpack*. The term *snowpack* means layers of snow that accumulate over extended periods of time in certain geographic regions or at high elevation (e.g., in northern climes or mountainous regions).

(11) *Tidal waters and waters subject to the ebb and flow of the tide*. The terms *tidal waters and waters subject to the ebb and flow of the tide* mean those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters and waters subject to the ebb and flow of the tide end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.

(12) *Tributary*. The term *tributary* means a river, stream, or similar naturally occurring surface water channel that contributes surface water flow to a water identified in paragraph (a)(1) of this section in a typical year either directly or through one or more waters identified in paragraph (a)(2), (3), or (4) of this section. A tributary must be perennial or intermittent in a typical year. The alteration or relocation of a tributary does not modify its jurisdictional status as long as it continues to satisfy the flow conditions of this definition. A tributary does not lose its jurisdictional status if it contributes surface water flow to a downstream jurisdictional water in a typical year through a channelized non-jurisdictional surface water feature, through a subterranean river, through a culvert, dam, tunnel, or similar artificial feature, or through a debris pile, boulder field, or similar natural feature. The term tributary includes a ditch that either relocates a tributary, is constructed in a tributary, or is constructed in an adjacent wetland as long as the ditch satisfies the flow conditions of this definition.

(13) *Typical year*. The term *typical year* means when precipitation and other climatic variables are within the normal periodic range (e.g., seasonally, annually) for the geographic area of the applicable aquatic resource based on a rolling thirty-year period.

(14) *Upland*. The term *upland* means any land area that under normal circumstances does not satisfy all three wetland factors (i.e., hydrology, hydrophytic vegetation, hydric soils) identified in paragraph (c)(16) of this section, and does not lie below the ordinary high water mark or the high tide line of a jurisdictional water.

(15) *Waste treatment system*. The term *waste treatment system* includes all components, including lagoons and treatment ponds (such as settling or cooling ponds), designed to either convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater prior to discharge (or eliminating any such discharge).

(16) *Wetlands*. The term *wetlands* means 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.

Section 404 (b)(1) compliance must be demonstrated before a Section 404 permit can be issued. Guidelines for a Section 404(b)(1) analysis were developed by the EPA in conjunction with USACE (40 CFR Parts 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

2.1.2 Fish and Wildlife Coordination Act

Under the Fish and Wildlife Coordination Act (16 U.S.C. 661-666), project proponents are required to consult with the United States Fish and Wildlife Service and the appropriate state wildlife agency for any federal project where the waters of any stream or other body of water are impounded, diverted, deepened, or otherwise modified. These agencies prepare reports and recommendations that document project effects on wildlife and identify measures that may be adopted to prevent loss or damage to wildlife resources. The term "wildlife" includes both animals and plants. Provisions of the Fish and Wildlife Coordination Act are implemented through the National Environmental Policy Act process and Section 404 permit process.

2.1.3 Executive Order 11990 for Protection of Wetlands

Executive Order 11990 for the Protection of Wetlands (May 24, 1977) establishes a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative. On federally funded projects, impacts on wetlands must be identified in the environmental document. Alternatives that avoid wetlands must be considered. If wetland impacts cannot be avoided, then all practicable measures to minimize harm must be included. This must be documented in a specific "Wetlands Only Practicable Alternative Finding" in the final environmental document. An additional requirement is to provide early public involvement for projects affecting wetlands.

2.2 State

2.2.1 Waters of the State

The California State Water Resources Control Board (SWRCB) and its Regional Water Quality Control Boards (RWQCBs) regulate discharge of waste in any region that could affect the waters of the State under the California Porter-Cologne Water Quality Act or waters of the US under Section 401 of the federal CWA.

Under the Porter-Cologne Act, a Report of Waste Discharge must be submitted prior to discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the State (California Water Code § 13260). Waste Discharge Requirements (WDRs) or a waiver of WDRs will then be issued by the RWQCB. Waters of the State are defined as any surface water or groundwater, including saline waters that are within the boundaries of the state (California Water Code § 13050). This differs from the CWA definition of waters of the US by its inclusion of groundwater and waters outside the ordinary high-water mark in its jurisdiction.

Although all waters of the US also fall under the category of waters of the State, some waters of the State may be identified beyond the delineation of waters of the US, and the RWQCB may exert authority to regulate waste discharge into these waters even if the waters do not fall under USACE federal jurisdiction. All projects that have a federal component and may affect waters of the US, including those that require a

Section 404 Permit from the USACE, must also comply with Section 401 of the CWA. If discharge into waters of the US is being proposed, a 401 Water Quality Certification from the RWQCB is required (23 California Code of Regulation §§ 3830–3869) in addition to obtaining WDRs for impacts to waters of the State.

2.2.2 California Fish and Game Code §§ 1600–1616: Streambeds and Banks and Riparian Habitat

The CDFW asserts jurisdiction over the bed and bank of a stream and associated wildlife and habitats as established in California Fish and Game Code §§ 1600–1616. In accordance with § 1602 of the code (Streambed Alteration), the CDFW regulates activities that will "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" and requires notification prior to such activities. In addition, § 1603 of the code states that "after the notification is complete, the department shall determine whether the activity may substantially adversely affect an existing fish and wildlife resource," and a Lake and Streambed Agreement (LSA) may be pursued.

These regulations were established to protect the wildlife resources that are associated with the riparian habitats that occur within and adjacent to ephemeral or year-round drainage systems. The CDFW jurisdiction area is often defined in practice as the top of bank of the stream or to the limit (outer dripline) of the adjacent riparian vegetation.[1]

2.3 Local

2.3.1 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

The Riverside County Multiple Species Habitat Conservation Plan (MSHCP) defines Riverine/Riparian Areas as "lands which contain Habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year". The goal of this MSHCP section is to ensure protection of wetland resources in the MSHCP area.

Project proponents are expected to avoid or mitigate identified and mapped riparian resources not necessary for inclusion in the MSHCP Conservation Area, pursuant to CEQA. The ultimate goal is preservation of wetland functions and values, so permittees are required to develop project alternatives demonstrating efforts that first avoid, and then minimize direct and indirect effects to the wetlands. An avoidance alternative shall be selected, if feasible. If an avoidance alternative is selected, measures shall be incorporated into the project design to ensure the long-term Conservation of the areas to be avoided, and associated functions and values, through the use of deed restrictions, conservation easement, or other appropriate mechanisms.

[1] Note that "any river, stream or lake" includes those that are episodic (dry for periods of time) as well as those that are perennial. This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. Permits may also apply to work undertaken within the flood plain of a body of water.

If an avoidance alternative is not Feasible and a practicable alternative is instead selected, the MSHCP requires a determination of biologically equivalent or superior preservation plan (DBESP) by the Permittee to ensure replacement of any lost functions and values of Habitat as it relates to Covered Species. Requirements for this are set forth in the MSHCP guidance documents, but include:

- A definition of the project area.
- A written project description, demonstrating why an avoidance alternative is not possible.
- A written description of biological information available for the project site including the results of resource mapping.
- Quantification of unavoidable impacts to riparian/riverine areas and vernal pools associated with the project, including direct and indirect effects.
- A written description of project design features and mitigation measures that reduce indirect effects, such as edge treatments, landscaping, elevation difference, minimization and/or compensation through restoration or enhancement.
- A finding demonstrating that although the proposed project would not avoid impacts, with proposed design and compensation measures, the project would be biologically equivalent or superior to that which would occur under an avoidance alternative without these measures, based on one or more of the following factors:
    - effects on Conserved Habitats;
    - effects on the species listed above under the heading, "Purpose" and,
    - effects on riparian linkages and function of the MSHCP Conservation Area

Prior to approval of Biologically Equivalent or Superior Preservation Determinations, the Wildlife Agencies shall be notified and be provided a 60-day review and response period. A written record of determinations shall be maintained and shall be included in the annual reporting documentation prepared by the Permittees and submitted to the Wildlife Agencies as set forth in Section 6.11 the MSHCP.

3.0 Methods

The limits of US Army Corps and CDFW jurisdiction were mapped on the project site during a pre-survey literature review (desktop analysis) and initial field survey on 7 May 2019. The desktop analysis was undertaken in April ~~2019~~ 2020. These efforts were used to guide the subsequent field surveys and to locate areas of potential jurisdictional waters.

3.1 Background Information Review

3.1.1 Literature Review

Review of relevant literature and materials was used to preliminarily identify areas that may fall under agency jurisdiction. The following resources were reviewed or used prior to the field surveys:

- The Corps of Engineers Wetlands Delineation Manual (USACE 1987);
- Steele Peak and Lake Elsinore 7.5-minute USGS Quadrangles;

- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008);
- A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar and McColley 2008);
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory Wetland Geodatabase (USFWS 2018);
- Arid West 2016 Regional Wetland Plant List (Lichvar et al. 2016);
- *Hydric Soils List of California*, 2018 (Natural Resources Conservation Services 2018); and,
- Previous jurisdictional determinations by the USACE near the project area.

3.1.2 Desktop Analysis

Potential jurisdictional water features were identified and preliminarily delineated via a desktop analysis that employed Google Earth (2018) and ESRI ArcGIS (2018, 2019) imagery. This included the use of historical imagery from Google Earth that allowed the examination of historic waterflow fluctuations. The desktop delineation was then verified during the field surveys.

The drainage features on the project site are in the San Jacinto River Sub-watershed of the Santa Ana River Watershed. The San Jacinto River Sub-watershed's headwaters are in the San Jacinto Mountains of San Bernardino County and mouth is in Lake Elsinore (County of Riverside 2017). The San Jacinto River segment closest to the subject drains to Canyon Lake and Lake Elsinore. The mainstem is located 1.3 miles east of the eastern project boundary (Figure 4). We examined water movement between the project site and the San Jacinto River (analysis area) to determine if there is connectivity between waters on the project site and the San Jacinto River.

