DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, ALBUQUERQUE DISTRICT
4101 JEFFERSON PLAZA, NE
ALBUQUERQUE, NM 87109

CESPA-RD September 11, 2025

MEMORANDUM FOR RECORD

SUBJECT: US Army Corps of Engineers (Corps) Approved Jurisdictional Determination in accordance with the "Revised Definition of 'Waters of the United States'"; (88 FR 3004 (January 18, 2023) as amended by the "Revised Definition of 'Waters of the United States'; Conforming" (September 8, 2023) ,[1] SPA-2024-00420

BACKGROUND. An Approved Jurisdictional Determination (AJD) is a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel. AJDs are clearly designated appealable actions and will include a basis of JD with the document.[2] AJDs are case-specific and are typically made in response to a request. AJDs are valid for a period of five years unless new information warrants revision of the determination before the expiration date or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.[3]

On January 18, 2023, the Environmental Protection Agency (EPA) and the Department of the Army ("the agencies") published the "Revised Definition of 'Waters of the United States,'" 88 FR 3004 (January 18, 2023) ("2023 Rule"). On September 8, 2023, the agencies published the "Revised Definition of 'Waters of the United States'; Conforming", which amended the 2023 Rule to conform to the 2023 Supreme Court decision in *Sackett v. EPA*, 598 U.S. 651, 143 S. Ct. 1322 (2023) ("*Sackett*").

This Memorandum for Record (MFR) constitutes the basis of jurisdiction for a Corps AJD as defined in 33 CFR §331.2. For the purposes of this AJD, we have relied on Section 10 of the Rivers and Harbors Act of 1899 (RHA),[4] the 2023 Rule as amended, as well as other applicable guidance, relevant case law, and longstanding practice in evaluating jurisdiction.

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[1] While the Revised Definition of "Waters of the United States"; Conforming had no effect on some categories of waters covered under the CWA, and no effect on any waters covered under RHA, all categories are included in this Memorandum for Record for efficiency.
[2] 33 CFR 331.2.
[3] Regulatory Guidance Letter 05-02.
[4] USACE has authority under both Section 9 and Section 10 of the Rivers and Harbors Act of 1899 but for convenience, in this MFR, jurisdiction under RHA will be referred to as Section 10.

1. SUMMARY OF CONCLUSIONS.

   a. Provide a list of each individual feature within the review area and the jurisdictional status of each one (i.e., identify whether each feature is/is not a water of the United States and/or a navigable water of the United States).

      Corrales Acequia, within the review area – is not a water of the United States.

2. REFERENCES.

   a. "Revised Definition of 'Waters of the United States,'" 88 FR 3004 (January 18, 2023) ("2023 Rule")

   b. "Revised Definition of 'Waters of the United States'; Conforming," 88 FR 61964 (September 8, 2023)

   c. *Sackett v. EPA*, 598 U.S. 651, 143 S. Ct. 1322 (2023)

3. REVIEW AREA. **The review area consists of a 95-linear-foot reach of the Corrales Acequia, an irrigation canal, and is part of a larger network of irrigation canals (see Attachment 1). The canal is approximately 15 feet in width within the review area. The upstream extent of review area is located at latitude 35.249963°, longitude -106.603027° and extends downstream to latitude 35.249817°, longitude -106.603296°. The review area is situated to the west of the Rio Grande, at Trosello Lane, within the village limits of Corrales, in Sandoval County, New Mexico.**

4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), THE TERRITORIAL SEAS, OR INTERSTATE WATER TO WHICH THE AQUATIC RESOURCE IS CONNECTED. **The Corrales Acequia conveys flows into the Rio Grande, depending on irrigation management and return flows. At this location, the Rio Grande is an interstate waters pursuant to 33 CFR 328.3(a)(1)(iii). The Rio Grande at the confluence point with the review area is a 7th-order stream. Approximately 270 miles downstream, the Rio Grande reaches the Americas Dam at the New Mexico–Texas–Mexico border (latitude 31.784247°, longitude -106.528033°). From the Americas Dam downstream to its confluence with the Gulf of America (latitude 25.957031°, longitude -97.147222°), the Rio Grande is recognized as a TNW (Act of August 8, 1917, 40 Stat. 250, ch. 49, § 201).**

5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, THE TERRITORIAL SEAS, OR INTERSTATE WATER.

The review area includes a 95-linear-foot portion of the Corrales Acequia. An approximately 1.5-mile-long portion of the Corrales Acequia is the reach of tributary for purposes of this analysis (i.e., the relative reach; see Attachment 2). The relative reach is situated to the west of the Rio Grande. The upstream extent of the relative reach is located at latitude 35.249963°, longitude -106.603027°, approximately 0.5 miles upstream of the review area, where Rio Grande water is periodically diverted to the Corrales Acequia through portions of the Corrales Main Canal and portions of the Sandoval Lateral. At this point the relative reach is the equivalent of a first order stream. The relative reach extends downstream to latitude 35.249817°, longitude -106.603296° where it is joined by another first order equivalent channel, the Corrales Feeder. Consistent with the Strahler stream order concept, the Corrales Acequia is a second order channel below this confluence and therefore a separate reach.

