APPENDIX C:

PRELIMINARY JURISDICTIONAL DELINEATION REPORT

PRELIMINARY JURISDICTIONAL DELINEATION REPORT
SOUTH HILLS BIKE PARK PROJECT

City of Glendora, Los Angeles County, California

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August 8, 2025

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CERTIFICATION STATEMENT

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

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ACRONYMS

AJD	Approved Jurisdictional Determination
BMP	Best Management Practices
BSA	Biological Study Area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGP	Construction General Permit
CRPR	California Rare Plant Rank
CSS	Coastal sage scrub
CWA	Clean Water Act
ESA	Endangered Species Act
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
GIS	Geographic Information System
LSA	Lake and Streambed Alteration
MSL	Mean Sea Level
NHD	National Hydrography Dataset
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NTCHS	National Technical Committee for Hydric Soils
NWI	National Wetlands Inventory
NWPL	National Wetland Plant List
OBL	Obligate Wetland
OHWM	Ordinary high-water mark
PJD	Preliminary Jurisdictional Determination
ROWD	Report of Waste Discharge
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SWPPP	Stormwater Pollution Prevention Plan
SWRQCB	California State Water Resources Quality Control Board
SWRCB	State Water Resources Control Board
U.S.	United States
UPL	Obligate Upland
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WATERS	Watershed Assessment, Tracking and Environmental Results System
WDR	Waste Discharge Requirements
WIS	Wetland Indicator Status
WOTUS	Waters of the United States
WQC	Water Quality Certification
WTI	Wetland Training Institute

SECTION 1. INTRODUCTION

A Preliminary Jurisdictional Delineation was conducted for the 318-acre Glendora South Hills Bike Park Project (Project) located in the in the City of Glendora, Los Angeles County, CA. Field surveys were conducted on June 11 and 12, 2025. The objective of the surveys was to determine the occurrence and extent of wetlands and Waters of the United States (WOTUS) within the Glendora South Hills Bike Park Project area that may be subject to the regulatory jurisdiction of one or more resource agencies. These include the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA) (33 Code of Federal Regulations [CFR] parts 320–330), which regulates the discharge of dredged or fill material into WOTUS; the California Department of Fish and Wildlife (CDFW) under California Fish and Game Code §§ 1600-1616, which governs alterations to streams and associated riparian habitats; and the Los Angeles Regional Water Quality Control Board (RWQCB) under Section 401 (Water Quality Certification) of the CWA, which addresses water quality certification for projects that may affect jurisdictional waters.

1.1. Report Purpose

HANA Resources, Inc. (HANA) conducted a literature review and field surveys of the jurisdictional resources potentially associated with the Project and within a zone 50 feet out of the proposed trail corridor; this area is defined as the Biological Study Area (BSA) in this report. The survey was conducted to determine the presence and extent of federal or state wetlands, waters, and habitats that are potentially subject to the jurisdictional authority of USACE, the RWQCB, and CDFW. This report documents the methods and results of the survey and provides an analysis of the potential impacts on jurisdictional areas from site construction and development in view of federal and state laws and regulations. Finally, it recommends, as appropriate, best management practices (BMPs), avoidance and protection measures, and mitigation measures to reduce or avoid potential environmental impacts or to offset project impacts on jurisdictional areas.

1.2. Project Location

The Project site encompasses 318 acres in the City of Glendora, Los Angeles County, CA (**Exhibit I,** *Site Vicinity Map*). This site is located north of Interstate 210, east of South Glendora Avenue, and south of Big Dalton Wash. The project area spans numerous parcels including Assessor Parcel Numbers (APNs) 8644-013-905, 8644-013-906, 8644-014-901, 8644-014-902, 8644-014-904, 8644-014-905, 8644-014-907, 8644-014-909, 8644-014-910, 8644-014-911, 8644-015-914, 8644-015-915, 8644-027-900, 8644-027-901, 8644-027-902, 8644-027-905, 8644-027-906, 8644-027-908, 8644-027-913 and includes a Los Angeles Department of Water and Power Easement (**Exhibit II,** *Site Location Map*).

The Project is located on the U.S. Geological Survey (USGS) San Dimas and Glendora Quadrangles, 7.5-Minute Topographic map and ranges in elevation from approximately 715 to 1215 feet above mean sea level (MSL). The Project is located within Sections 31 and 32 of Township 1 North-Range 9 West, and Sections 5 and 6 of Township 1 South-Range 9 West, San Bernardino Meridian. This report summarizes the wetland resources and preliminary jurisdictional determination survey data collection and analysis conducted for the proposed Project. All determinations are preliminary and subject to verification by the USACE Los Angeles District and are also subject to the jurisdiction of CDFW (South Coast, Region 5) and Los Angeles RWQCB (Region 4).

Exhibit I: Site Vicinity Map

Exhibit II: Site Location Map

SECTION 2. PROJECT DESCRIPTION

The proposed Project involves the construction of a bike park and a 6-mile cross country style trail system within the 318-acre South Hills Wilderness Area in Glendora, CA. The development will have the following:

- Bike Park: 1 acre featuring bi-directional downhill trails and pedal-up trails.
- Parking lot: 17 spots in main lot, 7 parallel parking spots along the west side of the access road.
- Cross-country trail: 6 miles encompassing the entire South Hills Wilderness Area.
- Trail head: 36-48” wide full bench cut trail.
- Trails will be constructed using native soil surface with some areas including a soil stabilizer to reduce dust and erosion or onsite borrow for stabilization and occasional grading.

SECTION 3. REGULATORY CONTEXT

This Project must comply with applicable federal, state, and local environmental laws, regulations, ordinances, and policies that govern the protection of wetlands, waters, water quality, and aquatic and riparian habitats. These regulatory frameworks establish permitting requirements and biological survey standards and may present constraints to development. This section summarizes the major federal and state regulatory authorities that may apply to the project.

In California, the USACE, RWQCBs, and CDFW are the primary agencies responsible for regulating activities within inland streams, coastal streams, wetlands, and other waters. These agencies enforce the many federal and state laws, regulations, and policies that prevent further impacts on jurisdictional wetlands and waters. The USACE regulates the discharge of dredged or fill material into WOTUS (defined below) pursuant to section 404 of the federal Clean Water Act. The RWQCBs regulate activities pursuant to section 401(a)(1) of the CWA, which requires state water quality certification for any federally permitted activity that may result in a discharge to navigable waters. In addition, the RWQCBs also have jurisdiction over Waters of the State (defined below) under the Porter-Cologne Water Quality Control Act, which pertains to activities that may alter the bed, bank, or channel of a stream or lake, including associated riparian vegetation. CDFW regulates water resources under sections (§§) 1600-1616 of the California Fish and Game Code. Some regulations affecting wetlands focus on protecting water quality and preventing activities that would introduce or discharge harmful substances into waters. Others focus primarily on protection of fish and wildlife habitats, especially for endangered species.

3.1. Clean Water Act

The federal Clean Water Act (33 U.S.C. §§ 1251-1376) is the principal federal law governing pollution control and water quality of the nation's waterways. It establishes the basic structure for regulating discharges of pollutants into WOTUS and for regulating water quality and establishing water quality standards for surface waters.[1] Sections 401, 402, and 404 of the CWA are pertinent to surface and coastal WOTUS. The USACE generally requires the issuance of an individual permit, or coverage under an existing nationwide permit, for all actions that have the potential for dredge or fill activities. These sections are described further in the subsections below.

For purposes of section 404 permitting under the CWA, WOTUS are comprised of those wetland and non-wetland bodies of water that meet the criteria set forth in 33 Code of Federal Regulations (CFR) § 328.3, as interpreted by a number of court opinions and guidance, including *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers,* 531 U.S. 159 (2001) (SWANCC), consolidated cases *Rapanos v. United States* (Rapanos), and *Carabell v. United States* (Carabell), 547 U.S. 715 (2006), and joint guidance issued by USACE and United States Environmental Protection Agency (USEPA) in light of judicial decisions, including the *Joint Guidance Memorandum Regarding Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States and Carabell v. United States* (December 12, 2008) (USEPA and USACE, 2008), issued by the USACE and the USEPA in light of judicial decisions.

On June 29, 2015, the USACE and EPA published an amendment to 33 CFR § 328.3 revising the definition of WOTUS in a manner intended to consider, but supersede prior judicial decisions, regulations and guidance. The revised regulation, named the Clean Water Rule, was published in the Federal Register (80 FR 124: 37054-37127) and became effective on August 28, 2015. The Clean Water Rule has been

[1] CWA:http://cfpub.epa.gov/npdes/allfaqs.cfm?program_id=0#107 and http://cfpub.epa.gov/npdes/ and http://cfpub.epa.gov/npdes/faqs.cfm?program_id=6#1 and http://cfpub.epa.gov/npdes/home.cfm?program_id=6.

challenged in court by more than 30 different organizations and entities, and on October 9, 2015, the U.S. Court of Appeals, Sixth Circuit enjoined the implementation of the new Clean Water Rule on a nationwide basis, pending further judicial action.

The 2022 SCOTUS decision in the Sackett v. USEPA case, resulted in changes to the definition of "waters of the United States" as was defined at the time. This update was released by the USEPA in 2023 and defines WOTUS as:

> "…those waters [that] have relatively permanent, standing, or continuously flowing water connect to paragraph (a)(1) water or waters with a continuous surface connection to such relatively permanent water or to paragraph (a)(1) waters.; A waterbody (alone or in combination) that significantly affects the chemical, physical, or biological integrity of traditional navigable waters, the territorial seas, or interstate waters."

Section 401 of the CWA requires that all applicants that apply for a Section 404 permit from the USACE must also obtain a Section 401 Water Quality Certification from the state in which the discharge originates. As a result, proposed filling or development within jurisdictional features requires coordination with the appropriate RWQCB that administers Section 401. The RWQCB also plays a role in reviewing water quality and wetland issues, including avoidance and minimization of impacts. A Section 401 Water Quality Certification is required before issuance of a Section 404 permit. USACE jurisdiction over nontidal WOTUS extends laterally to the ordinary high water mark (OHWM) or beyond the OHWM to the limit of any adjacent wetlands, if present (33 CFR 328.4).

The USACE and the USEPA issued a final rulemaking on January 18, 2023, revising the definition of WOTUS pursuant to the CWA. Specifically, the WOTUS Rule defines WOTUS to include the following:

- Traditional navigable waters, the territorial seas, and interstate waters;
- Impoundments of WOTUS;
- "tributaries" to traditional navigable waters, the territorial seas, interstate waters, or impoundments when the tributaries meet either the relatively permanent standard or the significant nexus standard (i.e., jurisdictional tributaries);
- Wetlands "adjacent" to WOTUS; wetlands adjacent to and with a continuous surface connection to relatively permanent impoundments or jurisdictional tributaries when the jurisdictional tributaries meet the relatively permanent standard; and wetlands adjacent to impoundments or jurisdictional tributaries when the wetlands meet the significant nexus standard (i.e., jurisdictional adjacent wetlands); and
- Intrastate lakes and ponds, streams or wetlands that meet either the relatively permanent standard or the significant nexus standard.

The primary effect of the Clean Water Rule is to modify the types of water bodies that will be presumed to have a significant nexus to interstate waters, territorial sea, and waters used in interstate commerce as opposed to those types of water bodies that must be demonstrated on a case-by-case basis to have such a connection pursuant to CWA regulations.

Further, under either current law and guidance or the now-enjoined Clean Water Rule, USACE jurisdiction over non-tidal WOTUS extends laterally to or beyond the OHWM to the limit of any adjacent wetlands, if present (33 CFR 328.3(c)(6)). The OHWM is defined as:

> *"… 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 area" (33 CFR 328.3(c)(6)).

In addition, pursuant to either the currently effective law and guidance or the now-enjoined Clean Water Rule, water bodies that constitute wetlands are determined in accordance with the USACE Wetlands Delineation Manual Technical Report (1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE Engineer Research and Development Center 2008). Pursuant to these technical manuals, in general three criteria must be satisfied to classify an area as a jurisdictional wetland:

- A predominance of plant life that is adapted to life in wet conditions hydrophytic vegetation must be present;
- Soils must saturate, flood or pond long enough during the growing season to develop anaerobic conditions in the upper part hydric soils; and
- Permanent or periodic inundation or soils saturation must occur at least seasonally establishing wetland hydrology.

Biologists for the project classified waters as jurisdictional or non-jurisdictional based on the 2008 Regulatory Guidance. Nevertheless, biologists have concluded that the classification of water as jurisdictional or non-jurisdictional is substantially the same whether performed pursuant to the Clean Water Rule, which is now enjoined, or under the prior regulation, 33 CFR § 328.3 including the Preamble to the regulation, and the 2008 Regulatory Guidance, which are now effective.

3.1.1. Section 404 – Discharge of Dredge and Fill Requirements

Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into WOTUS. The USACE implementing regulations define "dredged material" as material that is excavated or dredged from WOTUS. The CWA implementing regulations define "fill material" as material placed in WOTUS where the material has the impact of either replacing any portion of WOTUS with dry land or changing the bottom elevation of any portion of a WOTUS. Examples include discharges of rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure for development projects in WOTUS.

No discharge of dredged or fill material may be permitted if there is a practicable alternative that would be less damaging to aquatic resources, so long as that alternative does not have other significant adverse environmental consequences 40 C.F.R. § 230.10(a). Under 40 C.F.R. § 230.10(a), a potential project alternative is "practicable" if it "is available and capable of being done after taking into consideration cost, existing technology and logistics in light of overall project purpose." These regulations are jointly administered and enforced by the USACE and the USEPA.

Permit review and issuance follows a process that prioritizes avoidance of impacts, followed by minimization of impacts (both as determined pursuant to the 404(b)(1) guidelines) and, finally, requiring compensatory mitigation assuring "no net loss of wetlands" for unavoidable impacts on the aquatic environment.

