



**U.S. ARMY CORPS OF ENGINEERS  
REGULATORY PROGRAM  
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)  
NAVIGABLE WATERS PROTECTION RULE**

**I. ADMINISTRATIVE INFORMATION**

Completion Date of Approved Jurisdictional Determination (AJD): 4/1/2021

ORM Number: SPA2021-078

Associated JDs: N/A

Review Area Location<sup>1</sup>: State/Territory: New Mexico City: Santa Fe County/Parish/Borough: Santa Fe

Center Coordinates of Review Area: Latitude 35.626214° Longitude -106.000756°

**II. FINDINGS**

**A. Summary:** Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

- The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
- There are “navigable waters of the United States” within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- There are “waters of the United States” within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

**B. Rivers and Harbors Act of 1899 Section 10 (§ 10)<sup>2</sup>**

§ 10 Name	§ 10 Size	§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A.	N/A.

**C. Clean Water Act Section 404**

Territorial Seas and Traditional Navigable Waters ((a)(1) waters): <sup>3</sup>			
(a)(1) Name	(a)(1) Size	(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):			
(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination
N/A.	N/A.	N/A.	N/A.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):			
(a)(3) Name	(a)(3) Size	(a)(3) Criteria	Rationale for (a)(3) Determination
N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):			
(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination
N/A.	N/A.	N/A.	N/A.

<sup>1</sup> Map(s)/figure(s) are attached to the AJD provided to the requestor.

<sup>2</sup> If the navigable water is not subject to the ebb and flow of the tide or included on the District’s list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

<sup>3</sup> A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.



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**D. Excluded Waters or Features**

Excluded waters ((b)(1) – (b)(12)): <sup>4</sup>			
Exclusion Name	Exclusion Size	Exclusion <sup>5</sup>	Rationale for Exclusion Determination
Governor Miles and Richards Avenue Lot 3	3400 linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	See Section III. C below for information supporting the exclusion determination.

**III. SUPPORTING INFORMATION**

**A. Select/enter all resources** that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

- Information submitted by, or on behalf of, the applicant/consultant: **Governor Miles and Richards Avenue Lot 3 Groundwater Site Investigation February 5, 2021**

This information is sufficient for purposes of this AJD.

Rationale: *N/A or describe rationale for insufficiency (including partial insufficiency).*

- Data sheets prepared by the Corps: *Title(s) and/or date(s).*
- Photographs: *Aerial:*
- Corps site visit(s) conducted on: *Date(s).*
- Previous Jurisdictional Determinations (AJDs or PJDs): *ORM Number(s) and date(s).*
- Antecedent Precipitation Tool: *provide detailed discussion in Section III.B.*
- USDA NRCS Soil Survey: *March 22, 2021*
- USFWS NWI maps: *March 22, 2021*
- USGS topographic maps: *NM Agua Fria 2020, NM Turquoise Hill 2020*

**Other data sources used to aid in this determination:**

Data Source (select)	Name and/or date and other relevant information
USGS Sources	N/A.
Other USDA data (specify)	N/A.
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	N/A.
Other Sources	A. Park Williams, Edward R. Cook, Jason E. Smerdon, Benjamin I. Cook, John T. Abatzoglou, Kasey Bolles, Seung H. Baek, Andrew M. Badger, Ben Livneh. 2018. Large Contribution from Anthropogenic Warming to an Emerging North American Megadrought. Science. Vol. 368 Issue 6488. Pp. 314-318.

**B. Typical year assessment(s):** According to the Antecedent Precipitation Tool (APT), July through October is the time of year with the most precipitation over a 30-year rolling period for the review area; and the monsoon season occurs between mid-June and the end of September. However, it should be noted that upon reviewing the ATP results discussed in the next section, this area

<sup>4</sup> Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

<sup>5</sup> Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



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experiences a highly variable amount of precipitation each year. Due to this lack of a consistent amount of precipitation from year to year for the review area, it is difficult to determine whether the analysis has been conducted during normal, wetter, or drier conditions. Regardless, the results of this AJD are not heavily reliant on the typical year assessment.

It is also worth noting that a recent study by Columbia University notes that the American Southwest is experiencing a historic “megadrought” not seen in centuries. In fact, for several western states, including New Mexico, the last twenty years ranks as the second-driest period in the past 1,200 years (A. Park. Williams, 2018). Based on this data, it seems reasonable that in New Mexico a typical year within the 30-year rolling period is characterized by drought conditions—even severe drought conditions.

- C. Additional comments to support AJD:** The review area for this AJD includes the location of one planned project (housing development) by the applicant.

