



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

CESPK-RDI-U

28 March 2025

MEMORANDUM FOR RECORD

SUBJECT: US Army Corps of Engineers (Corps) Pre-2015 Regulatory Regime Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023),¹ [SPK-2024-00621]

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 For the purposes of this AJD, we have relied on section 10 of the Rivers and Harbors Act of 1899 (RHA),⁴ the Clean Water Act (CWA) implementing regulations published by the Department of the Army in 1986 and amended in 1993 (references 2.a. and 2.b. respectively), the 2008 *Rapanos-Carabell* guidance (reference 2.c.), and other applicable guidance, relevant case law and longstanding practice, (collectively the pre-2015 regulatory regime), and the *Sackett* decision (reference 2.d.) in evaluating jurisdiction.

This Memorandum for Record (MFR) constitutes the basis of jurisdiction for a Corps AJD as defined in 33 CFR §331.2. The features addressed in this AJD were evaluated consistent with the definition of “waters of the United States” found in the pre-2015 regulatory regime and consistent with the Supreme Court's decision in *Sackett*. This AJD did not rely on the 2023 “Revised Definition of ‘Waters of the United States,’” as amended on 8 September 2023 (Amended 2023 Rule) because, as of the date of this decision, the Amended 2023 Rule is not applicable in this state due to litigation.

¹ While the Supreme Court's decision in *Sackett* 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.

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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).
 - i. W-1 (0.01 acre), non-jurisdictional under CWA Section 404.
 - ii. W-2 (0.14 acre), non-jurisdictional under CWA Section 404.
 - iii. W-3a (0.15 acre), non-jurisdictional under CWA Section 404.
 - iv. W-3b (0.05 acre), non-jurisdictional under CWA Section 404.
 - v. D-1 (1,566 linear feet, 0.111 acre), non-jurisdictional under CWA Section 404.

Note: The features within the review area identified as East Jordan Canal (467 linear feet, 0.278 acre) and Jordan and Salt Lake City Canal (73 linear feet, 0.03 acre) are not being evaluated on this form and are not included in this AJD.

2. REFERENCES.

- a. Final Rule for Regulatory Programs of the Corps of Engineers, 51 FR 41206 (November 13, 1986).
- b. Clean Water Act Regulatory Programs, 58 FR 45008 (August 25, 1993).
- c. U.S. EPA & U.S. Army Corps of Engineers, Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States* (December 2, 2008).
- d. *Sackett v. EPA*, 598 U.S. 651, 143 S. Ct. 1322 (2023).

3. REVIEW AREA. The approximately 167-acre review area is located near 14425 Bitterbrush Lane and contains portions of the former Utah State Prison site, with a center point near Latitude 40.4934°, Longitude -111.9050°, Draper, Salt Lake County, Utah (AJD MFR Enclosure 1). The review area is located in a high desert environment west of the Wasatch Mountains, with an elevation of approximately 4,450 feet. The site consists primarily of open space historically used for agricultural purposes, as well as newly graded areas where prison facilities have been recently demolished and cleared. No previous jurisdictional determinations were found in ORM for this site. The delineation maps are attached as AJD MFR Enclosure 2.

4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), INTERSTATE WATER, OR THE TERRITORIAL SEAS TO WHICH THE AQUATIC RESOURCE IS CONNECTED. The review area is located between Utah Lake, approximately 9 aerial miles to the south, and the Great Salt Lake (GSL), approximately 24 aerial miles to the northwest. GSL meets TNW criteria, having been found navigable-in-fact under Federal law in *Utah v. United States*, 403 U.S. 9 (1971). Therefore, the GSL is a TNW and is subject to CWA jurisdiction under 33 CFR §328.3(a)(1) and 40 CFR §230.3(s)(1).

The Jordan River drains northward from Utah Lake and flows near the west side of the review area, eventually draining directly into the Great Salt Lake (AJD MFR Enclosure 3).

5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, INTERSTATE WATER, OR THE TERRITORIAL SEAS. The hydrology source for Ditch D-1 (a non-RPW) and abutting wetlands originates from two primary sources on the south end of the review area. A turnout on the East Jordan Canal pipes water northward, where it converges with water piped from a nearby geothermal well. Both of these aquatic resources (ARs) daylight at the south end, or beginning, of ditch D-1. D-1 flows northeast for approximately 400 feet, where it slows and spreads, creating wetland W-1. At this point D-1 makes a slight turn and flows directly north for approximately 740 feet, where it backs up behind a dirt road crossing and spreads out, creating wetland W-2. After passing under the dirt road through a culvert, some of the water continues flowing north, creating wetlands W-3a and 3b in adjacent depressional areas and within an abandoned ditch alignment. The remainder of the water in D-1 turns 90 degrees after the road crossing and flows west for approximately 780 feet, where it historically was either used for flood irrigation in the surrounding fields or captured by a separate pipeline carrying water from the previously mentioned geothermal well. This pipeline provides water to the Galena Mitigation Site wetlands, which directly abut the Jordan River, approximately 5,700 feet north of D-1. This geothermal pipeline connection is the only potential connection from D-1 to a relatively permanent water (RPW). The Jordan River is a well-documented RPW that flows directly into GSL. In recent years, all irrigation practices on site have ceased and flows are no longer released into D-1 or recaptured by the geothermal pipe. However, remnant ordinary high water mark indicators were still present in D-1 at the time of the delineation field work. The length of connection between W-1 and the RPW (Jordan River), through the non-relatively permanent tributary (D-1) and geothermal pipeline, is approximately 7,220 feet. The length of this same connection is 6,506 feet for W-2, 6,480 feet for W-3a, and 6,484 feet for W-3b (AJD MFR Enclosure 4).

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6. SECTION 10 JURISDICTIONAL WATERS⁵: 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 pre-2015 regulatory regime and 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 pre-2015 regulatory regime. 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. TNWs (a)(1): N/A.
 - b. Interstate Waters (a)(2): N/A.
 - c. Other Waters (a)(3): N/A.
 - d. Impoundments (a)(4): N/A.
 - e. Tributaries (a)(5): N/A.
 - f. The territorial seas (a)(6): N/A.
 - g. Adjacent wetlands (a)(7): 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.

8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

- a. Describe aquatic resources and other features within the review area identified as “generally non-jurisdictional” in the preamble to the 1986 regulations (referred to as “preamble waters”).⁷ Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA as a preamble water. N/A.
- b. Describe aquatic resources and features within the review area identified as “generally not jurisdictional” in the *Rapanos* guidance. Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA based on the criteria listed in the guidance. N/A.
- c. Describe aquatic resources and features identified within the review area as waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA. Include the size of the waste treatment system within the review area and describe how it was determined to be a waste treatment system. N/A.
- d. Describe aquatic resources and features within the review area determined to be prior converted cropland in accordance with the 1993 regulations (reference 2.b.). Include the size of the aquatic resource or feature within the review area and describe how it was determined to be prior converted cropland. N/A.
- e. Describe aquatic resources (i.e. lakes and ponds) within the review area, which do not have a nexus to interstate or foreign commerce, and prior to the January 2001 Supreme Court decision in “*SWANCC*,” would have been jurisdictional based solely on the “Migratory Bird Rule.” Include the size of the aquatic resource or feature, and how it was determined to be an “isolated water” in accordance with *SWANCC*. N/A.
- f. 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 pre-2015 regulatory regime consistent with the Supreme Court’s decision in *Sackett* (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 contains approximately 1,566 linear feet (0.11 acre) of ditch (D-1) and 0.35 acre of wetlands, consisting of W-1, W-2, W-3a, and W-3b. All 4 delineated wetlands are supported by, and directly abut, ditch D-1. D-1 is a man-made irrigation

⁷ 51 FR 41217, November 13, 1986.

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conveyance that does not have relatively permanent flow and is not currently regulated under CWA Section 404.