Under the law, any project that discharges dredged or fill material (temporarily or permanently) into WOTUS, including wetlands, may require a section 404 permit. The section 404 permit may be a nationwide permit or an individual permit from the USACE pursuant to section 404 of the CWA. The USACE has established a series of nationwide permits that authorize certain activities in WOTUS provided that a proposed activity can demonstrate compliance with standard terms and conditions. No activity is

authorized under any nationwide permit that is likely to jeopardize the continued existence of a threatened or endangered species, or a species proposed for such designation, as identified under the federal Endangered Species Act (ESA), or that will destroy or adversely modify the critical habitat of such species. If the conditions cannot be met, a regional or individual permit will be required.

3.1.2. Section 401 – Water Quality Certification

Although the Clean Water Act (CWA) is a federal law, Section 401 affirms that states hold primary authority and responsibility for establishing surface water quality standards. Under this provision, the U.S. Army Corps of Engineers (USACE) must obtain a state certification confirming that any discharge or dredge-and-fill activities authorized under their permits will not violate state water quality standards. Specifically, Section 401 requires applicants for a Section 404 permit involving the discharge of dredged or fill material into WOTUS to provide certification that the proposed discharge complies with all applicable state water quality standards established under the CWA and relevant state law.

Section 401 is implemented through a water quality certification process. In the State of California, the State Water Resources Control Board (SWRCB) has given the responsibility for issuing section 401 Water Quality Certifications (WQCs) to the RWQCBs, unless a discharge of dredged or fill material is proposed within more than one region. In the event a project proposes discharges of dredged or fill material in more than one region, responsibility for issuance of a section 401 WQC will lie either with the SWRCB, or, upon agreement of the RWQCBs for the affected regions, with the RWQCB chosen in the discretion of the RWQCBs. Cal. Water Code, § 13160; Cal. Code Regs., tit. 23, § 3838. Certification must be based on a finding that the proposed discharge will comply with water quality standards, which include numeric and narrative water quality objectives applicable to identified surface waters in the Water Quality Control Plan for the region in which a discharge of fill is proposed.

3.2. California Fish and Game Code §§ 1600-1616

Pursuant to §§ 1600–1616 of the California Fish and Game Code, the CDFW regulates all substantial diversions, obstructions, or changes to the natural flow or the bed, channel, or bank of any river, stream, or lake, which provides habitat and supports fish or wildlife. CDFW defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation” (California Code of Regulations, Title 14, Division 1, Subdivision 1, Chapter 1, § 1.72). “Bank” means the slope or elevation of land that bounds the bed of the stream in a permanent or longstanding way, and that confines the stream water up to its highest level. “Lake” includes “natural lakes or man-made reservoirs.”

Rivers, streams, lakes, and riparian vegetation that provide habitat for fish and wildlife species are subject to jurisdiction by the CDFW under §§ 1600-1616 of the California Fish and Game Code. Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Section 2785(e) defines "riparian habitat" as lands which contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source. CDFW regulates bed, bank to bank, as well as associated riparian vegetation, and fish and wildlife resources. CDFW has interpreted jurisdictional boundaries to be defined by the tops of stream banks (i.e., the limit of stream influence) and/or the limit of the canopy of riparian vegetation (outer drip line) that is hydrologically connected to river, stream, or lake, whichever is greatest. As a result, the area of CDFW jurisdiction is usually greater than the active channel and overlaps and extends beyond the USACE jurisdiction. Isolated wetlands not associated with a river, stream or lake are not protected

under §§ 1600 et seq. of the California Fish and Game Code. In addition, CDFW does not have regulatory authority on Tribal Lands.

CDFW jurisdiction may also extend to altered or artificial waterways based upon the value of those waterways to fish and wildlife (CDFG and ESD, 1994), particularly to the extent that such constructed waterways were originally natural waterways.

The CDFW Lake and Streambed Alteration (LSA) Program requires an entity to notify CDFW before initiating any activity that may substantially modify the bed, bank, or channel of a river, stream, or lake, including the associated flow of water. Pursuant to the California Fish and Game Code § 1602, if CDFW determines that the activity may result in adverse impacts, the entity must enter a Streambed Alteration Agreement (SAA) with the department, It is unlawful to alter these features without an SAA.

Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- Substantially divert or obstruct the natural flow of any river, stream or lake.
- Substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake.
- 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.

The notification requirement applies to any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes intermittent and ephemeral streams and washes, and other watercourses with subsurface flows, or drainages with beds and banks that support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife.

3.3. Porter-Cologne Water Quality Control Act

In 1969, the California State Legislature enacted the Porter-Cologne Water Quality Control Act (Porter-Cologne) to revise the existing water quality laws in California.[2] Through the act, the State Water Resources Control Board (SWRCB) and nine RWQCBs were entrusted with duties and powers to preserve, restore, and enhance the quality of California's water resources. The SWRCB has the ultimate authority over state water rights and water quality policy. The SWRCB adopts statewide water quality control plans, policies and guidance that direct RWQCBs in designating beneficial uses, setting water quality control standards, and administering programs to protect and preserve the “Waters of the State.” Pursuant to these statewide plans, policies and guidance, each of the nine RWQCBs within California is required to adopt a Basin Plan that sets water quality standards, including narrative and numeric water quality objectives for various constituents of concern, recognizing and reflecting the regional differences in existing water quality, the beneficial uses of the region’s ground and surface waters, and local water quality conditions.

Pursuant to Porter-Cologne, the SWRCB and RWQCBs, on a statewide and regional basis, respectively, have authority to regulate the “discharge of waste” to “Waters of the State” independently of the CWA and as a matter of state law. Discharges of waste are defined to “include sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation or of human or animal origin, or from any producing, manufacturing or processing operations, include waste placed in containers of whatever nature prior to and for purposes of, disposal” Cal. Water Code § 13050(d). Discharges of fill are included in the Porter-Cologne definition of discharge of “waste.” “Waters of the

[2] Porter-Cologne: http://www.swrcb.ca.gov/laws_regulations/docs/portercologne.pdf.

State" are defined to mean "any surface water or groundwater, including saline waters, within the boundaries of the state" Cal. Water Code § 13050(e). Under Porter-Cologne, "Waters of the State" include, but are not limited to, WOTUS. As a matter of state law, any party proposing a discharge of waste, including fill or other pollutants, that threatens to affect any Water of the State that is not also a water of the United States must file a Report of Waste Discharge (ROWD) with the SWRCB or appropriate RWQCB, as applicable (Cal. Water Code §§ 13260; 13264). The water board, after a public hearing, will then respond to the ROWD by imposing appropriate Waste Discharge Requirements (WDRs) (Cal. Water Code §§ 13263; 13264), or by issuing a Waiver of WDRs with appropriate conditions (Cal. Water Code § 13269) to control discharges for the protection of Waters of the State.

The SWRCB and RWQCBs, on a statewide and regional basis, respectively, also have authority to issue, deny, condition, enforce and otherwise administer all CWA section 402 National Pollutant Discharge Elimination System (NPDES) Permits for discharges of pollutants into WOTUS, and section 401 WQCs for section 404 permits. 33 U.S.C. § 1311; Cal. Water Code § 13160; *Memorandum of Understanding Regarding Permit and Enforcement Programs Between the State Water Resources Control Board and the Regional Administrator, Region IX, Environmental Protection Agency* (effective March 26, 1973) as supplemented by *the NPDES Memorandum of Agreement between the U.S. Environmental Protection Agency and the California State Water Resources Control Board* (effective June 8, 1989). USACE retains and has not delegated jurisdiction to issue section 404 permits for discharges of fill to WOTUS.

Accordingly, the SWRCB and RWQCBs have, respectively, issued the statewide Construction General NPDES Permit and the MS4 NPDES Permits which constitute both federal CWA section 402 permits and state Porter-Cologne WDRs Under guidance issued by the SWRCB, discharges of fill subject to USACE CWA section 404 permitting are reviewed and protected by the SWRCB by issuance of section 401 water quality certifications, and no additional state law WDRs are required to authorize discharges of fill. Discharges of fill to Waters of the State that are not also WOTUS are subject to regulation by the SWRCB or appropriate RWQCBs, as applicable. Any project proponent proposing such discharges of fill must submit a report of waste discharges along with USACE jurisdictional disclaimers, and prior to placing such fill, must either obtain coverage for such discharges under:

(i) the SWRCB's *Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction,* Order No. 2004-004-DWQ,
(ii) individual WDRs, or
(iii) a conditional waiver of WDRs. *Guidance for Regulation of Discharges to "Isolated" Waters* (Celeste Cantu, Executive Director June 25, 2004).

SECTION 4. METHODOLOGY

This section describes the study methods used by biologists for evaluating the biological resources and hydrologic features within the BSA and the project vicinity. The BSA includes the proposed trail within a 50 feet buffer zone out from the National Wetland Inventory (NWI) and National Hydrography Dataset (NHD) wetlands (**Exhibit III**, *Wetland – Trail Intersection*).

Exhibit III: Wetland – Trail Intersection

4.1. Literature Review

Prior to initiation of the field analysis a literature review was conducted to identify water resources (e.g. wetland areas, drainages, water bodies) and mapped regulated wetlands and WOTUS within a 3-mile radius of the survey area. Biologists reviewed relevant literature, databases, agency web sites, reports and management plans, Geographic Information System (GIS) data, maps, and aerial imagery obtained from public domain sources. Before conducting field surveys, survey locations were identified by overlaying the proposed Project with the following:

- Aerial photography of the Glendora South Hills Bike Park to determine the potential locations of USACE jurisdictional wetlands or other WOTUS,
- U.S. Geological Survey National Hydrology Dataset (NHD) (USGS, 2025),
- U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory to identify areas mapped as wetland features (USFWS, 2025),
- U.S. Department of Agriculture Natural Resources Conservation Service (USDA NRCS) soil mapping data (USDA NRCS, 2024), and
- Vegetation maps and landscape features (e.g., mapped wetlands, wetland vegetation, and drainages).

For purposes of this report, potential wetlands and other WOTUS are classified according to the *Cowardin Classification of Wetlands and Deepwater Habitat of the United States* (Cowardin *et al.,* 1979), which is also used by the USACE for jurisdictional determination. Plant names follow *The Jepson Manual*: *Higher Plants of California* (Hickman, 2012); plants are also assigned a Wetland Indicator Status (WIS) according to the National Wetland Plant List (NWPL) (USACE, 2023).

4.1.1. Topography and Physical Features

To gain a perspective of the topographic and physical features associated with the BSA and project vicinity, a 50-foot-to-the-inch scaled topographic map, scaled aerial photograph, and the *San Dimas/Glendora* 7.5-minute USGS topographic quadrangle map were examined to determine the locations of potential areas of USACE, RWQCB, and/or CDFW jurisdiction. Information obtained from this review included onsite and offsite locations of city and county boundaries and jurisdictions; valleys, hills, and mountain ranges; park boundaries; natural and man-made drainages, blue-line streams, and open waters (rivers, lakes, ponds, streams, creeks, channels, etc.); plant community boundaries; land use such as developed land, agriculture, and natural open space; important landmarks; roads, highways, paths, and trails; and potential wildlife movement corridors. HANA biologists examined the BSA to identify potential USACE jurisdiction pursuant to Section 404 and 401 of the Clean Water Act and CDFW jurisdiction pursuant to Section 1602 of the State of California Fish and Game Code. No jurisdictional drainages/areas were found onsite.

4.1.2. Soils

The Web Soil Survey (USDA, 2024), operated by the U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service, was referenced online to determine the types of soil found on the site. The Web Soil Survey provides soil data and information produced by the National Cooperative Soil Survey.

After the review of the USDA Natural Resources Conservation Services Web Soil Survey (USDA, 2024) (**Appendix A**, *USDA Natural Resources Conservation Service Web Soil Survey*), it was determined that the project site was composed of the following two (4) soil types:

Urban land-Palmview-Tujunga, gravelly complex, 2 to 9 percent slopes

The Urban land-Palmview-Tujunga, gravelly complex is split into three groups: Urban land, Palmview, and Tujunga, Gravelly. The complex has a mean annual precipitation of 17 to 27 inches and mean annual air temperature of 63 to 66°F. These soils can be found at elevations of 200 to 2,240 feet. The Urban land has a very high runoff class. The Palmview soil is a sandy loam, and the parent material is discontinuous human-transported material over alluvium derived from granite. The soil is well drained and has a very low runoff class. The Tujunga soil is composed of loamy sand, gravelly loamy sand, and gravelly sand and the parent material is discontinuous human-transported material over alluvium derived from granite. The soil is somewhat excessively drained and has a low runoff class. These soils are not hydric.

Zaca-Apollo, warm complex, 20 to 55 percent slopes

The Zaca-Apollo, warm complex is split into two groups: Zaca and Apollo, warm. The complex has a mean annual precipitation of 14 to 21 inches and mean annual air temperature of 62 to 66°F. These soils can be found at elevations of 20 to 1,630 feet. The Zaca soil is clay, and the parent material is colluvium and/or residuum weather from sandstone and siltstone. The soil is well drained and has a very high runoff class. The Apollo, warm soil is clay loam, and the parent material is colluvium and/or residuum weather from sandstone and siltstone. The soil is well drained and has a very high runoff class. These soils are not hydric.

Lithic Haploxerolls-Lithic Argixerolls complex, 20 to 55 percent slopes

The Lithic Haploxerolls-Lithic Argixerolls complex is split into two groups: Lithic Haploxerolls and Lithic Argixerolls. The complex has a mean annual precipitation of 17 to 25 inches and mean annual air temperature of 62 to 65°F. These soils can be found at elevations of 720 to 2,380 ft. The Lithic Halpoxerolls soil is slightly decomposed plant material and loam, and the parent material is residuum weathered from volcanic rock. The soil is well drained and has a high runoff class. The Lithic Argixerolls soil is slightly decomposed plant material and sandy loam, and the parent material is residuum weathered from volcanic rock. The soil is well drained and has a high runoff class. These soils are not hydric.