Topography depicted as elevation contours indicates that flow is from west to east through the property and slightly northeast beyond it (Figure 5). Prior to 1966, there were several west-east oriented drainage features that extended through the property (Figures 6 and 7). Development that followed removed sections of the drainages and eliminated hydrologic connectivity between these features and the San Jacinto River in the analysis area (Figure 8).

Water conveyance over the analysis area presented a challenge to past projects that were approved over existing drainages. This produced ponding or flooding in this area and there is evidence that water flowing from the west will infrequently flood where even minor elevation changes (roads) present an impediment to overland flow. This is evident at the southwest corner of Theda Street and Sharp Road where flows normally ablate and deposit fine sediment (Figure 9; Photograph 1). In wetter years drainage flows may reach the east side of Theda Street, not through any established drainage or channel but by flowing over it. In August 2017, for example, in the area of Sharp Road and Spring Street debris flows created hazardous driving conditions and a hard closure was put into effect on Sharp, between Spring and Theda streets.[2]

[2] https://www.nbclosangeles.com/news/monsoon-damages-neighborhoods-floods-inland-empire-corona/21174/

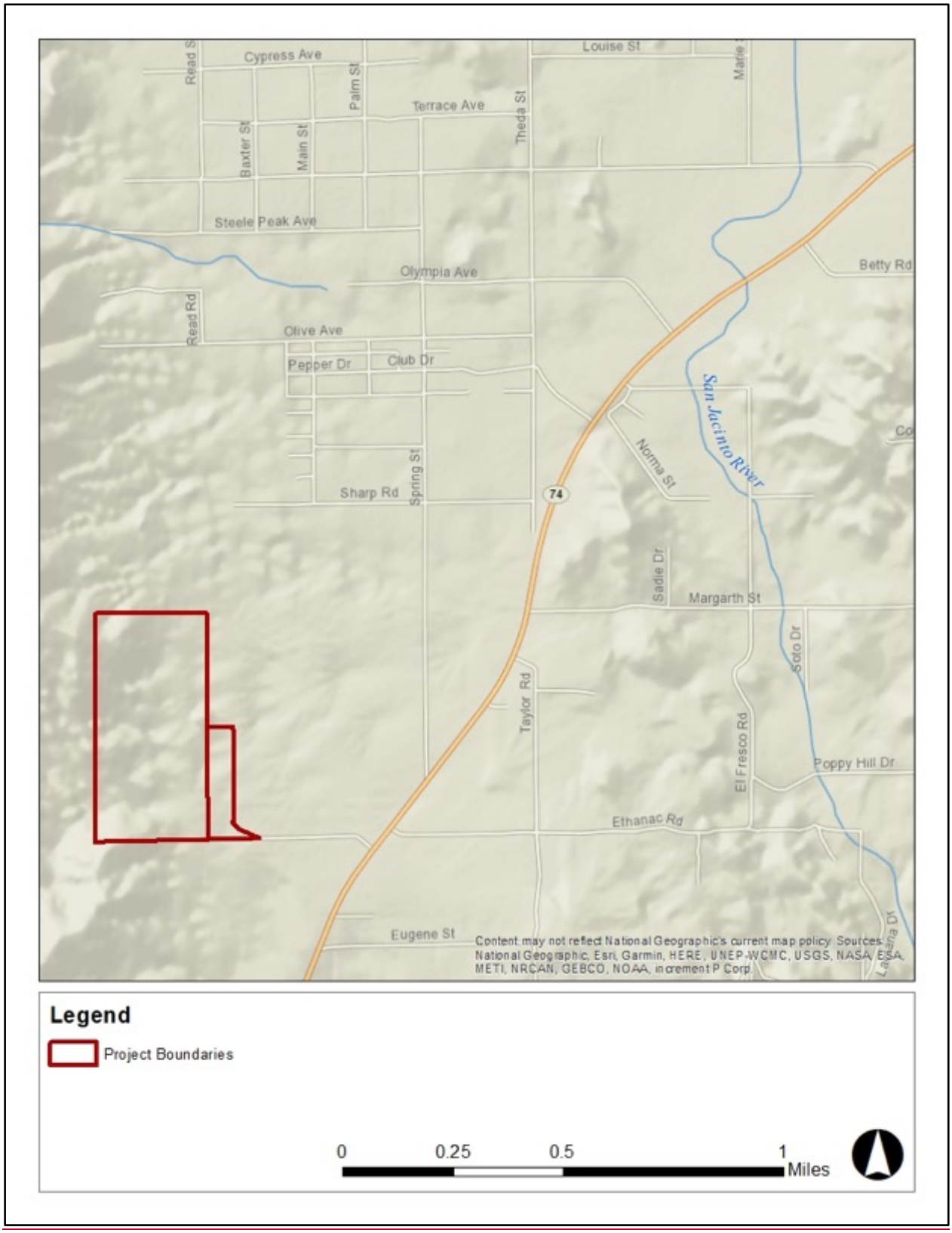


Figure 4. Project Site in Relation to the San Jacinto River

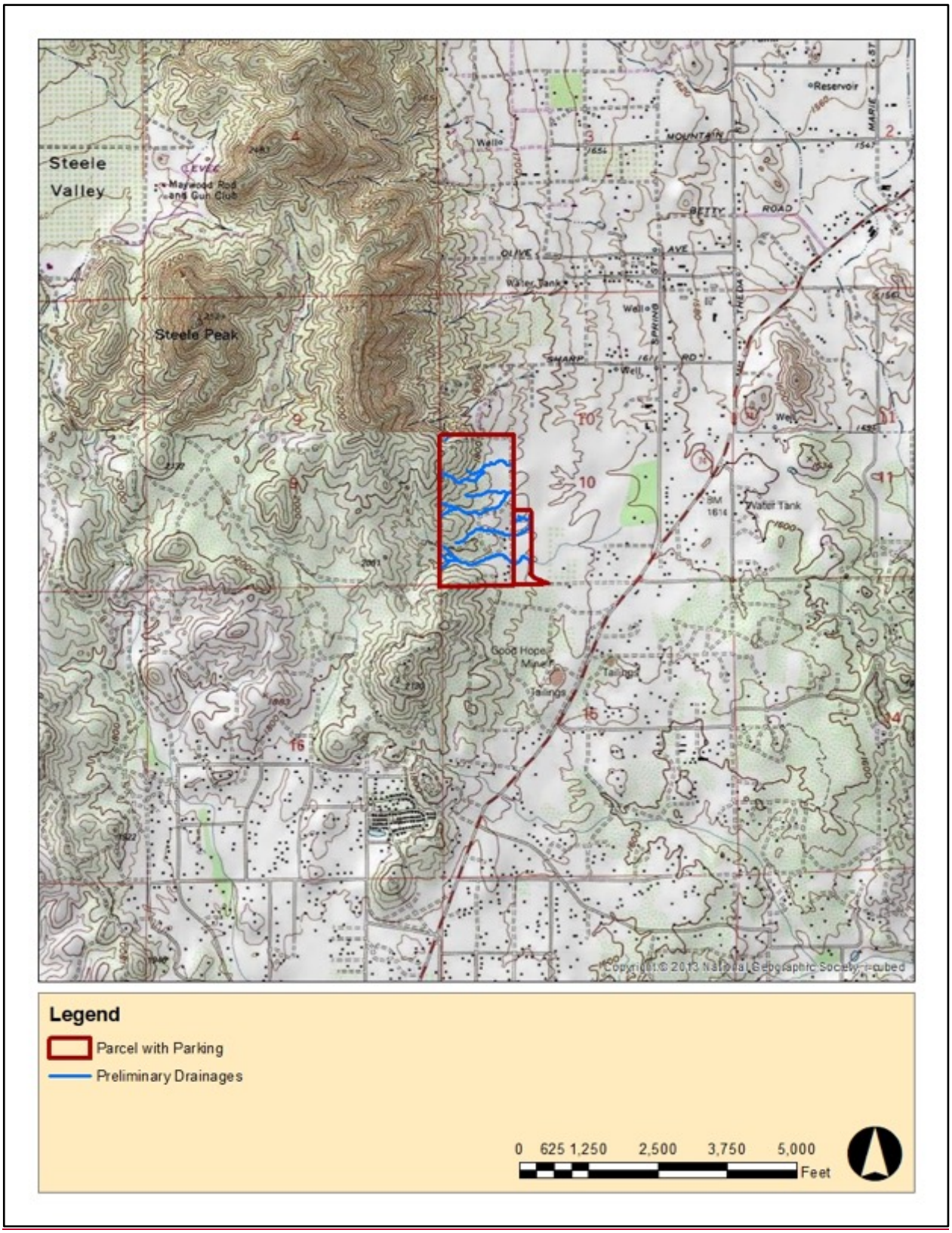


Figure 5. Topographic Map and Preliminary Waters Features on the Property..