There are two potential flow paths associated with this relative reach. Both Flow Path 1 and Flow Path 2 share the same channel until the headgate control structure (located between Lyria Road and Pace Road) where water leaves the Corrales Main Canal and enters the Summerford Lateral. If the headgate at this location is closed, water is conveyed through Flow Path 1. If the headgate at this location is open, water is conveyed through Flow Path 2. The actual flow path is influenced by irrigation management practices and may vary depending on water availability, irrigation delivery, and stormwater conditions.

Water is initially pumped from the Rio Grande into the Corrales Main Canal at latitude 35.2800° and longitude -106.5989°. The flow in the Corrales Main Canal travels approximately two miles before the canal splits into two channels: the Corrales Main Canal and the Sandoval Lateral. The relative reach follows the Sandoval Lateral at latitude 35.2558° and longitude -106.6035°, which continues for approximately 0.25 miles before reaching another diversion point where the flow divides again—either continuing down the Sandoval Lateral or diverting into the Corrales Acequia. For the purpose of this assessment, the relative reach follows the Corrales Acequia, latitude 35.2559° and longitude -106.5989°, which continues for approximately five miles. This segment eventually transitions into the Corrales Main Canal; however, this is a change in name only, as designated by the Middle Rio Grande Conservancy District (MRGCD), and does not indicate a change in the physical flow path. From the Corrales Main Canal, the flow path continues for about one mile before encountering another diversion at latitude 35.1846° and longitude -106.6539°. At this junction, water can either enter the Summerford Lateral or continue down the Corrales Main Canal. The direction of flow at this point is dependent on irrigation demand and water delivery

schedules. This is the point where the flow path diverges into two separate potential flow paths.

Flow Path 1 enters the Rio Grande approximately 8.80 river miles below the relative reach at approximately latitude 35.158752°, longitude -106.670265°, near the Coors Bosque Trails (a hiking and recreation area). However, while there is a continuous channel from the relative reach to the Rio Grande which is clearly designed to carry flow, and there is evidence of flow in this low portion of the flow path both in the form of gage data and water visible in aerial imagery, it is unlikely water from the relative reach actually reaches the Rio Grande through Flow Path 1. This is because the relative reach is used exclusively to carry irrigation water. According to MRGCD, most flow from the relative reach is diverted from the Corrales Main Canal into Summerford Lateral (i.e., Flow Path 2) and only two users receive irrigation water deliveries past the Summerford Lateral control structure on the Corrales Main Canal. Any excess irrigation water or return flows from these irrigation users is then diverted into the Corrales Lower Riverside Drain Extension (i.e., Flow Path 2) at a manually controlled structure a little north of the eastern end of La Orilla Road (during our field observations on August 5, 2025, U.S. Army Corps of Engineers (USACE or Corps) staff observed this structure and evidence of how it operates). While water can and does flow past this structure and straight into the Rio Grande, this water is limited, according to MRGCD, to stormwater flows entering the flow path from other channels, and not water from the relative reach. This assertion is corroborated by the Corps' observation of how the structure functions and the timing of irrigation flows compared to the timing of stormwater discharges through this flow path which are unlikely to overlap in time.

Flow Path 2 represents an alternate route, in which water travels approximately two additional miles through the Corrales Lower Drain before spilling into an oxbow area adjacent to the Rio Grande. From the oxbow, flow paths split but are distinguishable using LiDAR to their entries into the Rio Grande at the south end of the oxbow near latitude 35.1318°, longitude -106.6907° (see Attachment 3).

On August 4, 2025, representatives from the USACE conducted a site visit to the oxbow lake area to evaluate existing hydrologic conditions and potential surface water connectivity to the Rio Grande. Field observations initially suggested that the oxbow was separated from the river by a natural berm estimated at approximately four (4) feet in height. While much of the oxbow is enclosed by this berm, supplemental LiDAR elevation data identified a lower topographic feature at the southern end of the oxbow that could allow for surface water conveyance to the Rio Grande during periods of elevated water levels. During the site inspection, no actively flowing water was observed; however, the LiDAR-derived

elevations indicate that the southern low point can function as a surface connection during irrigation releases, precipitation events, or seasonal high-water periods. Standing water was observed in several depressional areas within the oxbow, suggesting localized pooling from precipitation or overland runoff.