Urban land, frequently flooded, 0 to 5 percent slopes

The Urban land, frequently flooded has a mean annual precipitation of 12 to 24 inches and mean annual air temperature of 63 to 66°F. It can be found at elevations of 0 to 1,190 feet. The Urban land is a manufactured layer that has a very high runoff class and is not hydric.

4.1.3. Jurisdictional Waters

The National Wetlands Inventory is a series of maps established by the U.S. Fish and Wildlife Service to show wetlands and deepwater habitats. The NWI uses high-altitude imagery and identifies wetlands based on the visible presence of wetland vegetation or hydrology. The NWI is not intended to define limits of jurisdiction of any federal, state, or local agency but is used as a tool that contributes to the existing information available for the survey area. Additionally, the National Hydrography Dataset, maintained by the U.S. Geological Survey (USGS), was referenced to identify mapped streams, rivers, and other surface water features that may be hydrologically connected to wetlands in the project area. Both the NWI and NHD datasets were consulted during the preliminary desktop review and informed field survey planning. After reviewing the NWI Wetland Mapper and the NHD, it was determined that multiple nameless wetlands occurred within the wilderness park (**Exhibit IV**, *NWI and NHD Wetlands*).

Exhibit IV: NWI and NHD Wetlands

Ephemeral Stream

This feature is classified as an ephemeral stream, meaning that it is a non-tidal feature that conveys surface water only in response to precipitation events. It is typically dry for most of the year and does not exhibit continuous or seasonal flow. The drainage is generally characterized by a defined channel with minimal or no persistent vegetation, and it may show evidence of surface water flow such as sediment deposits or scour marks. Its water regime is temporarily flooded, defined as surface water being present for brief periods (days to weeks) during the growing season, with the water table generally lying well below the ground surface for the remainder of the year.

Palustrine Forested Temporarily Flooded (PFOA)

This wetland is classified as a Palustrine (P) type of wetland, meaning that it is non-tidal and dominated by trees, shrubs, and other emergent vegetation. In this case it is forested (FO) or dominated by woody vegetation 6 meters or taller. Its water regime is Temporary Flooded (A), defined as surface water being present for brief periods (days to weeks) during growing season with a water table generally lying well below ground surface for most of the season.

Palustrine Forested Seasonally Saturated (PFOB)

This wetland is classified as a Palustrine (P) type of wetland, meaning that it is non-tidal and dominated by trees, shrubs, and other emergent vegetation. In this case it is forested (FO) or dominated by woody vegetation 6-meters or taller. Its water regime is Seasonally Saturated (B), defined as lacking surface water, and instead having saturated substrate at or near the surface for an extended period during the growing season but is otherwise unsaturated the rest of the year.

Palustrine Scrub-shrub Temporarily Flooded (PSSA)

This wetland is also a Palustrine (P) wetland, as described above, but its dominant vegetation is Scrub-Shrub (SS) or vegetation less than 6-meters in height and includes shrubs, saplings, and small or stunted trees or shrubs. It also has the same Temporary Flooded (A) water regime as listed above.

Riverine Intermittent Streambed Temporarily Flooded (R4SBA)

This wetland is classified as a Riverine (R) type of wetland, in this case meaning non-tidal, not dominated by trees, shrubs, or emergent vegetation, and contains flowing water. The flow is Intermittent (4), or present only part of the year, with small pools forming when not flowing. The Streambed (SB) classification is a term associated with intermittent riverine wetlands, described as a collection of substrates and forms who vary greatly depending on gradient of the channel, velocity of water, and sediment being carried by water. The water regime here also is Temporary Flooded (A), as seen above.

<u>Big Dalton Wash</u>

Directly north of the site is Big Dalton wash, identified by the USEPA's Watershed assessment, Tracking and Environmental Results System (WATERS) as a navigable water under the Clean Water Act. NWI as R4SBCx, defines this as:

Riverine Intermittent Streambed Temporarily Flooded (R4SBCx)

This wetland is classified as a Riverine (R) type of wetland, in this case meaning non-tidal, not dominated by trees, shrubs, or emergent vegetation, and contains flowing water. The flow is Intermittent (4), or present only part of the year, with small pools forming when not flowing. The Streambed (SB) classification is a term associated with intermittent riverine wetlands, described as a collection of substrates and forms who vary greatly depending on gradient of the channel, velocity of water, and sediment being carried by water. The water regime is seasonally flooded (C), defined as surface water being present for extended periods of time during the growing season and becoming absent by the end of the growing season. This also contains the special modifier of excavated (x) which is used to identify wetland basins or channels excavated by humans.

As defined by the USGS's NHD, the unnamed wetlands found onsite are defined as ephemeral wetlands.

The USGS NHD was used to identify hydrologic features such as rivers, streams, canals, lakes, ponds, coastline, dams, and stream gages.

Additionally, the watershed boundary data set containing the most current 10-digit and 12-digit HUCs was obtained in geodatabase form from the USGS.

The following were also reviewed and consulted:

- Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987) (referred to as "USACE Manual" in this report).
- Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual (WTI, 1999).
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE, 2008) (referred to as "Supplemental Manual" in this report).
- The National Wetland Plant List (USACE, 2023).

In 1987, the USACE published the USACE Manual for the identification and delineation of wetlands. In 2008, the USACE published a supplement to the USACE Manual that describes wetland indicators, delineation guidance, and other information that is specific to the arid west region. The USACE and CDFW's definitions of wetlands are described below.

4.1.3.1. USACE Definition of Wetlands

The USACE technical guidelines for defining wetlands are provided in the Supplemental Manual. The USACE Manual was used as a secondary resource. According to the Supplemental Manual, "Indicators and procedures given in the supplement are designed to identify wetlands as defined jointly by the USACE (33 CFR 328.3) and the USEPA (40 CFR 230.3).[3] Wetlands are a subset of the WOTUS that may be subject to regulation under section 404 of the CWA. One key feature of the definition of wetlands is that, under normal circumstances, they support 'a prevalence of vegetation typically adapted to life in saturated soil conditions.' Many WOTUS are unvegetated and thus are excluded from the USACE/USEPA definition of wetlands, although may still be subject to CWA regulations." Wetlands and other special aquatic sites are afforded additional protection in the USACE's section 404 permitting program.

The USACE Manual defines a "wetland" (a subset of WOTUS) as:

> *Those areas that are inundated or saturated by surface or ground water (either fresh or salt) 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."* (33 CFR 328).

According to the USACE Manual, identification of wetlands is based on a three-factor approach involving indicators of wetland hydrology, hydric soil, and hydrophytic vegetation. A feature must normally satisfy all three criteria to be classified as a wetland. These criteria are defined as follows:

1. **Wetland hydrology.** Wetland hydrology is determined to exist if an area is flooded or ponded for 14 or more consecutive days or has a water table 12 inches or less below the soil surface, during

[3] On October 9, 2015, the Sixth Circuit Court of Appeal issued a nationwide stay of the U.S. EPA's revised definition, promulgated on June 29, 2015, entitled the "Clean Water Rule." See 80 Fed. Reg. 37, 054 (June 29, 2015). The Clean Water Rule affected the regulatory interpretation of "Waters of the U.S." as used in the Clean Water Act, 33 U.S.C. section 1251 et seq.

the growing season at a minimum frequency of 5 years in 10 (50% or higher probability). Water saturation largely determines how the soil develops and the types of plant and wildlife communities living in and on the soil. Wetlands may support both aquatic and terrestrial species. The prolonged presence of water creates conditions that favor the growth of specially adapted plants (hydrophytes) and promote the development of characteristic wetland (hydric) soils. Field indicators that are used to determine the presence of wetland hydrology are described in the USACE Manual and Supplemental Manual and include flow data; direct observation of surface water or groundwater; indirect evidence of flow or saturation, such as high water marks, drift lines, or sediment deposits; evidence that the soil is saturated currently or was saturated recently; and vegetation and soil features that indicate contemporary rather than historical wet conditions.

2. **Hydric soils.** Water saturation (hydrology) largely determines how the soil develops in wetlands. The National Technical Committee for Hydric Soils (NTCHS) provides the continuing formulation, evaluation, and application of hydric soil definition, criteria, and indicators. The NTCHS also updates and distributes a national list of hydric soils annually. The definition of hydric soil is a soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part (USDA Soil Conservation Service, 1994). Anaerobic means a situation in which molecular oxygen is virtually absent from the environment. The definition of hydric soils includes soils that developed under anaerobic conditions in the upper part but no longer experience these conditions due to hydrologic alteration such as those hydric soils that have been artificially drained or protected (e.g., by ditches or levees). Most hydric soils exhibit characteristic morphologies that result from repeated periods of saturation or inundation for more than a few days. Saturation or inundation, when combined with microbial activity in the soil, causes the depletion of oxygen. This anaerobiosis promotes certain biogeochemical processes, such as the accumulation of organic matter and the reduction, translocation, or accumulation of iron and other reducible elements. These processes result in distinctive "characteristics" that persist in the soil during both wet and dry periods, making them particularly useful for identifying hydric soils in the field (USDA NRCS, 2006).

   Wetland soil conditions are considered to be present if the soils are hydric or have characteristics that are associated with reducing chemical processes. The USACE Manual also specifies that a hydric soil "may be either drained or undrained, and a drained hydric soil may not continue to support hydrophytic vegetation. Therefore, not all areas having hydric soils will qualify as wetlands. Only when a hydric soil supports hydrophytic vegetation and the area has indicators of wetland hydrology may the soil be referred to as a wetland soil." Field indicators of wetland soil conditions are described in the USACE Manual and Supplemental Manual and include a range of criteria for color and mottling.

3. **Hydrophytic vegetation.** The USACE Manual defines hydrophytic vegetation as the community of macrophytes that occurs in areas where inundation or soil saturation is either permanent or of sufficient frequency and duration to exert a controlling influence on the plant species present. Hydrophytic vegetation is present when the plant community is dominated by species that can tolerate prolonged inundation or soil saturation during the growing season. The first procedure used to determine whether a site contains hydrophytic vegetation is called the "Dominance Test" (Indicator 1). The Dominance Test looks at the wetland indicator status of species that make up the plant community. The wetland indicator status of a plant species is determined by reviewing the most current wetland plant list (USACE, 2023). When more than 50 percent of the dominant plant species across all strata in the plant community are rated obligate wetland (OBL), facultative wetland (FACW), or facultative (FAC), the site contains hydrophytic vegetation. Obligate

vegetation occurs almost always under natural conditions in wetlands. FACW vegetation usually occurs in wetlands but occasionally found in non-wetlands. FAC vegetation is equally likely to occur in wetlands or non-wetlands. If plant community fails the Dominance Test then hydrophytic vegetation can also be identified by using the "Prevalence Index" (Indicator 2) which takes into consideration all plant species in the community, not just a few dominants. In addition, plant morphological adaptations (Indicator 3) can be used to distinguish certain wetland plant communities in the Arid West, when indicators of hydric soil and wetland hydrology are present.

A "parameter" is a characteristic component of a defined unit. The USACE wetland definition is often referred to as a "three parameter definition" because three key parameters (wetland hydrology, hydric soil, and hydrophytic vegetation) must all occur and meet the defined characteristics for a location to be classified as a wetland. Except in certain situations defined in the Supplemental Manual, evidence of a minimum of one positive wetland indicator from each parameter (hydrology, soil, and vegetation) must be found to make a positive wetland determination. Field "indicators" are physical, chemical, or biological features of an area that can be easily observed or assayed and that are usually correlated with the presence of a wetland parameter.

4.1.3.2. CDFW Definition of Wetlands

CDFW uses the USFWS general definition from its wetlands classification system (Cowardin et al., 1979) to define "wetlands" as:

> *[L]ands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. Wetlands must have one or more of the following three attributes:*
>
> - at least periodically, the land supports predominantly hydrophytes;
> - the substrate is predominantly undrained hydric soil; and
> - the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year.

4.2. Water Resources Field Methodology

The field surveys focused on areas that supported aquatic features in the Project area. Additional areas outside the survey area beyond the South Hills Bike Park were evaluated to investigate connecting drainages and assist in determining potential jurisdictional features.

Preliminary jurisdictional determination field surveys were conducted on June 11 and 12, 2025 by Associate Biologists Kaelyn Bridgette, Jose Olvera, and Austin Isakson. Senior Biologist, Sloane Sanchez also accompanied the surveys on June 11. The boundaries of jurisdictional features were delineated within the survey area.

Surveys were conducted by walking the survey area and identifying areas of potential wetlands or other WOTUS based on presence of wetland plants, surface water or saturated soils, and other soil surface features that indicate surface water or saturated conditions (e.g., low spots, darker soils, cracks in the soil surface, biotic crust). Areas identified as potential wetlands or other WOTUS were further investigated using the *USACE Wetlands Delineation Manual* (USACE, 1987) and the most current *Arid West Regional Supplement* (USACE, 2008) wetland delineation methods. Sample points were selected within each plant community (or change in topography) from the potential jurisdictional resource and outward to show the wetland– non- wetland boundary.

All plant names follow The *Jepson Manual: Higher Plants of California* (Hickman, 2012). Wetland types were classified according to the *Cowardin Classification of Wetlands and Deepwater Habitat of the United States* (Cowardin et. al., 1979), which is also used by the USACE for jurisdictional determination.

A narrow pit (24 inches maximum depth) was dug at each sample point to identify indicators of wetland conditions for three parameters: hydrophytic vegetation; hydric soils; and wetland hydrology. Data were recorded on the most current *Wetland Determination Data Form – Arid West Region*.

Representative photographs were taken and are provided in **Appendix B**, *Site Photographs*. Data was recorded on wetland determination data forms for the arid west region (USACE, 2008) and are provided in **Appendix C**, *Wetland Determination Data Forms*.