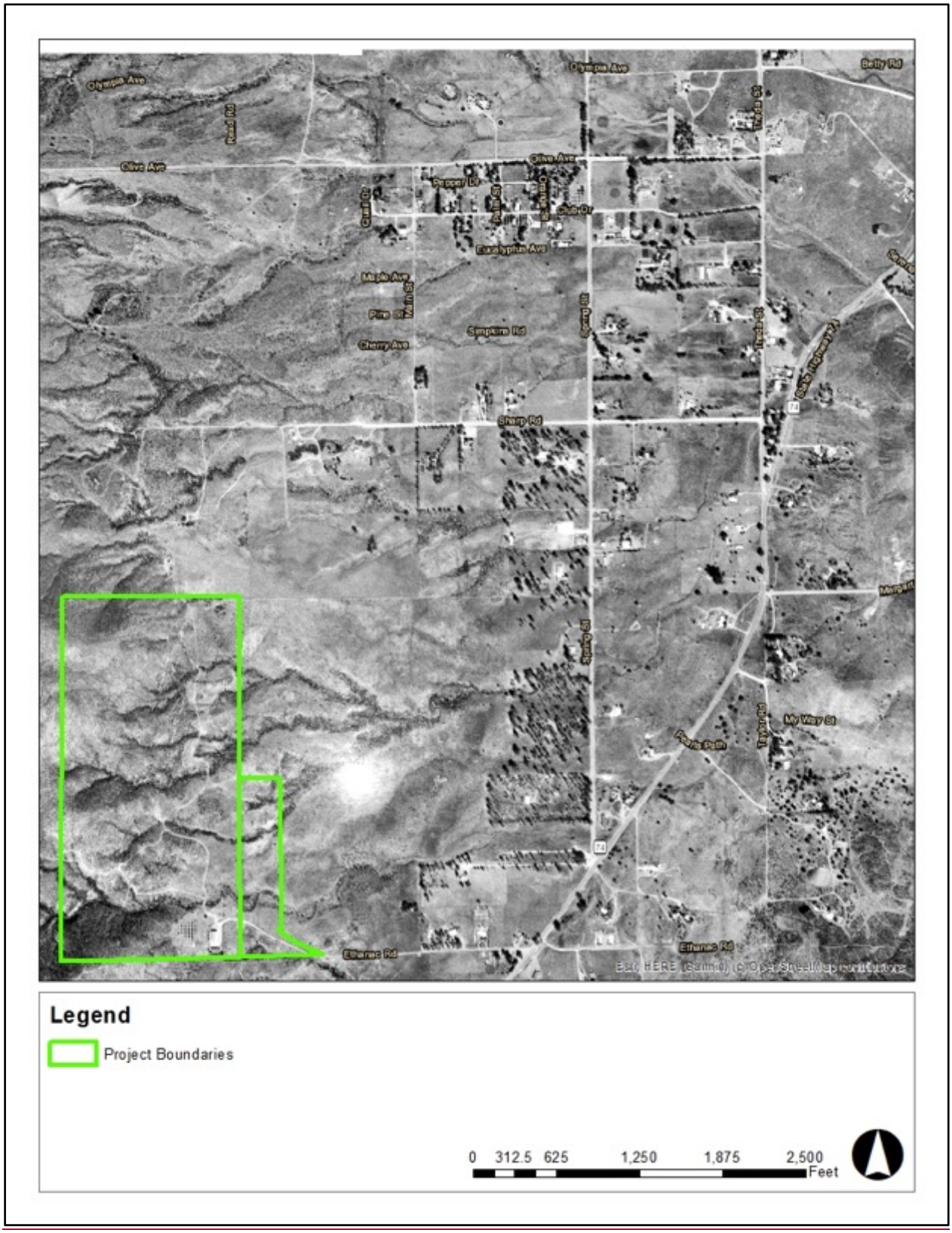


Figure 6. Aerial Photograph of the Property and Analysis Area in 1966.

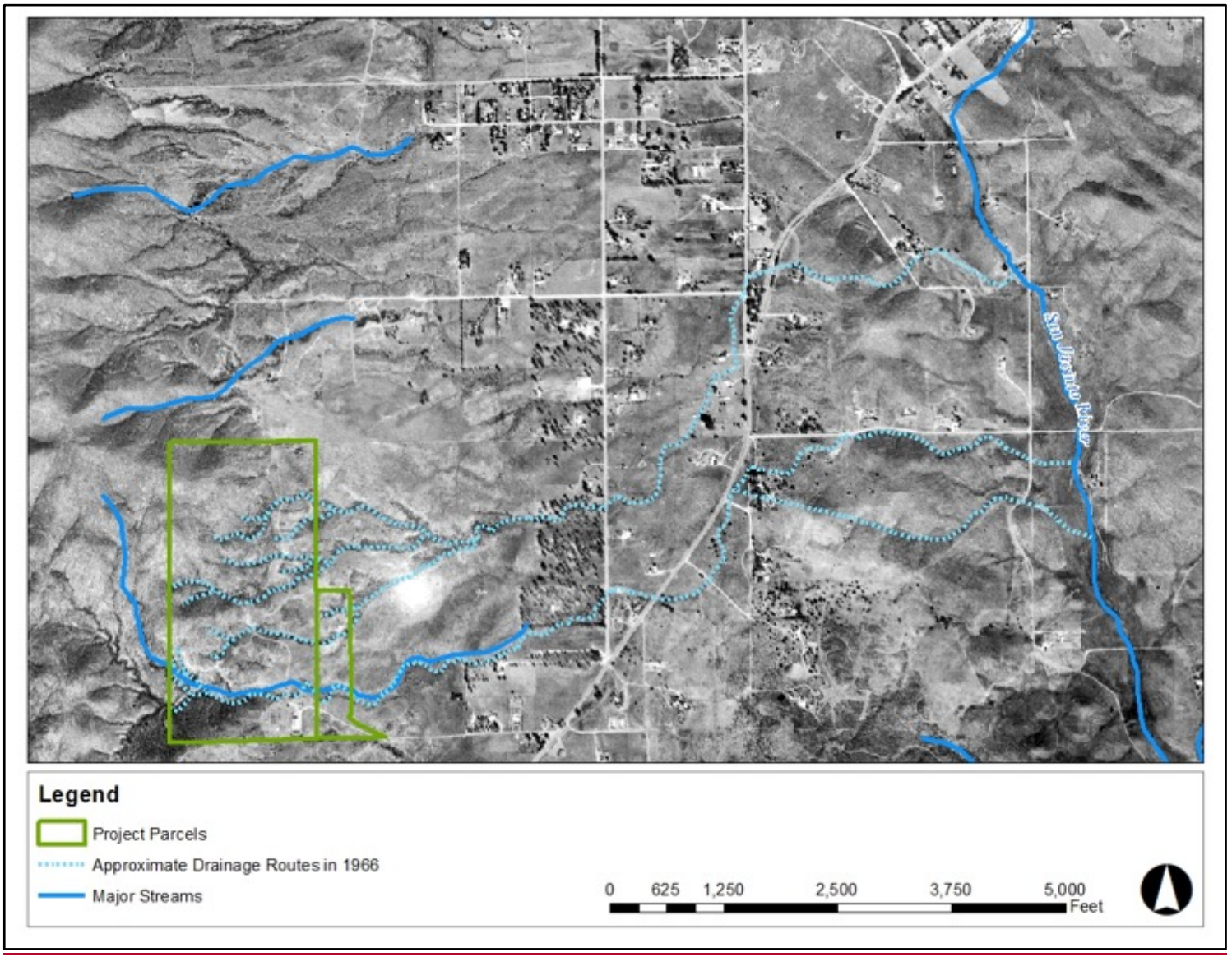


Figure 7. Drainages Mapped from the 1966 Aerial Photograph.

Figure 8. Modified Drainages

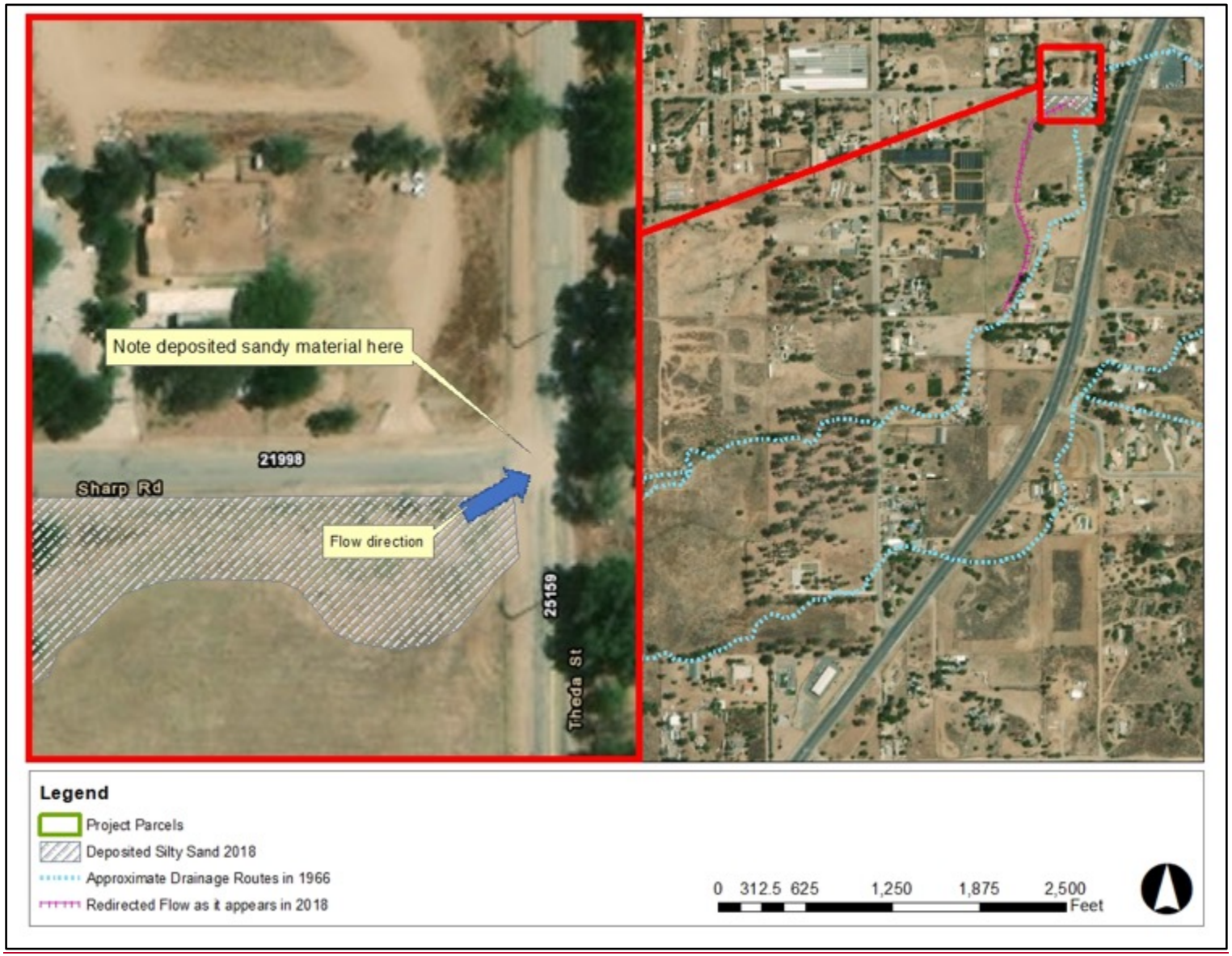


Figure 9. Modified Drainage and Deposited Alluvium from Flooding

Photograph 1. Southwestern Corner of Sharp Road and Theda Street (Photo faces slightly southwest)

Riverside County Department of Transportation officials also closed Theda Street, between Olive Avenue and Sharp Road, due to flooding.