6. SECTION 10 JURISDICTIONAL WATERS[5]: Describe aquatic resources or other features within the review area determined to be jurisdictional in accordance with Section 10 of the Rivers and Harbors Act of 1899. Include the size of each aquatic resource or other feature within the review area and how it was determined to be jurisdictional in accordance with Section 10.[6] **N/A**

7. SECTION 404 JURISDICTIONAL WATERS: Describe the aquatic resources within the review area that were found to meet the definition of waters of the United States in accordance with the 2023 Rule as amended, consistent with the Supreme Court's decision in *Sackett*. List each aquatic resource separately, by name, consistent with the naming convention used in section 1, above. Include a rationale for each aquatic resource, supporting that the aquatic resource meets the relevant category of "waters of the United States" in the 2023 Rule as amended. The rationale should also include a written description of, or reference to a map in the administrative record that shows, the lateral limits of jurisdiction for each aquatic resource, including how that limit was determined, and incorporate relevant references used. Include the size of each aquatic resource in acres or linear feet and attach and reference related figures as needed.

a. Traditional Navigable Waters (TNWs) (a)(1)(i): **N/A**

b. The Territorial Seas (a)(1)(ii): **N/A**

c. Interstate Waters (a)(1)(iii): **N/A**

d. Impoundments (a)(2): **N/A**

e. Tributaries (a)(3): **N/A**

f. Adjacent Wetlands (a)(4): **N/A**

[5] 33 CFR 329.9(a) A waterbody which was navigable in its natural or improved state, or which was susceptible of reasonable improvement (as discussed in § 329.8(b) of this part) retains its character as "navigable in law" even though it is not presently used for commerce or is presently incapable of such use because of changed conditions or the presence of obstructions.
[6] This MFR is not to be used to make a report of findings to support a determination that the water is a navigable water of the United States. The district must follow the procedures outlined in 33 CFR part 329.14 to make a determination that water is a navigable water of the United States subject to Section 10 of the RHA.

g. Additional Waters (a)(5): **N/A**

8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

a. Describe aquatic resources and other features within the review area identified in the 2023 Rule as amended as not "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(2) through (5). Include the type of excluded aquatic resource or feature, the size of the aquatic resource or feature within the review area and describe how it was determined to meet one of the exclusions listed in 33 CFR 328.3(b).[7] **N/A**

b. Describe aquatic resources and features within the review area that were determined to be non-jurisdictional because they do not meet one or more categories of waters of the United States under the 2023 Rule as amended (e.g., tributaries that are non-relatively permanent waters; non-tidal wetlands that do not have a continuous surface connection to a jurisdictional water).

The review area of the Corrales Acequia is not a water of the United States pursuant to 33 CFR 328.3(a)(3) because it does not meet the relatively permanent standard.

Reach Analysis.

The relative reach for this jurisdictional determination begins at the start of the Corrales Acequia, located at latitude 35.2559°, longitude -106.5989°. The end of the reach is at latitude 35.2387°, longitude -106.6108°, where the North Diversion Feeder Channel discharges into the Corrales Acequia (see Attachment 2).

The North Diversion Feeder Channel has the potential to contribute significant flow to the acequia during irrigation season. Both the Corrales Acequia and the North Diversion Feeder Channel are analogous to first order streams. Where two first order streams come together, they form a second order stream. Therefore, the relative reach ends at this confluence.

Relatively Permanent Standard:
The relative reach does not meet the relatively permanent standard. Based on conversations with Matt Martinez, Irrigation Manager for the MRGCD, approximately 30 cubic feet per second (cfs) of water is pumped into the Corrales

[7] 88 FR 3004 (January 18, 2023)

Main Lateral (which is not part of the relative reach) and flows for the entirety of the irrigation season, which typically lasts approximately four months, depending on river conditions. Gage data from the Corrales Main Canal (Gage Station 113) supports the statements provided by Mr. Martinez. At the diversion point where the Corrales Main Lateral splits into the Sandoval Lateral, water is alternated between the two channels on a two-week rotation—two weeks on, two weeks off. According to the MRGCD pump operator, the lateral that is not receiving water dries out within approximately 72 hours and no longer contains standing or flowing water. Statements made by MRGCD staff were corroborated by gage data which reported the release of water into the system followed by the cessation of flow, as reflected by the gage subsequently reading no flow.

During the two-week period when the Sandoval Lateral receives water, the flow continues downstream and either remains in the Sandoval Lateral or is diverted into the Corrales Acequia, which marks the beginning of the relative reach. Water enters the Corrales Acequia for approximately two-week periods and then dries out again once delivery is discontinued. This flow pattern has been confirmed using gage data from the CORRALES ACEQUIA (52) site (see Attachment 4). In 2025, the acequia received water during five alternating two-week intervals over the course of the irrigation season. On March 12, 2025, the gage recorded a peak flow of approximately 14.87 cfs corresponding to a scheduled irrigation release. This flow follows a two-weeks-on, two-weeks-off pattern throughout the irrigation season, with water deliveries ceasing after each two-week period and the channel drying out shortly thereafter. Additionally, the gage has a known measurement error margin of ±0.02 cfs, meaning any readings at or below 0.02 cfs should be considered as zero flow.

This two-weeks-on, two-weeks-off pattern was evident in the gage data, which showed periods of water being released into the system followed by periods with no flow in 2024 and 2023, though 2023 appears to be an outlier, showing only two flow periods due to limited water delivery that year. It should be noted this two-week period is an approximation and is dependent on water delivery.