4.2.1. USACE Wetlands

Jurisdictional wetlands were delineated using a routine determination according to the methods outlined in the USACE Wetland Delineation Manual (1987) and the Arid West Supplement (2008) based on three wetland parameters: dominant hydrophytic vegetation, wetland hydrology, and hydric soils. The three parameters were evaluated at a series of sample points throughout the Glendora South Hills Bike Park Project area. The locations of these sample points were selected at locations judged most likely and least likely to meet wetlands criteria. Soil pits were excavated at these locations to evaluate the presence of hydric soils.

1. **Wetland hydrology.** At each sample location, the presence or absence of wetland hydrology was evaluated by observing indicators of hydrology (USACE, 2008). These indicators are divided into two categories (primary and secondary indicators). The presence of one primary indicator is evidence of wetland hydrology. The presence of two or more secondary indicators can also be evidence of wetland hydrology. The Arid West Supplement includes two additional indicator groups that can be utilized during dry conditions or in areas where surface water and saturated soils are not present including evidence of recent inundation and evidence of soil saturation (USACE, 2008).
2. **Hydric soils.** Soil pits were excavated at each sample location using a shovel. Whenever possible they were excavated to a depth of 20 inches (USACE, 2008). At each soil pit, the soil texture and color were recorded by comparison with a Munsell soil color chart (2009). Any other indicators of hydric soils, such as redoximorphic features, hydrogen sulfide odor, buried organic matter, organic streaking, reduced soil conditions, or low-chroma soils were also recorded.
3. **Hydrophytic vegetation.** At each sample location, the aerial cover of all plant species in each vegetation type was visually estimated. Plant species in each stratum (tree, sapling and shrub, herb, and woody vine) were ranked according to their canopy dominance (USACE, 2008). Species that contributed to a cumulative coverage total of at least 50 percent and any species that comprised at least 20 percent of the total coverage for each stratum were recorded on the Field Data Sheets (50/20 Rule). Wetland indicator status was assigned to each dominant species using the Arid West Region of The National Wetland Plant List (USACE, 2023). If greater than 50 percent of the dominant species from all strata were Obligate, Facultative-wetland, or Facultative species, the criteria for wetland vegetation was met.

4.2.2. Non-wetland Waters of the United States

Non-wetland WOTUS were mapped and delineated in the field based on the location of the OHWM, following guidelines set forth by the *USACE Field Guide to the Identification of the OHWM in the Arid West Region of the United States* (Lichvar & McColley, 2008) and the *Updated Datasheet for the Identification of the OHWM in the Arid West Region of the United States* (Curtis & Lichvar, 2010).

The USACE defines the OHWM as:

> *…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* (33 CFR 328.3[e]).

USACE jurisdiction extends laterally landward of the OHWM to include all adjacent wetlands, wherever such adjacent wetlands are present. If and when wetlands were identified, WOTUS were delineated beyond the OHWM to the limits of the adjacent wetlands.

4.2.3. CDFW Jurisdictional Waters

CDFW jurisdiction applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state. The CDFW's regulatory authority, under §§ 1600-1616 of the California Fish and Game Code, extends to include riparian habitat supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. CDFW jurisdiction was delineated to the top of the banks and/or to the edge of wetlands associated with the river, whichever is wider.

4.2.4. RWQCB Jurisdictional Waters

Generally, the areas within the drainages subject to RWQCB jurisdiction pursuant to section 401 of the CWA were determined to match those areas of USACE jurisdiction (WOTUS).

SECTION 5. RESULTS

5.1. Climate/Hydrology

The Glendora South Hills Bike Park lies within the San Gabriel River watershed (HUC 12 180701050203), situated in a Mediterranean foothill climate zone. The area experiences hot, dry summers and mild, wet winters, with average annual precipitation around 16–22 inches, most falling between late October and April. During summer months, especially June, rainfall is exceedingly rare, Glendora typically sees only 0.0 to 0.16 inches per month, with 1% chance of rainfall on any given day (California State Water Resources Control Board, 2016).

The site was surveyed on June 11 and 12, 2025, during peak summer conditions. Temperature data indicate average highs of 89 and 91 °F and lows of 64 and 66 °F in mid-June. Sunshine was abundant (~12 hours/day), and the weather was stable and dry, providing ideal conditions for observing upland versus wetland indicators.

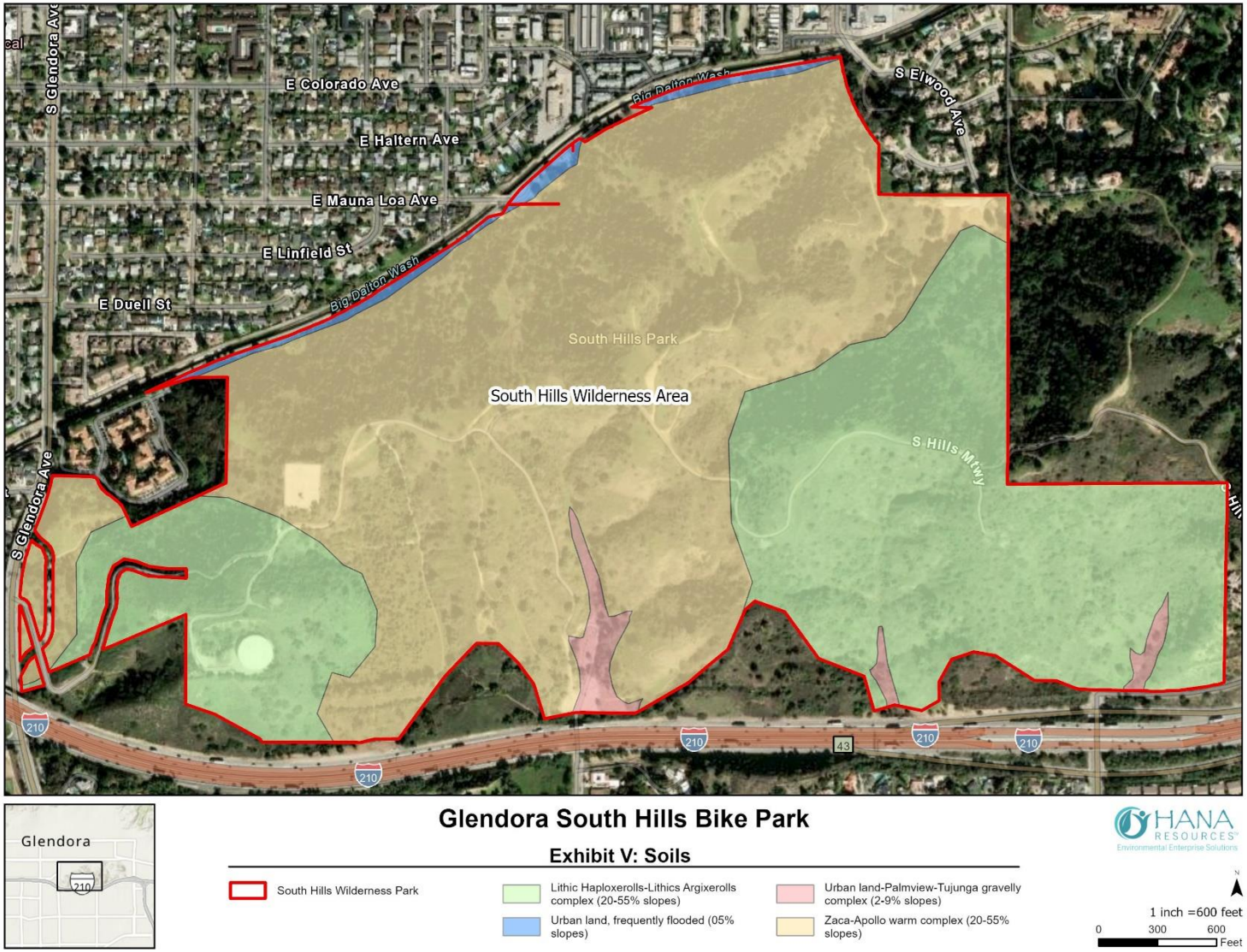
These June conditions resulted in dry soils with no evidence of recent saturation or ponding, and upland vegetation communities showed no sign of hydrophytic species. The lack of rainfall in the weeks preceding the survey (last rainfall was April 2025) and the dryness during the visit confirm that temporary wetland indicators, if present during wetter seasons, were not active at the time of assessment.

This climate and site condition data are essential for evaluating potential wetland features and suggest that field indicators of hydric soils, hydrophytic vegetation, and wetland hydrology may be difficult to observe or less pronounced during surveys conducted in the summer season.

5.2. Soils

The dominant soil types in the Project area are Zaca-Apollo, warm complex and Lithic Haploxerolis-Lithic Agrixerolls complex (**Exhibit V**, *Soils*). These soils, both occurring on 20 to 55 percent slopes, are well drained with high to very high runoff potential and are not classified as hydric (USDA 2024). The Zaca component consists of clay derived from colluvium and/or residuum weathered from sandstone and siltstone, while the Apollo, warm component is clay loam from similar parent materials. The Lithic Haploxerolls and Lithic Argixerolls components are composed of slightly decomposed plant material and loam or sandy loam, respectively, with volcanic rock-derived residuum as the parent material. These soils occur at elevations ranging from 20 to 2,380 feet, with a mean annual precipitation of 14 to 25 inches and mean annual air temperature between 62 and 66°F.

Exhibit V: Soils



5.3. Wetland And Jurisdictional Determination

The entire survey area is located within the San Gabriel River Watershed. A total of 5.39 acres of potential USACE-defined and protected wetlands and WOTUS were identified within the Project area.

A total of nine (9) wetlands and six (5) streams were investigated on the project site. A summary of observation points where features (survey points/pits) were examined are provided in **Exhibit VI**, *Survey Points*. Acreages for NWI defined wetlands are below in **Table 1***, Features and Acreages*. The NHD does not include acreage data for mapped ephemeral streams; therefore, acreage estimates for these features have been excluded.

Table 1. Features and Acreages

Feature Name	Survey Point	Latitude	Longitude	Acreage
Ephemeral Stream	NW-1	34.12257	-117.85786	-
Palustrine Forested Temporarily Flooded (PFOA)	NW-2A	34.12399329	-117.85484376	0.36
Palustrine Forested Temporarily Flooded (PFOA)	NW-2B	34.12399329	-117.85525773	0.36
Palustrine Forested Seasonally Saturated (PFOB)	NW-3	34.12527896	-117.85465251	0.59
Palustrine Forested Temporarily Flooded (PFOA)	NW-4	34.12512306	-117.85434051	0.35
Ephemeral Stream	NW-5A	34.12563	-117.85123	-
Ephemeral Stream	NW-5B	34.1245078	-117.85241316	-
Ephemeral Stream	NW-6	34.1243016	-117.85122788	-
Palustrine Scrub-shrub Temporarily Flooded (PSSA)	NW-7	34.12185	-117.85334	0.57
Palustrine Scrub-shrub Temporarily Flooded (PSSA)	SW-1A	34.12184821	-117.85601491	0.58
Palustrine Scrub-shrub Temporarily Flooded (PSSA)	SW-1B	34.12097855	-117.85372123	0.58
Palustrine Scrub-shrub Temporarily Flooded (PSSA)	SW-2A	34.12091	-117.85103	1.00
Palustrine Scrub-shrub Temporarily Flooded (PSSA)	SW-2B	34.12148728	-117.85031153	1.00
Ephemeral Stream	SW-2C	34.12195	-117.85053	-
			Total	**5.39**

Exhibit VI: Survey Points

Ephemeral Stream (NW-1)

NW-1, located in the northwestern section of the Project area, is mapped as an ephemeral stream located on a steep slope, but field evaluation indicates that it does not meet the criteria for a jurisdictional wetland under the 1987 USACE Wetlands Delineation Manual and the Arid West Regional Supplement. Although the NHD suggests a surface hydrologic connection between NW-1 and the nearby Big Dalton Wash, no physical connection was observed in the field. The feature appears to be isolated, lacking any defined channel or hydrologic continuity to adjacent jurisdictional waters. As such, the area does not provide a significant nexus and is therefore not potentially subject to federal or state jurisdiction.

Vegetation at the site is not hydrophytic. The plant community does not exhibit dominance by obligate wetland, facultative wetland, or even facultative species. Instead, the vegetation consists entirely of upland species, and the site fails the Dominance Test (0% hydrophytic vegetation) and does not meet the Prevalence Index threshold, indicating that hydric vegetation is not supported.

Due to the steep topography, absence of sustained surface water or saturation, and lack of a hydrologic connection to a regulated waterbody, NW-1 is not considered a jurisdictional wetland despite its initial classification as an ephemeral wetland. Due to the steep slope, surface water at this location would not be expected to pond or persist, and there is no evidence of saturation or wetland hydrology. Considering these conditions, a wetland determination data form was not completed for NW-1, as the topographic setting clearly precludes the development of wetland hydrology. Based on the lack of hydrophytic vegetation, hydric soils, and wetland hydrology, NW-1 does not satisfy any of the three required wetland criteria and is not considered a jurisdictional wetland.

Palustrine Forested Temporarily Flooded (PFOA) (NW-2A)

PFOA NW-2A is in the northwestern section of the Project area. This sampling point is one of two for this PFOA watershed. This is classified by the NWI as a temporarily flooded floodplain dominated by forested vegetation. This watershed contains 0.36 acres of freshwater forested/scrub wetland habitat. There is no connection to the potential WOTUS, the Big Dalton Wash, within the Glendora South Hills Bike Park. As such, the area does not provide a significant nexus and is therefore not potentially subject to federal or state jurisdiction.

Although the NWI maps the area as PFOA, site-specific data indicate that the area does not meet the criteria for a jurisdictional wetland. The evaluation found that the site lacks all three required wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. Furthermore, the NHD maps the area as having a connection to the Big Dalton Wash; however, upon further investigation this was not observed.

