



December 9, 2022

Tracy Zinn
T&B Planning
3200 El Camino Real, Suite 100
Irvine, CA 92602

SUBJECT: Jurisdictional Delineation for the Rider Street and Patterson Avenue Project,
Located in the Community of Mead Valley, Riverside County, California

Dear Ms. Zinn:

This letter report summarizes our preliminary findings of U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and California Department of Fish and Wildlife (CDFW) jurisdiction for the above-referenced property.¹

The Rider Street and Patterson Avenue Project site, located in the community of Mead Valley in Riverside County [Exhibit 1], comprises approximately 45.45 acres and does not contain any blue-line drainages (as depicted on the U.S. Geological Survey (USGS) topographic map Steele Peak, California [Exhibit 2]). On May 5, September 14, and November 14, 2022, regulatory specialists of Glenn Lukos Associates, Inc. (GLA) examined the Project site to determine the limits of (1) Corps jurisdiction pursuant to Section 404 of the Clean Water Act, (2) Regional Board jurisdiction pursuant to Section 401 of the CWA and Section 13260 of the California Water Code (CWC), and (3) CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code. Enclosed is a 150-scale map [Exhibit 3] that depicts the areas of potential Corps, Regional Board and CDFW jurisdiction. Photographs to document the topography, vegetative communities, and general widths of each of the waters are provided as Exhibit 4. A Soils Map is attached as Exhibit 5 and a wetland data sheet is included as Appendix A.

The Project site contains four ephemeral drainages, referred to herein as Drainages A through D, and a roadside ditch along Rider Street. Drainages within the Project site consist of ephemeral

¹ This report presents our best effort at estimating the subject jurisdictional boundaries using the most up-to-date regulations, written policy, and guidance from the regulatory agencies. Only the regulatory agencies can make a final determination of jurisdictional boundaries.

features that do not connect to further downstream traditional navigable waters. As such, drainages on site are isolated and not subject to Corps jurisdiction.

Potential Regional Board jurisdiction at the site totals approximately 0.14 acre, none of which consists of jurisdictional wetlands.

Potential CDFW jurisdiction at the site totals approximately 0.35 acre, of which approximately 0.13 acre consists of riparian habitat.

I. METHODOLOGY

Prior to beginning the field delineation, a color aerial photograph, a topographic base map of the property, the previously cited USGS topographic map, and a soils map were examined to determine the locations of potential areas of Corps, Regional Board, and CDFW jurisdiction. Suspected jurisdictional areas were field checked for evidence of stream activity and/or wetland vegetation, soils and hydrology. Where applicable, reference was made to the 2008 Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (OWHM Manual)² to identify the width of Corps jurisdiction, and suspected wetland habitats on the site were evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual³ (Wetland Manual) and the 2006 Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Arid West Supplement).⁴ While in the field the potential limits of jurisdiction were recorded with a sub-meter Trimble GPS device in conjunction with a color aerial photograph using visible landmarks. Other data were recorded onto wetland data sheets.

The National Cooperative Soil Survey (NCSS) has mapped the following soil types as occurring in the general vicinity of the project site:

Fallbrook Rocky Sandy Loam, shallow, 8 to 15 Percent Slopes, Eroded

The Fallbrook series consists of deep, well drained soils that formed in material weathered from granitic rocks. These soils are on rolling hills.

² U.S. Army Corps of Engineers. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States

³ Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

⁴ U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

Hanford Coarse Sandy Loam, 2 to 8 Percent Slopes

The Hanford series consists of very deep, well drained soils that formed in moderately coarse textured alluvium dominantly from granite. Hanford soils are on stream bottoms, floodplains, and alluvial fans.

Ramona Sandy Loam, shallow, 2 to 5 Percent Slopes, Eroded

The Ramona series consist of well-drained, very deep sandy loams with a sandy clay loam subsoil formed from granitic alluvium. They are on terraces and alluvial fans.