After consideration of flow and the length of continuous surface connection (CSC) through non jurisdictional channel and pipeline to the Jordan River, including the approximately 7,220-foot length of connection for W-1, the 6,506-foot length of connection for W-2, the 6,480-foot length of connection for W-3a, and the 6,484-foot length of connection for W-3b, the ARs are not physically close enough to meet the CSC requirement. Thus, W-1, W-2, W-3a, and W3b do not have a continuous surface connection to the nearest downstream (a)(5) RPW tributary, the Jordan River (AJD MFR Enclosure 4).

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. Aquatic resources delineation report titled "Aquatic Resources Delineation Report-Porter Rockwell Extension", prepared by [REDACTED], and dated August 2024, revised November 2024. The consultant prepared the delineation report in accordance with the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual and the USACE Regional Supplement for the Arid West Region.
 - b. Google Earth 7.3.6.10201. Aerial images dated August 1993, October 1997, July 2007, June 2010, October 2011, June 2022, July 2023, and January 2025. Accessed 12 March 2025.
 - c. LiDAR - National Layer in the National Regulatory Viewer for the South Pacific Division. Accessed 12 March 2025.
 - d. USACE, OMBIL Regulatory Module, 2023. Corpsmap. Accessed 30 October 2024 and 12 March 2025. (<https://orm.ops.usace.army.mil/>).
 - e. USACE 30 October 2024 and 12 March 2025 Office Evaluations.
10. OTHER SUPPORTING INFORMATION. Other potential ditch features can be seen on aerial photographs within the review area, such as at Photo Points 7, 8, 10, 12, 13, 14, 18, 20, 21, 22, and 25. These are man-made irrigation features that have been abandoned and do not exhibit ordinary high water mark indicators, as supported by the delineation report.

The applicant is not contesting Clean Water Act jurisdiction on the East Jordan Canal or the Jordan and Salt Lake City Canal, and therefore is not requesting that these features be included in this AJD evaluation. The boundaries of these two

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canals will be separately evaluated and project impacts verified by issuance of a Nationwide Permit.

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.

4 Enclosures

AJD MRF Encl 1- Vicinity Map

AJD MFR Encl 2- Delineation Maps

AJD MFR Encl 3- TNW Map

AJD MFR Encl 4- AR Flow Path Map

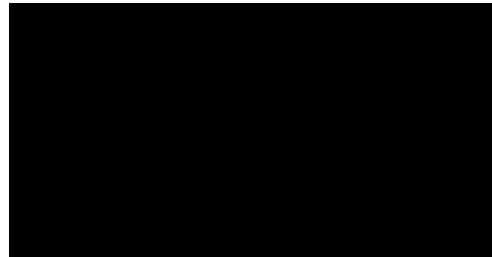


FIGURE: 3
Porter Rockwell Boulevard
Extension (Package 2A)
Topographic Map



0 1,000 2,000

Feet

1:24,000; 7.5' Quadrangle Jordan
Narrows and Midvale, UT (2023)
Map Created: August 2024



Upper Left: 111°54'27"W 40°30'3"N

Upper Middle: 111°54'22"W 40°30'3"N

Upper Right: 111°54'17"W 40°30'3"N

Middle Left: 111°54'27"W 40°29'59"N

Middle Right: 111°54'17"W 40°29'59"N

Lower Left: 111°54'27"W 40°29'55"N

Lower Right: 111°54'16"W 40°29'55"N



Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



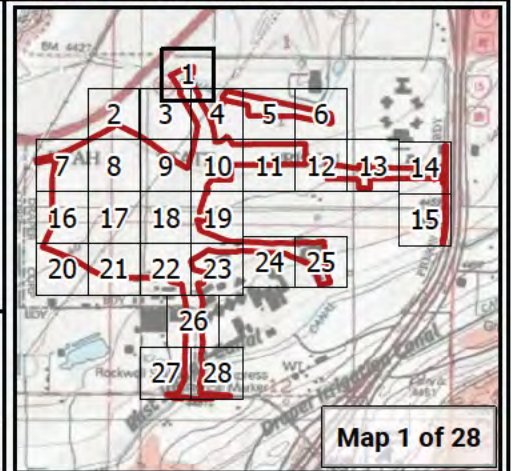
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Upper Left: 111°54'42"W 40°29'57"N

Upper Middle: 111°54'37"W 40°29'57"N

Upper Right: 111°54'31"W 40°29'57"N

Middle Left: 111°54'42"W 40°29'53"N

Middle Right: 111°54'31"W 40°29'53"N

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Lower Right: 111°54'31"W 40°29'49"N

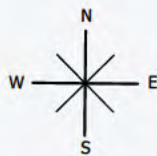


Porter Rockwell Extension

Aquatic Resources Delineation Mapbook

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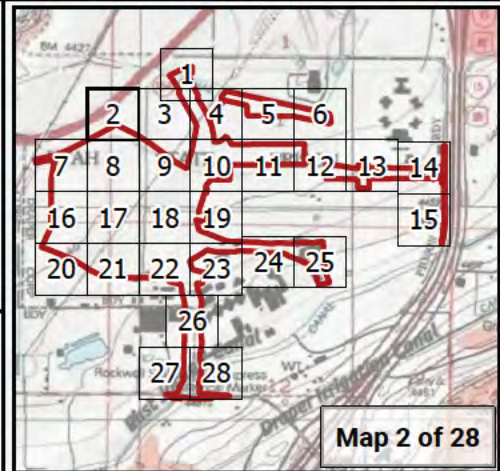
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- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Upper Left: 111°54'31"W 40°29'57"N

Upper Middle: 111°54'26"W 40°29'57"N

Upper Right: 111°54'21"W 40°29'57"N

Middle Left: 111°54'31"W 40°29'53"N

Middle Right: 111°54'21"W 40°29'53"N

Lower Left: 111°54'31"W 40°29'49"N

Lower Right: 111°54'21"W 40°29'49"N

Porter Rockwell Extension Aquatic Resources Delineation Mapbook

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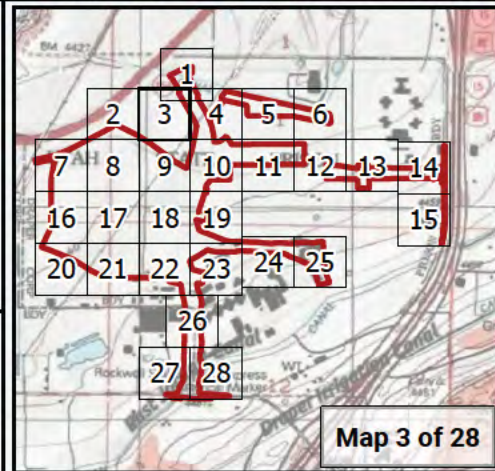
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Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Upper Left: 111°54'21"W 40°29'57"N

Upper Middle: 111°54'16"W 40°29'57"N

Upper Right: 111°54'11"W 40°29'57"N

Middle Left: 111°54'21"W 40°29'53"N

Middle Right: 111°54'11"W 40°29'53"N

Lower Left: 111°54'21"W 40°29'49"N

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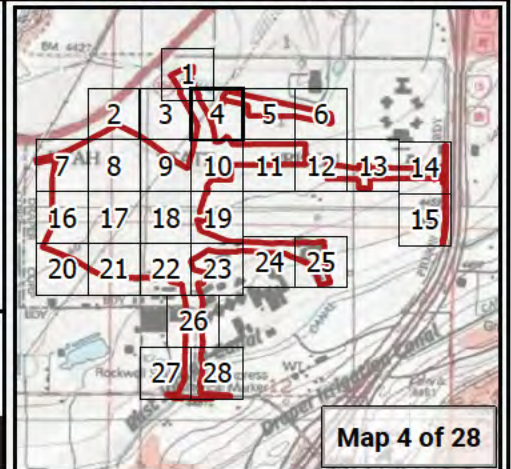
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07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