Vegetation within the sampling plot includes California walnut *(Juglans californica)*, coast live oak (*Quercus agrifolia*), and blue elderberry (*Sambucus cerulea*) in the tree stratum, with poison oak (*Toxicodendron diversilobum*) in the shrub stratum. These species are all classified as obligate upland (UPL) or facultative upland (FACU) and do not indicate wetland conditions. The vegetation failed both the Dominance Test (0% hydrophytic species) and the Prevalence Index Test, which returned a score of 4.31, well above the ≤3.0 threshold for wetland vegetation. As such, the plant community does not meet the criteria for hydrophytic vegetation.

Soils at the site are mapped as Zaca-Apollo, warm complex, which are not listed as hydric by the USDA NRCS. Field observations further support this classification. The surface horizon (0–5 inches) consists of sandy loam with a 10YR 3/2 matrix color (99%), and the 5-to-10-inch horizon contains loam with a 10YR 4/3 matrix and a minor presence (1%) of redox concentrations (5YR 4/6). These characteristics do not meet any of the hydric soil indicators outlined in the Regional Supplement. Additionally, a restrictive rocky layer was encountered at 10 inches, but this does not contribute to a hydric classification.

Wetland hydrology indicators were not observed during the investigation. The site lacked surface water, saturation within the upper 12 inches, or any primary or secondary indicators of hydrology such as oxidized rhizospheres, water-stained leaves, or sediment deposits. Therefore, the site does not meet the criteria for wetland hydrology.

In conclusion, although the area is mapped by the NWI as a forested wetland, it does not meet the three-parameter criteria for a jurisdictional wetland. It lacks hydrophytic vegetation, hydric soils, and wetland hydrology, and is therefore not considered a wetland under current USACE guidelines.

Palustrine Forested Temporarily Flooded (PFOA) (NW-2B)

PFOA NW-2B is in the northwestern section of the Project area. This sampling point is one of two for this PFOA watershed. This is classified by the NWI as a temporarily flooded floodplain dominated by forested vegetation. This watershed contains 0.36 acres of freshwater forested/scrub wetland habitat. There is no connection to the potential WOTUS, the Big Dalton Wash, within the Glendora South Hills Bike Park. As such, the area does not provide a significant nexus and is therefore not potentially subject to federal or state jurisdiction.

Although the NWI classifies the area as PFOA, site-specific data demonstrate that the area does not meet the criteria for a jurisdictional wetland. The site lacks all three required parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. Furthermore, the NHD maps the area as having a connection to the Big Dalton Wash; however, upon further investigation this was not observed.

The vegetation consists of toyon (*Heteromeles arbutifolia*), California walnut, coast live oak, and blue elderberry in the tree stratum. All species observed are classified as obligate upland (UPL) or facultative upland (FACU), and the vegetation fails both the Dominance Test (0% hydrophytic species) and the Prevalence Index Test, which returned a value of 5.0. As such, the site does not support a hydrophytic plant community.

Soils at the site are mapped as Zaca-Apollo, warm complex, which are not classified as hydric by the USDA NRCS. Field observations are consistent with this classification. The surface horizon (0–5 inches) consists of clay loam with a 10YR 3/2 matrix color, and the 5-to-10-inch horizon is clay loam with a 7.5YR 3/2 matrix. No redoximorphic features or other hydric soil indicators were observed. A restrictive rocky layer was encountered at approximately 12 inches, but this does not alter the non-hydric classification of the profile.

No indicators of wetland hydrology were present at the time of investigation. The site lacked evidence of surface water, saturation within the upper 12 inches, or any primary or secondary indicators of wetland hydrology. Therefore, the site does not meet the hydrology criterion for wetland determination.

In conclusion, while the area is mapped by the NWI as a forested wetland, the site lacks hydrophytic vegetation, hydric soils, and wetland hydrology. Based on these findings, the area is not considered a jurisdictional wetland under current USACE guidance.

Palustrine Forested Seasonally Saturated (PFOB) (NW-3)

PFOB NW-3 is in the northwestern section of the Project area. This watershed contains 0.59 acres of freshwater forested/scrub wetland habitat. This is classified by the NWI as a seasonally flooded floodplain dominated by forested vegetation. There is no connection to the potential WOTUS, the Big Dalton Wash, within the Glendora South Hills Bike Park. As such, the area does not provide a significant nexus and is therefore not potentially subject to federal or state jurisdiction.

Although the NWI maps the area as PFOB, field data collected at the site demonstrate that it does not meet the criteria for jurisdictional wetlands. Specifically, the site fails to meet all three required wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology. Furthermore, the NHD maps the

area as having a connection to the Big Dalton Wash; however, upon further investigation this was not observed.

Vegetation within the plot includes Shamel ash (*Fraxinus uhdei*) and coast live oak in the tree stratum, and toyon and spiny redberry (*Rhamnus crocea*) in the shrub stratum. All observed species are obligate upland (UPL) or facultative upland (FACU) species. The vegetation fails both the Dominance Test (0% hydrophytic species) and the Prevalence Index Test, which produced a value of 5.0, indicating that the site does not support a hydrophytic plant community.

Soils at the site are mapped as Zaca-Apollo, warm complex, which are not listed as hydric by the USDA NRCS. Field data confirm the absence of hydric soil indicators. The upper 0 to 4 inches consists of loam with a matrix color of 10YR 4/3(95%) and 5% redox concentrations (7.5YR 6/6), while the 4-to-8-inch layer consists of loam with a 10YR 5/3 matrix (97%) and 3% redox concentrations (7.5YR 6/8). The observed redox features are sparse and do not meet the thresholds required by any applicable hydric soil indicators. A restrictive rocky layer was encountered at 8 inches, preventing further excavation.

No evidence of wetland hydrology was observed during the site visit. The site did not exhibit any primary or secondary indicators of hydrology, including saturation, surface water, or other signs such as oxidized rhizospheres or drift deposits. Therefore, the site does not meet the hydrology criteria.

In summary, although the area is mapped by the NWI as a forested, seasonally flooded wetland, it does not meet the hydrophytic vegetation, hydric soil, or wetland hydrology criteria required to be classified as a jurisdictional wetland. Based on the field data, the area is not considered a wetland under current USACE guidelines.

Palustrine Forested Temporarily Flooded (PFOA) (NW-4)

PFOA NW-4 is in the northwestern section of the Project area. This watershed contains 0.35 acres of freshwater forested/scrub wetland habitat. This is classified by the NWI as a seasonally flooded floodplain dominated by forested vegetation. There is no connection to the potential WOTUS, the Big Dalton Wash, within the Glendora South Hills Bike Park. As such, the area does not provide a significant nexus and is therefore not potentially subject to federal or state jurisdiction.

Although the National Wetlands Inventory classifies the area as PFOA (Palustrine, Forested, Temporarily Flooded), site-specific investigation confirms that the area does not meet the criteria for a jurisdictional wetland. The site lacks all three required wetland indicators: hydrophytic vegetation, hydric soils, and wetland hydrology. Furthermore, the NHD maps the area as having a connection to the Big Dalton Wash, however upon further investigation this was not observed.

Vegetation within the plot includes coast live oak and toyon in the tree stratum, and toyon and spiny redberry in the shrub stratum. All observed species are obligate upland (UPL) or facultative upland (FACU) and the site fails both the Dominance Test (0% hydrophytic species) and the Prevalence Index Test (value of 5.0). Therefore, the site does not support a hydrophytic plant community.

Soils are mapped as Zaca-Apollo, warm complex, which are not considered hydric. Field data confirms this classification. The upper 0 to 4 inches consists of loam with a matrix color of 10YR 3/2, and the 4-to-9-inch loamy sand layer has a matrix color of 10YR 3/3; no redoximorphic features were observed. Rocks a few inches in diameter were encountered within the top two inches, and a restrictive rocky layer at 9 inches prevented further excavation. No hydric soil indicators were identified.

Hydrological indicators were also absent. The site exhibited no signs of saturation, ponding, or surface water, and no primary or secondary indicators of wetland hydrology were present.

In conclusion, although mapped as a temporarily flooded forested wetland (PFOA), the site lacks hydrophytic vegetation, hydric soils, and wetland hydrology. Based on the field data, this area does not qualify as a jurisdictional wetland under current USACE guidelines.

Ephemeral Stream (NW-5A)

NW-5A, located in the northwestern section of the Project area, is identified by the NHD as an ephemeral stream, but field assessment confirms that it does not meet the criteria for a jurisdictional wetland. The feature is isolated, located on a steep slope, and is not situated within a hydrologic corridor or connected to any mapped jurisdictional drainage. There is no connection to the potential WOTUS, the Big Dalton Wash, within the Glendora South Hills Bike Park. As such, the area does not provide a significant nexus and is therefore not potentially subject to federal or state jurisdiction.

The area is characterized by oak woodland habitat, dominated by mature coast live oak and other large oaks. The understory includes spiny redberry, toyon, poison oak, and desert willow (*Chilopsis linearis*). The ground surface is primarily covered in leaf litter, with limited herbaceous vegetation and a sparse presence of new shrubs. All observed species are obligate upland (UPL) or facultative upland (FACU), and the site does not support hydrophytic vegetation. It fails both the Dominance Test and the Prevalence Index Test, confirming that the plant community is not characteristic of wetlands.

No indicators of hydric soils or wetland hydrology were observed during the site evaluation. The steep topography precludes surface water retention or saturation, and no evidence of ponding or water-dependent features was present. Due to the clear absence of all three wetland criteria, a wetland determination data form was not completed for NW-5A.

In conclusion, field evidence indicates that this is a non-jurisdictional upland feature. It lacks hydrophytic vegetation, hydric soils, and wetland hydrology, and therefore does not qualify as a jurisdictional wetland under current USACE guidance.

Ephemeral Stream (NW-5B)

NW-5B, located in the northwestern section of the Project area, is mapped as an ephemeral stream but field conditions indicate it does not meet the criteria for a jurisdictional wetland. The feature is located on a steep slope and is vegetated with a mature oak woodland community, which typically consists of upland species. There is no connection to the potential WOTUS, the Big Dalton Wash, within the Glendora South Hills Bike Park. As such, the area does not provide a significant nexus and is therefore not potentially subject to federal or state jurisdiction.

The overstory is dominated by coast live oak, with limited understory vegetation due to shading and a ground surface composed largely of leaf litter and duff. These conditions are typical of upland oak woodland ecosystems and are not supportive of hydrophytic vegetation. Although full species data is not provided, based on habitat type and slope, the area would be expected to fail both the Dominance Test and the Prevalence Index Test, indicating the absence of a hydrophytic plant community.

No indicators of hydric soils or wetland hydrology were present. The steep topography prevents surface water retention and inhibits saturation, and no signs of ponding, saturation, or wetland hydrology were observed. Given the clear absence of hydrophytic vegetation, hydric soils, and wetland hydrology, a wetland determination data form was not completed for NW-5B.

In conclusion, while NW-5B is mapped as an ephemeral wetland, field evidence shows it is an upland feature with no hydrophytic vegetation, no hydric soils, and no wetland hydrology, and therefore does not qualify as a jurisdictional wetland under current USACE guidance.

Ephemeral Stream (NW-6)

NW-6, located in the northwestern section of the Project area, is mapped as an ephemeral drainage and is situated on a moderate slope within a mixed chaparral vegetation community. A mapped PFOA feature from the NWI is shown to connect to and pass through the area. There is no connection to the potential WOTUS, the Big Dalton Wash, within the Glendora South Hills Bike Park. As such, the area does not provide a significant nexus and is therefore not potentially subject to federal or state jurisdiction.

The dominant vegetation consists of chaparral species, including woody shrubs and small trees commonly associated with upland environments. Although a full species list was not provided, the mixed chaparral community typically consists of obligate upland (UPL) and facultative upland (FACU) species, and no indicators of hydrophytic vegetation were noted. The area would therefore be expected to fail the Dominance and Prevalence Index Tests, indicating a plant community not characteristic of wetlands.

Although a PFOA feature is mapped through the area, field conditions indicate that NW-6 functions as an ephemeral drainage. The site lacks evidence of sustained surface water, saturation, or ponding, and no indicators of wetland hydrology were observed. No signs of hydric soils were documented. The moderate slope further reduces the potential for water retention necessary to support wetland conditions. Due to the clear absence of hydrophytic vegetation, hydric soils, and wetland hydrology, a wetland determination data form was not completed for NW-6.

In summary, although NW-6 is mapped with a PFOA connection and identified as an ephemeral wetland, the slope, vegetation type, and lack of apparent wetland indicators suggest that it likely does not meet the criteria for a jurisdictional wetland.

Palustrine Scrub-shrub Temporarily Flooded (PSSA) (NW-7)

PSSA NW-7, located in the northwestern section of the Glendora South Hills Bike Park project area, is classified as a 0.57-acre temporarily flooded scrub-shrub wetland. There is no connection to the potential WOTUS, the Big Dalton Wash, within the Glendora South Hills Bike Park. As such, the area does not provide a significant nexus and is therefore not potentially subject to federal or state jurisdiction.

Although mapped as a PSSA by the NWI, the site is vegetated with a combination of coastal sage scrub and mixed chaparral, plant communities that are well-documented as upland in nature. Dominant species observed include California sagebrush *(Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*), both of which are obligate upland (UPL) species adapted to dry, well-drained conditions. No obligate wetland (OBL), facultative wetland (FACW), or even facultative (FAC) species were observed. Given the composition of the vegetation, the site clearly fails both the Dominance Test and the Prevalence Index Test, indicating that hydrophytic vegetation is not present.

Additionally, no indicators of hydric soils or wetland hydrology were observed. The site's slope and vegetation type further preclude conditions necessary for saturation or ponding. The mapped PSSA classification suggesting temporary inundation does not reflect field conditions.