A review of Federal Emergency Management Agency (FEMA) Flood Information Rate Maps (FIRM) for this area shows that FEMA has not yet assigned a specific flood hazard (Zone D – Undetermined Flood Hazard) for this area, acknowledging that there is a possible flood risk here. Flooding only occurs during heavier rainfall years when rerouted drainages are unable to direct waters adequately to the San Jacinto River via removed historic drainages. Man-made structures and roads between Theda Street and Spring Road east of the Project Site obstruct flows and cause occasional flooding.

There is no direct connection between the drainages on the property and the San Jacinto River. A recent study suggests that because the San Jacinto River has a low gradient, it limits discharge velocity along the channel and decreases the erosive energy maintaining a stable riverine system (Santa Ana Region MS4 Permittees 2016). Historical aerial photographs evaluated for that study show no significant change over a 52-year study reach (Santa Ana Region MS4 Permittees 2016).

3.2 Field Investigation

3.2.1 Delineation Methodology

Three visits were made by NRAI biologists Karen Kirtland and Ricardo Montijo. The first was conducted on 7 May 2019. The potential jurisdictional water features identified during the desktop analysis within the project area were checked using a global navigation satellite system (GNSS) device with submeter accuracy. Plants that could not be identified in the field were collected and later identified using the Jepson Manual: Higher Plants of California (Hickman 1993). A formal delineation survey was conducted on 11 and 12 September 2019.

The routine wetland delineation was conducted and areas of potential USACE and CDFW jurisdiction following the Corps of Engineers 1987 Wetland Delineation Manual (Environmental Laboratory 1987), Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008), and the current wetland indicator plant list (Lichvar et al. 2019). Also used were the current hydric soils list and criteria (U.S. Department of Agriculture [USDA] 2006), CWA Guidance for implementing Rapanos and Carabell Cases (USACE 2007), and current guidance from the CDFW.

The boundaries of potential jurisdictional waters were observed in the field and mapped using ESRI's ArcGIS Collector Application and ArcMap 10 on a Juno device.

3.2.2 CDFW Jurisdictional Delineation

According to CDFW, streams are generally defined by the presence of bed and bank or channelized topography, shorelines, and similar features. In addition, CDFW has discretion to assert jurisdiction over ecological systems (i.e., riparian communities) associated with streams and water bodies, as well as isolated water bodies that are outside of the USACE jurisdiction.

Delineation of the limits of CDFW jurisdiction was accomplished through both onsite and through remote analysis in GIS. State jurisdiction was delineated by measuring outer width and length boundaries of state

jurisdiction ("lakes or streambeds"), consisting of the greater of either the "top of bank" measurement ("bankfull" width) or the extent of associated riparian or wetland vegetation. Additionally, remote or offsite analysis included a review of aerial photography, analysis of available topographic maps, and calculation of preliminary jurisdictional area using ArcMap 10.6®.

3.2.3 USACE Jurisdictional Delineation

Federal jurisdiction over a non-wetland waters of the US extends to the ordinary high-water mark (OHWM), defined in 33 C.F.R. § 328.3 as the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, or the presence of litter and debris. In the Arid West region of the United States, waters are variable and include ephemeral/intermittent and perennial channel forms. The most problematic ordinary high-water (OHW) delineations are associated with the commonly occurring ephemeral/intermittent channel forms that dominate the Arid West landscape.

The climate of the region drastically influences the hydrology, channel-forming processes, and distribution of OHWM indicators such that delineations can be inconsistent (over space and time) and problematic. The OHW zone in low-gradient, alluvial ephemeral/intermittent channel forms in the Arid West is the active floodplain. The dynamics of arid channel forms and the transitory nature of traditional OHWM indicators in arid environments render the limit of the active floodplain the only reliable and repeatable feature in terms of OHW delineation (Lichvar and McColley 2008). This was supported by recent additional research in Vegetation and Channel Morphology Responses to Ordinary High-Water Discharge Events in Arid West Stream Channels (Lichvar et al. 2009).

The Corps of Engineers Wetlands Delineation Manual (USACE 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008) are normally used as guides for identifying wetland characteristics, pursuant the federal Clean Water Act. The following three indicators are typically present in wetlands:

1. hydrology providing permanent or periodic inundation by groundwater or surface water;
2. hydrophytic vegetation; and
3. hydric soils.

To be considered a wetland, an area must exhibit at least minimal hydric conditions within these three parameters. RWQCB and CDFW wetlands are equivalent to the limits of USACE wetlands.

4.0 Environmental Setting

4.1 Soils and Topography

A review of the National Resource Conservation Service (NRCS) Web Soil Survey (USDA NRCS 2019) indicates that the soils listed in Table 1 occur on the property parcel (Figure 10). Detailed soil descriptions are provided in the sections following the table. The soils and soil surface have been heavily disturbed over much of the property due to past land uses.

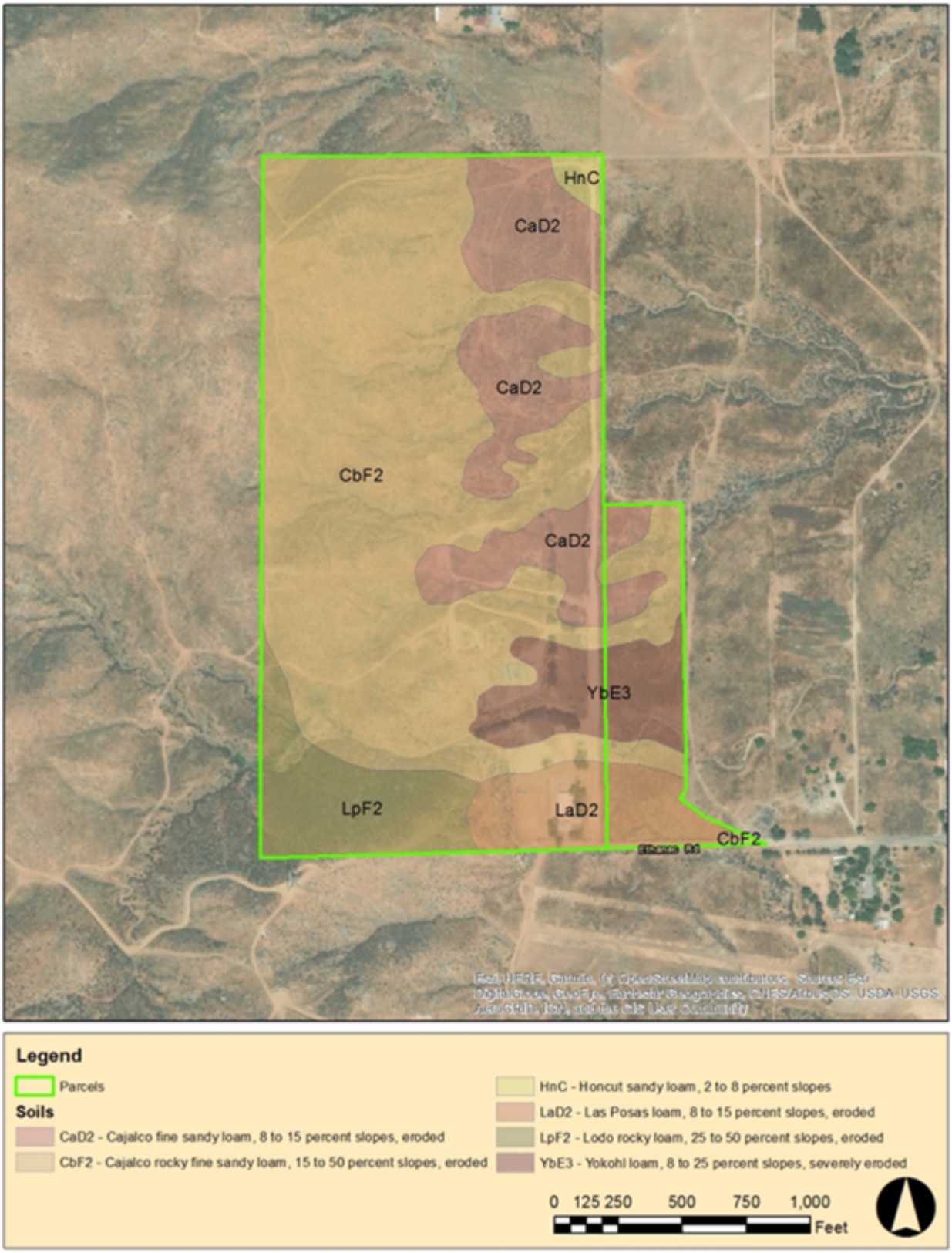


Figure 10. Soils

Table 1. Soils

Soil Symbol	Map Unit Name	Acres	Percent of Property
CbF2	Cajalco Rocky Fine Sandy Loam	55.7	60%
CaD2	Cajalco Fine Sandy Loam	16.41	18%
HnC	Honcut Sandy Loam	0.79	1%
YbE3	Yokohl Loam	6.48	7%
LpF2	Lodo Rocky Loam	7.99	9%
LaD2	Las Posas Loam	6.42	7%

Hydric soils formed under saturation, flooding or ponding of sufficient duration during the growing season tend to develop anaerobic conditions in their upper horizons. Hydric soil lists exist for each state and were created by using National Soil Information System (NASIS) database selection criteria that were developed by the National Technical Committee for Hydric Soils. Of the six types mapped for the property, none is considered hydric in California.