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Upper Middle: 111°54'5"W 40°29'57"N

Upper Right: 111°54'W 40°29'57"N

Middle Left: 111°54'11"W 40°29'53"N

Middle Right: 111°54'W 40°29'53"N

Lower Left: 111°54'11"W 40°29'49"N

Lower Right: 111°54'W 40°29'50"N

Porter Rockwell Extension

Aquatic Resources Delineation Mapbook

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 GCS: GCS North American 1983
 Datum: North American 1983
 Projection: Transverse Mercator
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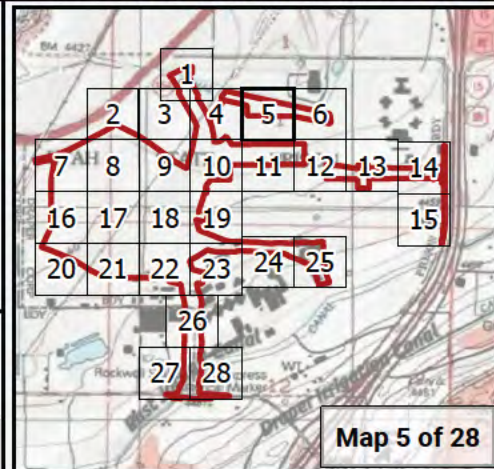
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- Pipe
- ▨ Irrigation Ditch
- ▨ Wetland
- ▨ Concrete-lined Ditch

Date Delineated:
 07/31/2024, 11/04/2024

Date Drawn:
 12/19/2024

Delineated By:



Upper Left: 111°54'W 40°29'57"N

Upper Middle: 111°53'55"W 40°29'57"N

Upper Right: 111°53'50"W 40°29'58"N

Middle Left: 111°54'W 40°29'53"N

Middle Right: 111°53'50"W 40°29'54"N

Lower Left: 111°54'W 40°29'50"N

Lower Right: 111°53'50"W 40°29'50"N

Porter Rockwell Extension

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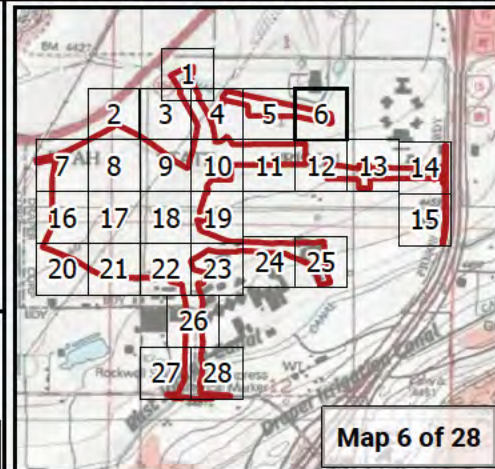
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- Cross Section
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- Pipe
- ▨ Irrigation Ditch
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- ▨ Concrete-lined Ditch

Date Delineated:
 07/31/2024, 11/04/2024

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 12/19/2024

Delineated By:



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Upper Middle: 111°54'47"W 40°29'49"N

Upper Right: 111°54'42"W 40°29'49"N

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Middle Right: 111°54'42"W 40°29'45"N

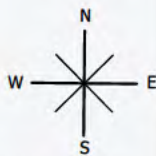
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Lower Right: 111°54'41"W 40°29'41"N

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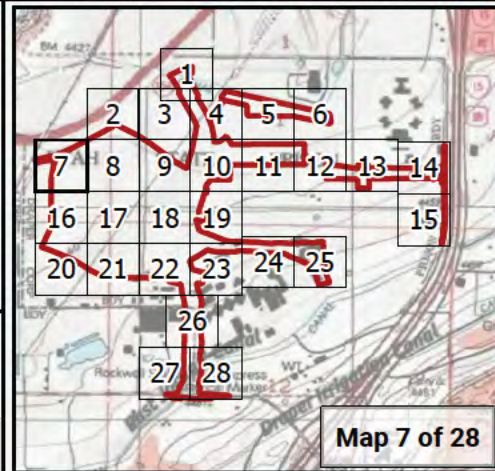
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Delineated By:



Map 7 of 28

Upper Left: 111°54'42"W 40°29'49"N

Upper Middle: 111°54'36"W 40°29'49"N

Upper Right: 111°54'31"W 40°29'49"N

Middle Left: 111°54'42"W 40°29'45"N

Middle Right: 111°54'31"W 40°29'45"N

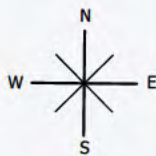
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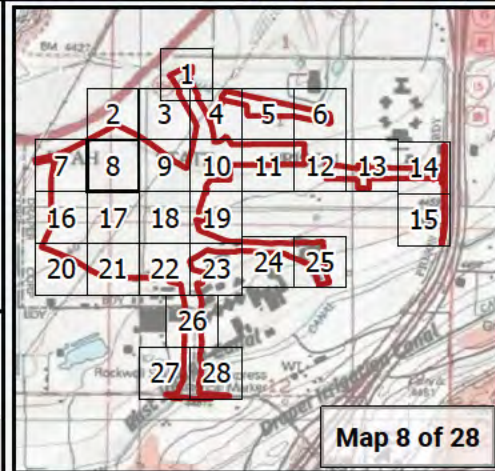
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Pipe with Combined Geothermal and Irrigation Flow

Porter Rockwell Extension

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1 inch equals 100 feet
0 50 100 Feet



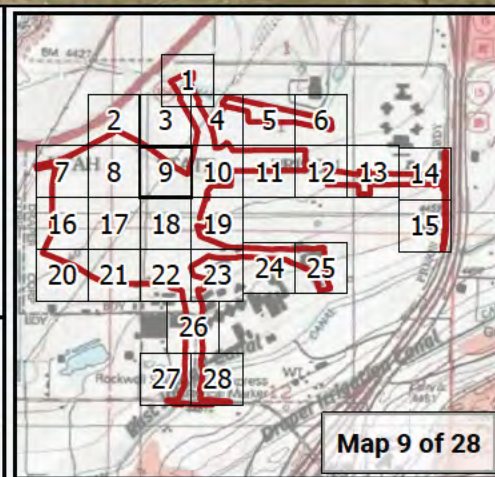
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Upper Left: 111°54'21"W 40°29'49"N

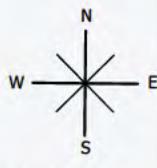
Upper Middle: 111°54'16"W 40°29'49"N

Upper Right: 111°54'11"W 40°29'49"N



Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
GCS: GCS North American 1983
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000



1 inch equals 100 feet
0 50 100 Feet

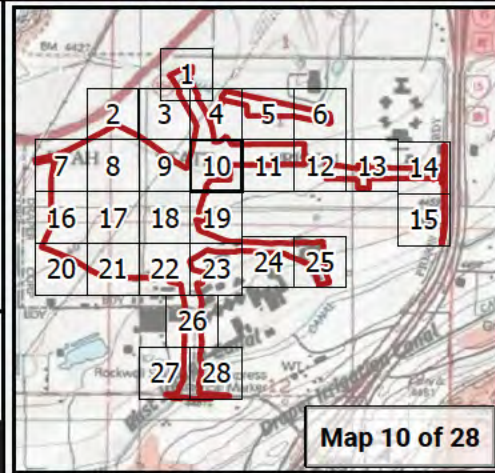
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Upper Left: 111°54'11"W 40°29'49"N

Upper Middle: 111°54'5"W 40°29'49"N

Upper Right: 111°54'W 40°29'50"N

Middle Left: 111°54'10"W 40°29'45"N

Middle Right: 111°54'W 40°29'46"N

Lower Left: 111°54'10"W 40°29'42"N

Lower Right: 111°54'W 40°29'42"N



Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
GCS: GCS North American 1983
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