Ramona Sandy Loam, shallow, 8 to 15 Percent Slopes, Severely Eroded

The Ramona series consist of well-drained, very deep sandy loams with a sandy clay loam subsoil formed from granitic alluvium. They are on terraces and alluvial fans.

II. JURISDICTION

A. Army Corps of Engineers

Pursuant to Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a) as:

- (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
- (2) All interstate waters including interstate wetlands;*
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:
 - (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or*
 - (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or*
 - (iii) Which are used or could be used for industrial purpose by industries in interstate commerce...**

- (4) *All impoundments of waters otherwise defined as waters of the United States under the definition;*
- (5) *Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;*
- (6) *The territorial seas;*
- (7) *Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.*
- (8) *Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.*

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.

In the absence of wetlands, the limits of Corps jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(e) as:

...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

1. Wetland Definition Pursuant to Section 404 of the Clean Water Act

The term “wetlands” (a subset of “waters of the United States”) is defined at 33 CFR 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions.” In 1987 the Corps published the Wetland Manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the Wetland Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the Wetland Manual and Arid West Supplement provide great detail in methodology and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

- More than 50 percent of the dominant plant species at the site must be hydrophytic in nature as published in the most current national wetland plant list;

- Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
- Whereas the Wetland Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with “problematic hydrophytic vegetation,” which require a minimum of 14 days of ponding to be considered a wetland.

2. Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.

Pursuant to Article I, Section 8 of the U.S. Constitution, federal regulatory authority extends only to activities that affect interstate commerce. In the early 1980s the Corps interpreted the interstate commerce requirement in a manner that restricted Corps jurisdiction on isolated (intrastate) waters. On September 12, 1985, the U.S. Environmental Protection Agency (EPA) asserted that Corps jurisdiction extended to isolated waters that are used or could be used by migratory birds or endangered species, and the definition of “waters of the United States” in Corps regulations was modified as quoted above from 33 CFR 328.3(a).

On January 9, 2001, the Supreme Court of the United States issued a ruling on *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.* (SWANCC). In this case the Court was asked whether use of an isolated, intrastate pond by migratory birds is a sufficient interstate commerce connection to bring the pond into federal jurisdiction of Section 404 of the Clean Water Act.

The written opinion notes that the court’s previous support of the Corps’ expansion of jurisdiction beyond navigable waters (*United States v. Riverside Bayview Homes, Inc.*) was for a wetland that abutted a navigable water and that the court did not express any opinion on the question of the authority of the Corps to regulate wetlands that are not adjacent to bodies of open water. The current opinion goes on to state:

In order to rule for the respondents here, we would have to hold that the jurisdiction of the Corps extends to ponds that are not adjacent to open water. We conclude that the text of the statute will not allow this.

Therefore, we believe that the court’s opinion goes beyond the migratory bird issue and says that no isolated, intrastate water is subject to the provisions of Section 404(a) of the Clean Water Act

(regardless of any interstate commerce connection). However, the Corps and EPA have issued a joint memorandum which states that they are interpreting the ruling to address only the migratory bird issue and leaving the other interstate commerce clause nexuses intact.

3. Rapanos v. United States and Carabell v. United States

On June 5, 2007, the EPA and Corps issued joint guidance that addresses the scope of jurisdiction pursuant to the Clean Water Act in light of the Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* ("Rapanos"). The chart below was provided in the joint EPA/Corps guidance.

For sites that include waters other than Traditional Navigable Waters (TNWs) and/or their adjacent wetlands or Relatively Permanent Waters (RPWs) tributary to TNWs and/or their adjacent wetlands, as set forth below, the Corps must apply the "significant nexus" standard.

For "isolated" waters or wetlands, the joint guidance also requires an evaluation by the Corps and EPA to determine whether other interstate commerce clause nexuses, not addressed in the SWANCC decision are associated with isolated features on project sites for which a jurisdictional determination is being sought from the Corps.

The Corps and EPA will assert jurisdiction over the following waters:

- Traditional navigable waters.
- Wetlands adjacent to traditional navigable waters.
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).
- Wetlands that directly abut such tributaries.