4.1.1 Cajalco Rocky Fine Sandy Loam

Cajalco rocky fine sandy loam (CbF2) is an eroded soil found on 15 to 50 percent slopes. It is a well-drained soil found on hillsides. This soil is derived from residuum weathered from gabbro. It is a non-hydric soil that never ponds or flood. Cajalco rocky fine sandy loam is the dominant soil on the property.

4.1.2 Cajalco Fine Sandy Loam

Cajalco fine sandy loam (CaD2) is an eroded soil found on eight to 15 percent slopes. It is a well-drained non-hydric soil that never ponds or floods. This soil is derived from residuum weathered from gabbro and found on hillsides. On the property it occurs predominately in the eastern part of the two properties, mostly along the drainages.

4.1.3 Honcut Sandy Loam

Honcut sandy loam (HnC) is found on two to eight percent slopes. It is a well-drained non-hydric soil that never ponds or floods. This soil is an alluvium derived from igneous rock and occurs on alluvial fans. Honcut sandy loam is non-saline to very slightly saline. It occupies the second smallest area on the two properties, occurring only in the extreme northeast corner of the eastern property.

4.1.4 Yokohl Loam

Yokohl loam (YbE3) is a severely eroded soil found on eight to 25 percent slopes. It is formed of alluvium derived from igneous rock and is found on alluvial fans. This soil is non-hydric, non-saline to very slightly saline. Yokohl is well drained and never ponds or floods. It occurs in and around the lowest drainage on the project site.

4.1.5 Lodo Rocky Loam

Lodo rocky loam (LpF2) is an eroded soil found on 25 to 50 percent hill slopes. It is formed of metamorphosed residuum that has weathered from sandstone. This soil is somewhat excessively drained,

non-hydric and never ponds or floods. Lodo rocky loam occurs on the steeper hillsides in the southern area of the project site.

4.1.6 Las Posas Loam

Las Posas loam (LaD2) is an eroded soil found on eight to 15 percent hill slopes. It is formed from residuum weathered from gabbro. This soil is well-drained, non-hydric that never ponds or floods. Los Posas loam occurs at the base of the mountain slopes in the southern section of the project site.

4.2 Hydrology

Based on the initial assessment and mapping effort, water on the property intermittently flows east in several drainages eventually leaving the property along its eastern and northern boundaries (Figure 11). There are six drainages that drain the property and they flow together at approximately 1,000 feet east of the property. These hydrologically disconnected drainage features are shown in Figure 12.

4.3 Vegetation

Vegetation (Figure 6) was mapped using California Manual of Vegetation Online available at http://vegetation.cnps.org/. Vegetation morphology was matched to the most similar vegetation description following classification of types based on infrared imagery. Anthropogenic features were designated descriptive identifiers.

5.0 Results and Conclusions

This report was prepared to delineate potential USACE, RWQCB, and CDFW jurisdictional authority over hydrological structures within the project site. This report represents an initial best effort at determining the jurisdictional boundaries using the most current regulations and guidance from the regulatory agencies. However, the final determination of jurisdictional boundaries within a project site is made by the regulatory agencies' discretion. Jurisdictional boundaries for each agency within the project site are described below. Future iterations of this report will address actual impacts to jurisdictional areas from the proposed project.

5.1 Clean Water Act – Section 404: Determination

Drainage from the property (and the region) historically flowed east toward the San Jacinto River (Figure 13). Over time, the connections to this regulated waterbody have been modified. As a result of the modifications, the drainages on the property are disconnected from the River and would not be considered waters of the United States. In addition, the 2020 Rule defines these drainages as ephemeral. Therefore, project drainages do not fall within USACE's jurisdiction.

Photographs of each stream are included in Appendix A. A sampling location map is included in Appendix B and wetland determination forms are included as Appendix C.

5.2 California Porter-Cologne Water Quality Act: Waters of the State Determination

RWQCB jurisdiction is over the waters of the State that are concurrent with the limits of features delineated as federal waters within the project area.