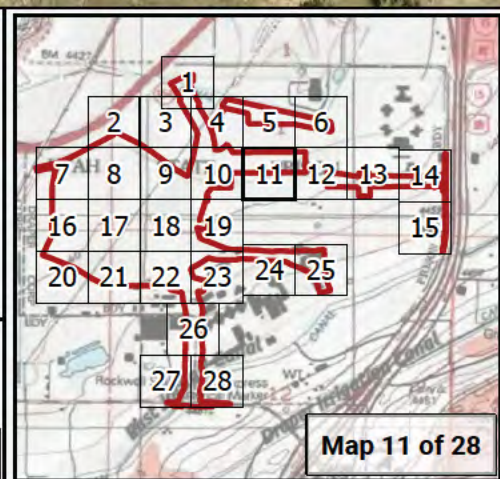
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Upper Left: 111°54'W 40°29'50"N

Upper Middle: 111°53'55"W 40°29'50"N

Upper Right: 111°53'50"W 40°29'50"N

Middle Left: 111°54'W 40°29'46"N

Middle Right: 111°53'50"W 40°29'46"N

Lower Left: 111°54'W 40°29'42"N

Lower Right: 111°53'50"W 40°29'42"N

Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



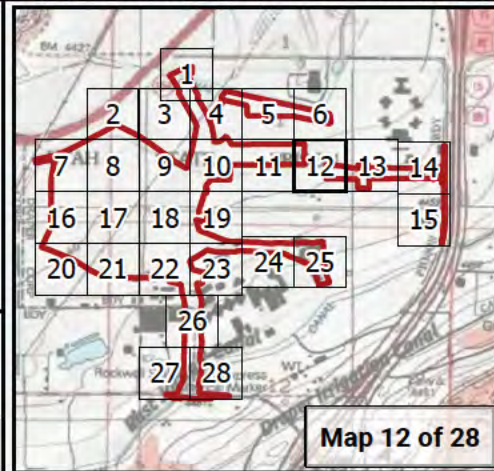
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Map 12 of 28

Upper Left: 111°53'50"W 40°29'50"N

Upper Middle: 111°53'45"W 40°29'50"N

Upper Right: 111°53'39"W 40°29'50"N

Middle Left: 111°53'50"W 40°29'46"N

Middle Right: 111°53'39"W 40°29'46"N

Lower Left: 111°53'50"W 40°29'42"N

Lower Right: 111°53'39"W 40°29'42"N



Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
GCS: GCS North American 1983
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



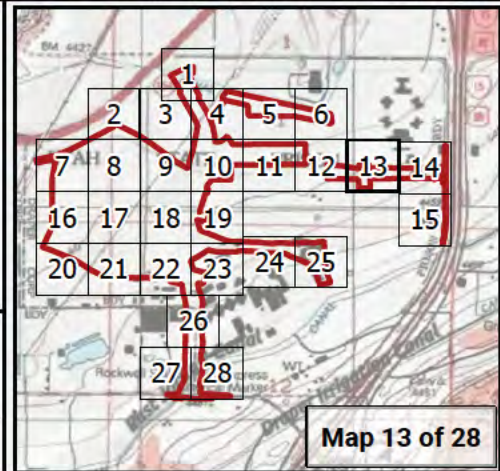
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Map 13 of 28

Upper Left: 111°53'39"W 40°29'49"N

Upper Middle: 111°53'34"W 40°29'49"N

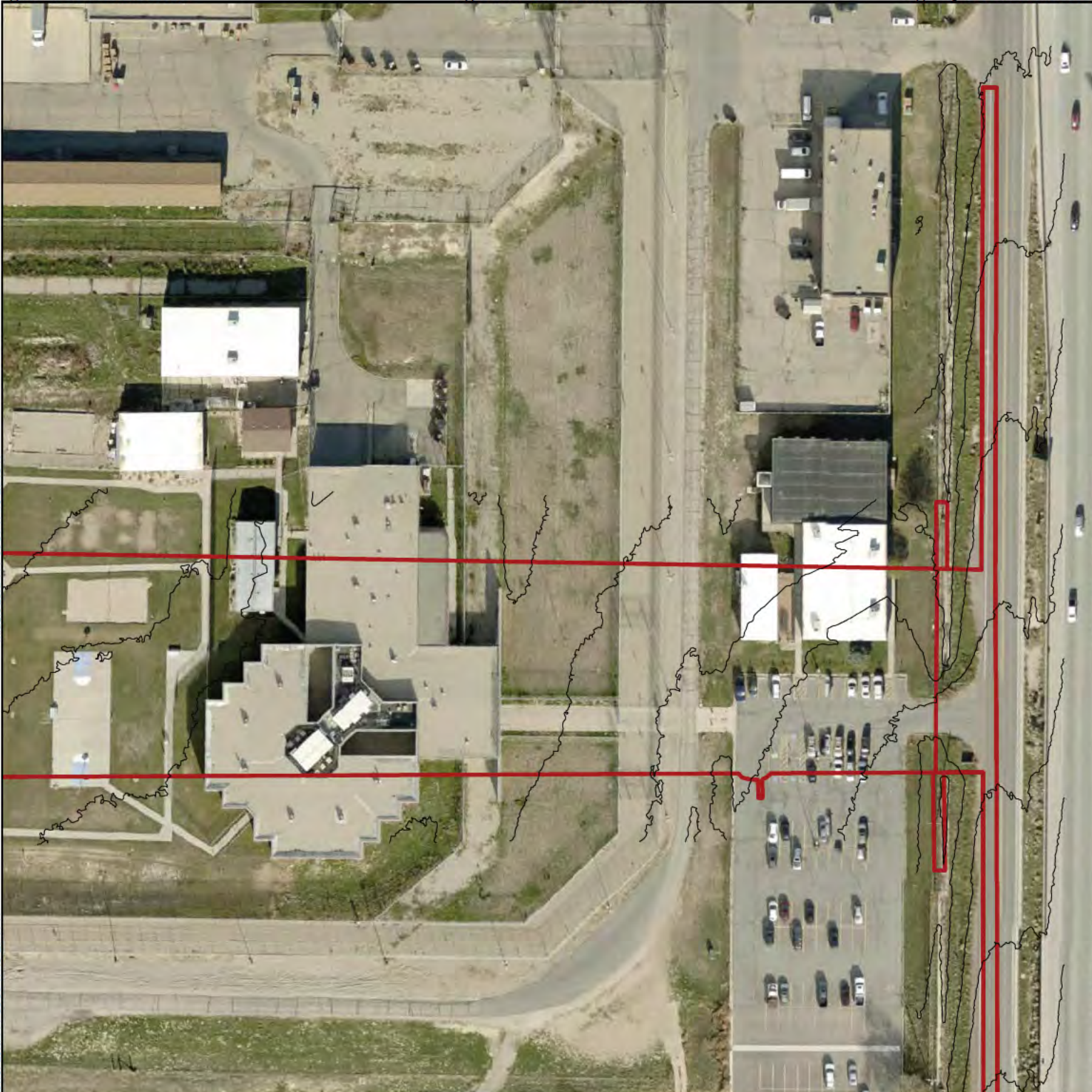
Upper Right: 111°53'29"W 40°29'49"N

Middle Left: 111°53'39"W 40°29'45"N

Middle Right: 111°53'29"W 40°29'45"N

Lower Left: 111°53'39"W 40°29'41"N

Lower Right: 111°53'29"W 40°29'42"N



Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
GCS: GCS North American 1983
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000



