

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 22-JUL-2021 ORM Number: SPA-2021-00188 Associated JDs: N/A Review Area Location¹: State/Territory: TX City: El Paso County/Parish/Borough: El Paso County Center Coordinates of Review Area: Latitude 31.83388 Longitude -106.54428

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)²

§ 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)³

(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

D. Excluded Waters or Features

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

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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.



Excluded waters $((b)(1) - (b)(12))^4$:

Exclusion Name	Exclusion Size	Exclusion⁵	Rationale for Exclusion Determination
SPA-2021-00188-1	~700 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.
SPA-2021-00188-2	~7264 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.
SPA-2021-00188-3	~2585 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.
 - X Information submitted by, or on behalf of, the consultant: AECOM.
 - This information *is* sufficient for purposes of this AJD. Rationale: *N/A*
 - X_ Data sheets prepared by the Corps: National Wetland Plants List (2018).
 - <u>X</u> Photographs: Aerial: designated project area and stream imagery; on 12-20-2020.
 Site Photographs: images of ephemeral stream as seen at ground level: on 03-12-2021.
 Corps Site visit(s) conducted on: N/A
 - Previous Jurisdictional Determinations (AJDs or PJDs):
 - _X_ Antecedent Precipitation Tool: provide detailed discussion in Section III.B.
 - X USDA NRCS Soil Survey: USDA/NRCS Web Soil Survey.
 - X USFWS NWI maps: Albuquerque District Regulatory Viewer.
 - X USGS topographic maps: Albuquerque District Regulatory Viewer.

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	Water Watch (2020); Condition of Drought with 7-day average stream flow compared to historical
	stream flow in the state of Texas.
USDA Sources	Land Resource Regions and Major Land Resource Areas of the United States, the Caribbean, and
	the Pacific Basin (USDA Handbook 296, issued 2006. pp 1-669); USDA/NRSC, Plants Database
	(2020), https://plants.usda.gov/java/; USDA/NRSC, Web Soil Survey (2019),
	https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm
NOAA Sources	National Drought Mitigation Center© (2021), U.S. Drought Monitor, Texas (4/2021),
	https://droughtmonitor.unl.edu/CurrentMap.aspx
USACE Sources	National Wetland Plant List (2018); Albuquerque District Regulatory Viewer (ESRI)
State/Local/Tribal Sources	N/A.
Other	Google © 2021, INEGI © 2021, Google Earth satellite Imagery (12/20/2020).
Other	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. 2020, Large Contribution from
	Anthropogenic Warming to an Emerging North American Megadrought. Science. Vol. 368 Issue
	6488. Pp. 314-318.
Other	Griffith, G.E., Bryce, S.A., Omernik, J.M., Comstock, J.A., Rogers, A.C., Harrison, B., Hatch, S.L.,

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	and Benzanson, D. (2004), Ecoregions of Texas: U.S. Environmental Protection Agency, Corvallis, OR. https://gaftp.epa.gov/EPADataCommons/ORD/Ecoregions/tx/tx_eco_pg.pdf	
Other Griffith, G., Bryce, S., Omernik, J., & Rogers, A. (2007, December), Dynamac Corporation		
	Geological Survey, Texas Commission on Environmental Quality. Ecoregions of Texas.	
	https://gaftp.epa.gov/EPADataCommons/ORD/Ecoregions/tx/TXeco_Jan08_v8_Cmprsd.pdf	

B. Typical year assessment(s): According to the Antecedent Precipitation Tool (APT), July through September 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 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, 2020). Additionally, the National Drought Mitigation Center© (2021) identified that El Paso County, TX on April 20, 2021 experienced "D3-Extreme Drought" with the apparent drought condition percent area growing exponentially from historic data.

C. Additional comments to support AJD: The review areas for this AJD total approximately 10,520 linear feet of an unnamed stream system labeled "Arroyo #4" and encompasses the location of one planned project by AECOM on behalf of El Paso Water Utilities.

In General, the study areas along Arroyo #4 originate along the western facing flanks of the southwestern portion of the Franklin Mountains. From that point, the stream extends west into the upper study area (SPA-2021-00188-1), and then continues West until flowing into a detention basin that includes a culvert drainage system located under Canyon View Lane transporting flow on through the middle study area (SPA-2021-00188-2) into the lower (SPA-2021-00188-3) study area and exiting into the Keystone Dam immediately after crossing under Interstate Highway 10 within the City limits of El Paso, TX. The average width of the subject channel within the upper study area measures approximately 25 feet and varies in depth between 1-5 feet; the middle study area includes an open channel leading into a storm water detention basin and is connected downstream through a piped culvert system measuring approximately 1-2 feet in diameter, that leads into the lower study area which includes a concrete lined trapezoidal shaped open channel measuring approximately 15-30 feet wide and 5-10 feet deep. The residing stream does not have any connection to springs or other subsurface water within all three study areas. Lastly, it should be noted that flows within Arroyo #4 is primarily attributed form residential storm surface water runoff and from existing subsurface residential storm water relief infrastructure.