Based on the gage data, field observations, and discussions with MRGCD personnel, the relative reach does not have flowing or standing water year-round or continuously during certain times of the year. (See 88 FR 3004, 3084, January 18, 2023). Flowing or standing water is present only during scheduled irrigation releases and ceases shortly after water is cut off, resulting in a system that regularly dries out. Although the relative reach periodically conveys flowing water or retains standing water that is not directly in response to precipitation, this periodic short interval flow then drying pattern is similar to an example provided

in the Federal Register. At 88 FR 3086, the agencies conclude that an example provided of a stream characterized by the repeated sequence of streamflow, flow cessation, and channel drying throughout the year, did not meet the relatively permanent standard because it lacked continuously flowing water for an extended period at any point during the year. This cyclical, short duration, flowing and drying pattern indicates that the relative reach, even during irrigation season, does not have the continuous flowing or standing water necessary to meet the relatively permanent standard. Should the duration of flows change as a result of MRGCD management practices or natural availability of water, this would constitute a change in conditions and a new determination may be required.

9. DATA SOURCES. List sources of data/information used in making determination. Include titles and dates of sources used and ensure that information referenced is available in the administrative record.

a. **Middle Rio Grande Conservation District (MRGCD), Water Data, MRGCD Gage map, Corrales Acequia (52), Flow-7040-E, https://mrgcd.onerain.com/sensor/?site_id=39&site=796e99f6-78b9-41e5-8997-aa97467c3575&device_id=2&device=ad2601c8-350d-459e-a54b-ea84836138d6.**

b. **Middle Rio Grande Conservation District (MRGCD), Water Data, MRGCD Gage map, Lower Corrales Riverside Drain (304), Flow-7040-E, https://mrgcd.onerain.com/sensor/?time_zone=US%2FMountain&site_id=183&site=f5082469-3f41-4a01-8ea0-cfe1b95cc153&device_id=5&device=1b0d9f67-9a1d-4c64-a61e-c59cd70e5edb&bin=86400&range=Custom%20Range&markers=false&legend=true&thresholds=true&refresh=off&show_raw=true&show_quality=true&data_start=2024-02-01%2000%3A00%3A00&data_end=2024-11-12%2023%3A59%3A59**

c. **Google Earth. (2005–2023). *Imagery of Corrales Acequia and Rio Grande study area* [NAIP imagery]. Google Earth Pro, version 7.3. Retrieved August 08, 2025, from https://earth.google.com/web/**

d. **Office evaluation of Google Earth©, Street View photos with available images of the Corrales Acequia in September 2014, April 2022, January 2023, May 2023, and September 2023.**

e. **The USACE, National Regulatory Viewer, South Pacific Division, New Mexico viewer, NHD data set and NWI data set, accessed on 11/07/2024**

(City of Rio Rancho, Bernalillo County, NM, City of Albuquerque, Bureau of Land Management, Texas Parks & Wildlife, ESRI, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA, USGS TNM – National Hydrography Dataset. Data Refreshed September 2024).

f. USACE, Rapid Ordinary High Water Mark (OHWM) Field Identification Data Sheet, ENG FORM 6250, Sep 2024 (Attachment 5).

10. OTHER SUPPORTING INFORMATION. **N/A**

11. NOTE: The structure and format of this MFR were developed in coordination with the EPA and Department of the Army. The MFR’s structure and format may be subject to future modification or may be rescinded as needed to implement additional guidance from the agencies; however, the approved jurisdictional determination described herein is a final agency action.


Reveiw Area Map
Map of the Reveiw Area for SPA-2024-00420
Attachment 1
Legend
Relitive Reach
Review Area
35.249963° -106.603027°
35.249817°, -106.603296°
Google Earth
Image © 2025 Airbus
100 ft
N


Relative Reach Map
Map of the Relative Reach for SPA-2024-00420
Attachment 2
Legend
Relative Reach
Review Area
35.255950° -106.598944°
Premier Sports Multiplex
Wagner's Farmland Experience
ANM Crane Services
Corrales Lateral
Sandia View Christian School
Corrales Seventh-day Adventist Church
Ms. Theresa Rhodes
Barrows Services
Red Horse Riding Company
Rio Grande
Upper Corrales Riverside Drain
35.238733° -106.610843°
Google Earth
N
1000 ft