Due to the clear dominance of upland vegetation and the absence of any indicators of hydrophytic vegetation, hydric soils, or wetland hydrology, a wetland determination data form was not completed for PSSA NW-7.

In conclusion, while the area is mapped as a temporarily flooded scrub-shrub wetland, field evidence confirms that PSSA NW-7 is an upland feature and does not meet the criteria for a jurisdictional wetland.

Palustrine Scrub-shrub Temporarily Flooded (PSSA) (SW-1A)

PSSA SW-1A is in the southwestern section of the Project area. This watershed contains 0.58 acres of freshwater forested/scrub wetland habitat. This is classified as a temporarily flooded scrub-shrub wetland. There is no connection to the potential WOTUS, the Big Dalton Wash, within the Glendora South

Hills Bike Park. As such, the area does not provide a significant nexus and is therefore not potentially subject to federal or state jurisdiction.

Although the NWI classifies the area as PSSA, field data collected on-site confirm that the area does not meet the criteria for a jurisdictional wetland. Specifically, the site fails to meet all three required parameters: hydrophytic vegetation, hydric soils, and wetland hydrology.

Vegetation within the plot includes California walnut, Peruvian pepper tree (*Schinus molle*), and blue elderberry in the tree stratum; Italian thistle (*Carduus pycnocephalus*) in the shrub stratum; and yellow starthistle (*Centaurea solstitialis*) in the herb stratum. All observed species are obligate upland (UPL) or facultative upland (FACU), and the site fails both the Dominance Test (0% hydrophytic species) and the Prevalence Index Test (value of 4.2), indicating that the vegetation community is not hydrophytic.

Soils are mapped as Zaca-Apollo, warm complex, which are not considered hydric. Field observations are consistent with this classification. The upper 0 to 7 inches consist of clay loam with a matrix color of 10YR 3/2, and the 8-to-21-inch horizon is also clay loam with a matrix color of 10YR 4/3. No redoximorphic features or other indicators of hydric soil were present.

No signs of wetland hydrology were present during the site visit. The area lacked surface water, evidence of soil saturation within the upper 12 inches, and any primary or secondary indicators of wetland hydrology. Given that the site clearly fails to meet all three parameters, a wetland determination data form was not completed for PSSA SW-1A.

In conclusion, although the area is mapped by NWI as a temporarily flooded scrub-shrub wetland (PSSA), it does not meet the vegetation, soil, or hydrology criteria required to qualify as a jurisdictional wetland under current USACE guidance.

Palustrine Scrub-shrub Temporarily Flooded (PSSA) (SW-1B)

PSSA SW-1B is in the southern section of the Project area. This watershed contains 0.58 acres of freshwater forested/scrub wetland habitat. This is classified as a temporarily flooded scrub-shrub wetland. There is no connection to the potential WOTUS, the Big Dalton Wash, within the Glendora South Hills Bike Park. As such, the area does not provide a significant nexus and is therefore not potentially subject to federal or state jurisdiction.

Although the NWI classifies the site as PSSA (Palustrine, Scrub-Shrub, Temporarily Flooded), field data demonstrate that the area does not meet the criteria for a jurisdictional wetland. The site fails to satisfy all three required parameters: hydrophytic vegetation, hydric soils, and wetland hydrology.

Vegetation within the plot consists of blue elderberry and tree tobacco (*Nicotiana glauca*) in the tree stratum, and shortpod mustard (*Hirschfeldia incana*) in the shrub stratum. While blue elderberry is a facultative species, the site does not pass the Dominance Test (only 50% hydrophytic species) and fails the Prevalence Index Test with a score of 4.89, indicating the plant community is not hydrophytic overall.

The soil is mapped as Zaca-Apollo, warm complex, which is not classified as hydric. Field investigation supports this classification. The upper 0 to 6 inches consist of clay loam with a matrix color of 10YR 3/3, and the 7-to-12-inch layer consists of clay loam with a 10YR 4/3 matrix and 2% redox concentrations (5YR 4/6). The limited extent of redox features does not meet the threshold for any hydric soil indicators.

No hydrology indicators were present at the time of the site visit. There was no evidence of surface water, soil saturation, or any primary or secondary indicators of wetland hydrology.

In summary, although the NWI identifies this location as a temporarily flooded scrub-shrub wetland (PSSA), the site does not meet the necessary vegetation, soil, or hydrology criteria to be classified as a jurisdictional wetland under current USACE guidance.

Ephemeral Stream (SW-2A)

SW-2A, located in the southwestern section of Project area, is mapped as a 1.00-acre ephemeral stream with a connection or overlay to a Palustrine Scrub-Shrub Temporarily Flooded (PSSA) classification in the National Wetlands Inventory. However, field observations indicate the site is dominated by coastal sage scrub (CSS) with some elements of mixed chaparral, typical of upland habitats. The vegetation community includes California sagebrush, shortpod mustard, and laurel sumac (*Malosma laurina*). There is no connection to the potential WOTUS, the Big Dalton Wash, within the Glendora South Hills Bike Park. As such, the area does not provide a significant nexus and is therefore not potentially subject to federal or state jurisdiction.

A well-used trail passes through the area, and large patches of prickly pear cactus (*Opuntia* spp.) are present, further confirming upland characteristics. The site supports a community of entirely upland species, with no observed hydrophytic vegetation. As such, it would be expected to fail the Dominance and Prevalence Index Tests, indicating that the vegetation does not meet wetland criteria.

Despite the ephemeral wetland and PSSA mapping, the site lacks evidence of hydric soils and wetland hydrology. The topography, vegetation, and absence of observable saturation or ponding indicate that the area does not function as a wetland and a determination data form was not completed.

In conclusion, while SW-2A is mapped with ephemeral and PSSA designations, field evidence demonstrates it is a non-jurisdictional upland feature. It does not meet the criteria for a jurisdictional wetland.

Palustrine Scrub-shrub Temporarily Flooded (PSSA) (SW-2B)

PSSA SW-2B is in the southwestern section of the Project area. This watershed contains 1.00 acre of freshwater forested/scrub wetland habitat. This is classified as a temporarily flooded scrub-shrub wetland. There is no connection to the potential WOTUS, the Big Dalton Wash, within the Glendora South Hills Bike Park. As such, the area does not provide a significant nexus and is therefore not potentially subject to federal or state jurisdiction.

Although the NWI classifies this area as PSSA (Palustrine, Scrub-Shrub, Temporarily Flooded), field data collected confirm that the site does not meet the criteria for a jurisdictional wetland. Specifically, the area fails to meet all three required parameters: hydrophytic vegetation, hydric soils, and wetland hydrology.

Vegetation includes blue elderberry, tree tobacco, and laurel sumac in the tree stratum; California sagebrush, poison oak, and California brickellbush (*Brickellia californica*) in the shrub stratum; and fringed twinevine (*Funastrum cynanchoides*), yellow starthistle, and shortpod mustard in the herb stratum. All observed species are obligate upland (UPL) or facultative upland (FACU), and the site fails both the Dominance Test (0% hydrophytic species) and the Prevalence Index Test (value of 4.59), indicating a non-hydrophytic plant community.

The soils are mapped as Lithic Haploxerolls–Lithic Argixerolls complex, which are not considered hydric. Field observations support this designation. The 0-to-14-inch horizon consists of sandy clay loam with a matrix color of 10YR 3/3 and no observable redoximorphic features. A restrictive rocky layer was encountered at 14 to 17 inches, which prevented further sampling. No hydric soil indicators were identified.

Hydrology indicators were absent. The site lacked any observable evidence of saturation, ponding, or other primary or secondary indicators of wetland hydrology.

In conclusion, although the site is mapped as a temporarily flooded scrub-shrub wetland (PSSA), field observations confirm that it does not meet the vegetation, soil, or hydrology criteria required to be classified as a jurisdictional wetland under current USACE guidance.

Ephemeral Stream (SW-2C)

SW-2C, located in the southwestern section of the Project area, is mapped as an ephemeral stream with a potential overlay or proximity to a Palustrine Scrub-Shrub Temporarily Flooded (PSSA) feature per the National Wetlands Inventory. However, field conditions indicate that the site is dominated by coastal sage scrub with some mixed chaparral elements, consistent with an upland environment. There is no connection to the potential WOTUS, the Big Dalton Wash, within the Glendora South Hills Bike Park. As such, the area does not provide a significant nexus and is therefore not potentially subject to federal or state jurisdiction.

The plant community includes species such as California sagebrush, laurel sumac, shortpod mustard, and patches of prickly pear cactus, further supporting an upland characterization. The vegetation is composed entirely of obligate upland (UPL) and facultative upland (FACU) species, and the site fails both the Dominance Test and the Prevalence Index Test, indicating it does not support hydrophytic vegetation. No evidence of hydric soils or wetland hydrology was observed during the field assessment. The site is situated on sloped terrain and lacks indicators such as soil saturation, ponding, or primary/secondary hydrologic markers. Given the absence of hydrophytic vegetation, hydric soils, and wetland hydrology, a wetland determination data form was not completed for SW-2C.

In conclusion, while the area is mapped as an ephemeral or temporarily flooded scrub-shrub wetland, field evidence indicates it does not meet the vegetation, soil, or hydrology criteria required for a jurisdictional wetland. Therefore, this area should be considered a non-jurisdictional upland feature.

5.3.1. Summary of Results for Survey Points

While a total of 14 points were examined in the field, wetland delineation forms were completed for 7 of these locations where conditions warranted a formal assessment of wetland parameters. The remaining 7 survey points were photo only observations and did not include a wetland data sheet, as conditions did not warrant a formal assessment of wetland parameters, as described in Section 5.3. The results of the field survey and corresponding survey points are summarized in **Table 2***, Summary of Results for Survey Points.* The wetland delineation forms are provided in **Appendix C**, *Wetland Determination Data Forms.*

Table 2. Summary of Results for Survey Points

Survey Point	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Photo Only	Wetland
NW-1				X	No
NW-2A	No	No	No		No
NW-2B	No	No	No		No
NW-3	No	No	No		No
NW-4	No	No	No		No
NW-5A				X	No
NW-5B				X	No
NW-6				X	No
NW-7				X	No
SW-1A	No	No	No		No
SW-1B	No	No	No		No
SW-2A				X	No
SW-2B	No	No	No		No
SW-2C				X	No

SECTION 6. CONSERVATION MEASURES

To avoid or minimize potential impacts within the Project area, a variety of conservation measures are recommended for implementation throughout project design, construction, and post-construction maintenance. Where feasible, aquatic features, including potential ephemeral drainages and wetland polygons identified during the delineation survey, should be avoided or minimally disturbed through careful trail alignment and siting of infrastructure. During construction, trail crossings should utilize low-impact design methods through trail alignment along the narrowest portion of the streambed and use of elevated stream crossings (i.e. small-span bridge, elevated puncheon) to avoid in-channel grading. If elevated stream crossings cannot be implemented, maintain the natural grade and slope of the streambed during construction to avoid alteration of hydrology. Use of native cobble or armored rock can be used for bank stabilization and to prevent channel incision. Construction activities within or adjacent to potential aquatic resources should be scheduled during the dry season (typically May through October) to reduce the risk of hydrologic disruption and erosion.

If work must occur outside of the dry season (November through April), enhanced sediment and erosion controls should be used (two rows of silt fencing or wattles, sediment trap, etc.). In-channel work should also be limited to low-water or dry conditions. A qualified biologist should be present for all in-channel or adjacent work to inspect erosion controls, ensure permit compliance, and stop work if necessary.

Erosion control measures and stormwater best management practices should be incorporated into construction plans, particularly along slopes that drain toward mapped aquatic features. These may include straw wattles, silt fencing, or stabilized construction entrances to prevent sediment transport. Disturbed soils should be stabilized as soon as practicable following construction through native seed mixes, erosion control blankets, or equivalent methods as approved by agencies. To ensure compliance, a qualified biologist shall conduct monitoring at least once per week during active construction within or adjacent to aquatic features, and within 24 hours following any rainfall event. Monitoring shall include inspection of all erosion and sediment control measures, photo documentation of work areas, and verification of adherence to avoidance and minimization measures. A weekly monitoring report summarizing site conditions, compliance status, and any corrective actions taken shall be submitted to the lead agency and maintained in the project file. The qualified biologist shall have the authority to halt work if non-compliance is observed until corrective measures are implemented.

SECTION 7. POTENITAL PERMITS AND APPROVALS

A Preliminary Jurisdictional Delineation is typically acceptable for CEQA analysis as long as it meets certain standards. It must be prepared in accordance with USACE guidelines, clearly document the absence of WOTUS or state (if that is the conclusion), and be supported by appropriate field data and mapping. Because CEQA requires identification and evaluation of potential impacts to biological and hydrological resources, a well-supported Preliminary Jurisdictional Determination PJD can serve as a sufficient basis for assessing whether project related impacts to jurisdictional features could occur. A project may proceed with CEQA review using a PJD, even without an Approved Jurisdictional Determination (AJD), provided the lead agency is satisfied with the level of detail and documentation included.

Although the current delineation is based on a PJD, the features identified during the June 2025 field survey are considered potentially jurisdictional under federal and state regulatory programs. If required by the lead agency, until an AJD is issued by the USACE, all aquatic features should be treated as potentially subject to the Clean Water Act and California Porter-Cologne Water Quality Control Act for the purposes of environmental review and planning. Should any features be determined to be jurisdictional by the USACE, project activities that involve the placement of fill or excavation within those features may require a Section 404 permit under the CWA. In such cases, a Section 401 Water Quality Certification from the RWQCB would also be required prior to permit issuance.