According to information provided by the Natural Resources Conservation Service, the review area has an arid climate with distinct seasonal temperature variations and large annual and diurnal temperature changes characteristic of a continental climate. Precipitation averages 8 to 10 inches annually. Deviations of 4 inches or more from the average are quite common. Fifty percent of the precipitation is received from July to November, which is the dominant growing season of native plants. Summer precipitation is characterized by high-intensity, short-duration rainstorms. Winter precipitation averages less than one-half inch per month, usually in the form of rain. There are occasional snowstorms of short duration. Temperatures vary from a mean monthly average of 77 F in July to 34 F in January, with a maximum of 104 F and a minimum of -10 F. Temperatures are conducive to native grass and forb growth from March through November. Spring winds of 15 to 40 miles per hour are common from February to June. These winds increase transpiration rates of native plants and rapidly dry the surface soil. Small soil particles are often displaced by the wind near the soil surface. This results in structural damage to native plants, especially young seedlings.

There is one predominate soil type present in the review area: Levante-Riverwash complex, (95 percent). The Levante soil is described as Excessively drained with a depth to restrictive feature of more than 80 inches and a depth to water table greater than 80 inches. The soil is also characterized as having a Very low capacity and does not flood or pond. A typical profile for this soil consists of 0 to 4 inches of loamy sand in the AC Horizon, 4 to 17 inches of course sand in the C1 Horizon, 17 to 32 inches of gravelly coarse sand in the C2 Horizon, 32 to 45 inches of stratified gravelly loamy coarse sand to gravelly coarse sand in the C3 Horizon, 45 to 58 inches of gravelly loamy coarse sand in the C4 Horizon, 58 to 86 inches of very gravelly coarse sand in the C5 Horizon, and 86 to 122 inches of very gravelly coarse sand in the C6 Horizon.

The results of a natural resources survey of the review area conducted on February 5, 2021 and prepared by NV5 was submitted with the AJD request. The report states that:

“During the site visit dominant vegetation was recorded at 200-foot intervals along the unnamed waterway. In total, 19 points of these locations were established within the waterway starting on the east at Richards Avenue and proceeding westward to the western boundary of the study area. At ten of these locations, a 2-inch diameter hand



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auger was utilized to bore holes in the channel bottom to ascertain if shallow groundwater was present. The soil texture at each of these locations was recorded and compared to the soil types described for that area.

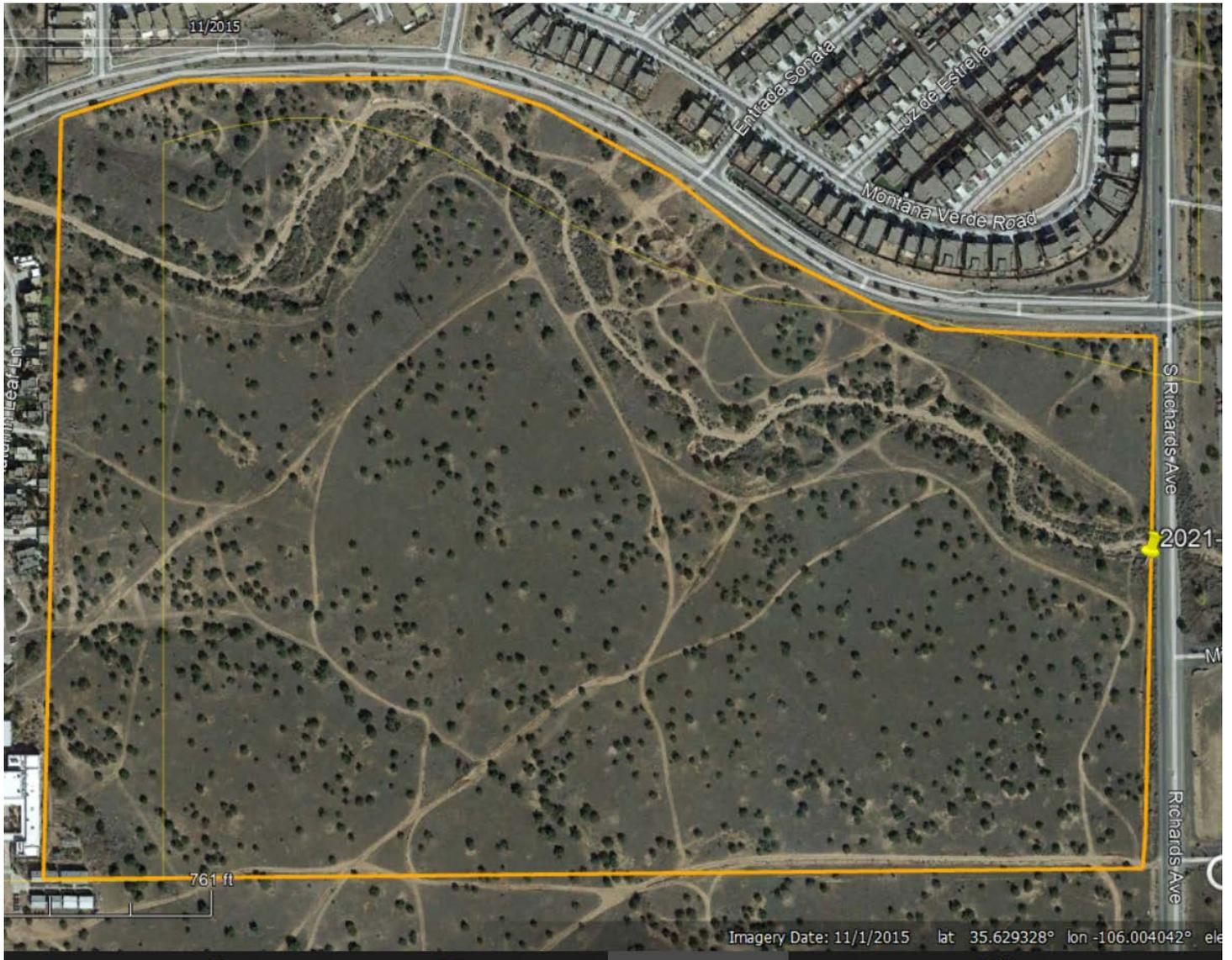
This unnamed waterway has a clearly defined bed and bank lined with mostly woody vegetation. These banks are steeply cut in some areas within the project area and into the adjacent hillsides. Generally, the channel varies between 12- to 20-feet wide. In most areas, the channel bottom is flat, covered with coarse sand and pea gravel. In some areas, the grade of the unnamed waterway steepens, and sandy soils have been swept away leaving exposed cobbles and gravel. There was no indication of wet or muddy areas that may be the result of seeps, springs, or even long-term bank storage within the unnamed drainage or in any of the adjacent upland areas.