1 inch equals 100 feet
0 50 100 Feet

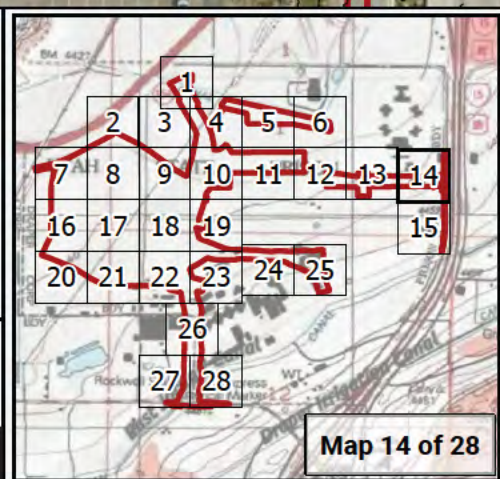
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Map 14 of 28

Upper Left: 111°53'39"W 40°29'41"N

Upper Middle: 111°53'34"W 40°29'41"N

Upper Right: 111°53'29"W 40°29'42"N

Middle Left: 111°53'39"W 40°29'38"N

Middle Right: 111°53'29"W 40°29'38"N

Lower Left: 111°53'39"W 40°29'34"N

Lower Right: 111°53'29"W 40°29'34"N



Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
GCS: GCS North American 1983
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



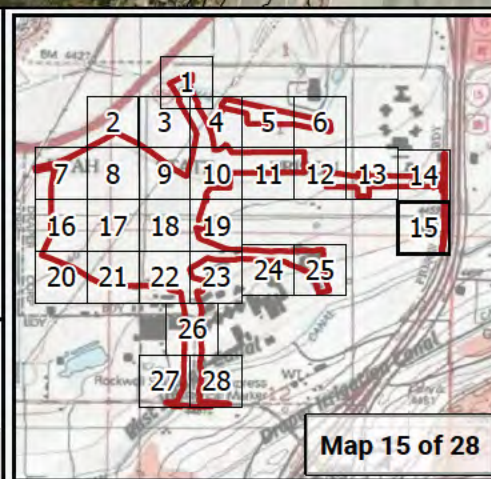
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- ▨ Irrigation Ditch
- Pipe
- ▨ Irrigation Ditch
- ▨ Wetland
- ▨ Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Map 15 of 28

Upper Left: 111°54'52"W 40°29'41"N

Upper Middle: 111°54'47"W 40°29'41"N

Upper Right: 111°54'41"W 40°29'41"N

Middle Left: 111°54'52"W 40°29'37"N

Middle Right: 111°54'41"W 40°29'37"N

Lower Left: 111°54'52"W 40°29'33"N

Lower Right: 111°54'41"W 40°29'33"N

Abandoned Irrigation Ditch
Concrete Removed

PP4

Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
GCS: GCS North American 1983
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



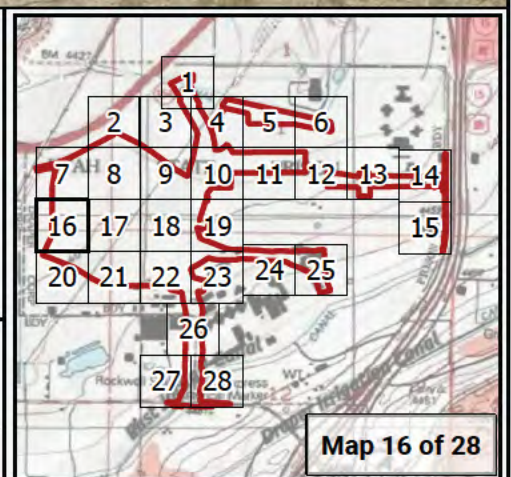
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Map 16 of 28

Upper Left: 111°54'41"W 40°29'41"N

Upper Middle: 111°54'36"W 40°29'41"N

Upper Right: 111°54'31"W 40°29'41"N

Middle Left: 111°54'41"W 40°29'37"N

Middle Right: 111°54'31"W 40°29'37"N

Lower Left: 111°54'41"W 40°29'33"N

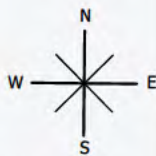
Lower Right: 111°54'31"W 40°29'33"N



Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
GCS: GCS North American 1983
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



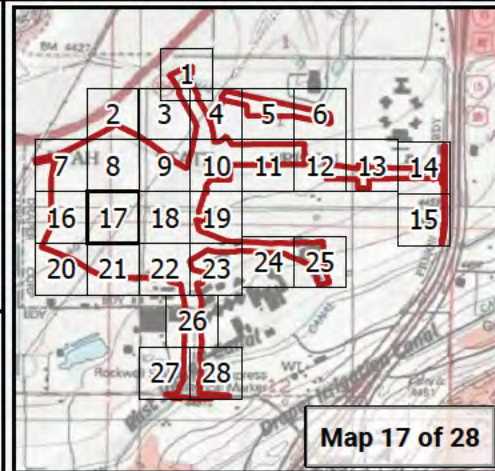
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:

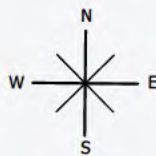




Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
GCS: GCS North American 1983
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



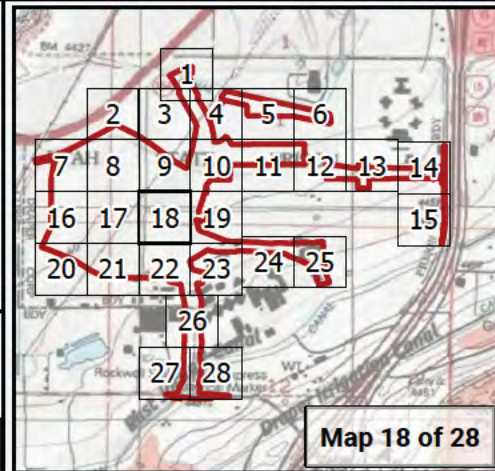
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Upper Left: 111°54'21"W 40°29'41"N