Digital Elevation Map of the Oxbow

Legend

Flowpath

USGS_3DEP_NMCentral_NAD83_NAVD88_3pt28FT_DEM.tif

Value

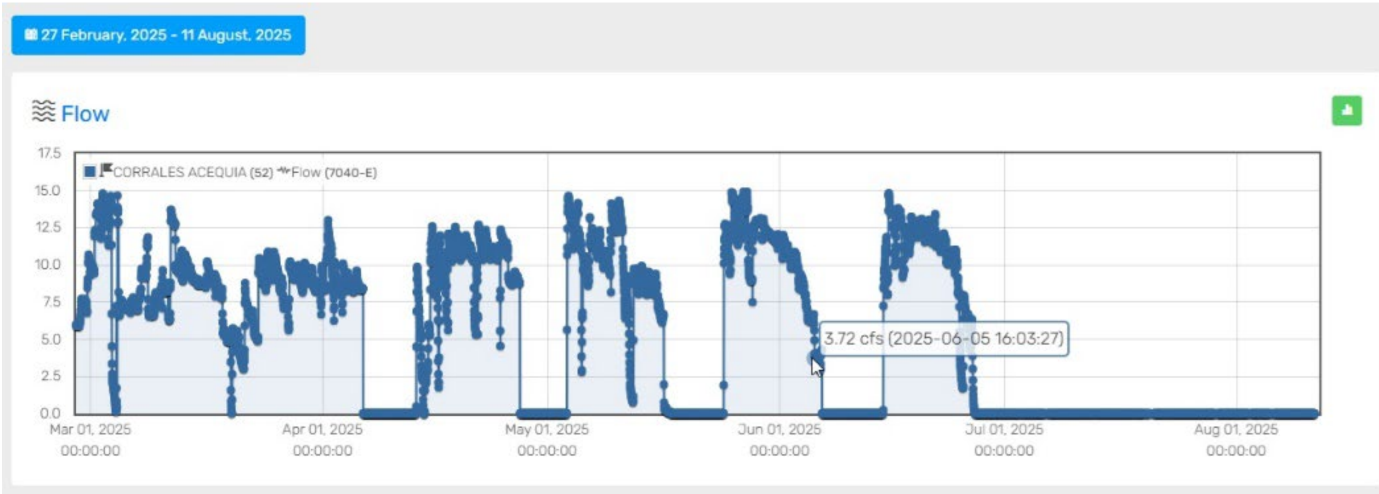
High : 5010.32

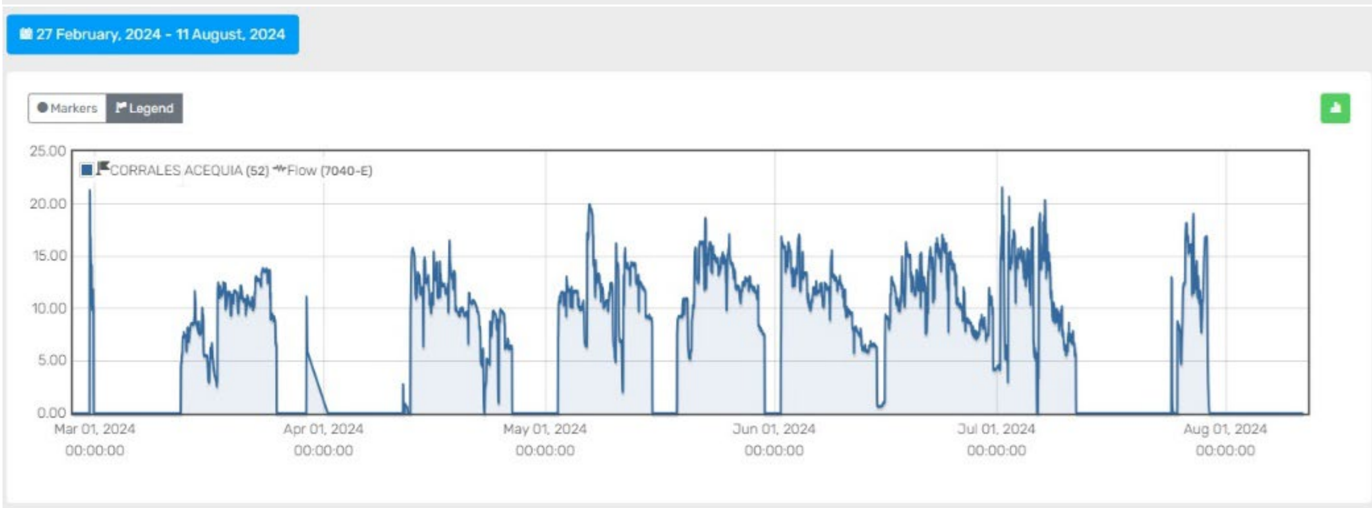
Low : 4963.46

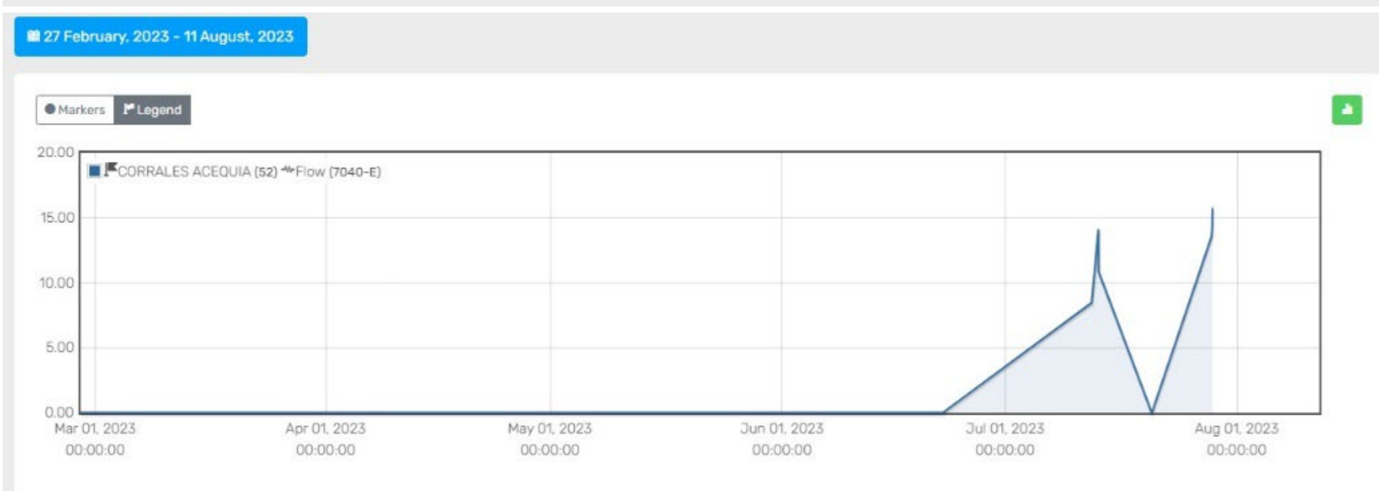
0 0.0250.05 0.1 0.15 0.2 Miles

1 inch = 0.08 miles

Attachment 4: Irrigation Flow Data.







Attachment 5

U.S. Army Corps of Engineers (USACE)
RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET
The proponent agency is Headquarters USACE CECW-COR.

Form Approved - OMB No. 0710-0024
Expires: 2027-09-30

The Agency Disclosure Notice (ADN)

The Public reporting burden for this collection of information, 0710-0024, is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

Project ID #: SPA-2024-00420	Site Name: Corrales Acequia	Date and Time: 08/05/2025
Location (lat/long): 35.2498, -106.6031	Investigator(s): Justin Riggs	

Step 1 Site overview from remote and online resources.
Check boxes for online resources used to evaluate site:

- [x] gage data
- [ ] LiDAR
- [x] geologic maps
- [ ] climatic data
- [ ] satellite imagery
- [ ] land use maps
- [x] aerial photos
- [ ] topographic maps
- [ ] Other: ______

Describe land use and flow conditions from online resources.
Were there any recent extreme events (floods or drought)?
The Corrales Acequia (35.2498, -106.6031) is a traditional irrigation ditch used to divert water from the Rio Grande to local agricultural fields. Flow is seasonal and depends on Rio Grande water levels; at the time of observation, the ditch was dry. Beyond irrigation, the acequia supports wildlife habitat and provides community recreational space along its banks.

Step 2 Site conditions during field assessment. First look for changes in channel shape, depositional and erosional features, and changes in vegetation and sediment type, size, density, and distribution. Make note of natural or human-made disturbances that would affect flow and channel form, such as bridges, riprap, landslides, rockfalls, etc.

During the field assessment, the Corrales Acequia channel appeared relatively straight with minor widening in some areas. Sediment deposition was minimal, consisting mostly of fine to medium sand and silt, with no significant erosion or scour observed. Vegetation along the channel was sparse, dominated by grasses, reflecting the lack of flow at the time of observation. Human-made features, including small diversion structures, earthen banks, and nearby agricultural infrastructure, were present. No major natural disturbances, such as landslides or rockfalls, were observed.