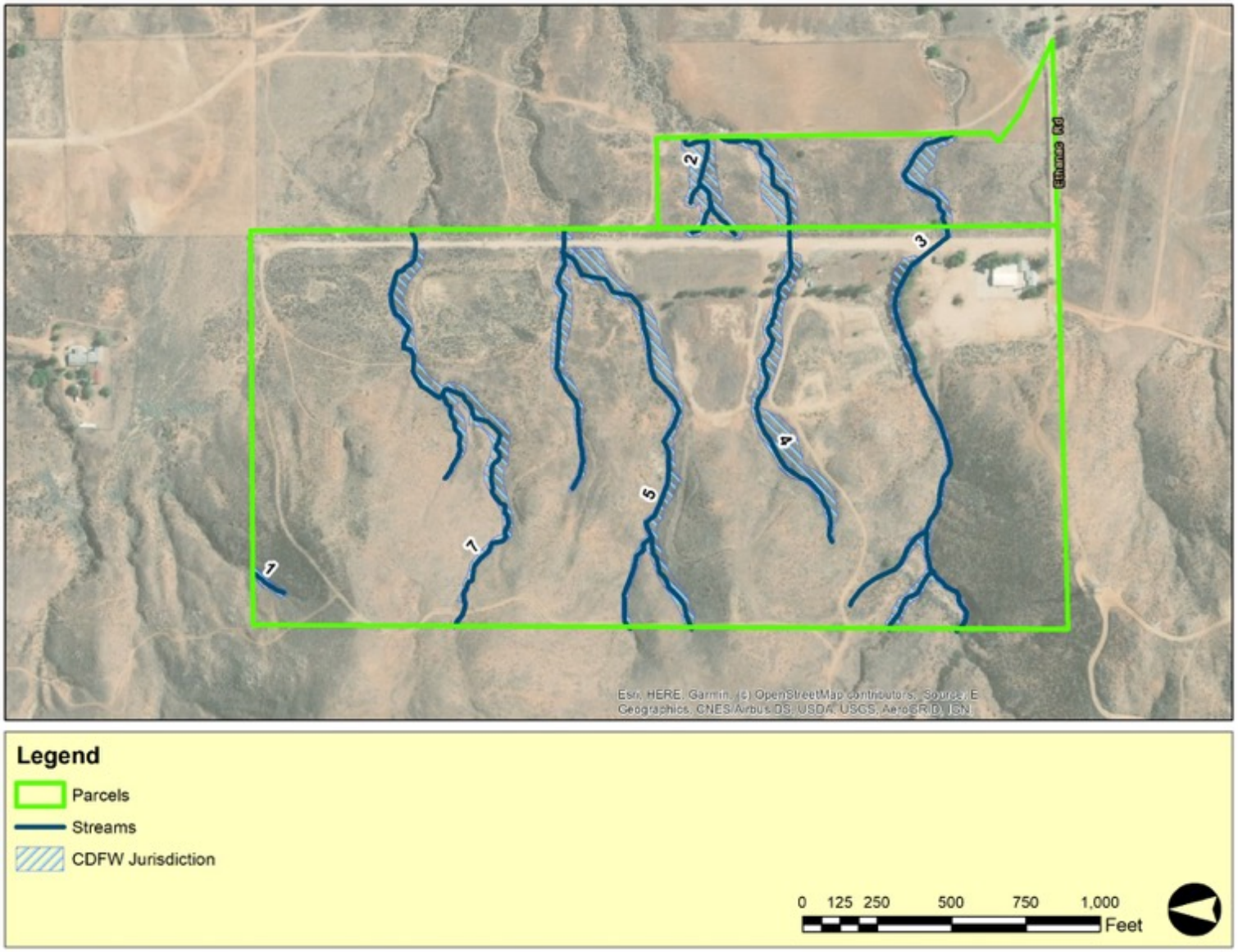


Figure 11. Jurisdictional Waters

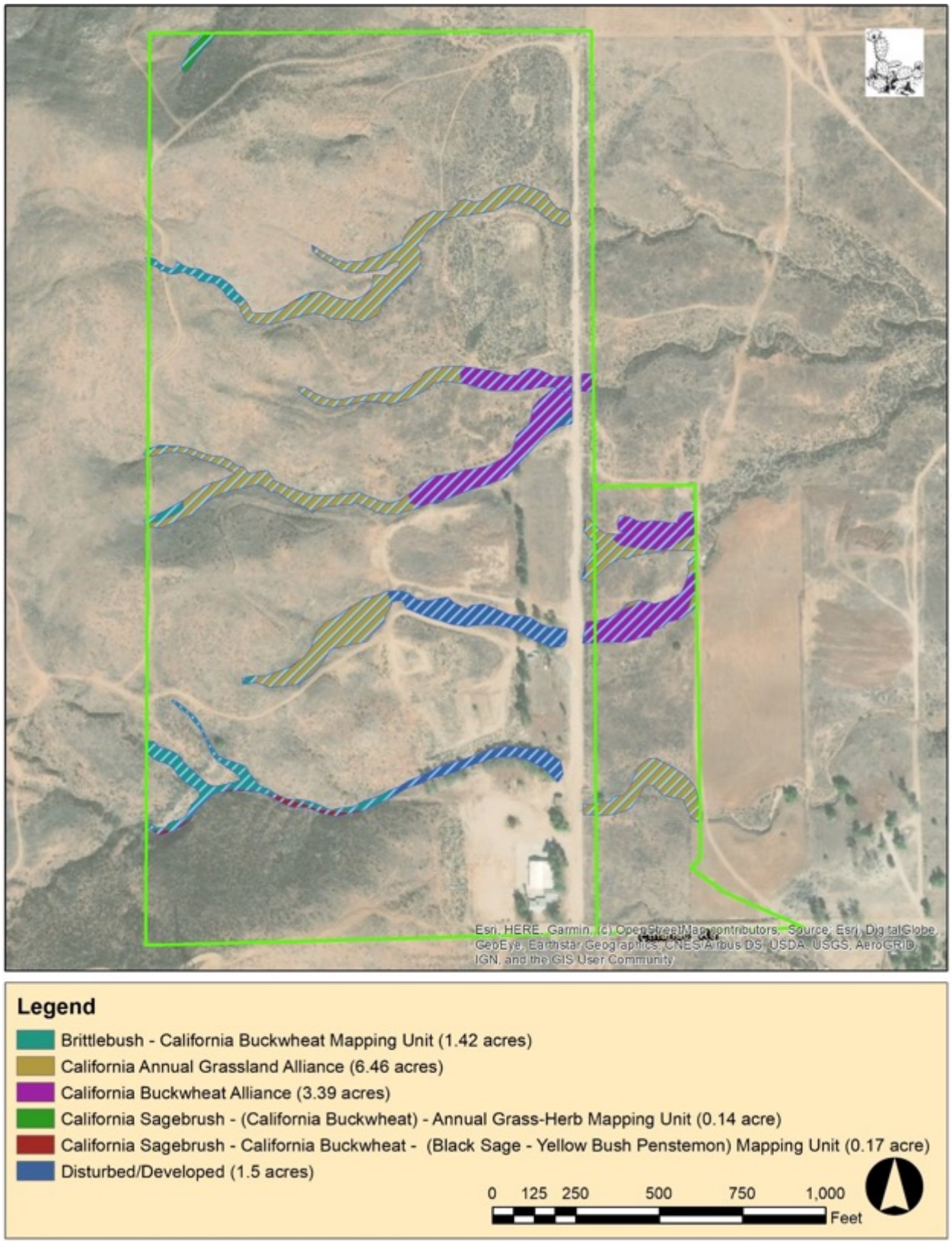


Figure 12. Jurisdictional Areas and Associated Vegetation

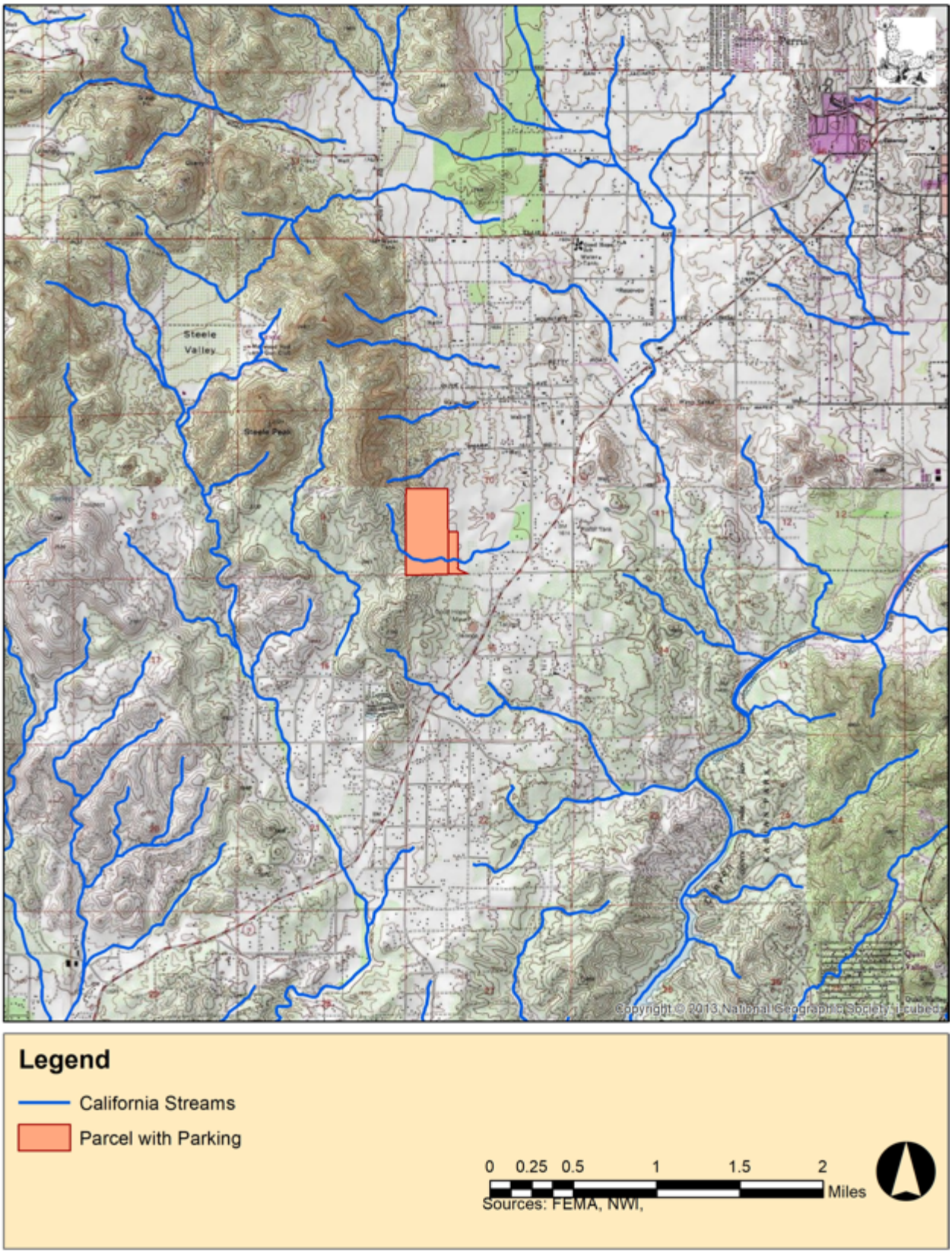


Figure 13. Regional Waters.

5.3 California Fish and Game Code §§ 1600–1616 Determination

CDFW jurisdiction includes the bank-top to bank-top of each of the linear features delineated on the project site, and the associated riparian habitat. Figure 6 shows California jurisdictional limits (hatched) in the project area based on field mapping of the stream and its vegetation. Figure 6 shows vegetation types in each of the mapped drainages. None of the vegetation mapped is inherently aquatic and the types mapped are considered upland vegetation types.

There are approximately 8.92 acres of CDFW jurisdictional area within the study area. Table 2 summarizes the results of the vegetation subject to this jurisdiction that falls within the project.

Table 2. Area Subject to CDFW jurisdiction by Vegetation Type

Type	Acres
Brittlebush - California Buckwheat Mapping Unit (1.42 acres)	1.42
California Annual Grassland Alliance (6.46 acres)	6.46
California Buckwheat Alliance (3.39 acres)	3.39
California Sagebrush - (California Buckwheat) - Annual Grass-Herb Mapping Unit (0.14 acre)	0.14
California Sagebrush - California Buckwheat - (Black Sage - Yellow Bush Penstemon) Mapping Unit (0.17 acre)	0.17
Disturbed/Developed (1.5 acres)	1.50

A summary of jurisdictional waters is provided in Table 3.

Table 3. Jurisdiction Summary

Stream Number	Stream Length (ft.)	USACE (acres)	CDFW (acres)	Photograph
1	168	0.00	0.10	1
2	686	0.00	0.80	2
3	2673	0.00	1.63	3
4	1654	0.00	2.11	4
5	2919	0.00	2.57	5
7	2055	0.00	1.71	6
TOTAL	**10,156**	**0.00**	**8.92**	

5.4 Typical Permit Requirements

5.4.1 Regional Water Quality Control Board

The RWQCB regulates discharges to surface waters under the federal CWA and the California Porter-Cologne Water Quality Control Act.

The RWQCB's jurisdiction extends to all waters of the State and waters of the US, including waters excluded by SWANCC and Rapanos determinations. Effective July 1, 2010, all dischargers are required to obtain coverage under the Construction General Permit Order 2009-0009-DWQ adopted on September 2, 2009.

5.4.2 Section 401 Water Quality Certification

Impacts to waters of the state will require a Section 401 WQC from the Santa Ana RWQCB. State law requires that a final environmental document developed under the California Environmental Quality Act (CEQA) must be reviewed before a WQC may be issued. An application may be submitted before a draft or final CEQA document is available, in which case the draft and final documents must be submitted as soon as possible. If the CEQA document will not be finalized for some time, the State or Regional Board may deny the project without prejudice. States are provided up to one year to issue a WQC decision, which commences upon the RWQCB's receipt of a complete application. RWQCB is often unable to make a certification decision within the one-year review period because the administrative record is inadequate to support issuance of a WQC. In such a case the state agency will often give applicants the option of letting the state make a "reasonable assurance" determination. This action allows the applicant to withdraw and resubmit the application once it contains adequate information. If the applicant does not choose to withdraw and resubmit the application, then the state agency will have to deny the certification request. In either case, the one-year review period starts over.

5.4.3 California Department of Fish and Wildlife

Proposed project implementation could impact up to 8.92 acres of CDFW-regulated streambed and banks, which requires an LSA. An LSA is a legally binding contract that sets forth various conditions that the applicant is obligated to follow. Conditions include mitigation and avoidance measures to reduce the project's impact on wildlife resources.