Upper Middle: 111°54'16"W 40°29'41"N

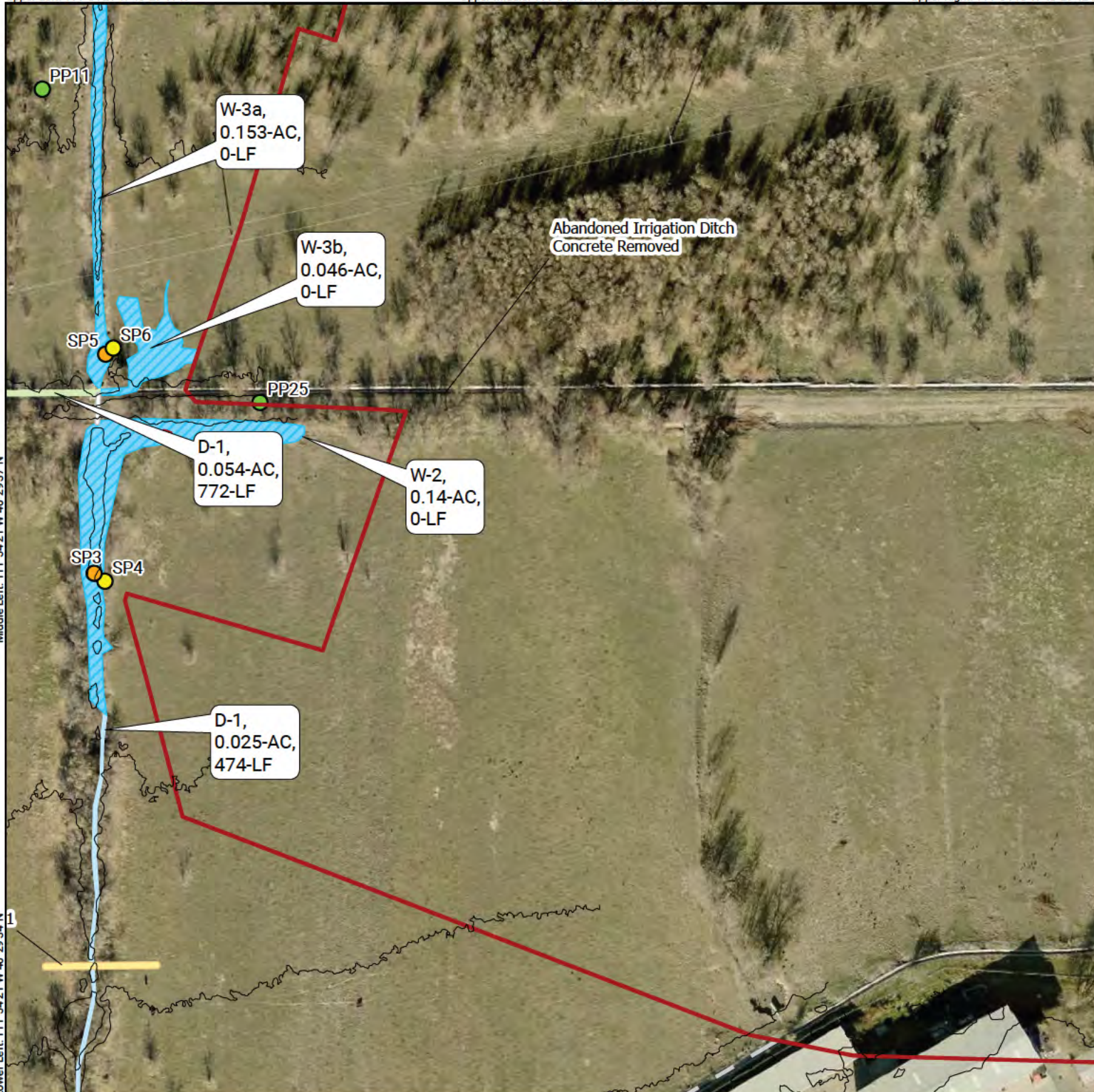
Upper Right: 111°54'10"W 40°29'42"N

Middle Left: 111°54'21"W 40°29'37"N

Middle Right: 111°54'10"W 40°29'38"N

Lower Left: 111°54'21"W 40°29'34"N

Lower Right: 111°54'10"W 40°29'34"N



Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
GCS: GCS North American 1983
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000



1 inch equals 100 feet
0 50 100 Feet

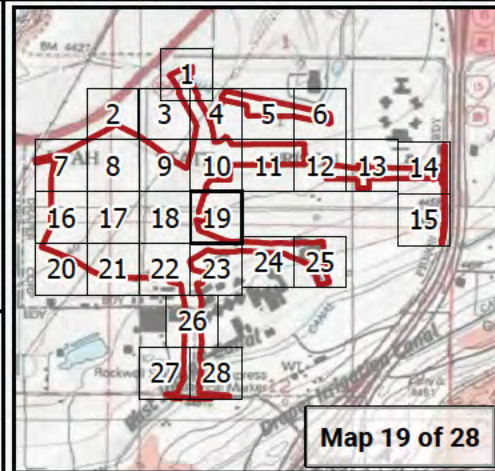
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Map 19 of 28

Upper Left: 111°54'52"W 40°29'33"N

Upper Middle: 111°54'47"W 40°29'33"N

Upper Right: 111°54'41"W 40°29'33"N

Middle Left: 111°54'52"W 40°29'29"N

Middle Right: 111°54'41"W 40°29'29"N

Lower Left: 111°54'52"W 40°29'25"N

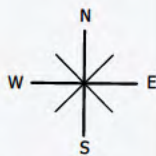
Lower Right: 111°54'41"W 40°29'25"N

Porter Rockwell Extension

Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



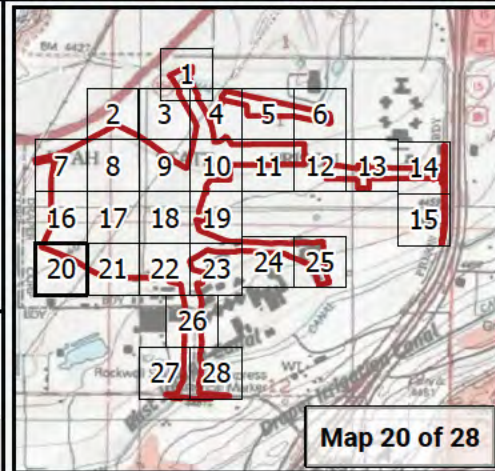
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Upper Left: 111°54'41"W 40°29'33"N

Upper Middle: 111°54'36"W 40°29'33"N

Upper Right: 111°54'31"W 40°29'33"N

Middle Left: 111°54'41"W 40°29'29"N

Middle Right: 111°54'31"W 40°29'30"N

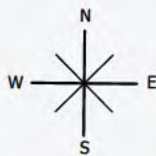
Lower Left: 111°54'41"W 40°29'25"N

Lower Right: 111°54'31"W 40°29'26"N

Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
GCS: GCS North American 1983
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



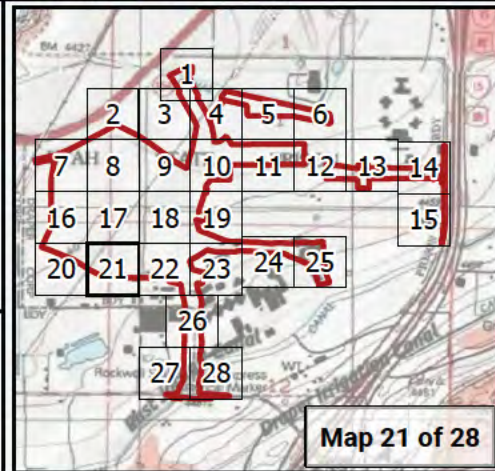
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Map 21 of 28

Upper Left: 111°54'31"W 40°29'33"N

Upper Middle: 111°54'26"W 40°29'33"N

Upper Right: 111°54'21"W 40°29'34"N

Middle Left: 111°54'31"W 40°29'30"N

Middle Right: 111°54'21"W 40°29'30"N

Lower Left: 111°54'31"W 40°29'26"N

Lower Right: 111°54'21"W 40°29'26"N

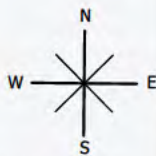


Porter Rockwell Extension

Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
GCS: GCS North American 1983
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



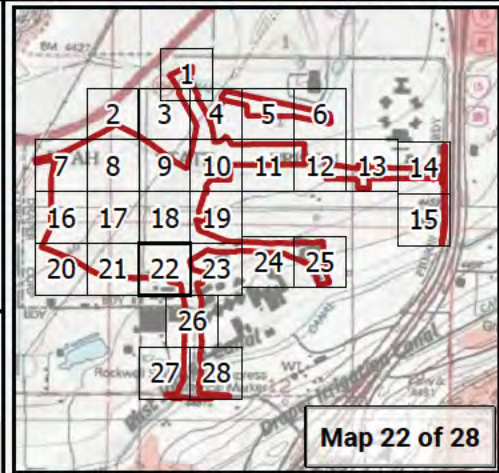
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Map 22 of 28

Upper Left: 111°54'21"W 40°29'34"N

Upper Middle: 111°54'15"W 40°29'34"N

Upper Right: 111°54'10"W 40°29'34"N

D-1,
0.025-AC,
474-LF

W-1,
0.006-AC, 0-LF

Abandoned Concrete-lined Irrigation Ditch

PP10

PP9

SP2

SP1

PP7

D-1,
0.032-AC,
320-LF

Middle Left: 111°54'21"W 40°29'30"N

Middle Right: 111°54'10"W 40°29'30"N

Lower Left: 111°54'21"W 40°29'26"N

Lower Right: 111°54'10"W 40°29'26"N

Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000



1 inch equals 100 feet
0 50 100 Feet

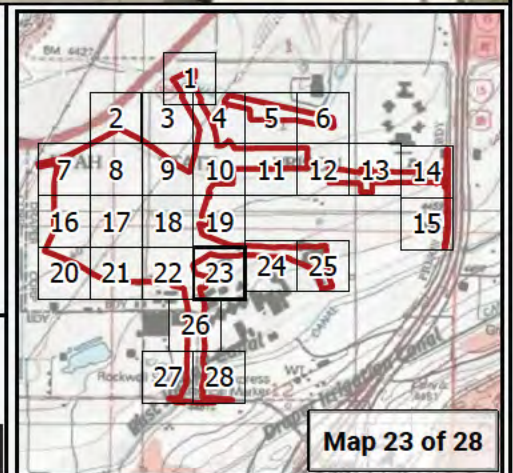
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Upper Left: 111°54'10"W 40°29'35"N