Step 3 Mark the boxes next to the indicators used to help identify the location of the OHWM.
OHWM is at a transition point, therefore some indicators used to identify the location of the OHWM may be just below or above the OHWM. Make a slash in boxes next to indicators that are helpful in identifying the OHWM. After the initial assessment, those indicators identified at the OHWM elevation should be changed from slashes to x's. Note, it is not necessary to mark indicators that are present but do not help inform identification of the OHWM.
Go to page 2 to describe overall rationale for location of OHWM, write any additional observations, and attach a photo log.

Geomorphic indicators

- [x] **Break in slope**
  - [x] *on the bank*
  - [ ] *undercut bank*
  - [ ] *valley bottom*
  - [ ] Other: ______
- [ ] **Shelving**
  - [ ] *shelf at top of bank*
  - [ ] *natural levee*
  - [ ] *human-made berms or levees*
  - [ ] *other berms:* ______
- [ ] **Secondary channels**
- [ ] **Channel bar**
  - [ ] *shelving (berms) on bar*
  - [ ] *unvegetated*
  - [ ] *vegetation transition (go to veg. indicators)*
  - [ ] *sediment transition (go to sed. indicators)*
  - [ ] *upper limit of deposition on bar*
- [ ] **Instream bedforms and other bedload transport evidence**
  - [ ] *deposition bedload indicators (e.g., imbricated clasts, gravel sheets, etc.)*
  - [ ] *bedforms (e.g., pools, riffles, steps, etc.)*
  - [ ] *Weathered clasts or bedrock*
  - [ ] *erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.)*

Sediment indicators

- [ ] **Soil development**
- [x] **Changes in character of soil**
- [ ] **Mudcracks**
- [x] **Changes in particle-sized distribution**
  - [x] *transition from* fine sand to silt
  - [ ] *upper limit of sand-sized particles*
  - [ ] *silt deposits*

Vegetation indicators (*Consider the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain*)

- [x] **Change in vegetation type from** b **to** short grasses
- [ ] **Change in density of vegetation**
- [ ] **Exposed roots below intact soil layer**
- [ ] **Vegetation matted down and/or bent**
- [x] **Other vegetation observations**
  b is for bare soil the form will not let me put more then one character.