Similarly, if the project proposes activity within or adjacent to streambeds or riparian features determined to be under the jurisdiction of the CDFW, a Lake and Streambed Alteration Agreement under Section 1602 of the Fish and Game Code may be necessary. In addition, CDFW may provide input regarding impacts to sensitive natural communities, such as coastal sage scrub, or California Rare Plant Rank (CRPR)-ranked species such as Southern California black walnut, even where a formal SAA is not required. Coordination with CDFW early in the process is advised to confirm permit requirements and appropriate mitigation strategies.

From a stormwater management standpoint, the project will likely require coverage under the Construction General Permit (CGP) issued by the SWRCB. This permit requires the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) and ongoing monitoring during the construction phase to control sediment, erosion, and pollutants associated with grading and trail construction.

At the local level, the project may be subject to permits or approvals from the City of Glendora, including grading permits and conformance with hillside development standards, as outlined in the City's General Plan and zoning ordinances. Although no specific ordinance protects coastal sage scrub within the city, projects impacting native vegetation and habitat in the South Hills are expected to demonstrate consistency with the City’s open space and conservation goals. Coordination with the Glendora Planning Division and Glendora Community Conservancy is recommended to ensure project compatibility with long-term land management and open space preservation objectives.

Ultimately, the need for regulatory permits will depend on the final project design, the location of disturbance relative to delineated features, and the outcomes of agency consultations. Proactively addressing these considerations will facilitate compliance and reduce the risk of delays during environmental permitting and review.

SECTION 8. CONCLUSIONS

A total of approximately 5.39 acres of potential jurisdictional features were identified within the 318-acre Project site. The project area is located within the San Gabriel River watershed, which drains to the Pacific Ocean. Wetland and stream features identified during the survey included palustrine forested wetlands, palustrine scrub-shrub wetlands, and ephemeral stream segments, though several features mapped by the NWI and NHD were determined not to meet federal wetland criteria based on field conditions.

The delineated features were isolated and lacked hydrologic connectivity to traditionally navigable waters or significant nexus to the Big Dalton Wash. Field investigations revealed that many NWI-mapped wetlands were dominated by upland plant species and failed to meet one or more of the three key wetland parameters (hydrophytic vegetation, hydric soils, and wetland hydrology). These features were classified as ephemeral or palustrine forested wetlands on NWI and NHD maps but were determined in the field to be upland environments, due to lack of wetland hydrology and dominance of non-hydrophytic vegetation.

While some areas showed evidence of temporary surface water flow during wetter seasons, no saturated soils or standing water were present during the dry-season survey in June and most mapped features lacked evidence of ongoing wetland processes. As a result, the PJD concluded that no jurisdictional wetland features are present within the project area.

SECTION 9. REFERENCES

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APPENDIX A

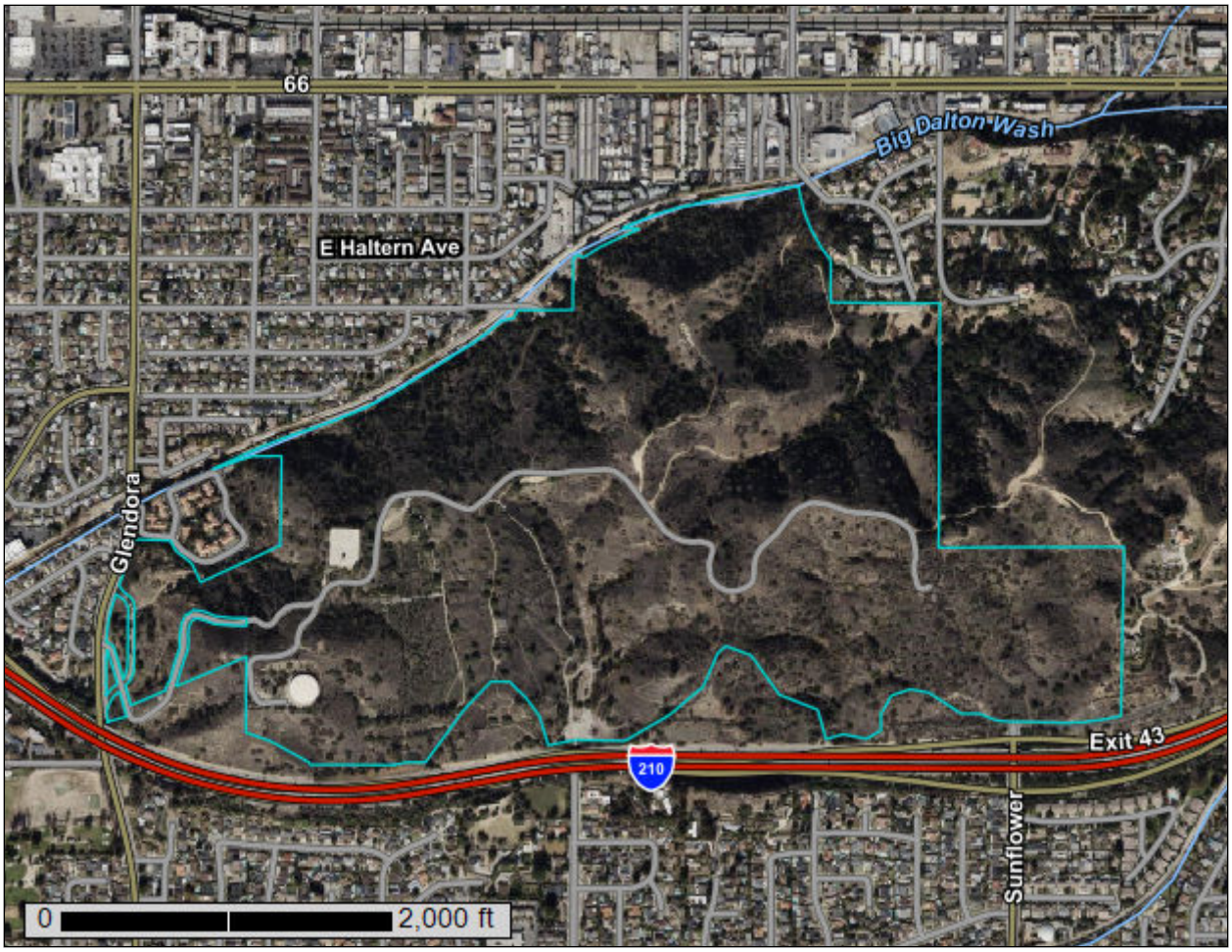
USDA NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY

United States Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Los Angeles County, California, Southeastern Part



October 31, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map (7113 South Hills Bike Park)

Map Scale: 1:10,300 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 150 300 600 900

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Los Angeles County, California, Southeastern Part
Survey Area Data: Version 11, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 20, 2022—Nov 25, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (7113 South Hills Bike Park)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1003	Urban land-Palmview-Tujunga, gravelly complex, 2 to 9 percent slopes	4.7	1.7%
1141	Zaca-Apollo, warm complex, 20 to 55 percent slopes	161.5	58.5%
1146	Lithic Haploxerolls-Lithic Argixerolls complex, 20 to 55 percent slopes	107.5	38.9%
1261	Urban land, frequently flooded, 0 to 5 percent slopes	2.4	0.9%
Totals for Area of Interest		**276.0**	**100.0%**

Map Unit Descriptions (7113 South Hills Bike Park)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not

mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Los Angeles County, California, Southeastern Part

1003—Urban land-Palmview-Tujunga, gravelly complex, 2 to 9 percent slopes

Map Unit Setting

National map unit symbol: 2qds7
Elevation: 200 to 2,240 feet
Mean annual precipitation: 17 to 27 inches
Mean annual air temperature: 63 to 66 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 45 percent
Tujunga, gravelly, and similar soils: 20 percent
Palmview and similar soils: 20 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Landform: Alluvial fans

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: 0 inches to manufactured layer
Runoff class: Very high

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Ecological site: R019XG911CA - Loamy Fan
Hydric soil rating: No

Description of Palmview

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Discontinuous human-transported material over alluvium derived from granite

Typical profile

^A1 - 0 to 4 inches: sandy loam
^A2 - 4 to 14 inches: sandy loam
2C1 - 14 to 28 inches: sandy loam
2C2 - 28 to 79 inches: sandy loam

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained

Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: A
Ecological site: R019XG911CA - Loamy Fan
Hydric soil rating: No

Description of Tujunga, Gravelly

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Discontinuous human-transported material over alluvium derived from granite

Typical profile

^Au - 0 to 6 inches: loamy sand
^A - 6 to 9 inches: gravelly loamy sand
2C1 - 9 to 30 inches: gravelly sand
2C2 - 30 to 79 inches: gravelly sand

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: R019XG912CA - Sandy Fan
Hydric soil rating: No

Minor Components

Soboba

Percent of map unit: 10 percent
Landform: Alluvial fans

Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Tujunga

Percent of map unit: 5 percent
Landform: Alluvial fans
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

1141—Zaca-Apollo, warm complex, 20 to 55 percent slopes

Map Unit Setting

National map unit symbol: 2pt45
Elevation: 220 to 1,630 feet
Mean annual precipitation: 14 to 21 inches
Mean annual air temperature: 64 to 66 degrees F
Frost-free period: 355 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Zaca and similar soils: 50 percent
Apollo, warm, and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Zaca

Setting

Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Colluvium and/or residuum weathered from sandstone and siltstone

Typical profile

A - 0 to 8 inches: clay
Bkss1 - 8 to 21 inches: clay
Bkss2 - 21 to 37 inches: clay
Bk - 37 to 53 inches: clay
Cr - 53 to 63 inches: bedrock

Properties and qualities

Slope: 20 to 55 percent
Depth to restrictive feature: 37 to 69 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F019XG913CA - Loamy Hills <30"ppt
Hydric soil rating: No

Description of Apollo, Warm

Setting

Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Colluvium and/or residuum weathered from sandstone and siltstone

Typical profile

A - 0 to 4 inches: clay loam
Btk1 - 4 to 11 inches: clay loam
Btk2 - 11 to 26 inches: clay loam
Bk - 26 to 45 inches: clay loam
Cr - 45 to 55 inches: bedrock

Properties and qualities

Slope: 20 to 55 percent
Depth to restrictive feature: 31 to 55 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: C
Ecological site: F019XG913CA - Loamy Hills <30"ppt
Hydric soil rating: No

Minor Components

Boades

Percent of map unit: 8 percent
Landform: Hillslopes
Landform position (two-dimensional): Shoulder, backslope, summit
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Balcom

Percent of map unit: 7 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

1146—Lithic Haploxerolls-Lithic Argixerolls complex, 20 to 55 percent slopes

Map Unit Setting

National map unit symbol: 2pt4b
Elevation: 720 to 2,380 feet
Mean annual precipitation: 17 to 25 inches
Mean annual air temperature: 62 to 65 degrees F
Frost-free period: 345 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Lithic haploxerolls and similar soils: 50 percent
Lithic argixerolls and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lithic Haploxerolls

Setting

Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex

Parent material: Residuum weathered from volcanic rock

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 10 inches: loam
R - 10 to 20 inches: bedrock

Properties and qualities

Slope: 20 to 55 percent
Depth to restrictive feature: 8 to 20 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: F019XG913CA - Loamy Hills <30"ppt
Hydric soil rating: No

Description of Lithic Argixerolls

Setting

Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from volcanic rock

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
A - 2 to 7 inches: sandy loam
Bt1 - 7 to 12 inches: sandy loam
Bt2 - 12 to 18 inches: sandy loam
R - 18 to 28 inches: bedrock

Properties and qualities

Slope: 20 to 55 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: F019XG913CA - Loamy Hills <30"ppt
Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 10 percent
Landform: Hillslopes
Landform position (three-dimensional): Side slope
Hydric soil rating: No

Zaca

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

1261—Urban land, frequently flooded, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2myv7
Elevation: 0 to 1,190 feet
Mean annual precipitation: 12 to 24 inches
Mean annual air temperature: 63 to 66 degrees F
Frost-free period: 320 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land, frequently flooded: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land, Frequently Flooded

Setting

Landform: Channels

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: 0 inches to manufactured layer
Runoff class: Very high
Frequency of flooding: Frequent

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Water

Percent of map unit: 5 percent

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APPENDIX B

SITE PHOTOGRAPHS

Photo 1: NW-1, looking down drainage. Proposed trail runs perpendicular to drainage across slope. (34.12257, -117.85786)

Photo 2: NW-2A, looking up drainage, several CA black walnut present. (34.12404, -117.85525)

Photo 3: NW-2A, proposed trail comes down hillside through poison oak into drainage, CA black walnut adjacent. (34.12405, -117.85528)

Photo 4: NW-2B, looking down drainage, several CA black walnut present. (34.12308, -117.85489)

Photo 5: NW-2B, looking down drainage, several CA black walnut present.
(34.12302, -117.85483)

Photo 6: NW-2B, small trail present through drainage, several CA black walnut present.
(34.12301, -117.85484)

Photo 7: NW-3, looking up drainage.
(34.12546, -117.85498)

Photo 8: NW-3, looking up drainage, overview of proposed trail corridor crossing.
(34.12532, -117.85459)

Photo 9: NW-3, looking up drainage, existing trail parallel and runs across the drainage. (34.12543, -117.85486)

Photo 10: NW-3 and NW-4, looking down drainage. (34.12532, -117.85473)

Photo 11: NW-3 and NW-4, looking up drainage.
(34.125929, -117.85460)

Photo 12: NW-3 and NW-4, looking up drainage, overview of proposed trail corridor crossing using existing trail. (34.12521, -117.85460)

Photo 13: NW-3 into NW-4.
(34.12525, -117.85453)

Photo 14: NW-3 and NW-4, where proposed trail crosses drainage.
(34.12522, -117.85459)

Photo 15: NW-3 and NW-4, where proposed trail crosses drainage.
(34.12527, -117.85457)

Photo 16: NW-3 and NW-4, where proposed trail crosses drainage.
(34.12521, -117.85460)

Photo 17: NW-4, looking up drainage, unhoused occurrence in drainage.
(34.12510, -117.85427)

