

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 1/20/2021

ORM Number: SPA2020-261 Associated JDs: 2005-649

Review Area Location¹: State/Territory: New Mexico City: Los Lunas County/Parish/Borough: Valencia

Center Coordinates of Review Area: Latitude 34.832057 Longitude -106.741831

II. FINDINGS

Α.	Su	mmary: Check all that apply. At least one box from the following list MUST be selected. Complete the
	cor	responding 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).
	\boxtimes	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)²

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

C. Clean Water Act Section 404

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

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

² 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.

³ 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.



D. Excluded Waters or Features

Excluded waters $((b)(1) - (b)(12))$:					
Exclusion Name	Exclusion	n Size	Exclusion ⁵	Rationale for Exclusion Determination	
Arroyo 1	1400	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.	
Arroyo 2	3900	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

Α.	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: Title(s) and date(s)
This information is sufficient for purposes of this AJD.
Rationale: N/A or describe rationale for insufficiency (including partial insufficiency).
Data shoots propored by the Corps: Title(s) and/or data(s)

- ☐ Data sheets prepared by the Corps: Title(s) and/or date(s).
- Photographs: Aerial and Other:
- ☐ Corps site visit(s) conducted on: Date(s).
- Previous Jurisdictional Determinations (AJDs or PJDs): 2005-649 issued July 20, 2006
- Antecedent Precipitation Tool: <u>provide detailed discussion in Section III.B.</u>
- USDA NRCS Soil Survey: November 18, 2020
- ☐ USFWS NWI maps: Title(s) and/or date(s).
- USGS topographic maps: Los Lunas, NM 2020, Dalies, NM 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)	NRCS Ecological site R042XA054NM - Deep Sand
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.

⁴ 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.

⁵ 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.



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.

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 Fiesta Phase V Tract.

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; however, deviations of 4 inches or more from the average are common. Approximately 50 percent of the precipitation occurs between July and 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 two predominate soil types present in the review area: Bluepoint loamy fine sand (43.6 percent) and Bluepoint loamy sand, hilly (39.2 percent). Bluepoint loamy fine sand, which is described as "Somewhat excessively drained" with a depth to restrictive feature of more than 80 inches and depth to the water table more than 80 inches. The soil is characterized as having a low available water capacity and does not flood or pond. A typical profile for this soil consists of 0 to 5 inches of loamy fine sand in the C1 Horizon, 5 to 28 inches of loamy fine sand in the C2 Horizon, 28 to 53 inches of loamy fine sand in the C3 Horizon, and 53-60 inches of loamy sand in the C4 Horizon. Bluepoint loamy sand, hilly, which is described as "Somewhat excessively drained" with a depth to restrictive feature of more than 80 inches and depth to the water table more than 80 inches. The soil is characterized as having a low available water capacity and does not flood or pond. A typical profile for this soil consists of 0 to 5 inches of loamy fine sand in the H1 Horizon and 5 to 60 inches of stratified fine sand to gravelly loamy fine sand in the H2 Horizon.

In addition to the field assessment, the APT was run for the following additional dates in conjunction with reviewing satellite imagery of the review area: February 14, 2011, October 25, 2018, September 23, 2018, February 25, 2018, December 28, 2017, February 19, 2014, January 17, 2013, December 31, 2005 and August 21 (see document 2020-261 APT Results Portfolio.pdf and 2020-261 Satellite Imagery.pdf). The date of February 2, 2014 was selected because it is in the wet season with satellite imagery available and the Antecedent Precipitation Condition was listed as "Normal". The dates of October 25, 2018 and September 23, 2018 was selected as both



dates have satellite imagery available and the Antecedent Precipitation Condition was listed as "Normal Conditions", in addition October 25 was within a few days of a 0.75" precipitation event and September 23 was within a few days of a 0.25" precipitation event. The dates of February 25, 2018, December 28, 2018, February 19, 2014, January 17, 2013, and December 31, 2005 were all selected those dates are all within the wet season with satellite imagery available. The date of August 21, 2018 was selected as it is within the monsoon season and has satellite imagery available.

Additionally, the banks and bed of the stream channel are mostly devoid of any vegetation, nor is there a riparian corridor present. The vegetation observed is typical high desert plant community.

In a letter dated July 20, 2006 from Regulatory Project Manager, Jean E. Manger regarding the proposed arroyo fills at the Fiesta Subdivision near Los Lunas, Valencia County, New Mexico she states: "The Corps has evaluated the information you provided and reviewed the project description, other records, and documents available to us. Portions of Arroyos #1 and #2, including #2a, are swales or erosional features without an ordinary high-water mark (OHWM). Those reaches of the arroyos that exhibit an OHWM lose the OHWM as flows proceed to the east. The waterway channels eventually disappear into sheet flow. This sheet flow is not directly connected to any downstream receiving water of the United States. Based on available information, the Corps has determined that these waterways (Arroyos #1 and #2) are isolated waters that are not jurisdictional waters of the United States."

Upon review of satellite imagery for the dates listed above, no surface water or indication of recent flows were observed in the stream channel for any of the dates. 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 flows in response to rain events and, therefore, is ephemeral.



Area Map



North Channel



South Channel