The Corps and EPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW:

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

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent or short duration flow).
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The agencies will apply the significant nexus standard as follows:

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

B. Regional Water Quality Control Board

The State Water Resource Control Board and each of its nine Regional Boards regulate the discharge of waste (dredged or fill material) into waters of the United States⁵ and waters of the State. Waters of the United States are defined above in Section II.A and waters of the State are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code 13050[e]).

Section 401 of the CWA requires certification for any federal permit or license authorizing impacts to waters of the U.S. (i.e., waters that are within federal jurisdiction), such as Section 404 of the CWA and Section 10 of the Safe Rivers and Harbors Act, to ensure that the impacts do not violate state water quality standards. When a project could impact waters outside of federal jurisdiction, the Regional Board has the authority under the Porter-Cologne Water Quality Control Act to issue Waste Discharge Requirements (WDRs) to ensure that impacts do not violate state water quality standards. Clean Water Act Section 401 Water Quality Certifications, WDRs, and waivers of WDRs are also referred to as orders or permits.

⁵ Therefore, wetlands that meet the current definition, or any historic definition, of waters of the U.S. are waters of the state. In 2000, the State Water Resources Control Board determined that all waters of the U.S. are also waters of the state by regulation, prior to any regulatory or judicial limitations on the federal definition of waters of the U.S. (California Code of Regulations title 23, section 3831(w)). This regulation has remained in effect despite subsequent changes to the federal definition. Therefore, waters of the state includes features that have been determined by the U.S. Environmental Protection Agency (U.S. EPA) or the U.S. Army Corps of Engineers (Corps) to be “waters of the U.S.” in an approved jurisdictional determination; “waters of the U.S.” identified in an aquatic resource report verified by the Corps upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of “waters of the U.S.” or any current or historic federal regulation defining “waters of the U.S.” under the federal Clean Water Act.

1. State Wetland Definition

The State Board Wetland Definition and Procedures define an area as wetland as follows: *An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.*

The following wetlands are waters of the State:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state;⁶ and*
3. *Artificial wetlands⁷ that meet any of the following criteria:*
 - a. *Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;*
 - b. *Specifically identified in a water quality control plan as a wetland or other water of the state;*
 - c. *Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or*
 - d. *Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):*
 - i. *Industrial or municipal wastewater treatment or disposal,*
 - ii. *Settling of sediment,*
 - iii. *Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,*
 - iv. *Treatment of surface waters,*
 - v. *Agricultural crop irrigation or stock watering,*
 - vi. *Fire suppression,*
 - vii. *Industrial processing or cooling,*

⁶ “Created by modification of a surface water of the state” means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification. It does not include a wetland that is created in a location where a water of the state had existed historically, but had already been completely eliminated at some time prior to the creation of the wetland. The wetland being evaluated does not become a water of the state due solely to a diversion of water from a different water of the state.

⁷ Artificial wetlands are wetlands that result from human activity.

- viii. Active surface mining – even if the site is managed for interim wetlands functions and values,*
- ix. Log storage,*
- x. Treatment, storage, or distribution of recycled water, or*
- xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or*
- xii. Fields flooded for rice growing.⁸*

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.

C. California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which 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.” CDFW's definition of “lake” includes “natural lakes or man-made reservoirs.” CDFW also defines a stream as “a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators.”

It is important to note that the Fish and Game Code defines fish and wildlife to include all wild animals, birds, plants, fish, amphibians, invertebrates, reptiles, and related ecological communities including the habitat upon which they depend for continued viability (FGC Division 5, Chapter 1, section 45 and Division 2, Chapter 1 section 711.2(a) respectively). Furthermore, Division 2, Chapter 5, Article 6, Section 1600 et seq. of the California Fish and

⁸ Fields used for the cultivation of rice (including wild rice) that have not been abandoned due to five consecutive years of non-use for the cultivation of rice (including wild rice) that are determined to be a water of the state in accordance with these Procedures shall not have beneficial use designations applied to them through the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, except as otherwise required by federal law for fields that are considered to be waters of the United States. Further, agricultural inputs legally applied to fields used for the cultivation of rice (including wild rice) shall not constitute a discharge of waste to a water of the state. Agricultural inputs that migrate to a surface water or groundwater may be considered a discharge of waste and are subject to waste discharge requirements or waivers of such requirements pursuant to the Water Board's authority to issue or waive waste discharge requirements or take other actions as applicable.