Other physical indicators

- [ ] **Sediment deposited on vegetation or structures**
- [ ] **Wracking/presence of organic litter**
- [ ] **Presence of large wood**
- [ ] **Leaf litter disturbed or washed away**
- [ ] **Water staining**

Other observed indicators? Describe:

Print Form | Save As

Project ID #: SPA-2024-00420

Step 4 Was additional information used to support identification of the OHWM? ☐ Yes ☒ No

If yes, describe and attach information to data sheet:

Step 5 Is an OHWM present at this site? ☒ Yes ☐ No

Describe rationale for location of OHWM or lack thereof by describing any observed indicators (at, above, and/or below the OHWM location).

The OHWM was delineated using the visible transition from bare soil in the channel bed to the established grasses and riparian vegetation along the banks. At the OHWM location, the channel surface was unvegetated, while immediately above this line, grasses and small shrubs were present, indicating the upper limit of regular water inundation. No distinct scour lines, sediment deposits, or other geomorphic features were observed below or above this transition due to the low or absent flow at the time of assessment.

Additional observations or notes

Attach an imagery log of the site.

Imagery log attached? ☒ Yes ☐ No If no, explain why not: ______

List photographs, or other imagery/sketches, and include descriptions in the table below.

Number photographs in the order that they are taken. Attach imagery and include annotations of features.

Imagery Number	Imagery description
1	NAIP imagery form google earth dated 03-21-2025
2	Photo of the observation point for OHWM

Print Form | Save As

OHWM Field Identification Data Sheet Instructions and Field Procedure

Step 1 Site overview from remote and online resources (Chapter 5) **Complete Step 1 prior to site visit.**

Online Resources: Identify what information is available for the site. Check boxes on data sheet next to the resources used to assess this site.

a. gage data
b. aerial photos
c. satellite imagery
d. LiDAR
e. topographic maps
f. geologic maps
g. land use maps
h. climatic data (precipitation and temperature)

Landscape context: Use the online resources to put the site in the context of the surrounding landscape. (Chapter 4)

a. **Note on the data sheet under Step 1:**
   i. Overall land use and change if known
   ii. Recent extreme events if known (e.g., flood, drought, landslides, debris flows, wildfires)
   iii. Erosional and depositional environments

b. Consider the following to inform weighting of evidence observed during field visit.
   i. What physical characteristics are likely to be observed in specific environments?
   ii. Was there a recent flood or drought? Are you expecting to see recently formed or obscured indicators?
   iii. How will land use affect specific stream characteristics? How natural is the hydrologic regime? How stable has the landscape been over the last year, decade, century?

Step 2 Site conditions during the field assessment (assemble evidence) (Chapter 1 and 3)

a. Identify the assessment area.
b. Walk up and down the assessment area noting all the potential OHWM indicators.
c. Note broad trends in channel shape, vegetation, and sediment characteristics.
   i. Is this a single thread or multi-thread system? Is this a stream-wetland complex?
   ii. Are there any secondary and/or floodplain channels?
   iii. Are there obvious human-made alterations to the system?
   iv. Are there man-made (e.g., bridges, dams, culverts) or natural structures (e.g., bedrock outcrops, Large Wood jams) that will influence or control flow?

d. Look for signs of recurring fluvial action.
   i. Where does the flow converge on the landscape?
   ii. Are there signs of fluvial action (sediment sorting, bedforms, etc.) at the convergence zone?

e. Look for indicators on both banks. If the opposite bank is not accessible, then look across the channel at the bank.

f. **In Step 2 of the data sheet,** describe any adjacent land use or flow conditions that may influence interpretation of each line of evidence.
   i. What land use and flow conditions may be affecting your ability to observe indicators at the site?
   ii. What recent extreme events may have caused changes to the site and affected your ability to observe indicators?

Step 3a List evidence (Chapter 2 and 3)

Assemble evidence by marking each box with a slash next to each line of evidence.

If using fillable form, then follow the instructions for filling in the fillable form.

Context is important when assembling evidence. For instance, pool development may be an indicator of interest on the bed of a dry stream, but may not be a useful indicator to take note of in a flowing stream. On the other hand, if the pool is found in a secondary channel adjacent to the main channel, it could provide a line of evidence for a minimum elevation of high flows. Therefore, consider the site context when deciding which indicators provide evidence for identifying the OHWM. Explain reasoning in Step 5.