Upper Middle: 111°54'5"W 40°29'35"N

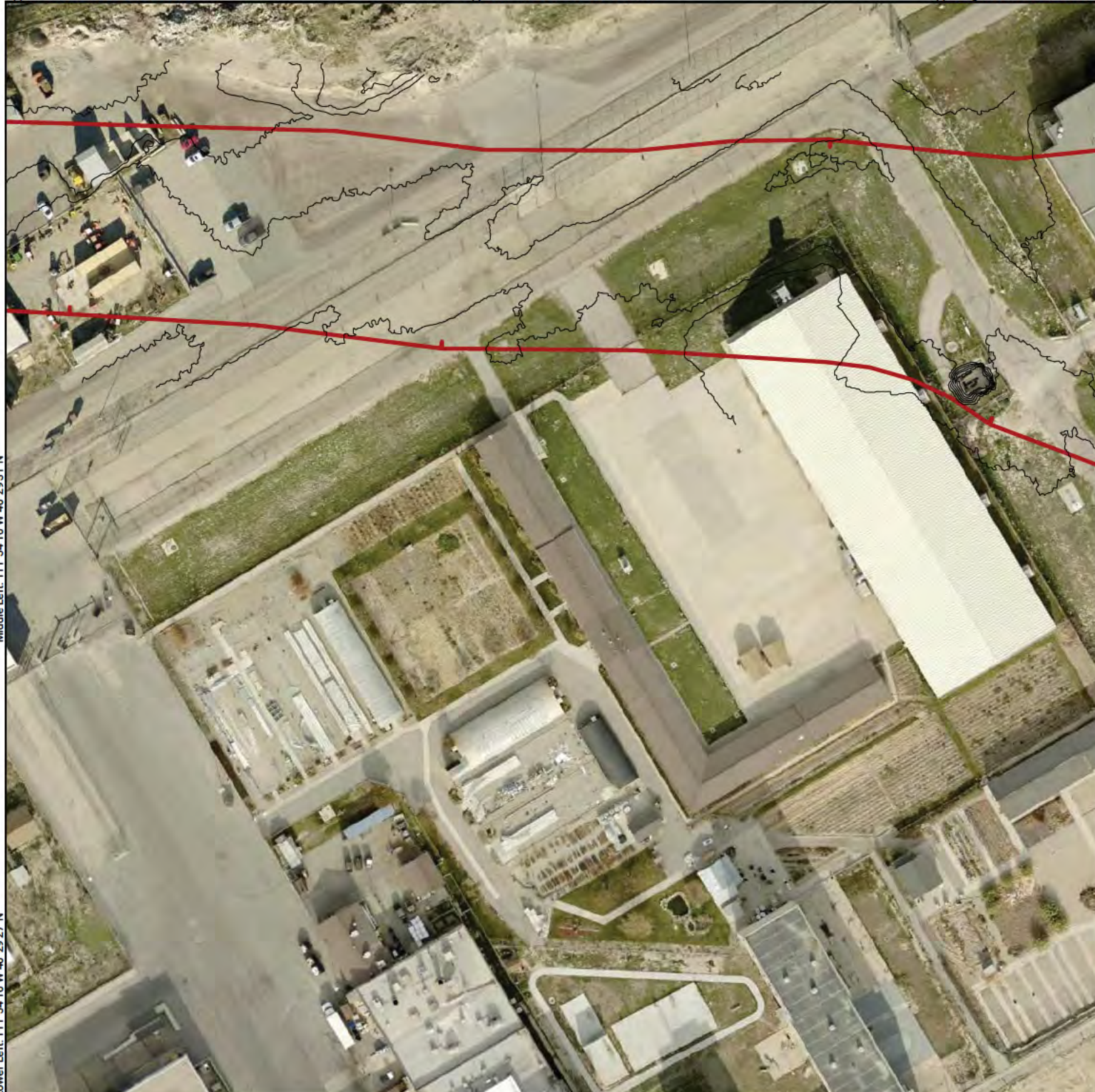
Upper Right: 111°54'W 40°29'35"N

Middle Left: 111°54'10"W 40°29'31"N

Middle Right: 111°54'W 40°29'31"N

Lower Left: 111°54'10"W 40°29'27"N

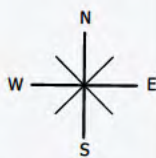
Lower Right: 111°54'W 40°29'27"N



Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
GCS: GCS North American 1983
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



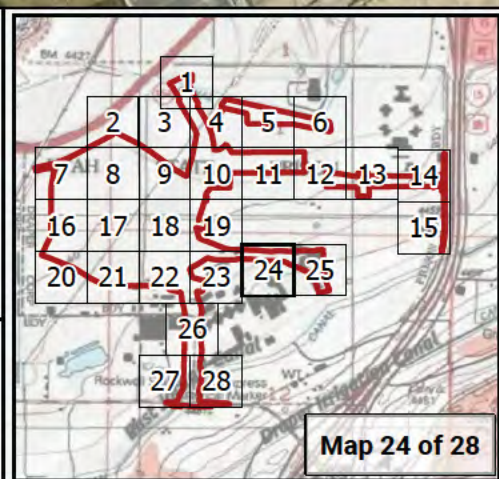
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Upper Left: 111°54'W 40°29'35"N

Upper Middle: 111°53'55"W 40°29'35"N

Upper Right: 111°53'50"W 40°29'35"N

Middle Left: 111°54'W 40°29'31"N

Middle Right: 111°53'50"W 40°29'31"N

Lower Left: 111°54'W 40°29'27"N

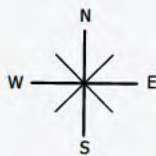
Lower Right: 111°53'49"W 40°29'27"N



Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
GCS: GCS North American 1983
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



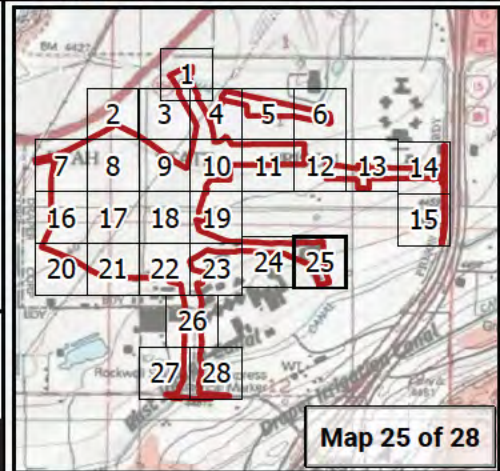
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Map 25 of 28

Upper Left: 111°54'25"W 40°29'26"N

Upper Middle: 111°54'20"W 40°29'26"N

Upper Right: 111°54'15"W 40°29'26"N

Middle Left: 111°54'25"W 40°29'22"N

Middle Right: 111°54'15"W 40°29'22"N

Lower Left: 111°54'25"W 40°29'18"N

Lower Right: 111°54'15"W 40°29'18"N

Geothermal Well Pump

Diversion from Irrigation Line to Geothermal Line

Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



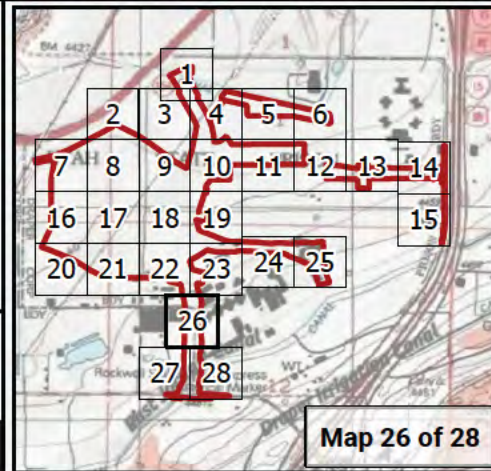
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Map 26 of 28