Game Code does not limit jurisdiction to areas defined by specific flow events, seasonal changes in water flow, or presence/absence of vegetation types or communities.

III. RESULTS

A. Drainage Descriptions

Drainage A

Drainage A originates at the northwestern portion of the Project site where the adjacent residential development to the west, specifically Norrisgrove Drive, currently ends. Runoff from the development accumulates at the end of Norrisgrove Drive and flows onto the Project site. Drainage A is bisected by numerous dirt roads, flows in an easterly direction, and terminates at the northeastern corner of the Project site.

Vegetation associated with the upstream reach of Drainage A includes southern willow scrub, a riparian habitat that consists primarily of sandbar willow (*Salix exigua*). Other plant species in the riparian area include mulefat (*Baccharis salicifolia*) and black willow (*Salix gooddingii*). Upland vegetation associated with Drainage A consists primarily of California buckwheat (*Eriogonum fasciculatum*) with some brittlebush (*Encelia farinosa*) and California sagebrush (*Artemisia californica*).

Drainage B

Drainage B originates near the southwestern portion of the Project site where the adjacent residential development to the west, specifically Sunny Canyon Street, currently ends. Runoff from the development accumulates at the end of Sunny Canyon Street and flows onto the Project site. Drainage B is bisected by numerous dirt roads, flows in a northeasterly direction, and terminates at a shallow impoundment on site.

Vegetation associated with Drainage B consists of upland species, primarily California buckwheat (*Eriogonum fasciculatum*), summer mustard (*Hirschfeldia incana*), ripgut (*Bromus diandrus*), and stinknet (*Oncosiphon piluliferum*). Other species include red brome (*Bromus madritensis* ssp. *rubens*), common fiddleneck (*Amsinckia intermedia*) and coastal heron's bill (*Erodium cicutarium*).

Drainage C

Drainage C originates on site near the southwestern portion of the Project site and is generally associated with runoff from the adjacent dirt roads. It flows in a northeasterly direction and terminates at a shallow impoundment on site. Vegetation associated with Drainage C is upland and similar to the vegetation listed above for Drainage B.

Drainage D

Drainage D originates on site near the southwestern portion of the Project site and is generally associated with runoff from the adjacent dirt road. It flows in a northeasterly direction and terminates at a shallow impoundment on site. Vegetation associated with Drainage D is upland and similar to the vegetation listed above for Drainage B.

Roadside Ditch

The Roadside Ditch originates at the southeastern corner of Rider Street and Patterson Avenue, is associated with runoff from Rider Street, and flows in an easterly direction along the southern edge of Rider Street. Vegetation associated with the Roadside Ditch consists of non-native grasses with overhanging Peruvian pepper trees (*Schinus molle*).

B. Corps Jurisdiction

Drainages on site consist of ephemeral features that terminate on site and do not connect to any downstream jurisdictional waters. Drainages A and B originate on site directly as a result of runoff from the adjacent residential development. Drainages C and D also originate on site and are associated with runoff from adjacent dirt roads. As such, the drainage features within the Project site are isolated and would not be subject to Corps jurisdiction.

The Roadside Ditch along Rider Street would not be regulated by the Corps, as roadside ditches excavated wholly in and draining only uplands that do not carry a relatively permanent flow of water would not be subject to Corps jurisdiction.

C. Regional Water Quality Control Board Jurisdiction

Regional Board jurisdiction within the Project site totals approximately 0.14 acre (2,880 linear feet), none of which consists of State wetlands [Exhibit 3A – Regional Board Jurisdictional Delineation Map], as described in Table 1 below.