Questions to consider while making observations and listing evidence at a site:

Geomorphic indicators	**Sediment and soil indicators**	**Vegetation indicators**	**Other physical indicators**
Where are the breaks in slope? Are there identifiable banks? Is there an easily identifiable top of bank? Are the banks actively eroding? Are the banks undercut? Are the banks armored? Is the channel confined by the surrounding hillslopes? Are there natural or man-made berms and levees? Are there fluvial terraces? Are there channel bars?	Where does evidence of soil formation appear? Are there mudcracks present? Is there evidence of sediment sorting by grain size?	Where are the significant transitions in vegetation species, density, and age? Is there vegetation growing on the channel bed? If no, how long does it take for the non-tolerant vegetation to establish relative to how often flows occur in the channel? Where are the significant transitions in vegetation? Is the vegetation tolerant of flowing water? Has any vegetation been flattened by flowing water?	Is there organic litter present? Is there any leaf litter disturbed or washed away? Is there large wood deposition? Is there evidence of water staining?

Are the following features of fluvial transport present?
Evidence of erosion: obstacle marks, scour, armoring
Bedforms; riffles, pools, steps, knickpoints/headcuts
Evidence of deposition: imbricated clasts, gravel sheets, etc.

In some cases, it may be helpful to explain why an indicator was NOT at the OHWM elevation, but found above or below. It can also be useful to note if specific indicators (e.g., vegetation) are NOT present. For instance, note if the site has no clear vegetation zonation.

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Step 3b Weight each line of evidence (Chapter 1 and 3)

Consider importance of each indicator by assessing the following:

a. Relevance:

i. Is this indicator left by low, high, or extreme flows? Did recent extreme events and/or land use affect this indicator?

ii. Consider the elevation of the indicator relative to the channel bed. What is the current flow level based on season or nearby gages?

iii. Consider the elevation of the indicator relative to the current flow. If the stream is currently at baseflow and indicator is adjacent to that, then it is likely a low-flow indicator. The difference between high-and extreme-flow indicators can sometimes be difficult to determine.

***Landscape context from Step 1 (Chapter 4) can help determine the relevance, strength, and reliability of the indicators observed in the field.**

***In Chapter 2 of the OHWM field manual provides information on specific indicators that can assist in putting these in context and determining relevance, strength, and reliability.**

iv. Recent floods may have left many extreme-flow indicators, or temporarily altered channel form. Other resources will likely be needed to support any OHWM identification at this site. Field evidence of the OHWM may have to wait for the site to recover from the recent flood.

v. Droughts may cause field evidence of OHWM to be obscured because there has been an extended time since the last high-flow event. There can be overgrowth of vegetation or deposition of material from surrounding landscape that can obscure indicators.

vi. Both human-made (e.g., dams, construction, mining activities, urbanization, agriculture, grazing) and natural (e.g., fires, floods, debris flows, beaver dams) disturbances can alter how indicators are expected to appear at a site. Chapter 6 and Chapter 7 of the OHWM field manual provide specific case-studies that can help in interpreting evidence at these sites.

b. Strength:

i. Is this indicator persistent across the landscape?

1. Look up and downstream and across the channel to see if you see the same indicator at multiple locations.
2. Does the indicator occur at the same elevation as other indicators?

c. Reliability:

i. Is this indicator persistent on the landscape over time? Will this indicator still persist across seasons?

1. This can be difficult to determine for some indicators and may be specific to climatic region (in terms of persistence of vegetation) and history of land use or other natural disturbances.
2. Chapter 2, Chapter 6, and Chapter 7 of the OHWM field manual describe each indicator in detail and provide examples of areas where indicators are difficult to interpret.

Step 4 Was additional information used to support identification of the OHWM? Are other resources used to support the lines of evidence observed in the field?

a. If additional resources are needed, then repeat steps 3a and 3b for the resources selected in Step 1 of assembling and weighting evidence collected from online resources. Chapter 5 of the OHWM field manual provides information on using online resources.

b. Any data collected from online tools have strengths and weaknesses. Make sure these are clear when determining relevance, strength, and reliability of the remotely collected data. Clearly describe why other resources were used to support the lines of evidence observed in the field, as well as the relevance, strength, and reliability of the supporting data and/or resources.

c. Attach any remote data and data analysis to the data sheet.

Step 5 Describe rationale for location of OHWM: (Chapter 1 and Chapter 3)

a. Weigh body of evidence:

Combine information from Step 3b: Why do the combination of indicators represent the OHWM?

i. Integrate the lines of evidence (relevance, strength, and reliability) of each indicator.

ii. Consider which indicators are high value indicators that co-occur along the stream reach. Which indicators are most relevant to identifying high flow elevations, which are most persistent across the landscape, and which are most persistent over time?

iii. Which indicators that are found above and below the location of the OHWM were helpful in identifying the elevation of the OHWM?

b. If there is more than one possible location, explain why, Include any relevant discussion on why specific indicators were not included in the final decision.

c. If needed, add additional site notes on page 2 of the data sheet under Step 5 or attach additional sketches and field observations to the data sheet.

d. Take photographs of indicators and attach an imagery log using page 2 of data sheet or another method of logging images.

i. Annotate images with descriptions of indicators.