Upper Left: 111°54'31"W 40°29'18"N

Upper Middle: 111°54'26"W 40°29'18"N

Upper Right: 111°54'20"W 40°29'18"N

Middle Left: 111°54'31"W 40°29'14"N

Middle Right: 111°54'20"W 40°29'14"N

Lower Left: 111°54'31"W 40°29'10"N

Lower Right: 111°54'20"W 40°29'10"N



Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
GCS: GCS North American 1983
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



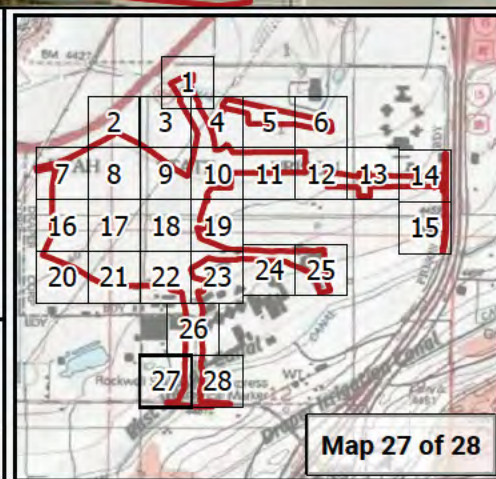
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

Delineated By:



Upper Left: 111°54'20"W 40°29'18"N

Upper Middle: 111°54'15"W 40°29'18"N

Upper Right: 111°54'10"W 40°29'18"N

Middle Left: 111°54'20"W 40°29'14"N

Middle Right: 111°54'10"W 40°29'14"N

Lower Left: 111°54'20"W 40°29'10"N

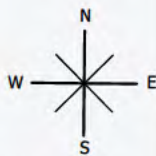
Lower Right: 111°54'10"W 40°29'10"N



Porter Rockwell Extension Aquatic Resources Delineation Mapbook

Spatial Reference
Name: NAD 1983 UTM Zone 12N
PCS: NAD 1983 UTM Zone 12N
GCS: GCS North American 1983
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -111.0000

1 inch equals 100 feet
0 50 100 Feet



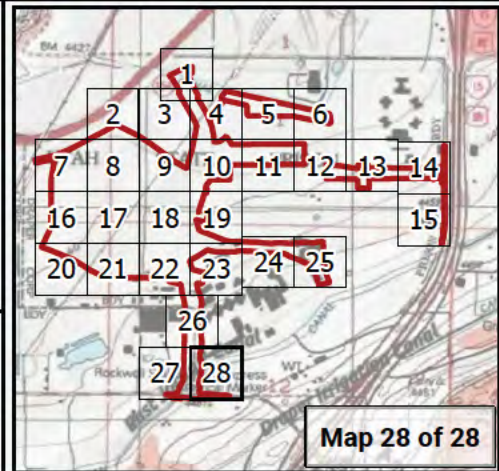
Legend

- Contours- 2ft interval
- Study Area - 167 Acres
- Photo point
- Upland Sample point
- Wetland Sample point
- Cross Section
- Irrigation Ditch
- Pipe
- Irrigation Ditch
- Wetland
- Concrete-lined Ditch

Date Delineated:
07/31/2024, 11/04/2024

Date Drawn:
12/19/2024

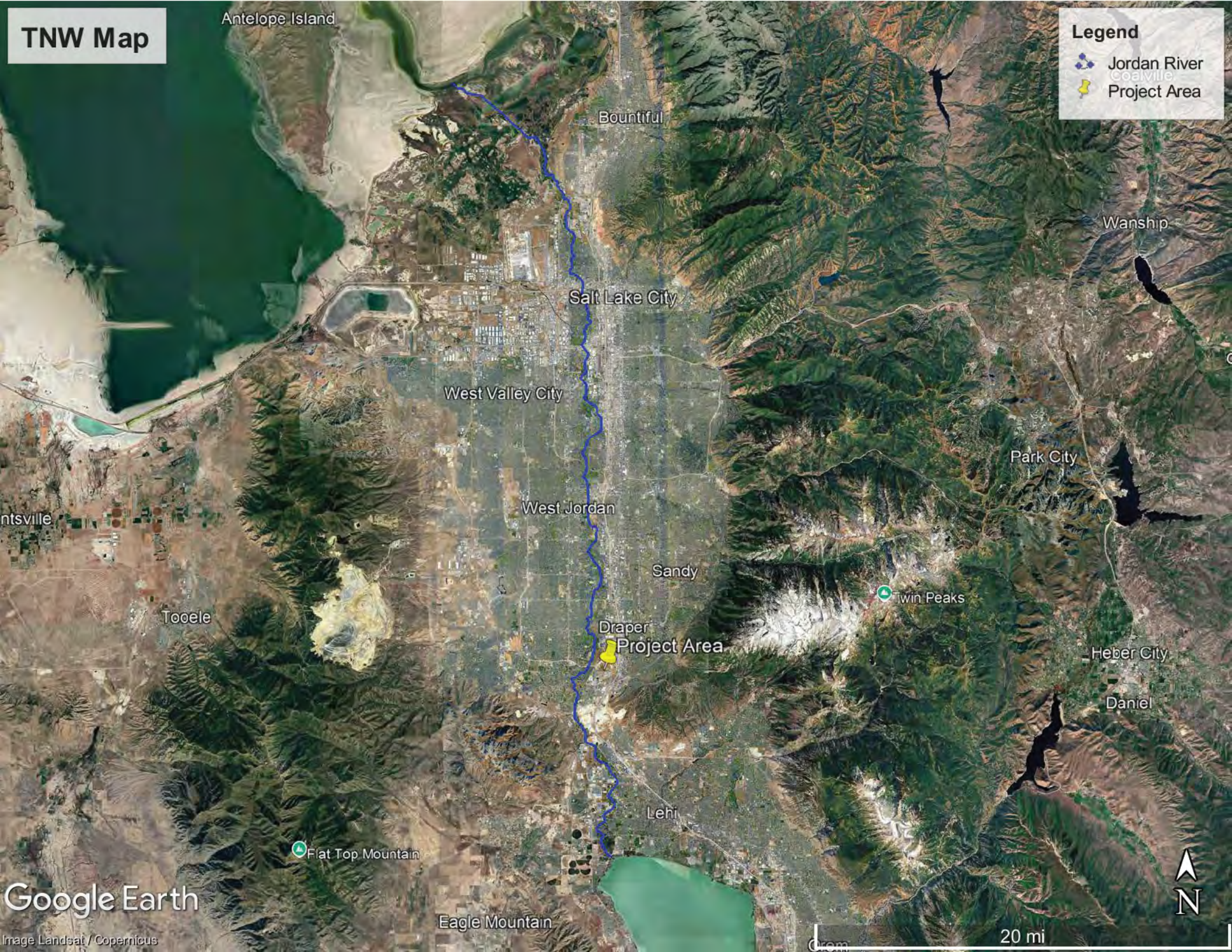
Delineated By:



Map 28 of 28

Legend

- Jordan River
- Project Area



UDOT Galena Wetland
Corrections Geothermal Well and Water Conveyance System

- Legend**
- Corrections Geothermal Well
 - Ex. Geothermal Water Pipe (1.25 miles)
 - Mileposts
 - UDOT Galena Wetland Site (25 acres)