The dominant vegetation along the waterway was limited in diversity. It was comprised principally of a shrub community composed of rubber rabbitbrush (*Ericameria nauseosa*) intermixed with apache plume (*Fallugia paradoxa*). The herbaceous understory within these areas was principally blue grama. However, there were also extensive portions of the arroyo bank where one-seed juniper was the dominant. There were no wetland indicator trees or shrubs such as cottonwood, willow, salt cedar or Russian olive. There was no woody or herbaceous wetland indicator plants classified as Facultative [FAC], Facultative Wetland [FACW], or Obligate [OBL] [USACE 2021] within or adjacent to the waterway. Similarly, there were no FACW or OBL plant indicators anywhere in the upland portions of the project area. There were no vegetative indicators of groundwater either within the drainage or in the upland habitats surrounding it.

There were no macroinvertebrates either within the unnamed waterway or anywhere in the project area.

A review of the well log data from the Office of the State Engineer (Office of State Engineer 2021) identified that in 1993, an old well #RG 56275 was placed in the study area just north of the unnamed waterway. The well log indicated that ground water was recorded 60-feet below the surface. Based on NV5's site visit, no indication of shallow groundwater is present within the unnamed waterway or anywhere else in the overall study area."

In addition to the field assessment conducted by NV5, the APT was run for the following additional dates in conjunction with reviewing satellite imagery of the review area: November 1, 2015, October 2, 2013 and July 24, 2011 (see document 2021-078 APT Batch Results.pdf and 2021-078 Satellite images.pdf). The date of November 1, 2015 was selected because this occurs in the wet season, with the drought index is listed as "Moderate wetness" and there is satellite imagery (Figure 1). In addition, approximately 2 weeks prior to this date there was an approximately 1 ½" precipitation event and no signs of surface water or flow in the satellite imagery. October 2, 2013 was selected as it is in the wet season with satellite imagery available (Figure 2) and the Drought Index is listed as "Moderate drought". The date of July 24, 2011 was chosen as it fell at the beginning of the monsoon season with available satellite imagery (Figure 3). Upon review of satellite imagery for these dates, no surface water or indication of recent flows were observed in the stream channel. As such, and in consideration of the other information provided above, it has been determined that the stream channel comprising the review area only experiences occasional flows in response to rain events and, therefore, is ephemeral.



Satellite Image November 1, 2015  
Figure 1



Satellite Image October 2, 2013  
Figure 2



Satellite Image July 24, 2011  
Figure 3