A Notification of Lake or Streambed Alteration form (Form FG 2023 [Rev. 7-06]), with required supplemental material and notification fee, is submitted by the applicant. The notification fee covers the CDFW's costs to process notifications and prepare the LSA. After the Department receives a notification, whether through the submittal of a notification form, it will determine whether or not it is complete within 30 days of its receipt. If the CDFW determines the notification is incomplete, it may return the notification and specify the information or materials that will need to be provided when the notification is resubmitted.

If the CDFW determines that an agreement is required, it will submit a draft agreement to the applicant for review within 60 days of receiving a complete notification. The draft agreement will include measures the CDFW determines are necessary to protect fish, wildlife, and plant resources while conducting the project. After receiving the draft agreement, the applicant has 30 days to notify the CDFW of whether the measures in the draft agreement are acceptable. If the applicant agrees with the measures included in the draft agreement, the applicant or authorized representative will need to sign the agreement and submit it to the CDFW. If the applicant disagrees with any measures in the draft agreement, they must notify the CDFW in writing and specify the measures that are not acceptable. Upon written request, the CDFW will meet with the applicant within 14 days of receiving the request to resolve the disagreement. If the applicant fails to respond, in writing, within 90 days of receiving the draft agreement, the CDFW may withdraw the agreement.

6.0 References Cited or Reviewed

California Department of Fish and Wildlife (CDFW). 2019. California Natural Diversity Database (CNDDB). Wildlife and Habitat Data Analysis Branch. Sacramento. Accessed: January 2019.

Consortium of California Herbaria. 2019. Specimen records. Available at: http://ucjeps.berkeley.edu/consortium. Accessed January 2019.

County of Riverside. 2017. Watershed Action Plan Santa Ana Region.

County of Riverside and Riverside Conservation Authority. 2003. Western Riverside County multiple species habitat conservation plan. *Information obtained from http://www. rctlma. org/mshcp/volume1/index. html.*

Google. 2019. Google Earth imagery from 1996 to 2016 for the Whittier project area. Google Earth desktop software. Accessed January 2019.

Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. CDFW (Sacramento), Nongame Heritage Program Report.

Natural Resources Conservation Service. 2006. Official Soil Series Descriptions [Online WWW]. U.S. Department of Agriculture. Available at: http://ortho.ftw.nrcs.usda.gov. Accessed: January 2018.

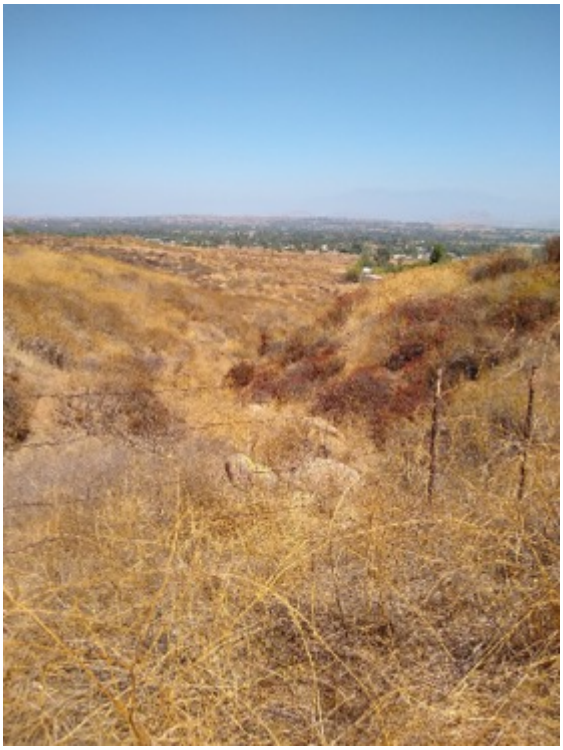
————. 2012. Hydric Soils List of California. U.S. Department of Agriculture. Available at http://soils.usda.gov/use/hydric/. Accessed: January 2018.

————. 2019. Web Soil Survey. Available at: https://websoilsurvey.nrcs.usda.gov. Accessed: January 2018.

Santa Ana Region MS4 Permittees. 2016. Draft San Jacinto River Study. Available at: https://www.waterboards.ca.gov/rwqcb8/water_issues/programs/stormwater/docs/scrap_metal/WAP_Sixth_Draft/SJR_Study.pdf. Accessed: 10 September 2020

USFWS (U.S. Fish and Wildlife Service). 2019. National Wetland Inventory, Wetland Geodatabase. Available at: http://wetlandsfws.er.usgs.gov/NWI/index.html. Accessed January 2019.

Appendix A. Photographs



Photographs 1a and 1b. Drainage 1, looking upstream to the southwest (left photograph) and downstream to the northeast (right photograph).

Photograph 2. Drainage 2, looking downstream to the east.

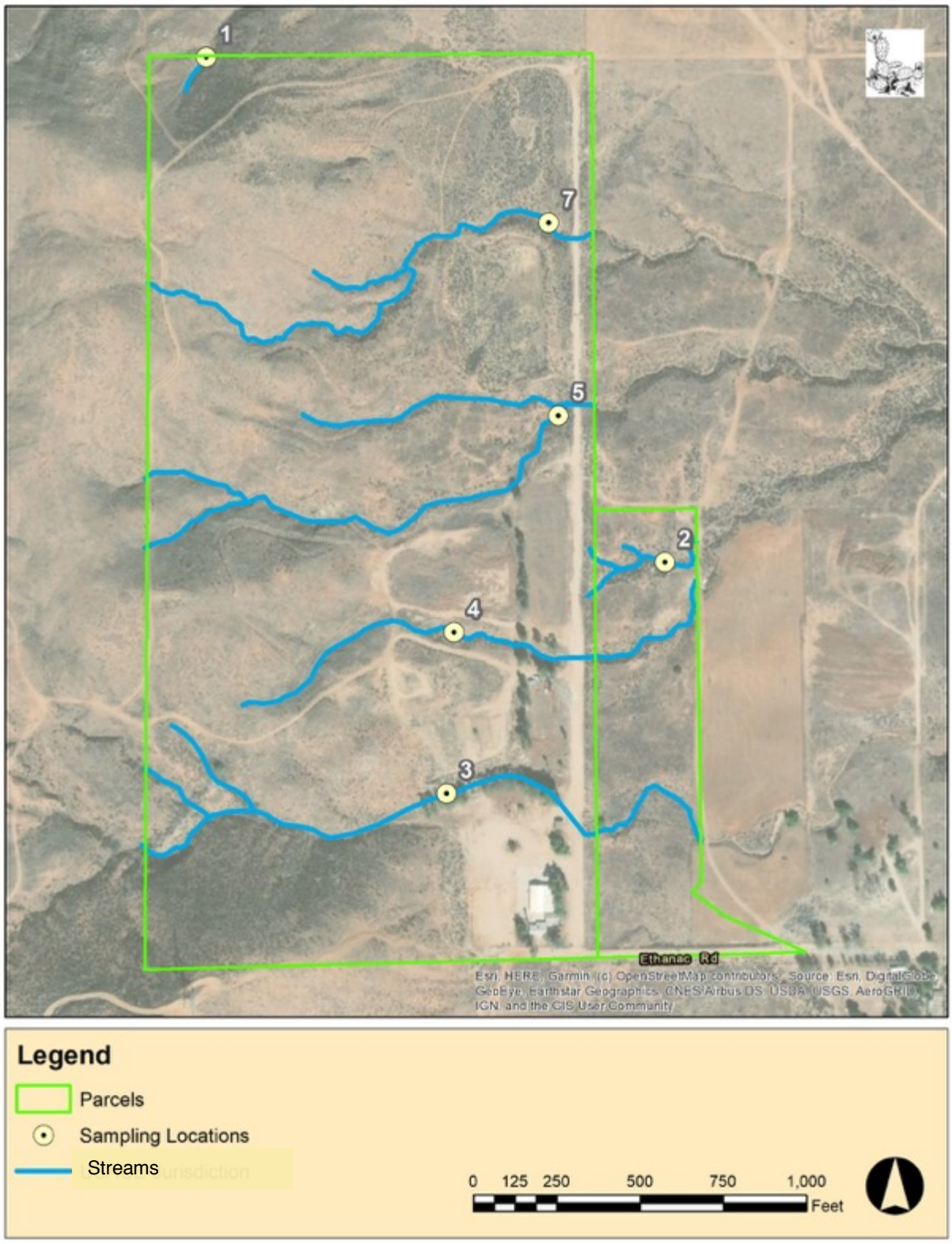
Photograph 3. Drainage 3, looking downstream to the east.

Photograph 4. Drainage 4, looking downstream to the east.

Photograph 5. Drainage 5, looking downstream to the east.

Photograph 6. Drainage 7, looking downstream to the east.