Drainage A supports an OHWM ranging in width from one to three feet and is evidenced by sediment sorting, sandy depositions, and a decrease in vegetation. Drainage B supports an OHWM of one foot and is evidenced by sandy depositions and sediment sorting. Drainage C supports an OHWM ranging in width from one to two feet and is evidenced by sediment sorting. Drainage D supports an OHWM ranging in width from two to three feet and is evidenced by natural lines impressed on the banks and sediment sorting. The Roadside Ditch supports an OHWM ranging in width from three to five feet and is evidenced by natural lines impressed on the banks, sediment sorting, gravelly depositions, and a lack of vegetation.

Drainages A through D as well as the Roadside Ditch are ephemeral features that would be regulated by the Regional Board as non-wetland waters of the State.

Table 1: Summary of Regional Board Jurisdiction

Drainage Name	Regional Board Non-Wetland Waters (acres)	Regional Board Jurisdictional Wetlands (acres)	Total Regional Board Jurisdiction (acres)	Length (linear feet)
Drainage A	0.05	0	0.05	1,302
Drainage B	0.02	0	0.02	529
Drainage C	0.01	0	0.01	353
Drainage D	0.01	0	0.01	221
Roadside Ditch	0.04	0	0.04	475
Total	0.14	0	0.14	2,880

D. CDFW Jurisdiction

CDFW jurisdiction within the Project site totals approximately 0.35 acre (2,880 linear feet), of which approximately 0.22 acre consists of non-riparian stream and approximately 0.13 acre consists of riparian habitat [Exhibit 3B – CDFW Jurisdictional Delineation Map], as described in Table 2 below.

Drainage A supports a bed and bank ranging in width from one to four feet. Drainage B supports a bed and bank of one foot. Drainage C supports a bed and bank ranging in width from one to

two feet. Drainage D supports a bed and bank ranging in width from two to seven feet. The Roadside Ditch supports a bed and bank ranging in width from eight to 15 feet.

Drainages A through D as well as the Roadside Ditch have the potential to support aquatic resources that would be regulated as streams and associated riparian habitat by the CDFW.

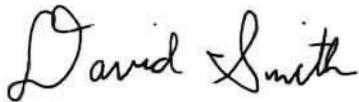
Table 2: Summary of CDFW Jurisdiction

Drainage Name	CDFW Non-riparian Stream (acres)	CDFW Riparian Habitat (acres)	Total Potential CDFW Jurisdiction (acres)	Length (linear feet)
Drainage A	0.04	0.13	0.17	1028
Drainage B	0.02	0	0.02	529
Drainage C	0.01	0	0.01	353
Drainage D	0.02	0	0.02	221
Roadside Ditch	0.13	0	0.13	475
Total	0.22	0.13	0.35	2,880