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The study areas are located within the Chihuahuan Basins and Playas ecological region residing above the Rio Grande Floodplain (24a) (Griffin G.E. 2004). This location also resides in the Western Range and Irrigated Land Resource Region (D), more specifically in Land Resource Area (MLRA) 42D; Southern Desertic Basins, Plains, and Mountains (USDA Handbook 296, issued 2006). The general area has a moderate dry climate with rain primarily limited to the summer in the form of high intensity convective storm events during the months of July to September. The average annual precipitation for this area is between 8 to 14 inches which occurs in flash events with very little winter precipitation; snowfall is minimal and is relatively short lived. The average annual temperatures in this area range from 50 to 71° Fahrenheit (F) (10 to 22°Celcius [C]) (USDA Handbook 296, issued 2006).

Ground water resides more than 80 inches below the soil surface. Predominate soil types in the review area are indicative of two map units: Delnorte-Canutio association, undulating, 1-8 percent (%) slopes (DCB), Delnorte-Canutio association hilly, 3-30% slopes (DCD), and Bluepoint association, rolling, 5-15% slopes (BPC). The units are identified based on the area's taxonomic classification of dominant soils, which are described below (USDA/NRCS, Web Soil Survey, 2019).

- DCB includes an estimated 75% Delnorte and similar soil composition and a 25% Canutio and similar soil composition. Delnorte soils can be found in landforms identified as fan piedmonts. The Delnorte soil profile includes an upper horizon between 0-6 inches consisting of a vary gravelly loam, an upper mid-horizon between 6-10 inches consisting of a very gravelly loam, a lower mid-horizon between 10-30 inches consisting of cemented material, and a lower horizon consisting of an extremely gravelly fine sand. It is characterized as having high infiltration rates and does not have the potential to pond or flood. Canutio soils can be found in landforms identified as hills. The Canutio soil profile includes an upper horizon between 0-11 inches consisting of a vary gravelly sandy loam, and a lower horizon between 11-45 inches consisting of an vary gravelly sandy loam. This soil is also characterized as having high infiltration rates and does not have the potential to pond or flood (USDA/NRCS, Web Soil Survey, 2019).
- DCD includes an estimated 60% Delnorte and similar soil composition, 20% Canutio and similar soil components, and 20% Minor soil components. Delnorte soils can be found in landforms identified as fan piedmonts. The Delnorte soil profile includes an upper horizon between 0-10 inches consisting of a very gravelly loam, a mid-horizon between 10-30 inches consisting of a cemented material, and a lower horizon between 30-80 inches consisting of extremely gravelly fine sand. This soil is characterized as having high infiltration rates and does not have the potential to pond or flood. Canutio soils can be found in landforms identified as hills. The Canutio soil profile includes an upper horizon between 0-11 inches consisting of a very gravelly sandy loam and a lower horizon between 11-45 inches consisting of very cobbly sandy loam. This soil also is characterized as having high infiltration rates and does not have

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the potential to pond or flood. Minor soil components only consist of approximately 20% of the map unit and has no hydraulic soil rating (USDA/NRCS, Web Soil Survey, 2019).

 BPC includes an estimated 100% Bluepoint and similar soil compositions. Bluepoint soils can be found in landforms identified as hillsides. The Bluepoint soil profile includes an upper horizon between 0-6 inches consisting of a Loamy fine sand, a mid-horizon between 6-12 inches consisting of fine sand, and a lower horizon between 12-60 inches consisting of stratified sand to loamy fine sand to very fine sandy loam. This soil is characterized as having high infiltration rates and does not have the potential to pond or flood (USDA/NRCS, Web Soil Survey, 2019).

Vegetation in the study areas consist of upland species and includes a mixture of sand scrub and desert shrub lands. These areas typically see salt tolerant plant verities such as fourwing salt bush (*Atriplex canescens*). The area consisting of valleys and alluvial fans support a large variety of desert shrubs such as creasote bush (*Larrea tridentata*), and Honey Mesquite (*Prosopis glandulosa Torr.*) (Griffin G.E. 2007). Based on photos of the site, the above-mentioned plant species reside in the area including marginal varieties of upland bunch grasses (USDA/NRCS, Plants Database, 2020).

Satellite imagery collected by the Corps show no surface water or flow in the stream channel. The APT was run for the date of December *20, 2020* in conjunction with the review of resent aerial imagery taken in the area (see document *2021-188 APT Data_2020-12-20 and 2021-03-12*) The aerial images taken on the aforementioned date show no observable indicators of flow or ponding even with the APT results showing an estimated 0.2-inch precipitation event occurring less than two weeks prior to December 20, *2020*. Additionally, site photography provided by the consultant show no surface water flow in the stream channel. The APT was also run for the date of March 12, 2021 in conjunction with the review of submitted site photography of each study area along Arroyo #4 (see document 2021-188 APT Data_2020-12-20 and 2021-03-12) The photos taken on the aforementioned date show no observable indicators of flow or ponding even with the APT results showing an estimated 0.2-inch precipitation event with the APT results show and 2021-03-12).

Based on the data provided by the consultant and obtained by Corps Regulatory Division personnel have determined that the stream channel within each study area only experience short duration flows in response to storm events and, is therefore, ephemeral. As such, and in accordance with 33 CFR 328.3 and the *June 22, 2020* implementation of the Navigable Waters Protection Rule, it does not meet the definition of "Waters of the United States" and, therefore, is not subject to regulation under Section 404 of the Clean Water Act.

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