Appendix B. Sampling Location Map



Appendix C. Wetland Determination Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Ethanac Motorcycle Track City/County: Perris/Riverside Sampling Date: 11 Sep 2019
Applicant/Owner: Milestone MX State: CA Sampling Point: 1
Investigator(s): Karen Kirtland, Ricardo Montijo Section, Township, Range: Section 10, T5S, R4W
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 8
Subregion (LRR): California Lat: 33.749850° Long: -117.292139° Datum: NAD 83
Soil Map Unit Name: Cajalco Rocky Fine Sandy Loam, 15 to 50 percent slopes, eroded (CBF2) NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____ No ✓	
Wetland Hydrology Present?	Yes _____ No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 0.01 acre)			
1. Eriogonum fasciculatum			
2. Encelia farinosa			
3. Artemisia californica			
4. Salvia apiana			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 0.01 acre)			
1. Hirschfeldia incana			
2. Avena barbata			
3. Bromus diandrus			
4. Amsinckia menziesii			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust _____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: _____ (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✓ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): _____

Water Table Present? Yes ____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers

Arid West – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Ethanac Motorcycle Track City/County: Perris/Riverside Sampling Date: 11 Sep 2019
Applicant/Owner: Milestone MX State: CA Sampling Point: 2
Investigator(s): Karen Kirtland, Ricardo Montijo Section, Township, Range: Section 10, T5S, R4W
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 2
Subregion (LRR): California Lat: 33.745753° Long: -117.287754° Datum: NAD 83
Soil Map Unit Name: Cajalco Rocky Fine Sandy Loam, 15 to 50 percent slopes, eroded (CBF2) NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 0.01 acre)			
1. Eriogonum fasciculatum			
2. Encelia farinosa			
3. Artemisia californica			
4. Acmispon glaber			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 0.01 acre)			
1. Hirschfeldia incana			
2. Avena barbata			
3. Bromus diandrus			
4.			
5.			
6.			
7.			
8.			
	____ = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: ____ (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

SOIL Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No ✓

Remarks:

Bottom coarse sandy slopes, rocky. Bottom underlain by bedrock.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✓ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): _____

Water Table Present? Yes ____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Ethanac Motorcycle Track City/County: Perris/Riverside Sampling Date: 11 Sep 2019

Applicant/Owner: Milestone MX State: CA Sampling Point: 3

Investigator(s): Karen Kirtland, Ricardo Montijo Section, Township, Range: Section 10, T5S, R4W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): California Lat: 33.745753° Long: -117.287754° Datum: NAD 83

Soil Map Unit Name: Yokohl Loam, 8 to 25 percent slopes, severely eroded (YbE3) NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation ✓, Soil ✓, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No ✓	Is the Sampled Area within a Wetland? Yes _____ No ✓
Hydric Soil Present?	Yes _____ No ✓	
Wetland Hydrology Present?	Yes _____ No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 0.01 acre)			
1. Eriogonum fasciculatum			
2. Encelia farinosa			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 0.01 acre)			
1. Hirschfeldia incana			
2. Avena barbata			
3. Bromus madritensis rubens			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

SOIL Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No ✓

Remarks:

Bottom coarse sandy slopes, rocky. Bottom underlain by bedrock.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✓ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): _____

Water Table Present? Yes ____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Ethanac Motorcycle Track City/County: Perris/Riverside Sampling Date: 11 Sep 2019

Applicant/Owner: Milestone MX State: CA Sampling Point: 4

Investigator(s): Karen Kirtland, Ricardo Montijo Section, Township, Range: Section 10, T5S, R4W

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): California Lat: 33.745113° Long: -117.289568° Datum: NAD 83

Soil Map Unit Name: Cajalco Rocky Fine Sandy Loam, 15 to 50 percent slopes, eroded (CBF2) NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation ✓, Soil ✓, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____ No ✓	
Wetland Hydrology Present?	Yes _____ No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 0.01 acre)			
1. Eriogonum fasciculatum			
2. Encelia farinosa			
3. Artemisia californica			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 0.01 acre)			
1. Hirschfeldia incana			
2. Onicosiphon piluliferum			
3. Bromus diandrus			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

SOIL Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No ✓

Remarks:

Bottom coarse sandy slopes, rocky. Bottom underlain by bedrock.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✓ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): _____

Water Table Present? Yes ____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Ethanac Motorcycle Track City/County: Perris/Riverside Sampling Date: 12 Sep 2019
Applicant/Owner: Milestone MX State: CA Sampling Point: 5
Investigator(s): Karen Kirtland, Ricardo Montijo Section, Township, Range: Section 10, T5S, R4W
Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 1
Subregion (LRR): California Lat: 33.747037° Long: -117.289367° Datum: NAD 83
Soil Map Unit Name: Cajalco Fine Sandy Slopes, 8 to 15 percent slopes, eroded (CaD2) NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____ No ✓	Is the Sampled Area within a Wetland? Yes ____ No ✓
Hydric Soil Present?	Yes ____ No ✓	
Wetland Hydrology Present?	Yes ____ No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 0.01 acre)			
1. Eriogonum fasciculatum			
2. Encelia farinosa			
3. Acmispon glaber			
4. Artemisia californica			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 0.01 acre)			
1. Hirschfeldia incana			
2. Avena barbata			
3. Bromus madritensis rubens			
4.			
5.			
6.			
7.			
8.			
	____ = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 15 % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: ____ (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

SOIL Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No ✓

Remarks:

Bottom coarse sandy slopes, rocky. Bottom underlain by bedrock.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✓ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): _____

Water Table Present? Yes ____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Ethanac Motorcycle Track City/County: Perris/Riverside Sampling Date: 11 Sep 2019
Applicant/Owner: Milestone MX State: CA Sampling Point: 2
Investigator(s): Karen Kirtland, Ricardo Montijo Section, Township, Range: Section 10, T5S, R4W
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 2
Subregion (LRR): California Lat: 33.745753° Long: -117.287754° Datum: NAD 83
Soil Map Unit Name: Cajalco Rocky Fine Sandy Loam, 15 to 50 percent slopes, eroded (CBF2) NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 0.01 acre)			
1. Eriogonum fasciculatum			
2. Encelia farinosa			
3. Artemisia californica			
4. Acmispon glaber			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 0.01 acre)			
1. Hirschfeldia incana			
2. Avena barbata			
3. Bromus diandrus			
4.			
5.			
6.			
7.			
8.			
	____ = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: ____ (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

SOIL Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No ✓

Remarks:

Bottom coarse sandy slopes, rocky. Bottom underlain by bedrock.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✓ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): _____

Water Table Present? Yes ____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Ethanac Motorcycle Track City/County: Perris/Riverside Sampling Date: 12 Sep 2019

Applicant/Owner: Milestone MX State: CA Sampling Point: 5

Investigator(s): Karen Kirtland, Ricardo Montijo Section, Township, Range: Section 10, T5S, R4W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): California Lat: 33.747037° Long: -117.289367° Datum: NAD 83

Soil Map Unit Name: Cajalco Fine Sandy Slopes, 8 to 15 percent slopes, eroded (CaD2) NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____ No ✓	
Wetland Hydrology Present?	Yes _____ No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 0.01 acre)			
1. Eriogonum fasciculatum			
2. Encelia farinosa			
3. Acmispon glaber			
4. Artemisia californica			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 0.01 acre)			
1. Hirschfeldia incana			
2. Avena barbata			
3. Bromus madritensis rubens			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 15 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

SOIL Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✓ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): _____

Water Table Present? Yes ____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Ethanac Motorcycle Track City/County: Perris/Riverside Sampling Date: 11 Sep 2019

Applicant/Owner: Milestone MX State: CA Sampling Point: 3

Investigator(s): Karen Kirtland, Ricardo Montijo Section, Township, Range: Section 10, T5S, R4W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): California Lat: 33.745753° Long: -117.287754° Datum: NAD 83

Soil Map Unit Name: Yokohl Loam, 8 to 25 percent slopes, severely eroded (YbE3) NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation ✓, Soil ✓, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No ✓	Is the Sampled Area within a Wetland? Yes _____ No ✓
Hydric Soil Present?	Yes _____ No ✓	
Wetland Hydrology Present?	Yes _____ No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 0.01 acre)			
1. Eriogonum fasciculatum			
2. Encelia farinosa			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 0.01 acre)			
1. Hirschfeldia incana			
2. Avena barbata			
3. Bromus madritensis rubens			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species _____	x 1 =	_____
FACW species _____	x 2 =	_____
FAC species _____	x 3 =	_____
FACU species _____	x 4 =	_____
UPL species _____	x 5 =	_____
Column Totals: _____ (A)		_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

SOIL Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No ✓

Remarks:

Bottom coarse sandy slopes, rocky. Bottom underlain by bedrock.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✓ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): _____

Water Table Present? Yes ____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Ethanac Motorcycle Track City/County: Perris/Riverside Sampling Date: 11 Sep 2019
Applicant/Owner: Milestone MX State: CA Sampling Point: 1
Investigator(s): Karen Kirtland, Ricardo Montijo Section, Township, Range: Section 10, T5S, R4W
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 8
Subregion (LRR): California Lat: 33.749850° Long: -117.292139° Datum: NAD 83
Soil Map Unit Name: Cajalco Rocky Fine Sandy Loam, 15 to 50 percent slopes, eroded (CBF2) NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 0.01 acre)			
1. Eriogonum fasciculatum			
2. Encelia farinosa			
3. Artemisia californica			
4. Salvia apiana			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 0.01 acre)			
1. Hirschfeldia incana			
2. Avena barbata			
3. Bromus diandrus			
4. Amsinckia menziesii			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust _____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: _____ (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

SOIL Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No ✓

Remarks:

Bottom coarse sandy slopes, rocky. Bottom underlain by bedrock.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✓ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): _____

Water Table Present? Yes ____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Ethanac Motorcycle Track City/County: Perris/Riverside Sampling Date: 11 Sep 2019

Applicant/Owner: Milestone MX State: CA Sampling Point: 4

Investigator(s): Karen Kirtland, Ricardo Montijo Section, Township, Range: Section 10, T5S, R4W

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): California Lat: 33.745113° Long: -117.289568° Datum: NAD 83

Soil Map Unit Name: Cajalco Rocky Fine Sandy Loam, 15 to 50 percent slopes, eroded (CBF2) NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation ✓, Soil ✓, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____ No ✓	
Wetland Hydrology Present?	Yes _____ No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 0.01 acre)			
1. Eriogonum fasciculatum			
2. Encelia farinosa			
3. Artemisia californica			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 0.01 acre)			
1. Hirschfeldia incana			
2. Onicosiphon piluliferum			
3. Bromus diandrus			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

SOIL Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No ✓

Remarks:

Bottom coarse sandy slopes, rocky. Bottom underlain by bedrock.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✓ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): _____

Water Table Present? Yes ____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers Arid West – Version 2.0