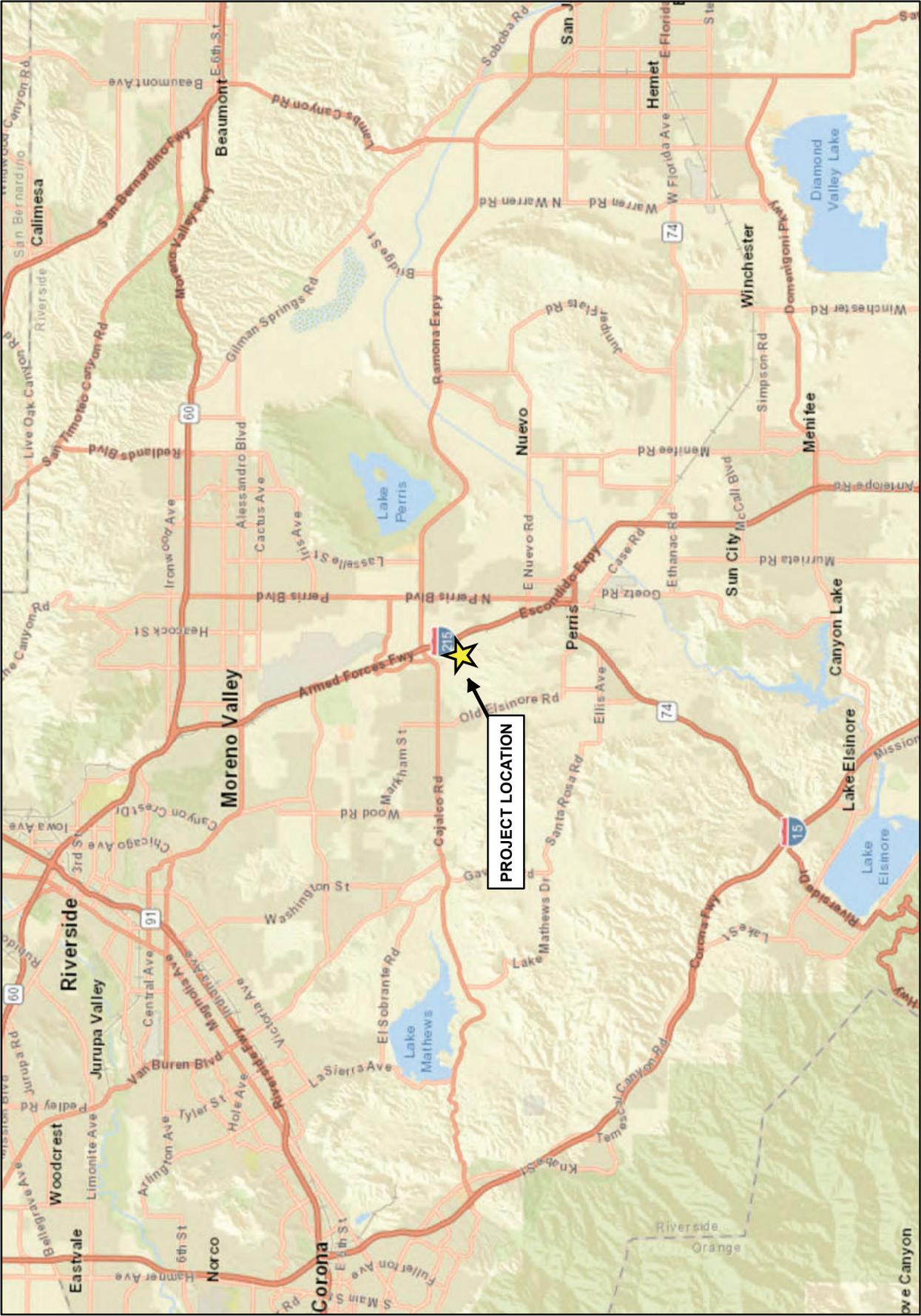
If you have any questions about this letter report, please contact David Smith at dsmith@wetlandpermitting.com or (949) 340-0256.

Sincerely,

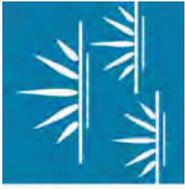
GLENN LUKOS ASSOCIATES, INC.



David Smith
Wildlife Biologist



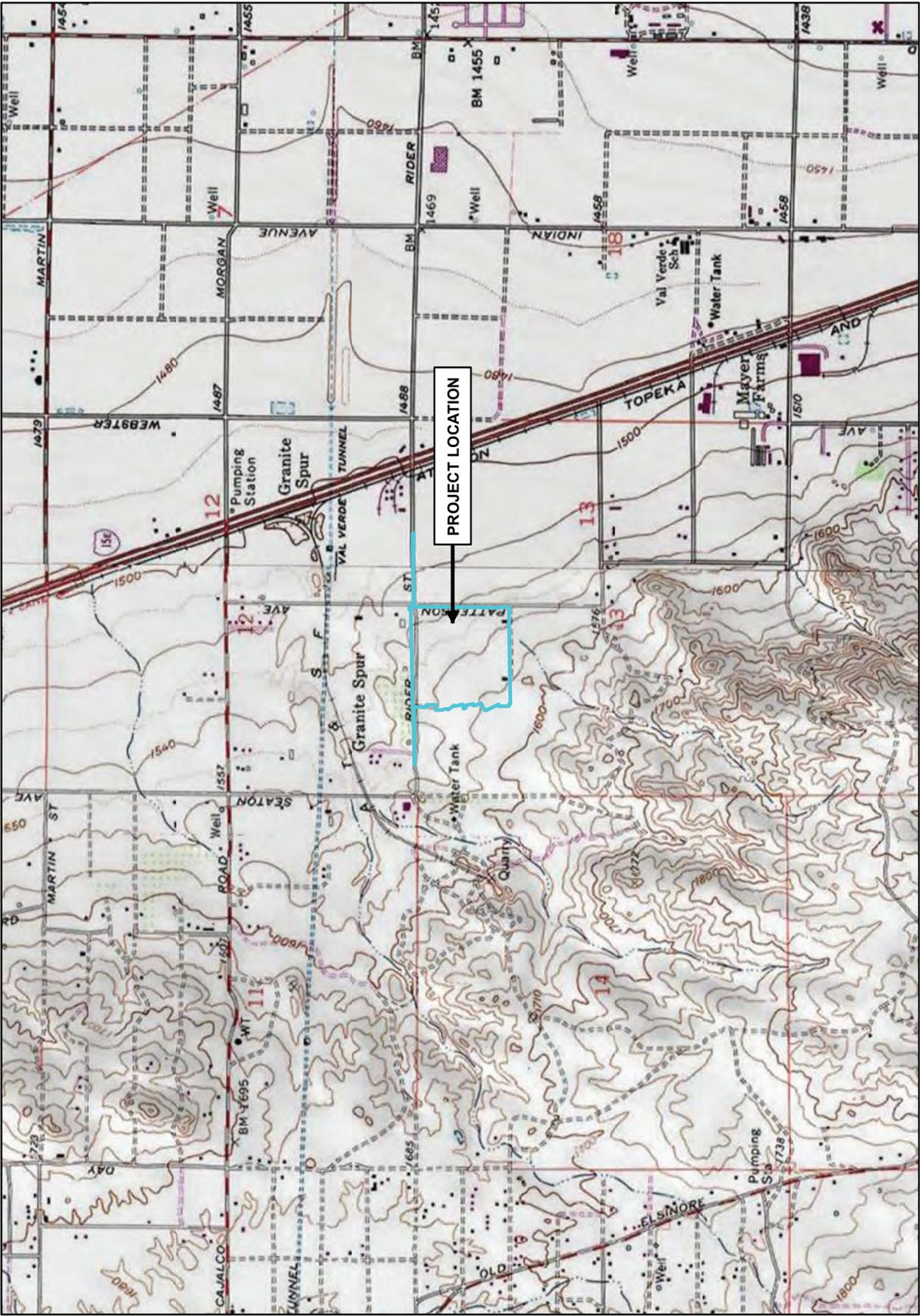
Source: ESRI World Street Map



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Exhibit 1

RIDER STREET & PATTERSON AVENUE PROJECT
Regional Map



Adapted from USGS Steele Peak, CA quadrangle



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RIDER STREET & PATTERSON AVENUE PROJECT
Vicinity Map

Exhibit 2



- Project Site
- Non-Wetland Waters of the State
- # Width in Feet
- Data Pit



1 inch = 225 feet

RIDER STREET & PATTERSON AVENUE PROJECT
 RWOCB Jurisdictional Delineation Map



GLENN LUKOS ASSOCIATES
 Exhibit 3A

Coordinate System: State Plane 6 NAD 83
 Projection: Lambert Conformal Conic
 Datum: NAD 1983 2011
 Map Prepared by: B. Galie, G.L.A.
 Date Prepared: December 6, 2022

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- Project Site
- Non-Riparian Stream
- Riparian
- # Width of Non-Riparian in Feet
- Data Pit



1 inch = 225 feet

Coordinate System: State Plane 6 NAD 83
 Projection: Lambert Conformal Conic
 Datum: NAD 1983 2011
 Map Prepared by: B. Gallo, G.L.A.
 Date Prepared: December 6, 2022

RIDER STREET & PATERSON AVENUE PROJECT
 CDFW Jurisdictional Delineation Map



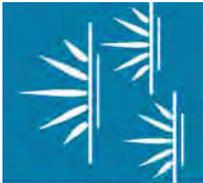
GLENN LUKOS ASSOCIATES
 Exhibit 3B



Photograph 1: Central view of Drainage A looking southwest.



Photograph 2: View depicting the northern portion of Drainage B, looking southwest.



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Exhibit 4 – Page 1

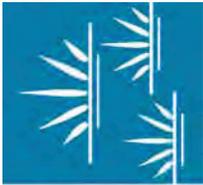
**RIDER STREET &
PATTERSON AVENUE PROJECT**
Site Photographs



Photograph 3: View depicting central portion of Drainage C, looking east.



Photograph 4: View depicting southern end of Drainage D, looking northeast.



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Exhibit 4 – Page 2

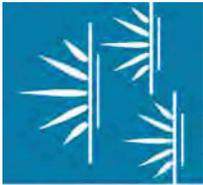
**RIDER STREET &
PATTERSON AVENUE PROJECT**
Site Photographs



Photograph 5: View depicting western terminus of roadside ditch, immediately south of Rider Street.



Photograph 6: View depicting eastern terminus of roadside ditch, immediately south of Rider Street.



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Exhibit 4 – Page 3

**RIDER STREET &
PATTERSON AVENUE PROJECT**
Site Photographs



- Project Site
- FbC2 - Fallbrook sandy loam, shallow, 5 to 8 percent slopes, eroded
- FcD2 - Fallbrook rocky sandy loam, shallow, 8 to 15 percent slopes, eroded
- HcC - Hanford coarse sandy loam, 2 to 8 percent slopes
- RaA - Ramona sandy loam, 0 to 2 percent slopes
- RaB2 - Ramona sandy loam, 2 to 5 percent slopes, eroded
- RaD3 - Ramona sandy loam, 8 to 15 percent slopes, severely eroded



1 inch = 225 feet

RIDER STREET & PATTERSON AVENUE PROJECT
Soils Map



GLENN LUKOS ASSOCIATES
Exhibit 5

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: K. Martunen, GLA
Date Prepared: December 6, 2022

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Rider/Patterson City/County: Riverside Sampling Date: 9/14/22
 Applicant/Owner: _____ State: CA Sampling Point: 1
 Investigator(s): D. Smith Section, Township, Range: 13, 4 S, 4 W
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): _____
 Subregion (LRR): Arid West Lat: 33.829738 Long: -117.257023 Datum: _____
 Soil Map Unit Name: Ramona Sandy Loam, 2 to 5 percent slopes, eroded NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: Though hydrology is present, vegetation and soils don't meet.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Salix exigua</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>30</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)				
1. <u>Salix exigua</u>	<u>70</u>	<u>Y</u>	<u>FACW</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>105</u> x 2 = <u>210</u> FAC species <u>5</u> x 3 = <u>15</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>90</u> x 5 = <u>450</u> Column Totals: <u>205</u> (A) <u>695</u> (B) Prevalence Index = B/A = <u>3.39</u>
2. <u>Baccharis salifolia</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>75</u> = Total Cover				
Herb Stratum (Plot size: <u>5' radius</u>)				
1. <u>Bromus madritensis ssp. rubens</u>	<u>40</u>	<u>Y</u>	<u>UPL</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Ambrosia acanthicarpa</u>	<u>40</u>	<u>Y</u>	<u>UPL</u>	
3. <u>Trichostema lanceolatum</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
4. <u>Heterotheca grandiflora</u>	<u>5</u>	<u>N</u>	<u>UPL</u>	
5. <u>Eriogonum fasciculatum</u>	<u>5</u>	<u>N</u>	<u>UPL</u>	
6. <u>Salix exigua</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>100</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>0</u> % Cover of Biotic Crust _____				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>

Remarks:
 Lots of willow