Photo 18: NW-4, looking up drainage, proposed trail crosses drainage.
(34.12515, -117.85441)

Photo 19: NW-4, looking up drainage, proposed trail crosses drainage.
(34.12512, -117.85440)

Photo 20: NW-4, looking up drainage, proposed trail enters drainage from the left hillside.
(34.12492, -117.85390)

Photo 21: NW-4, looking up drainage, proposed trail enters drainage from the right hillside. (34.12495, -117.85399)

Photo 22: NW-4, looking up drainage, unhoused occurrence. (34.12508, -117.85422)

Photo 23: NW-5A. Proposed trail to run perpendicular to the slope.
(34.12563, -117.85123)

Photo 24: NW-5B, looking down drainage, proposed trail to run along vegetation line.
(35.125078, 117.85241316)

Photo 25: NW-6, looking down drainage. Proposed trail runs perpendicular to drainage across slope. (34.1243016, -117.85122788)

Photo 26: NW-7, representative photo of the plant communities in the area. (34.12185, -117.85334)

Photo 27: SW-1A, looking down drainage.
(34.12187, -117.85599)

Photo 28: SW-1A, looking up drainage
(34.12187, -117.85601)

Photo 29: SW-1A, looking across intersection to hillside where trail will pass through.
(34.12188, -117.85602)

Photo 30: SW-1B, looking up drainage.
(34.12097, -117.85379)

Photo 31: SW-1B, looking up drainage, hillside where proposed trail will pass through. (34.12097, -117.85379)

Photo 32: SW-1B, looking up drainage, hillside where proposed trail will pass through. (34.11703, -117.85582)

Photo 33: SW-2A, proposed trail comes down hillside through drainage.
(34.12094, -117.85099)

Photo 34: SW-2A, proposed trail comes down hillside through drainage.
(34.12091, -117.85103)

Photo 35: SW-2B, looking up drainage, proposed trail runs across slope.
(34.12148728, -117.85031153)

Photo 36: SW-2B, looking up drainage.
(34.12148728, -117.85031153)

Photo 37: SW-2B, looking down drainage.
(34.12148728, -117.85031153)

Photo 38: SW-2B, looking down drainage proposed trail to run parallel to CA walnut.
(34.12148728, -117.85031153)

Photo 39: SW-2C, looking down drainage.
(34.12160, -117.84843)

APPENDIX C

WETLAND DETERMINATION DATA FORMS

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: South Hills Bike Park City/County: Glendora / Los Angeles Sampling Date: 6/11/25
Applicant/Owner: City of Glendora State: CA Sampling Point: NW-2A
Investigator(s): KB, JO Section, Township, Range: Section 31, Township North, Range 9 west
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 20-55%
Subregion (LRR): Region C Lat: 34.12899329 Long: -117.85484376 Datum: _____
Soil Map Unit Name: Zaca-Apollo, warm complex NWI classification: PFOA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
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 X
Hydric Soil Present?	Yes _____	No X
Wetland Hydrology Present?	Yes _____	No X

Is the Sampled Area within a Wetland? Yes _____ No X

Remarks: CA under drought conditions, severe drought

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. CA black walnut - Juglans californica	25	X	FACU
2. Coast live oak - Quercus agrifolia	20	X	UPL
3. Blue elder - Sambucus cerulea	5		UPL
4.			
Total Cover:	50		
Sapling/Shrub Stratum			
1. Pacific poison oak - Toxicodendron diversilobum	30	X	FACU
2.			
3.			
4.			
5.			
Total Cover:	30		
Herb Stratum			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % 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: 3 (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	55	x 4 = 220
UPL species	25	x 5 = 125
Column Totals:	80 (A)	345 (B)

Prevalence Index = B/A = 4.31

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50% fail
___ Prevalence Index is ≤3.0[1] fail
___ 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.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:
80 x .5 = 40
80 x .2 = 16

SOIL

Sampling Point: _____

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100	—	—	—	—	SL	
5-10	10YR 4/3	99	5YR 4/6	1	C	M	L	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, 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.

Restrictive Layer (if present):

Type: Rocky

Depth (inches): 10

Hydric Soil Present? Yes _____ No X

Remarks:

Stops giving at 10 inches.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

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

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

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: South Hills Bike Park City/County: Glendora/Los Angeles Sampling Date: 6/11/25

Applicant/Owner: City of Glendora State: CA Sampling Point: NW-2B

Investigator(s): KB, JO Section, Township, Range: Section 31, Township 1 North, Range 9 West

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 20-55%

Subregion (LRR): Region C Lat: 34.12399329 Long: -117.85525773 Datum: _____

Soil Map Unit Name: Zaca - Apollo, worm complex NWI classification: PFOA

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

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

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

Remarks: CA under drought conditions, severe drought

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Toyon - Heteromeles arbutifolia	50	X	UPL
2. CA black walnut - Juglans californica	5		FACU
3. Blue elder - Sambucus cerulea	7		UPL
4. Coast live oak - Quercus cerulea	15	X	UPL
Total Cover:	77		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1.			
2.			
Total Cover:			

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

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 0 (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	5	x 4 = 25
UPL species	72	x 5 = 360
Column Totals:	77 (A)	385 (B)

Prevalence Index = B/A = 5

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50% failed

___ Prevalence Index is ≤3.0[1] failed

___ 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.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

77 x .5 = 38.5

77 x .2 = 15.4

SOIL

Sampling Point: _____

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100	—	—	—	—	CL	
5-10	7.5YR 3/2	100	—	—	—	—	CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, 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.

Restrictive Layer (if present):

Type: Rocky

Depth (inches): 12

Hydric Soil Present? Yes _____ No _____

Remarks:

12 inches - rocky layer

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

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

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

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: South Hills Bike Park City/County: Glendora / Los Angeles Sampling Date: 6/11/25

Applicant/Owner: City of Glendora State: CA Sampling Point: NW-3

Investigator(s): KB, JD Section, Township, Range: Section 31, Township 1 North, Range 9 West

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 20-55%

Subregion (LRR): Region C Lat: 34.1257896 Long: -117.85465251 Datum: _____

Soil Map Unit Name: Zaca - Apollo, warm complex NWI classification: PFOB

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

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

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

Remarks: CA under drought conditions, severe drought
the ponding looked to be present prior to park construction

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Shamel ash - Fraxinus uhdei	15	X	UPL
2. Coast live oak - Quercus agrifolia	80	✓	UPL
3.			
4.			
	95	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15ft)			
1. Toyon - Heteromeles arbutifolia	10	X	UPL
2. Spiny redberry - Rhamnus crocea	20	X	UPL
3.			
4.			
5.			
	30	= Total Cover	

Herb Stratum (Plot size: 5ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum 5ft % 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: 1 (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	125	x 5 = 625
Column Totals:	125 (A)	625 (B)

Prevalence Index = B/A = 5

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50% fail

___ Prevalence Index is ≤3.0[1] fail

___ 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 X

Remarks:
125 x .5 = 62.5
125 x .2 = 25

SOIL

Sampling Point: _____

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/3	95	7.5YR 4/6	5	C	M	L	
4-8	10YR 5/3	97	7.5YR 6/8	3	C	M	L	

[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: Rocky

Depth (inches): 8

Hydric Soil Present? Yes _____ No X

Remarks:

Couldn't dig past 8 inches

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 X Depth (inches): _____

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

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

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: South Hills Bike Park City/County: Glendora / Los Angeles Sampling Date: 6/11/25

Applicant/Owner: City of Glendora State: CA Sampling Point: NW-4

Investigator(s): KB, JO Section, Township, Range: Section 31, Township 1 North, Range 9 wes

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 20-55%

Subregion (LRR): Region C Lat: 34.12512306 Long: -117.85434051 Datum: _____

Soil Map Unit Name: Zaca-Apollo, warm complex NWI classification: PFOA

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

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

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

Remarks: CA under drought conditions, severe drought

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Coast live oak - Quercus agrifolia	10		UPL
2. Toyon - Heteromeles arbutifolia	40	X	UPL
3.			
4.			
Total Cover:	50		
Sapling/Shrub Stratum			
1. Toyon - Heteromeles arbutifolia	10		UPL
2. Spiny redberry - Rhamnus crocea	15	X	UPL
3.			
4.			
5.			
Total Cover:	25		
Herb Stratum			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % 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: 2 (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	75	x 5 = 375
Column Totals:	(A)	(B)

Prevalence Index = B/A = 5

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50% failed

___ Prevalence Index is ≤3.0[1] failed

___ 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.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

75 x .5 = 37.5

75 x .2 = 15

SOIL

Sampling Point: _____

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100	—	—	—	—	L	
4-9	10YR 3/3	100	—	—	—	—	LS	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, 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.

Restrictive Layer (if present):

Type: Rocky

Depth (inches): 9

Hydric Soil Present? Yes _____ No X

Remarks: First two inches, couple inch rocks present

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

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

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

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: South Hills Bike Park City/County: Glendora / Los Angeles Sampling Date: 6/12/25

Applicant/Owner: City of Glendora State: CA Sampling Point: SW 1A

Investigator(s): KB, JO Section, Township, Range: Section 31, Township 1 North, Range 9 West

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 20-55%

Subregion (LRR): Region C Lat: 34.12184821 Long: -117.85601491 Datum: _____

Soil Map Unit Name: Zaca-Apollo, warm complex NWI classification: PFOB

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

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

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

Remarks: CA under drought conditions, severe drought

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. CA black walnut - Juglans californica	50	X	FACU
2. CA pepper tree - Schinus molle	30	X	FACU
3. Blue elder - Sambucus cerulea	10	X	UPL
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. Italian thistle - Carduus pycnocephalus	5		UPL
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Yellow star thistle - Centaurea solstitalis	5		UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % 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: 3 (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	80	x 4 = 320
UPL species	20	x 5 = 100
Column Totals:	100 (A)	420 (B)

Prevalence Index = B/A = 4.2

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50% failed

___ Prevalence Index is ≤3.0[1] failed

___ 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.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

100 x .5 = 50

100 x .2 = 20

SOIL

Sampling Point: _____

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/2	100	—	—	—	—	CL	
8-21	10YR 4/3	100	—	—	—	—	CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, 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.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

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

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

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: South Hills Bike Park City/County: Glendora, Los Angeles Sampling Date: 6/12/25

Applicant/Owner: City of Glendora State: CA Sampling Point: SW 1B

Investigator(s): KB, JO Section, Township, Range: Section 31, Township 1 North, Range 9 West

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 20-55%

Subregion (LRR): Region C Lat: 34.12097855 Long: -117.85372123 Datum: _____

Soil Map Unit Name: Zaca-Apollo, warm complex NWI classification: PSSA

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

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

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

Remarks: CA under drought conditions, severe drought

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Blue elder - Sambucus cerulea	25	X	UPL
2. Tree tobacco - Nicotiana glauca	5		FAC
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. Shortpod mustard - Hirschfeldia incana	90	X	UPL
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1.			
2.			
Total Cover:			

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

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	—	x 1 =
FACW species	—	x 2 =
FAC species	5	x 3 = 15
FACU species	—	x 4 =
UPL species	90	x 5 = 450
Column Totals:	95 (A)	465 (B)

Prevalence Index = B/A = 4.89

Hydrophytic Vegetation Indicators:

__ Dominance Test is >50% failed

__ Prevalence Index is ≤3.0[1] failed

__ 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.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

120 x .5 = 60

120 x .2 = 24

SOIL

Sampling Point: _____

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/3	100	—	—	—	—	CL	
7-12	10YR 3/3	98	5YR 4/6	2	C	M	CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, 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.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

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

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

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: South Hills Bike Park City/County: Glendora / Los Angeles Sampling Date: 6/12/25

Applicant/Owner: City of Glendora State: CA Sampling Point: SW-28

Investigator(s): KB, JO Section, Township, Range: Section 31, Township 1 North, Range 9 West

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 20-55%

Subregion (LRR): Region C Lat: 34.12148728 Long: -117.85031153 Datum: _____

Soil Map Unit Name: Lithic Haploxerolls - Lithic Argixerolls complex NWI classification: PSSA

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

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

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 X	Is the Sampled Area within a Wetland? Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks: CA under drought conditions, severe drought

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Tree Tobacco - Nicotiana glauca	2		FAC
2. Blue Elder - Sambucus cerulea	15		UPL
3. Laurel Sumac - Malosma laurina	5		UPL
4.			
Total Cover:	22		
Sapling/Shrub Stratum			
1. CA Sage brush - Artemisia californica	10		UPL
2. Pacific poison oak - Toxicodendron	7		FACU
3. diversilobum			
4. CA Bricklebush - Brickelia California	5		FACU
5.			
Total Cover:	22		
Herb Stratum			
1. Hartweg's Climbing Milkweed -	15		FACU
2. Funastrum cynanchoides			
3. Yellow Star Thistle - Centaurea solstitialis	7		UPL
4. Shortpod Mustard - Hirschfeldia incana	10		UPL
5.			
6.			
7.			
8.			
Total Cover:	32		
Woody Vine Stratum			
1.			
2.			
Total Cover:			

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

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 0 (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	2	x 3 = 6
FACU species	27	x 4 = 108
UPL species	47	x 5 = 235
Column Totals:	76 (A)	349 (B)

Prevalence Index = B/A = 4.59

Hydrophytic Vegetation Indicators:

__ Dominance Test is >50% failed

__ Prevalence Index is ≤3.0[1] failed

__ 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.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

76 x .5 = 38

76 x .2 = 15.2

SOIL

Sampling Point: _____

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 3/3		—	—	—	—	SCL	
14-17	—	—	—	—	—	—	—	restrictive rocky layer

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, 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.

Restrictive Layer (if present):

Type: Rocky

Depth (inches): 17

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ 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 Plowed Soils (C6)
- ___ 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)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

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

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

Wetland Hydrology Present? Yes _____ No X

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

Remarks: