



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

CESPK-RDE

1 July 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" (8 September 2023),¹ SPK-2024-00615, 1 of 2.

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., 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.

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.

CESPK-RDE

SUBJECT: 2023 Rule, as amended, Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), SPK-2024-00615, 1 of 2

1. SUMMARY OF CONCLUSIONS. This first of two MFRs includes the 38 non-relatively permanent streams tributary to the interstate portion of the Amargosa River (Table 1). None are jurisdictional under either Section 10 of the Rivers and Harbors Act or Section 404 of the Clean Water Act.

Table 1. Aquatic Resources.

NAME	Length (ft)	JURIS.	NAME	Length (ft)	JURIS.	NAME	Length (ft)	JURIS.
A1	2,748	No	B7	966	No	C2	46,202	No
A2	15,750	No	B8	4,029	No	C3	3,700	No
A3	6,233	No	B9	2,967	No	C4	2,156	No
A4	2,388	No	B10	6,928	No	C5	4,713	No
A5	5,118	No	B11	5,009	No	C6	2,999	No
A6	9,131	No	B12	12,722	No	C7	7,975	No
A7	2,876	No	B13	3,677	No	C8	4,035	No
B1	1,237	No	B14	1,511	No	C9	8,258	No
B2	12,725	No	B15	9,262	No	C10	3,403	No
B3	3,115	No	B16	18,070	No	C11	4,044	No
B4	10,367	No	B17	11,911	No	C12	1,524	No
B5	4,652	No	B18	5,225	No	C13	2,130	No
B6	10,566	No	C1	4,839	No			

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 overall project area is approximately 43,420 acres. (See Data Source 9.a.) Based upon the differences in flowpaths from the site to the nearest (a)(1) water we have divided the project area into two review areas each with its own MFR. This first MFR addresses the northern review area measuring approximately 24,226 acres. The centroid coordinates for this review area are approximately latitude 36.960282°N, longitude 116.668256°W, near the town of Beatty, Nevada. (See Figure 1 enclosed.)

4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), THE TERRITORIAL SEAS, OR INTERSTATE WATER TO WHICH THE AQUATIC RESOURCE IS CONNECTED.

The Amargosa River is just outside of and to the west of the review area. The Amargosa River crosses the California-Nevada state line at approximately latitude 36.536703°N, longitude 116.590443°W, approximately 23.8 straight-line miles south of the review area. At the point where the Amargosa River crosses the state line it is a 6th order stream according to USGS National Hydrography Dataset NHDPlus (see Data Source 9.b). According to the NHDPlus, the 6th order reach of the Amargosa River extends beyond (upstream and north of) the review area and all flowpaths discussed in Section 5 below are tributary to this 6th order reach.

5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, THE TERRITORIAL SEAS, OR INTERSTATE WATER. The requestor did not provide information concerning the flowpath outside of the review area (Data Source 9.a). To characterize the flowpath outside of the review area we have used the National Hydrography Dataset (NHD) (Data Source 9.b), USGS topographic maps (Data Source 9.c and 9.d), and aerial imagery available through Google Earth (Data Source 9.e and 9.f). (See Figure 2 enclosed.)

HUC 180902020402, Oasis Valley-Amargosa River: (Corresponds to Data Source 9.a, Appendix A.)

Tributary A1: The USGS topo map and NHD show this channel ending approximately 5,500 feet west of the review area, running parallel to another stream, and ending near several springs but short of the Amargosa River. Google Earth imagery at this location suggests that the USGS mapping may be oversimplified. This channel runs into a fan shaped feature of dendritic channels that braid and overlap and all coalesce in the Amargosa River.

Channel A2: The USGS topo maps show this channel ending in an impoundment approximately 1,800 feet west of the review area. The NHD shows the flowline ending in approximately this same location. The 26 August 2023 aerial imagery available in Google Earth indicates a flowpath between this impoundment and another further to the southwest. Additional effort in the form of fieldwork or remote analysis may reveal a flowpath that continues further to the west possibly to the Amargosa River. However, this additional effort is not warranted in this case as there is adequate information to make a jurisdictional determination based on the relatively permanent standard. See discussion in Section 8 below.

Tributary A6: Unnamed channel A6 extends approximately 6,600 feet west of the review area to its confluence with the Amargosa River. A3, A5, and A7 are tributary to A6. A4 is a tributary of A3.

HUC 180902020403, Town of Beatty-Amargosa River: (Corresponds to Data Source 9.a, Appendix B.)

Fluorspar Canyon: Fluorspar Canyon (B16) extends approximately another 1,100 feet west of the review area to its confluence with the Amargosa River. B17 is a tributary of B16. The requestor's mapping shows a break between B18 and B16 at a road. Aerial imagery indicates a channel below the road. Photographs and captions in the 18 September 2024 Aquatic Resources Delineation Report (Data Source 9.a, Appendix B, p. 6) indicate that the road acts like a dam. There was no culvert under the road.

Perlite Canyon: The tributaries mapped as B14 and B15 extend outside of the review area converging approximately 4,000 feet to the north. The resulting channel extends another approximately 3,500 feet northwest to its confluence with the Amargosa River.

Unnamed Tributary to Amargosa River 1: The requestor mapped several stream channels (B4, B6, B10, and B12) that all converge about 2,000 feet west of the review area into a single channel before continuing another 3,900 feet to its confluence with the Amargosa River. B11 and B13 are tributaries of B12. B7, B8, and B9 are tributary to B6. B5 is tributary to B4.

Stream Channel B2: Based on the information we have; it is unclear if stream channel B2 is actually tributary to the Amargosa River. NHD shows the channel ending before it reaches highway 95. The Amargosa River is on the opposite side of 95. Aerial imagery indicates earthmoving activities in this area may have resulted in an impoundment that subsequently breached. Several eroded channels are visible from the impoundment down to the highway embankment. Another impoundment is just south of this location. It is unclear if there is any flowpath under 95 to the Amargosa River in this location. B3, and B1 are tributary to B2. (Since B2 and its tributaries, B3 and B1, are not (a)(1) waters themselves and are non-relatively permanent as discussed in 8 below, there is no need to determine if they are tributary to an (a)(1) water to determine jurisdiction.)

HUC 180902020202, Lower Beatty Wash: (Corresponds to Data Source 9.a, Appendix C.)

Beatty Wash: Beatty Wash is a braided tributary of the Amargosa River mapped by the requestor as C2. NHD, the USGS topographic maps, and aerial imagery show it extends approximately another 7,200 feet west of the review area boundary, under highway 95, to the Amargosa River. C1, C3, C4, C5, C6, C7, C9, C10, C11, C12, and C13 are tributaries of Beatty Wash (C2). C8 is tributary to C7 which is in turn tributary to Beatty Wash.

6. SECTION 10 JURISDICTIONAL WATERS⁵: None within the review area.

7. SECTION 404 JURISDICTIONAL WATERS:

- a. Traditional Navigable Waters (TNWs) (a)(1)(i): None.
- b. The Territorial Seas (a)(1)(ii): None.
- c. Interstate Waters (a)(1)(iii): None.
- d. Impoundments (a)(2): None.
- e. Tributaries (a)(3): None
- f. Adjacent Wetlands (a)(4): None.
- g. Additional Waters (a)(5): None.

8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

a. There are no 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).

b. All 38 aquatic resources within the review area are non-jurisdictional because they do not meet one or more categories of waters of the United States under the 2023 Rule as amended. All 38 aquatic resources were reviewed as potential (a)(3) tributaries. None met the relatively permanent standard. See Table 1 for lengths.

9. DATA SOURCES. The following are sources of data/information used in making this determination.

a. [REDACTED] 2024. “Aquatic Resources Delineation Technical Report, Expanded Silicon Exploration Area, Approximately 43,420 Acres Project Area, Nye County, Nevada.” Dated August 2024 and received 18 September 2024.

b. USGS. 2018. “National Hydrography Dataset Plus High Resolution (NHDPlus HR) for 4-digit Hydrologic Unit -1809.” Reston, VA: U.S. Geological Survey, Dept. of the

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.

CESPK-RDE

SUBJECT: 2023 Rule, as amended, Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), SPK-2024-00615, 1 of 2

Interior, 9 August. Accessed 25 June 2025 at

<https://apps.nationalmap.gov/downloader/>.

c. USGS. 1986. "Thirsty Canyon SW Quadrangle, Nevada—Nye Co., 7.5 Minute Series (Topographic)." Accessed 26 June 2025 at

<https://ngmdb.usgs.gov/topoview/viewer/#14/37.0151/-116.7150>.

d. USGS. 1987. "Beatty Mtn. Quadrangle, Nevada—Nye Co., 7.5 Minute Series (Topographic)." Accessed 26 June 2025 at

<https://ngmdb.usgs.gov/topoview/viewer/#14/36.9649/-116.7178>.

e. Google Earth Pro 7.3.6.10201. 2023. Aerial Imagery Near Beatty, NV – 37.0454°, -116.7099°; 36.9958°, -116.7147°; 36.9606°, -116.713544°; 36.9528°, -116.7119°; and 36.9403°, -116.7079°; eye alt 6,526 ft. 26 August. Access 26 June 2025. <http://www.earth.google.com>.

f. Google Earth Pro 7.3.6.10201. 2024. Aerial Imagery Near Fluorspar Canyon. 36.9289°, -116.7223°; 36.8935°, -116.7399°; eye alt 6,986 ft. 20 June. Access 26 June 2025. <http://www.earth.google.com>.

10. OTHER SUPPORTING INFORMATION. The requestor provided documentation concerning flow characteristics including Streamflow Duration Assessment Method (SDAM) data sheets and ground photography. We find this information to be compelling and agree with their assertion that these 38 channels do not meet the relatively permanent standard.

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.

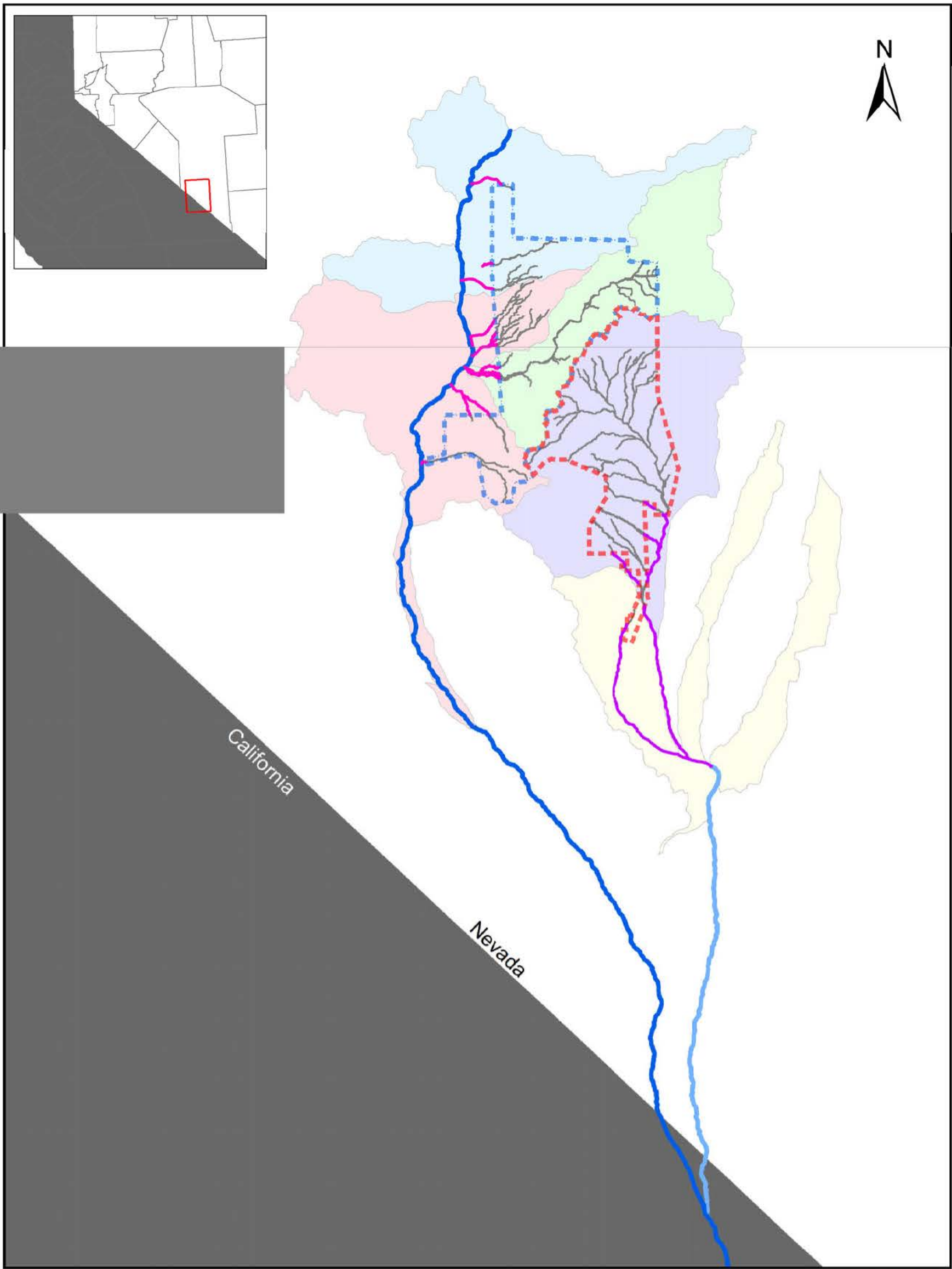
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Regional Technical Specialist

Enclosure 1

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Legend

HUC12 Boundaries

- 180902020202
- 180902020402

- 180902020403
- 180902020501
- 180902020504

Interstate Waters

- Amargosa River (6th Order)
- Windy Wash (4th Order)



- Review Area 1
- Review Area 2

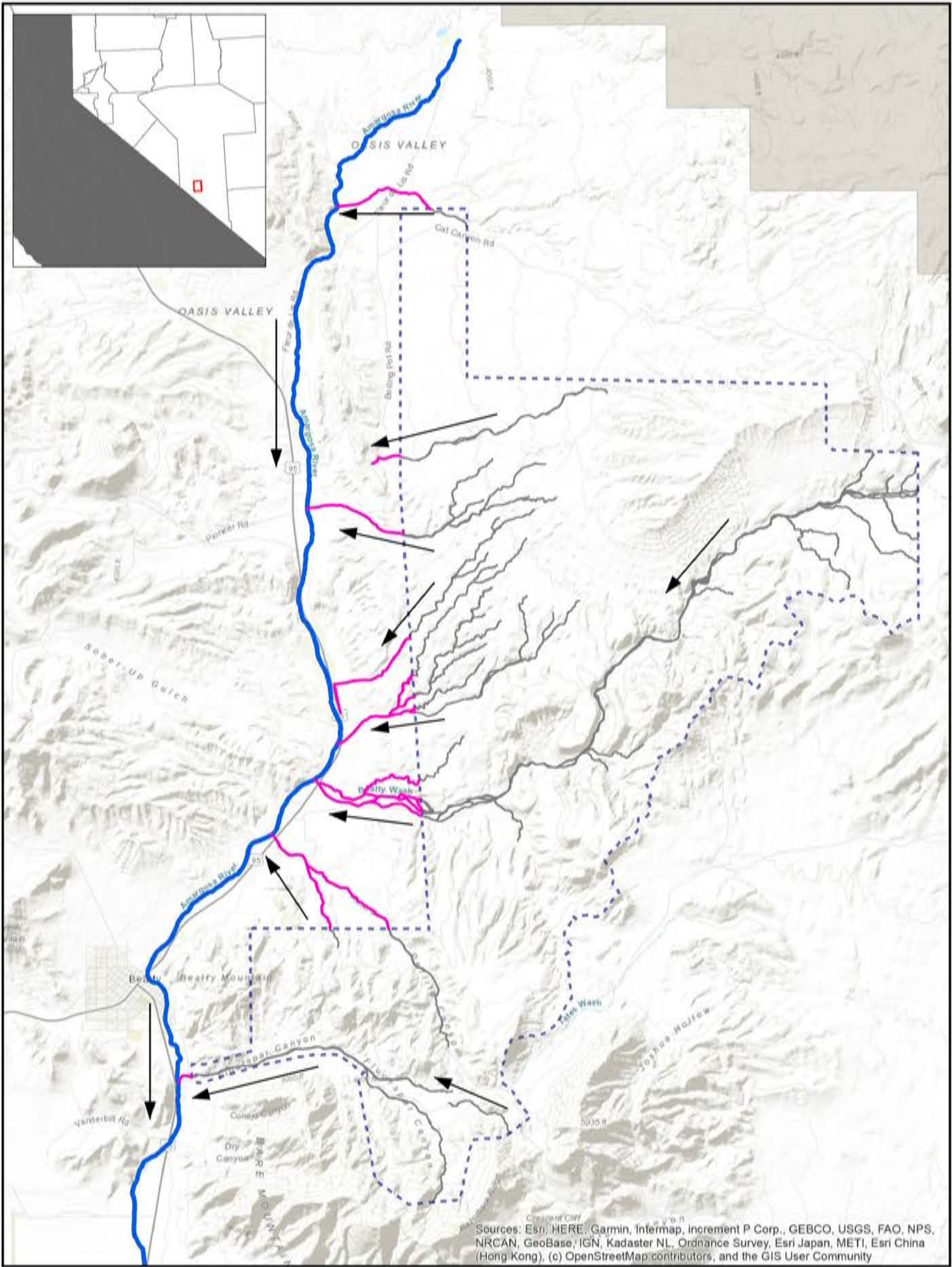
- Flowpaths (Review Area 1)
- Flowpaths (Review Area 2)



Data Source: Requestor submittals dated 18-SEP-24 and 7-FEB-25; and USGS NHDPlus (2018).
Coordinate System: NAD_1983_UTM_Zone_11N



**Figure 1: SPK-2024-00615
Review Areas & Flowpaths**



Legend

- Amargosa River (6th Order)
- Flowpaths (Review Area 1)
- Review Area 1
- Aquatic Resources (in Review Area)
- Direction of Flow



0 0.5 1 2 Miles

Data Source: Requestor submittals dated 18-SEP-24 and 7-FEB-25; and USGS NHDPlus (2010).
Coordinate System: NAD_1983_UTM_Zone_11N



**Figure 2: SPK-2024-00615
Review Area 1 Flowpaths**



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MEMORANDUM FOR RECORD

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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.

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.

CESPK-RDE

SUBJECT: 2023 Rule, as amended, Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), SPK-2024-00615, 2 of 2

1. SUMMARY OF CONCLUSIONS. This second of two MFRs includes the 37 non-relatively permanent streams tributary to the interstate portion (4th order) of Windy Wash (Table 1). None are jurisdictional under either Section 10 of the Rivers and Harbors Act or Section 404 of the Clean Water Act.

Table 1. Aquatic Resources.

NAME	Length (ft)	JURIS.	NAME	Length (ft)	JURIS.	NAME	Length (ft)	JURIS.
D1	50,181	No	D14	2,703	No	D27	2,346	No
D2	2,308	No	D15	3,810	No	D28	10,844	No
D3	5,681	No	D16	8,021	No	D29	14,336	No
D4	5,966	No	D17	18,744	No	D30	13,512	No
D5	4,095	No	D18	5,174	No	D31	2,176	No
D6	9,221	No	D19	9,953	No	D32	1,362	No
D7	8,014	No	D20	6,175	No	D33	996	No
D8	5,987	No	D21	1,310	No	D34	1,575	No
D9	16,846	No	D22	5,372	No	D35	643	No
D10	3,412	No	D23	3,379	No	D36	5,178	No
D11	1,730	No	D24	19,580	No	E1	3,489	No
D12	16,439	No	D25	10,061	No			
D13	17,814	No	D26	10,316	No			

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 overall project area is approximately 43,420 acres. (See Data Source 9.a.) Based upon the differences in flowpaths from the site to the nearest (a)(1) water we have divided the project area into two review areas each with its own MFR. This second MFR addresses the southern review area measuring approximately 19,194 acres. The centroid coordinates for this review area are approximately latitude 36.9043°N, longitude 116.6174°W, near the town of Beatty, Nevada. (See Figure 1.)

4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), THE TERRITORIAL SEAS, OR INTERSTATE WATER TO WHICH THE AQUATIC RESOURCE IS CONNECTED. An unnamed tributary to the Amargosa River crosses the California-Nevada state line at approximately latitude 36.513426°N, longitude 116.559759°W, approximately 19.5 straight-line miles south of the review area (Figure 1). While USGS NHD does not give a name for this stream, because it appears to be within the flowpath of a stream named Windy Wash on topographic maps of the area we will use that name in this MFR. At the point where Windy Wash crosses the state line, it is a 4th order stream according to USGS National Hydrography Dataset NHDPlus (see Data Source 9.b). According to the NHDPlus, the 4th order reach of Windy Wash extends to about 5.6 miles south-southeast of the review area where it spits into third order streams, including the flowpaths from the review area. The review area and all flowpaths discussed in Section 5 below are tributary to this 4th order reach.

5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, THE TERRITORIAL SEAS, OR INTERSTATE WATER. The requestor did not provide information concerning the flowpath outside of the review area (Data Source 9.a). To characterize the flowpath outside of the review area we have used the National Hydrography Dataset (NHD) (Data Source 9.b), and USGS topographic maps (Data Source 9.c through 9.e). See Figure 2.

HUC 180902020504, Solitario Canyon: Corresponds to Data Source 9.a, Appendix E.)

Tributary E1: The USGS topo map and NHD show this channel extending approximately 1,500 feet south-southwest until it joins with another second order channel to form a third order stream which continues outside of the review area to Windy Wash. The total length of the flowpath from the feature mapped as E1 to the 4th order reach of Windy Wash is approximately 7.7 miles.

HUC 180902020501, Tates Wash: (Corresponds to Data Source 9.a, Appendix D.)

Tributary D36: D36 corresponds to a second order stream mapped by NHD (NHDPlusID = 50000700080394). From the review area this flowpath extends approximately 6.3 miles to its confluence with the 3rd order stream flowpath described above under E1. From this confluence, the flowpath extends another approximately nine-tenths (0.9) of a mile to the confluence with the 4th order reach of Windy Wash. Except for E1, all remaining aquatic resources mapped within Review Area 2 are tributary to D36 and share its flowpath to Windy Wash.

CESPK-RDE

SUBJECT: 2023 Rule, as amended, Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), SPK-2024-00615, 2 of 2

6. SECTION 10 JURISDICTIONAL WATERS⁵: None within the review area.

7. SECTION 404 JURISDICTIONAL WATERS:

- a. Traditional Navigable Waters (TNWs) (a)(1)(i): None.
- b. The Territorial Seas (a)(1)(ii): None.
- c. Interstate Waters (a)(1)(iii): None.
- d. Impoundments (a)(2): None.
- e. Tributaries (a)(3): None
- f. Adjacent Wetlands (a)(4): None.
- g. Additional Waters (a)(5): None.

8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

a. There are no 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).

b. All 37 aquatic resources within the review area are non-jurisdictional because they do not meet one or more categories of waters of the United States under the 2023 Rule as amended. All 37 aquatic resources were reviewed as potential (a)(3) tributaries. None met the relatively permanent standard. See Table 1 for lengths.

9. DATA SOURCES. The following are sources of data/information used in making this determination.

a. [REDACTED] 2024. “Aquatic Resources Delineation Technical Report, Expanded Silicon Exploration Area, Approximately 43,420 Acres Project Area, Nye County, Nevada.” Dated August 2024 and received 18 September 2024.

b. USGS. 2018. “National Hydrography Dataset Plus High Resolution (NHDPlus HR) for 4-digit Hydrologic Unit -1809.” Reston, VA: U.S. Geological Survey, Dept. of the

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.

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SUBJECT: 2023 Rule, as amended, Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), SPK-2024-00615, 2 of 2

Interior, 9 August. Accessed 25 June 2025 at

<https://apps.nationalmap.gov/downloader/>.

c. USGS. 1987. "East of Beatty Mtn. Quadrangle, Nevada—Nye Co., 7.5 Minute Series (Topographic)." Accessed 29 June 2025 at <https://ngmdb.usgs.gov/topoview/viewer/#13/36.9367/-116.5782>.

d. USGS. 1987. "Beatty Mtn. Quadrangle, Nevada—Nye Co., 7.5 Minute Series (Topographic)." Accessed 26 June 2025 at <https://ngmdb.usgs.gov/topoview/viewer/#14/36.9649/-116.7178>.

e. USGS. 1986. "Crater Flat Quadrangle, Nevada—Nye Co., 7.5 Minute Series (Topographic)." Accessed 29 June 2025 at <https://ngmdb.usgs.gov/topoview/viewer/#13/36.8074/-116.5904>.

10. OTHER SUPPORTING INFORMATION. The requestor provided documentation concerning flow characteristics including SDAM data sheets and ground photography. We find this information to be compelling and agree with their assertion that these 37 channels do not meet the relatively permanent standard.

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.

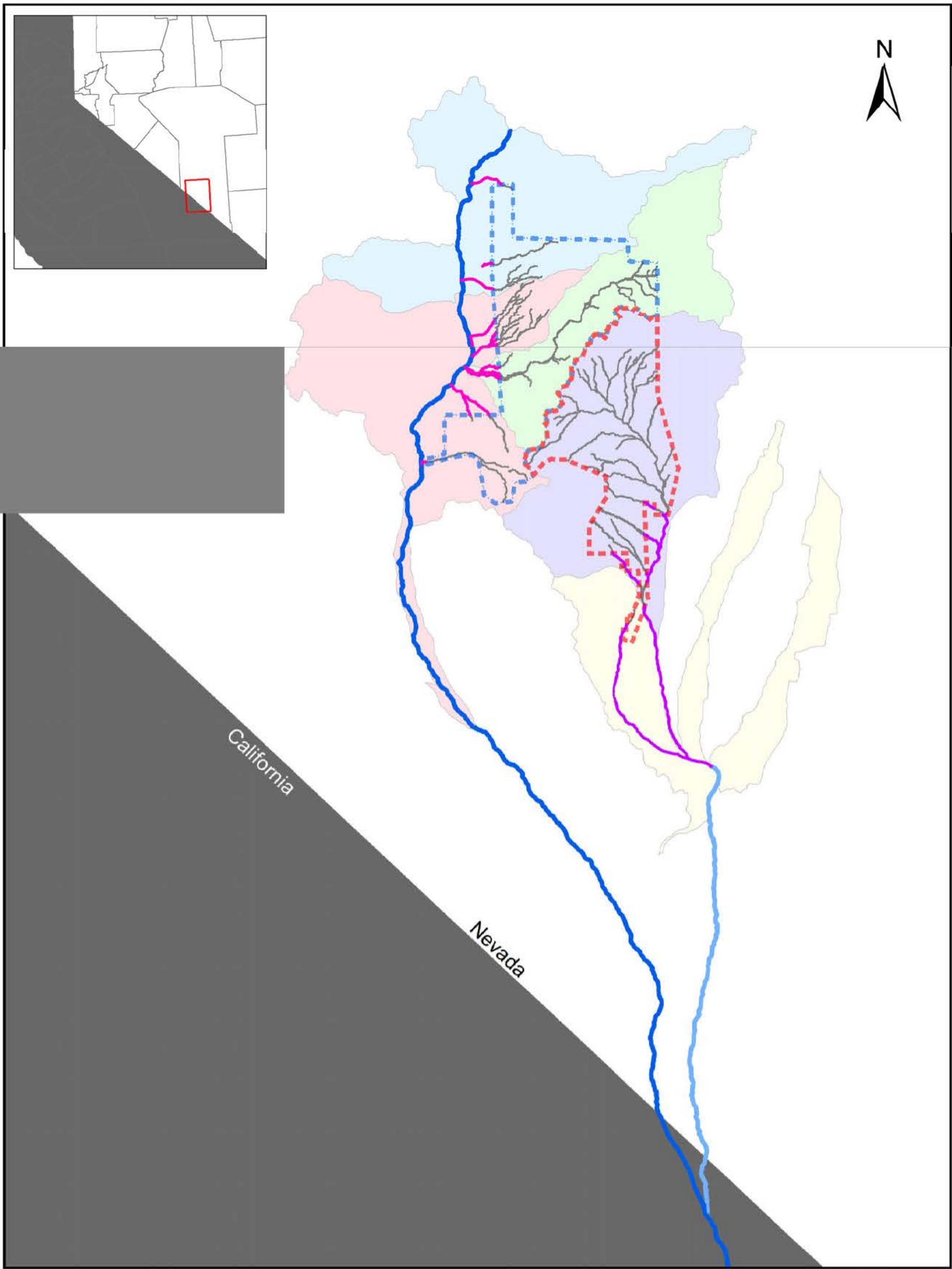
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Regional Technical Specialist

Enclosure 1

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Legend

HUC12 Boundaries

- 180902020202
- 180902020402

- 180902020403
- 180902020501
- 180902020504

Interstate Waters

- Amargosa River (6th Order)
- Windy Wash (4th Order)



Review Area 1

Review Area 2

Flowpaths (Review Area 1)

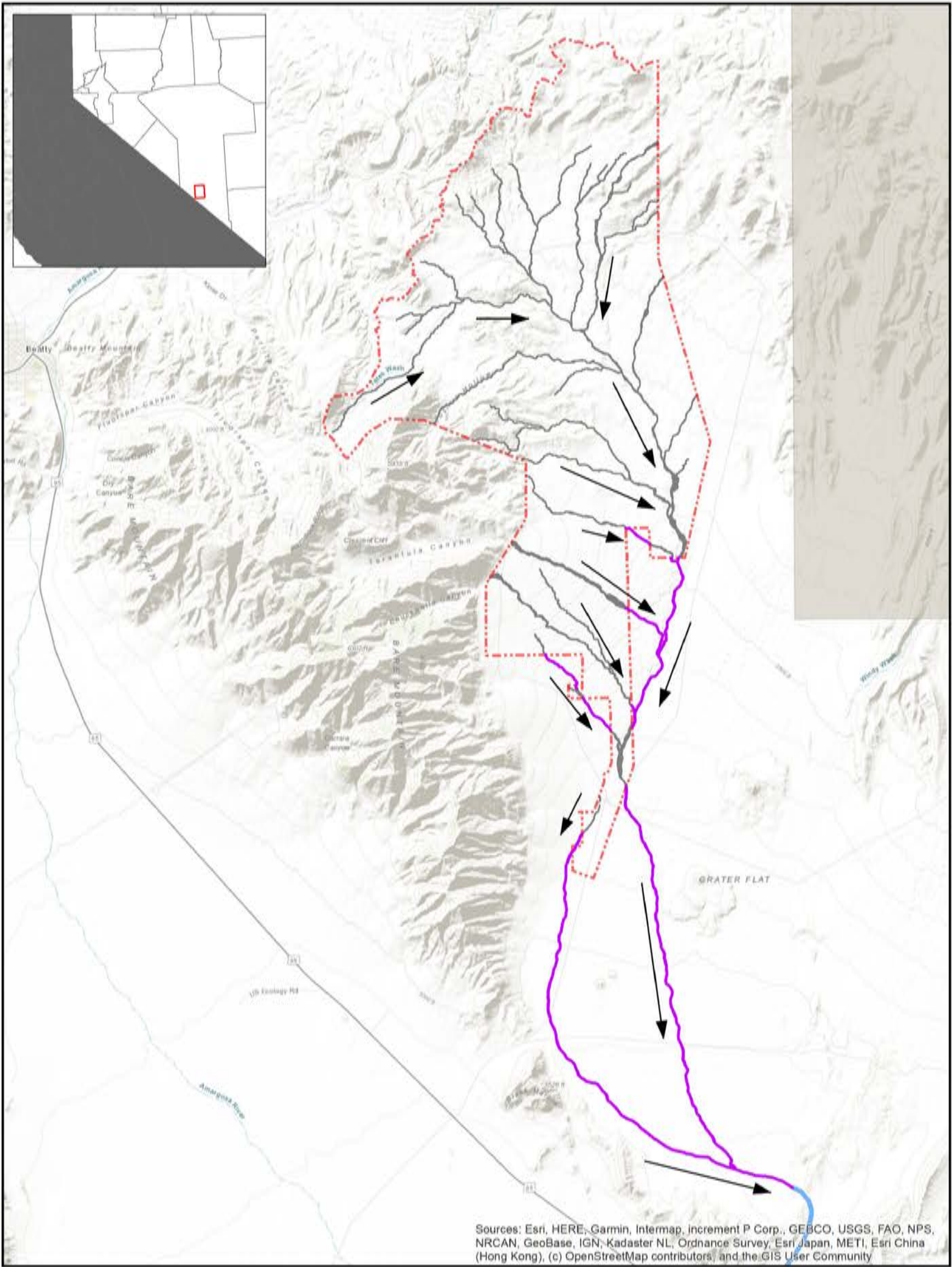
Flowpaths (Review Area 2)



Data Source: Requestor submittals dated 18-SEP-24 and 7-FEB-25; and USGS NHDPlus (2018).
Coordinate System: NAD_1983_UTM_Zone_11N



**Figure 1: SPK-2024-00615
Review Areas & Flowpaths**



Legend

- Windy Wash (4th Order)
- Flowpaths (Review Area 2)
- Review Area 2
- Aquatic Resources (in Review Area)
- Direction of Flow



0 0.5 1 2 Miles

Data Source: Requestor submittals dated 18-SEP-24 and 7-FEB-25; and USGS NHDPlus (2018).
Coordinate System: NAD_1983_UTM_Zone_11N



**Figure 2: SPK-2024-00615
Review Area 2 Flowpaths**

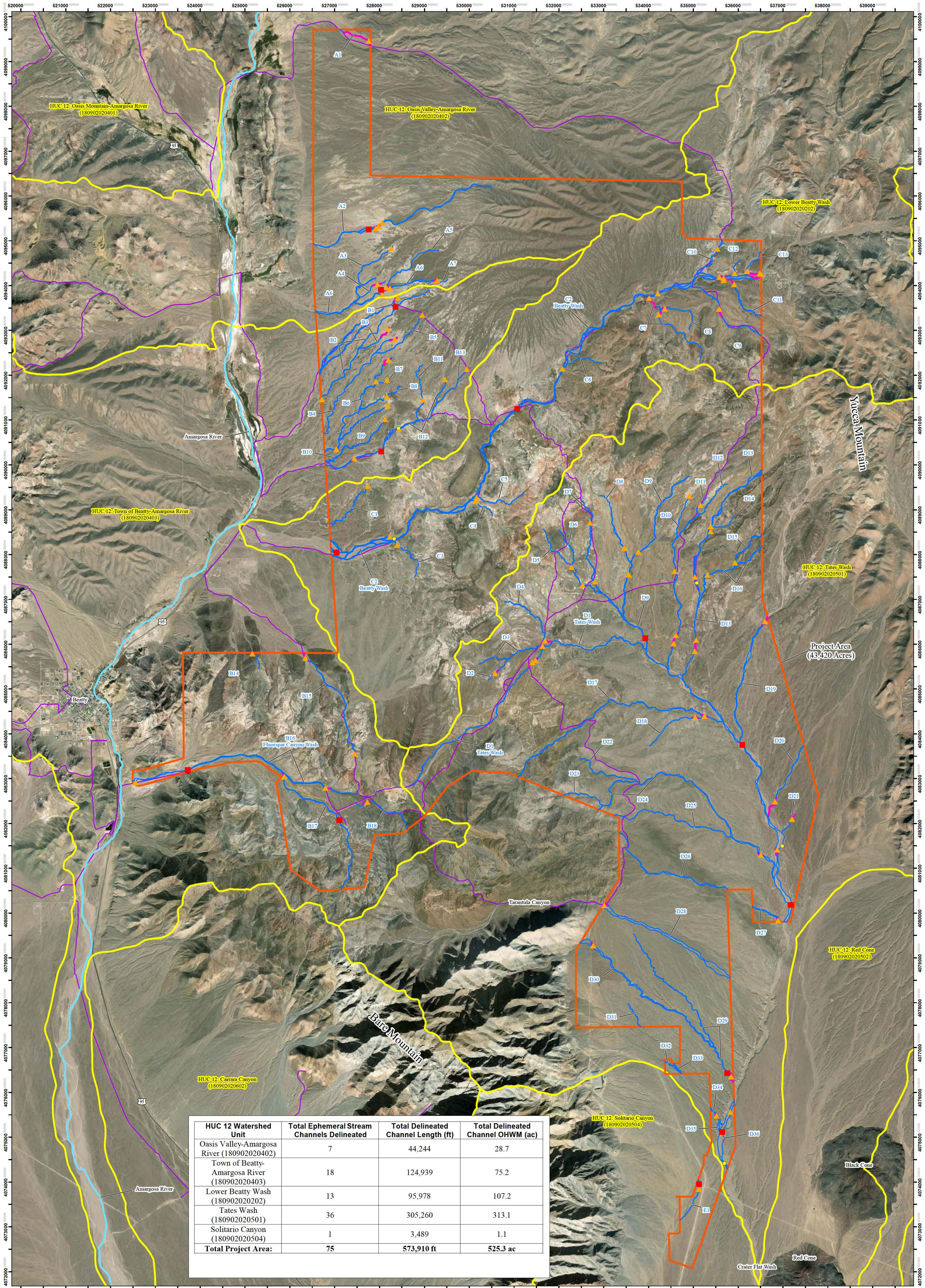


Figure 3: Overall Aquatic Resources Delineation Survey Map
Expanded Silicon Exploration Area
Nye County, NV

Map Date: 8/26/2024
Map Author: [Redacted]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N NAD 83

06,00012,000 Feet
1 inch = 3,000 feet
at "24x36" format

Project Area Boundaries (43,420 Acres)

HUC12 Boundaries

Desert Ephemeral Channels

Representative Delineation Survey Sites

OHWM Sample Points

Wetland Delineation Sample Points

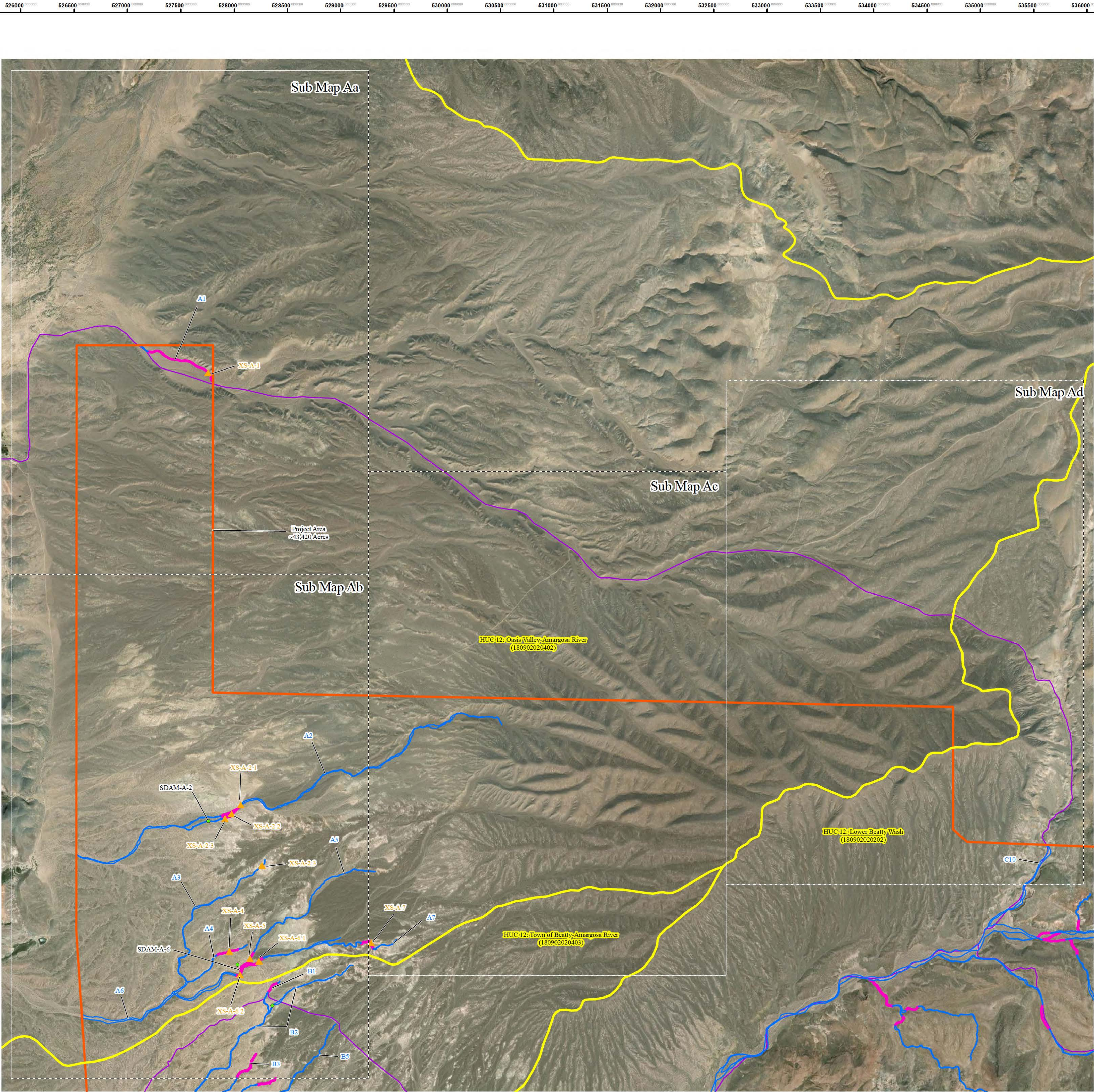
SDAM Sample Points

Amargosa River

Access Roads

North Arrow

[Redacted]



Legend

Project Area Boundaries

HUC12 Boundaries

Watershed Grid Index A

Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

OHWM Sample Points

Wetland Delineation Sample Points

SDAM Sample Points

Access Roads

Representative Photo Points

Aquatic Resources Delineation Survey Summary Table for HUC 12 Unit: Oasis Valley-Amargosa River (180902020402)							
Feature ID	Resource Type	Channel Length (feet)	Channel Area (acres)	OHWM Width (feet)	OHWM Delineation Sample Point	Wetland Delineation Sample Point	SDAM Sample Point
A1	Ephemeral Channel Non-relatively Permanent	2,748	0.890	13.5	XS-A-1	-	-
A2	Ephemeral Channel Non-relatively Permanent	15,750	10.982	22.0 10.2 7.7	XS-A-2.1 XS-A-2.2 XS-A-2.3	-	SDAM-A-2
A3	Ephemeral Channel Non-relatively Permanent	6,233	3.116	11.5	XS-A-3	-	-
A4	Ephemeral Channel Non-relatively Permanent	2,388	0.755	9.7	XS-A-4	-	-
A5	Ephemeral Channel Non-relatively Permanent	5,118	1.660	6.5	XS-A-5	-	-
A6	Ephemeral Channel Non-relatively Permanent	9,131	10.143	34.0 12.5	XS-A-6.1 XS-A-6.2	-	SDAM-A-6
A7	Ephemeral Channel Non-relatively Permanent	2,876	1.164	8.0	XS-A-7	-	-

Aquatic Resources Delineation Survey Map

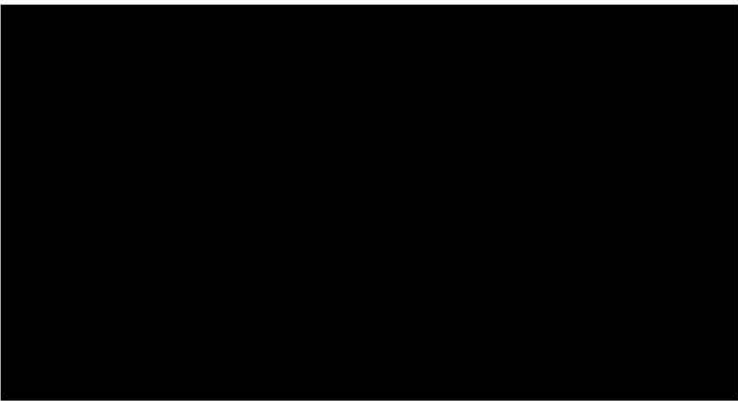
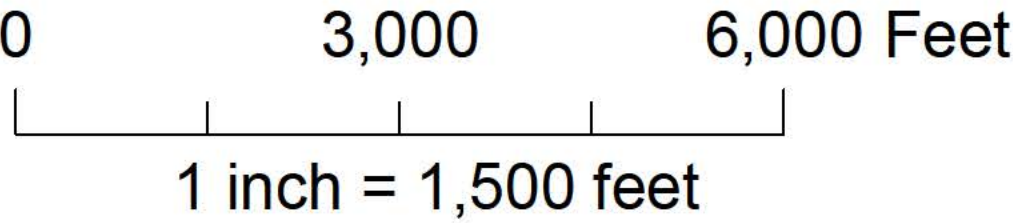
Watershed A: Oasis Valley - Amargosa River (180902020402)

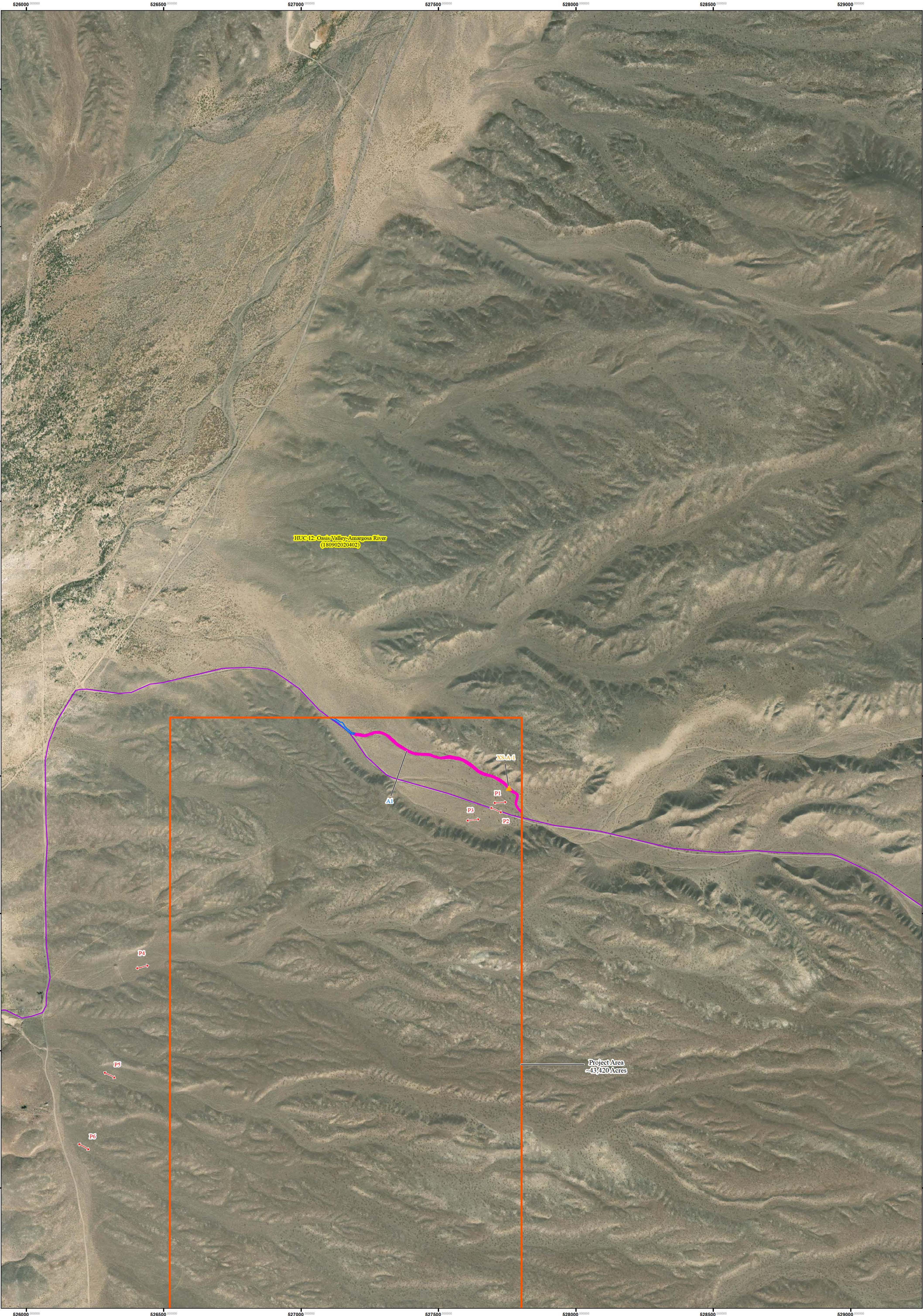
Map Date: 8/26/2024

Map Author: [REDACTED]

Imagery: MAXAR 2021

Coordinates: UTM Zone 11 N NAD 83





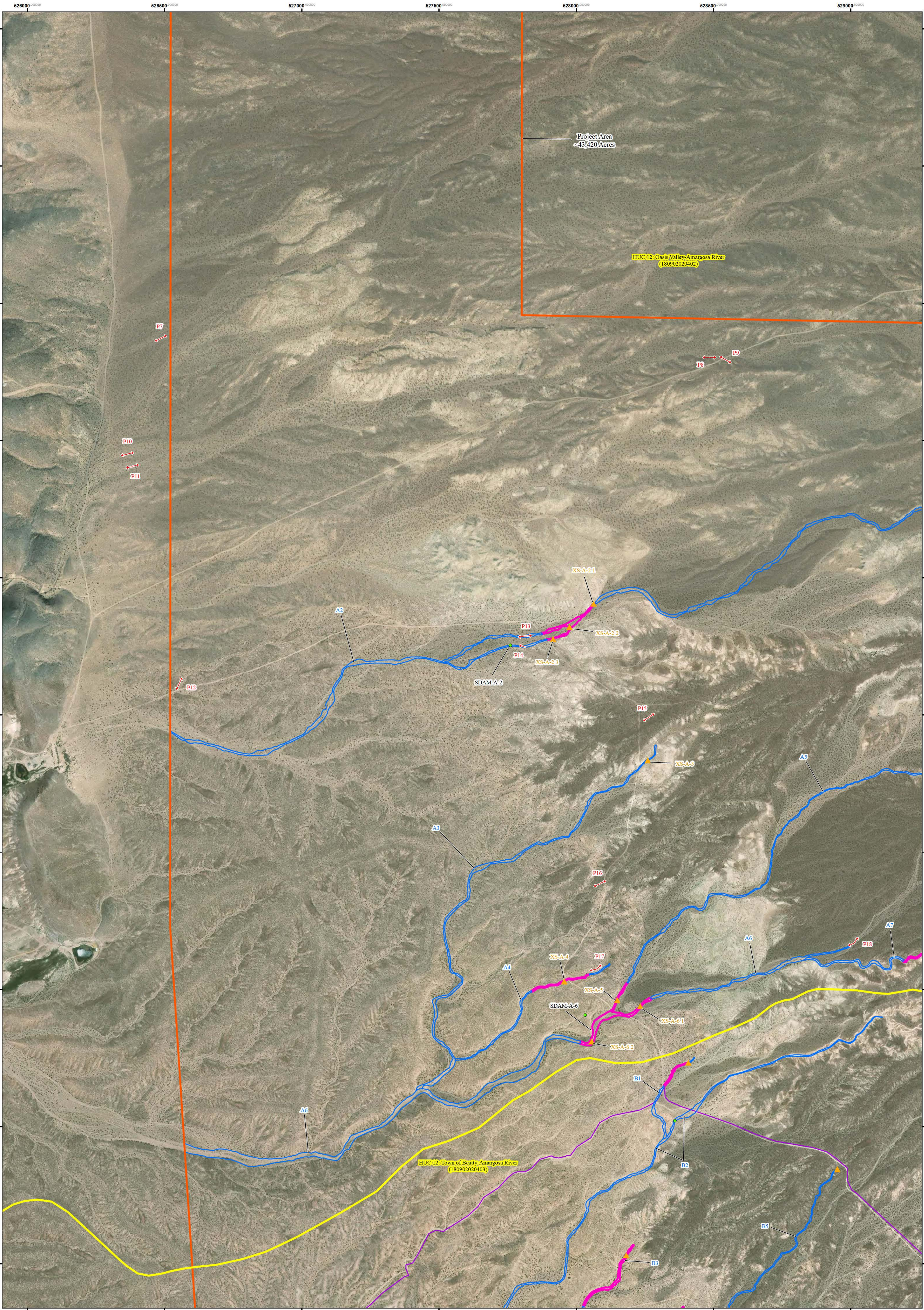
Aquatic Resources Delineation Survey Sub Map Aa
Watershed A: Oasis Valley-Amargosa River (180902020402)

Map Date: 8/26/2024
Map Author: [REDACTED]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet
1 inch = 500 feet

Project Area Boundaries (43,420 Acres)
HUC12 Boundaries
Desert Ephemeral Channels Non-relatively Permanent
Representative Delineation Survey Sites
OHWM Sample Points

Wetland Delineation Sample Points
SDAM Sample Points
Access Roads
Representative Photo Points



Aquatic Resources Delineation Survey Sub Map Ab

Watershed A: Oasis Valley-Amargosa River (180902020402)

Map Date: 8/26/2024
Map Author: [REDACTED]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

1 inch = 500 feet

Project Area Boundaries (43,420 Acres)

HUC12 Boundaries

Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

OHWM Sample Points

Wetland Delineation Sample Points

SDAM Sample Points

Access Roads

Representative Photo Points



Aquatic Resources Delineation Survey Sub Map Ac

Watershed A: Oasis Valley-Amargosa River (180902020402)

Map Date: 8/26/2024
Map Author: [REDACTED]
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

1 inch = 500 feet

Project Area Boundaries (43,420 Acres)

HUC12 Boundaries

Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

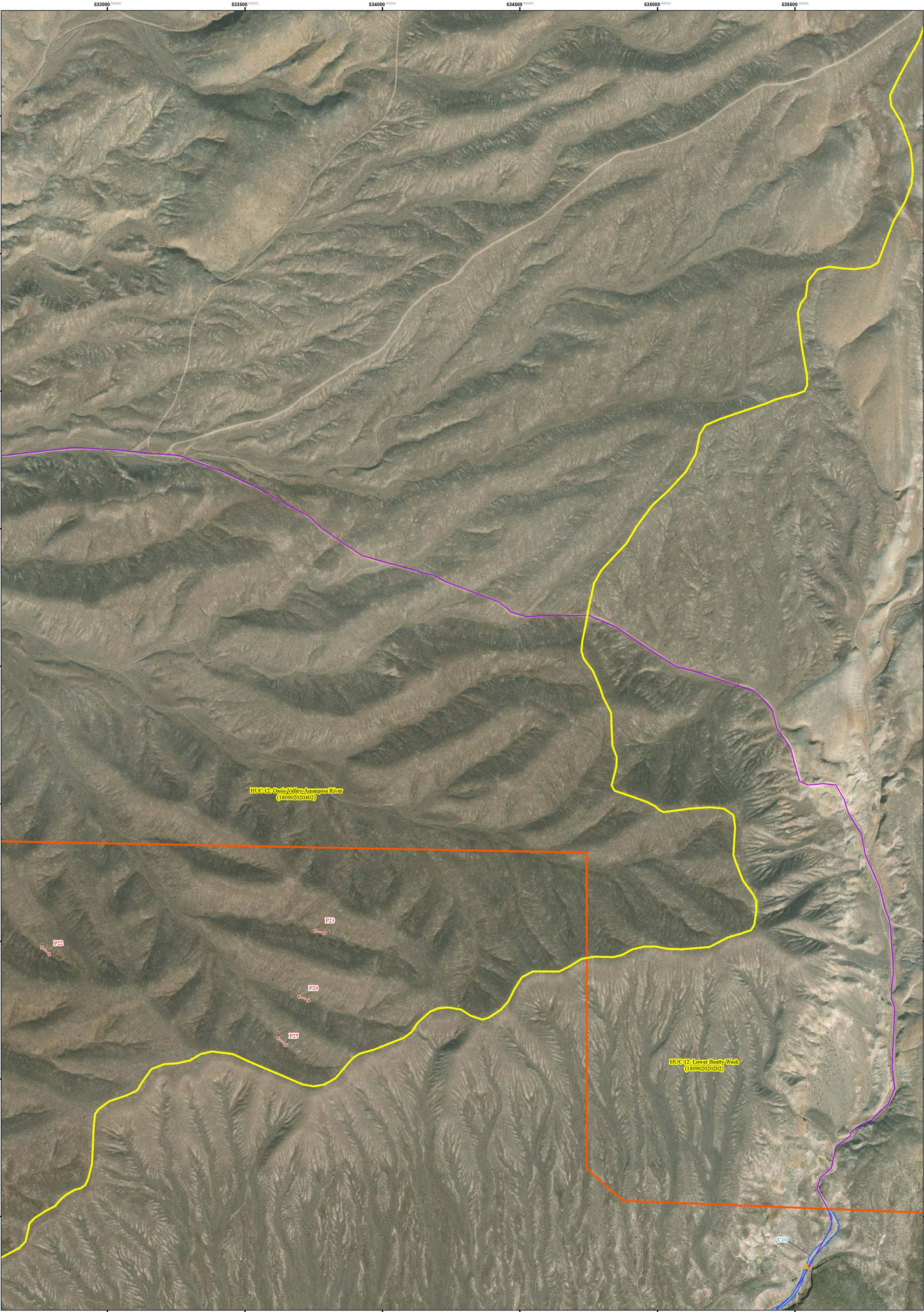
OHWM Sample Points

Wetland Delineation Sample Points

SDAM Sample Points

Access Roads

Representative Photo Points



Aquatic Resources Delineation Survey Sub Map Ad

Watershed A: Oasis Valley-Amargosa River (180902020402)

Map Date: 8/26/2024
Map Author: [REDACTED]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

1 inch = 500 feet

Project Area Boundaries (43,420 Acres)

HUC12 Boundaries

Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

OHWM Sample Points

Wetland Delineation Sample Points

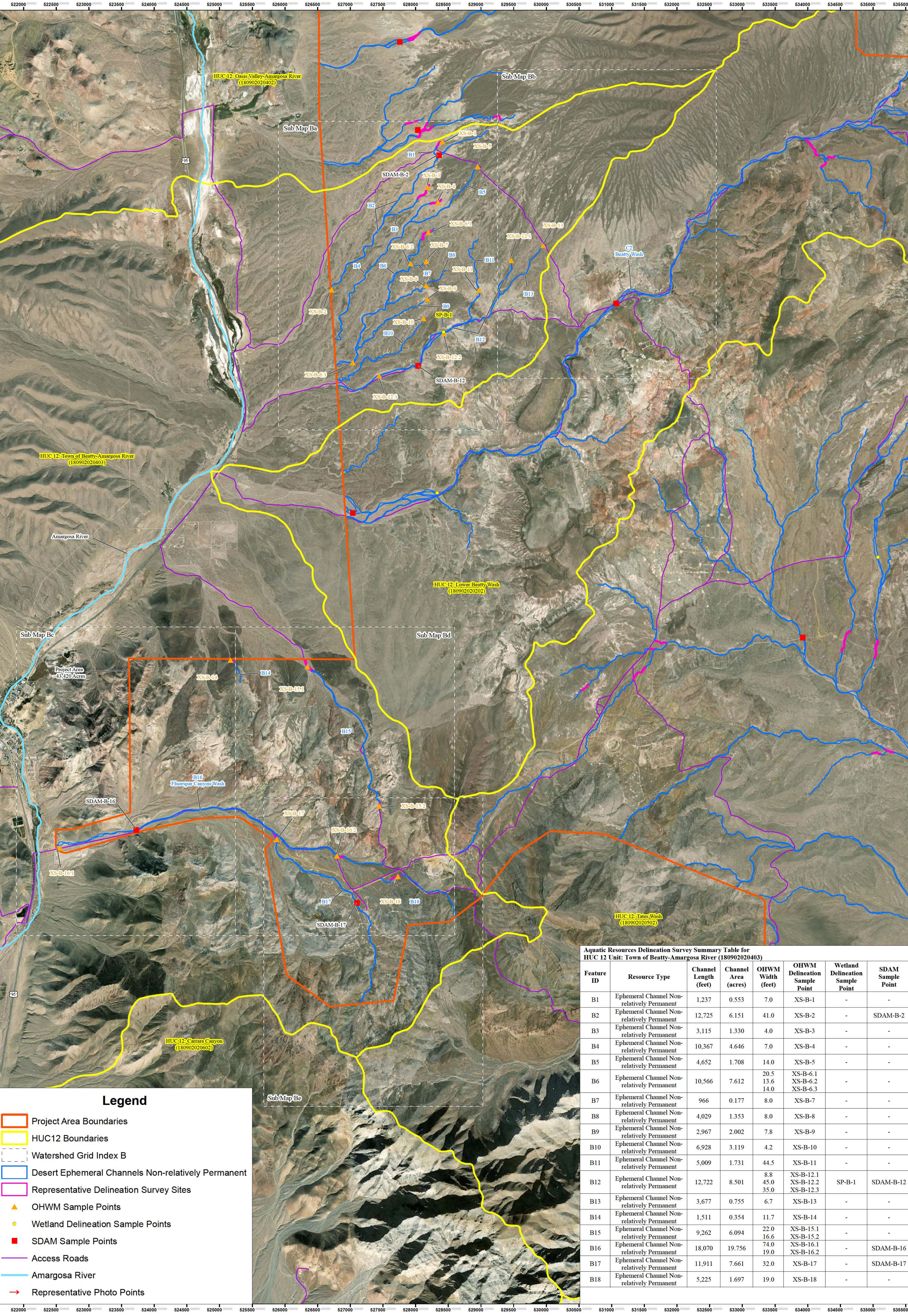
SDAM Sample Points

Access Roads

Representative Photo Points

N

W E S



Aquatic Resources Delineation Survey Summary Table for HUC 12 Unit: Town of Beatty-Amargosa River (180902020403)						
Feature ID	Resource Type	Channel Length (feet)	Channel Area (acres)	OHWM Width (feet)	OHWM Delineation Sample Point	Wetland Delineation Sample Point
B1	Ephemeral Channel Non-relatively Permanent	1,237	0.553	7.0	XS-B-1	-
B2	Ephemeral Channel Non-relatively Permanent	12,725	6.151	41.0	XS-B-2	-
B3	Ephemeral Channel Non-relatively Permanent	3,115	1.330	4.0	XS-B-3	-
B4	Ephemeral Channel Non-relatively Permanent	10,367	4.646	7.0	XS-B-4	-
B5	Ephemeral Channel Non-relatively Permanent	4,652	1.708	14.0	XS-B-5	-
B6	Ephemeral Channel Non-relatively Permanent	10,566	7.612	20.5 13.6 14.0	XS-B-6.1 XS-B-6.2 XS-B-6.3	-
B7	Ephemeral Channel Non-relatively Permanent	966	0.177	8.0	XS-B-7	-
B8	Ephemeral Channel Non-relatively Permanent	4,029	1.353	8.0	XS-B-8	-
B9	Ephemeral Channel Non-relatively Permanent	2,967	2.002	7.8	XS-B-9	-
B10	Ephemeral Channel Non-relatively Permanent	6,928	3.119	4.2	XS-B-10	-
B11	Ephemeral Channel Non-relatively Permanent	5,009	1.731	44.5	XS-B-11	-
B12	Ephemeral Channel Non-relatively Permanent	12,722	8.501	8.8 45.0 35.0	XS-B-12.1 XS-B-12.2 XS-B-12.3	SP-B-1
B13	Ephemeral Channel Non-relatively Permanent	3,677	0.755	6.7	XS-B-13	-
B14	Ephemeral Channel Non-relatively Permanent	1,511	0.354	11.7	XS-B-14	-
B15	Ephemeral Channel Non-relatively Permanent	9,262	6.094	22.0 16.6	XS-B-15.1 XS-B-15.2	-
B16	Ephemeral Channel Non-relatively Permanent	18,070	19.756	74.0 19.0	XS-B-16.1 XS-B-16.2	-
B17	Ephemeral Channel Non-relatively Permanent	11,911	7.661	32.0	XS-B-17	-
B18	Ephemeral Channel Non-relatively Permanent	5,225	1.697	19.0	XS-B-18	-

Legend

Project Area Boundaries

HUC12 Boundaries

Watershed Grid Index B

Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

OHWM Sample Points

Wetland Delineation Sample Points

SDAM Sample Points

Access Roads

Amargosa River

Representative Photo Points

Aquatic Resources Delineation Survey Map B

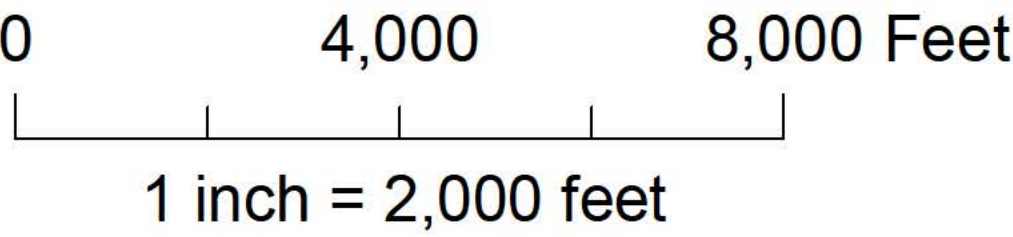
Town of Beatty-Amargosa River (180902020403)

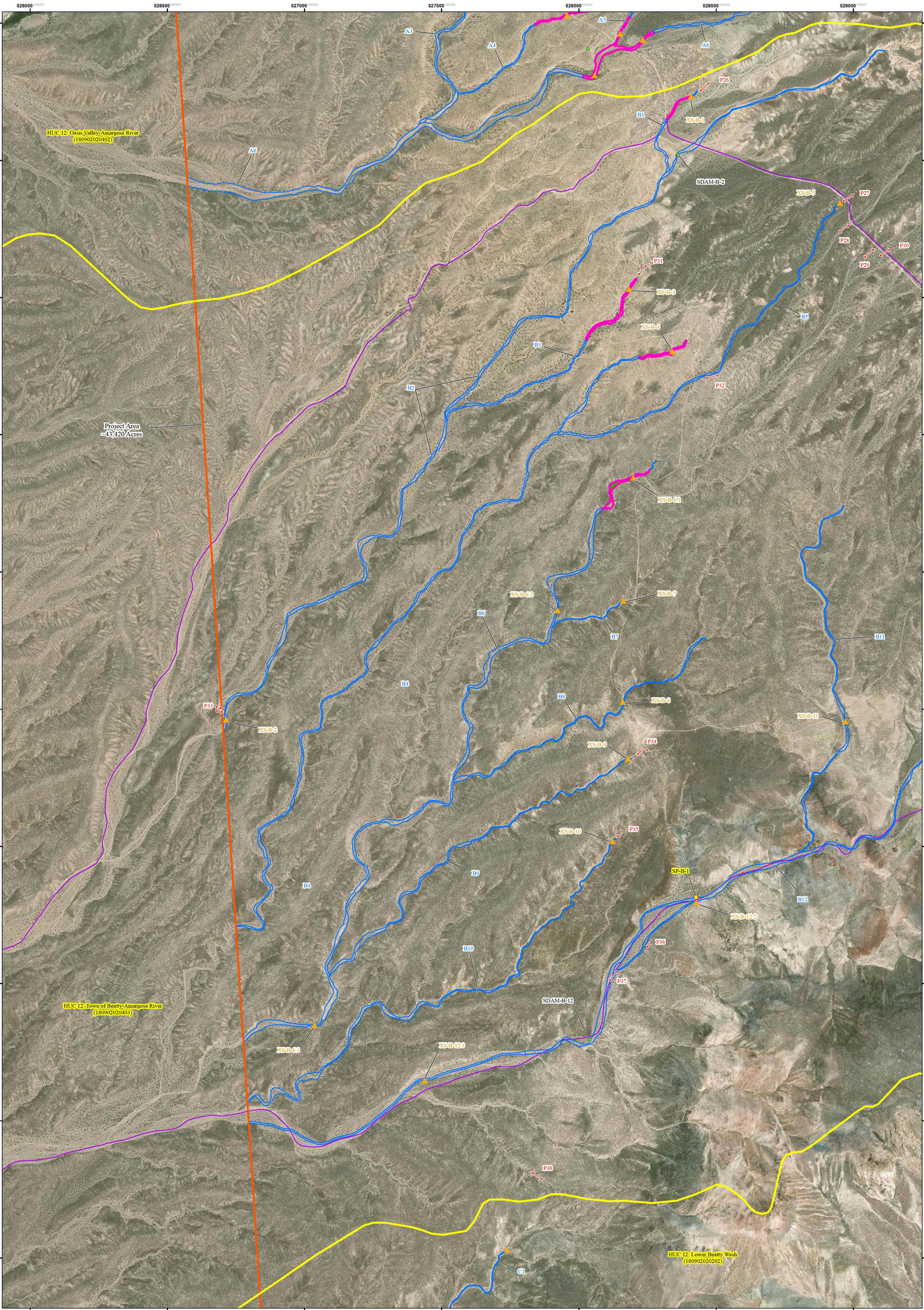
Map Date: 8/26/2024

Map Author: [REDACTED]

Imagery: MAXAR 2021

Coordinates: UTM Zone 11 N NAD 83





Aquatic Resources Delineation Survey Sub Map Ba

Watershed B: Town of Beatty-Amargosa River (180902020403)

Map Date: 8/26/2024
Map Author: [REDACTED]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

1 inch = 500 feet

Project Area Boundaries (43,420 Acres)

HUC12 Boundaries

Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

OHWM Sample Points

Wetland Delineation Sample Points

SDAM Sample Points

Access Roads

Representative Photo Points



Aquatic Resources Delineation Survey Sub Map Bb

Watershed B: Town of Beatty-Amargosa River (180902020403)

Map Date: 8/26/2024
Map Author: [Redacted]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

1 inch = 500 feet

Project Area Boundaries (43,420 Acres)

HUC12 Boundaries

Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

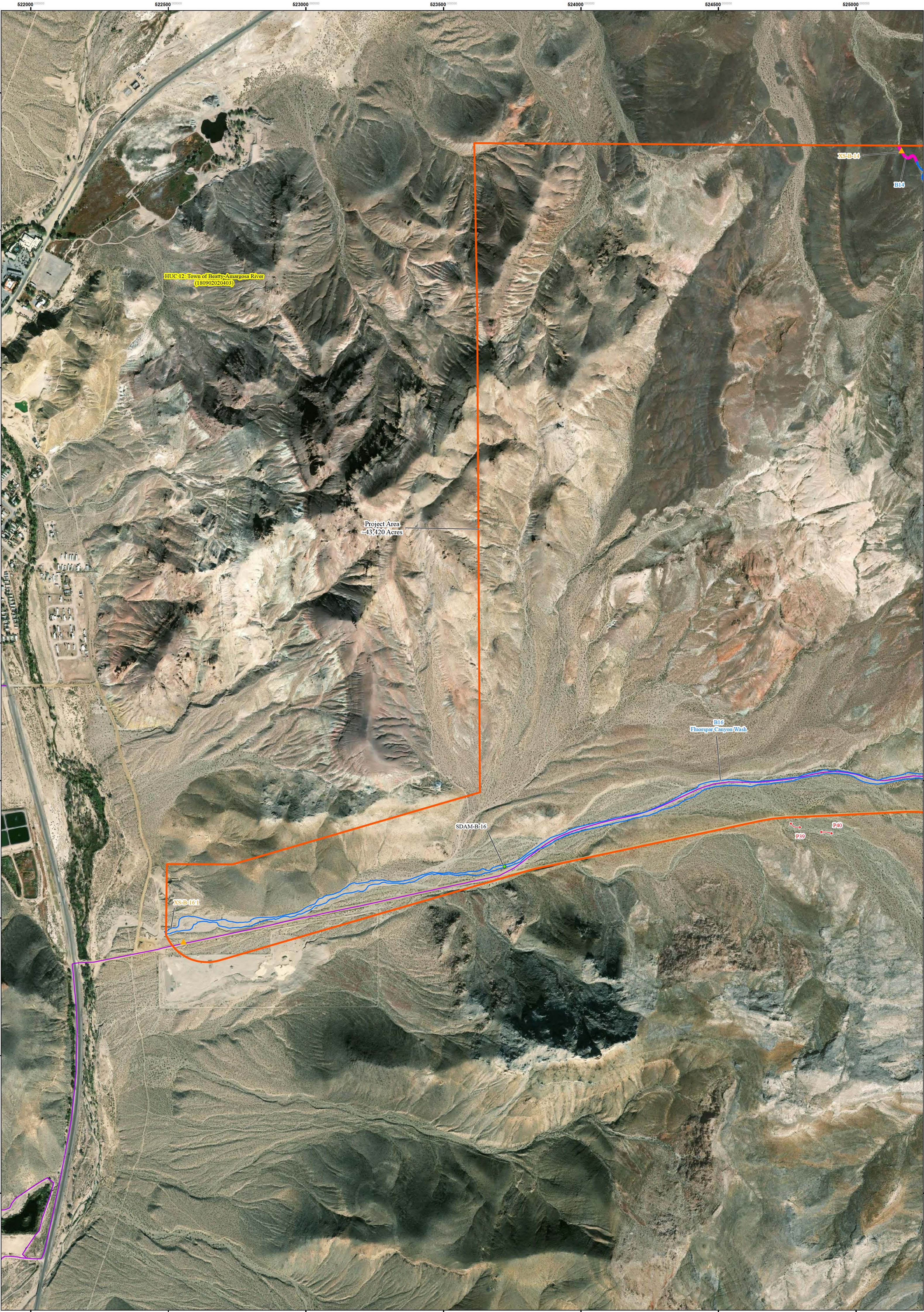
OHWM Sample Points

Wetland Delineation Sample Points

SDAM Sample Points

Access Roads

Representative Photo Points



Aquatic Resources Delineation Survey Sub Map Bc
Watershed B: Town of Beatty-Amargosa River (180902020403)

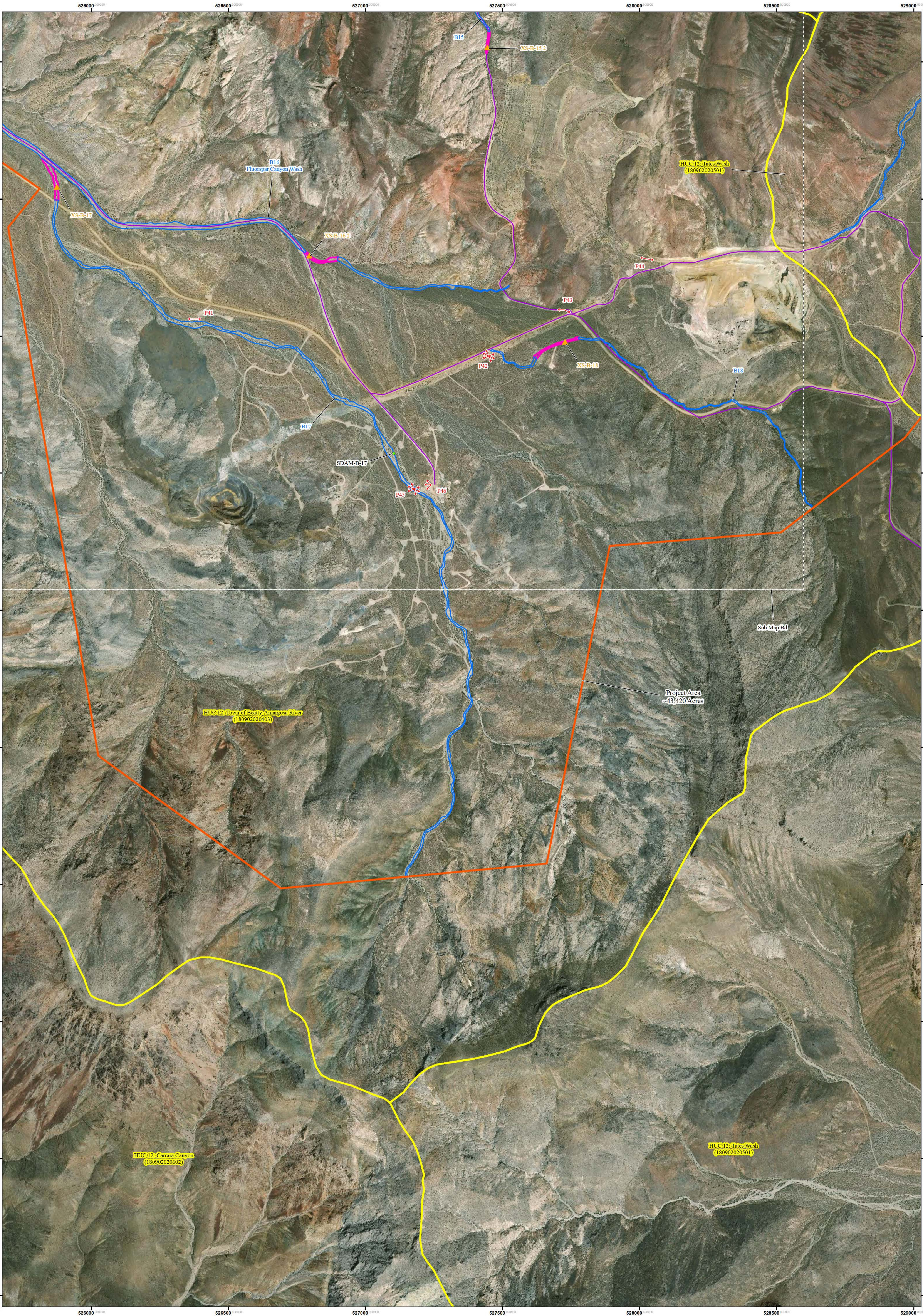
Map Date: 8/26/2024
Map Author: [Redacted]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

1 inch = 500 feet

- Project Area Boundaries (43,420 Acres)
- HUC12 Boundaries
- Desert Ephemeral Channels Non-relatively Permanent
- Representative Delineation Survey Sites
- OHWM Sample Points

- Wetland Delineation Sample Points
- SDAM Sample Points
- Access Roads
- Representative Photo Points



Aquatic Resources Delineation Survey Sub Map Be

Watershed B: Town of Beatty-Amargosa River (180902020403)

Map Date: 8/26/2024

Map Author: [Redacted]

Imagery: MAXAR 2021

Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

1 inch = 500 feet

Project Area Boundaries (43,420 Acres)

HUC12 Boundaries

Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

OHWM Sample Points

Wetland Delineation Sample Points

SDAM Sample Points

Access Roads

Representative Photo Points



Aquatic Resources Delineation Survey Sub Map Cb

Watershed C: Lower Beatty Wash (180902020202)

Map Date: 8/26/2024
Map Author: [REDACTED]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

1 inch = 500 feet

- Project Area Boundaries (43,420 Acres)
- HUC12 Boundaries
- Desert Ephemeral Channels Non-relatively Permanent
- Representative Delineation Survey Sites
- OHWM Sample Points

- Wetland Delineation Sample Points
- SDAM Sample Points
- Access Roads
- Representative Photo Points



Aquatic Resources Delineation Survey Sub Map Cc

Watershed C: Lower Beatty Wash (180902020202)

Map Date: 8/26/2024
Map Author: [REDACTED]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet
1 inch = 500 feet

Project Area Boundaries (43,420 Acres)
HUC12 Boundaries
Desert Ephemeral Channels Non-relatively Permanent
Representative Delineation Survey Sites
OHWM Sample Points

Wetland Delineation Sample Points
SDAM Sample Points
Access Roads
Representative Photo Points

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Aquatic Resources Delineation Survey Sub Map Cd

Watershed C: Lower Beatty Wash (180902020202)

Map Date: 8/26/2024
Map Author: [Redacted]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

1 inch = 500 feet

Project Area Boundaries (43,420 Acres)

HUC12 Boundaries

Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

OHWM Sample Points

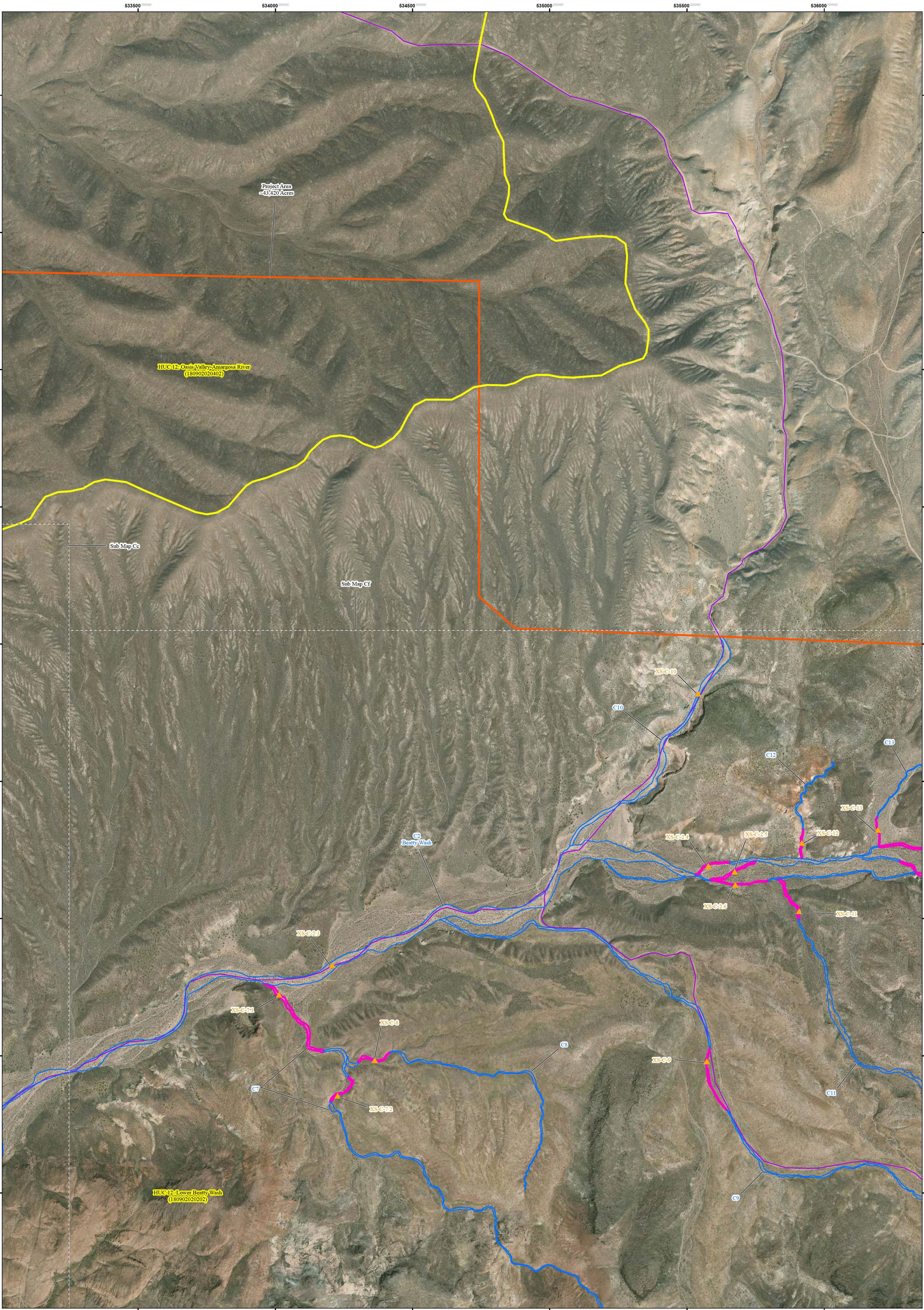
Wetland Delineation Sample Points

SDAM Sample Points

Access Roads

Representative Photo Points

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Aquatic Resources Delineation Survey Sub Map Ce

Watershed C: Lower Beatty Wash (180902020202)

Map Date: 8/26/2024
Map Author: [Redacted]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

1 inch = 500 feet

Project Area Boundaries (43,420 Acres)

HUC12 Boundaries

Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

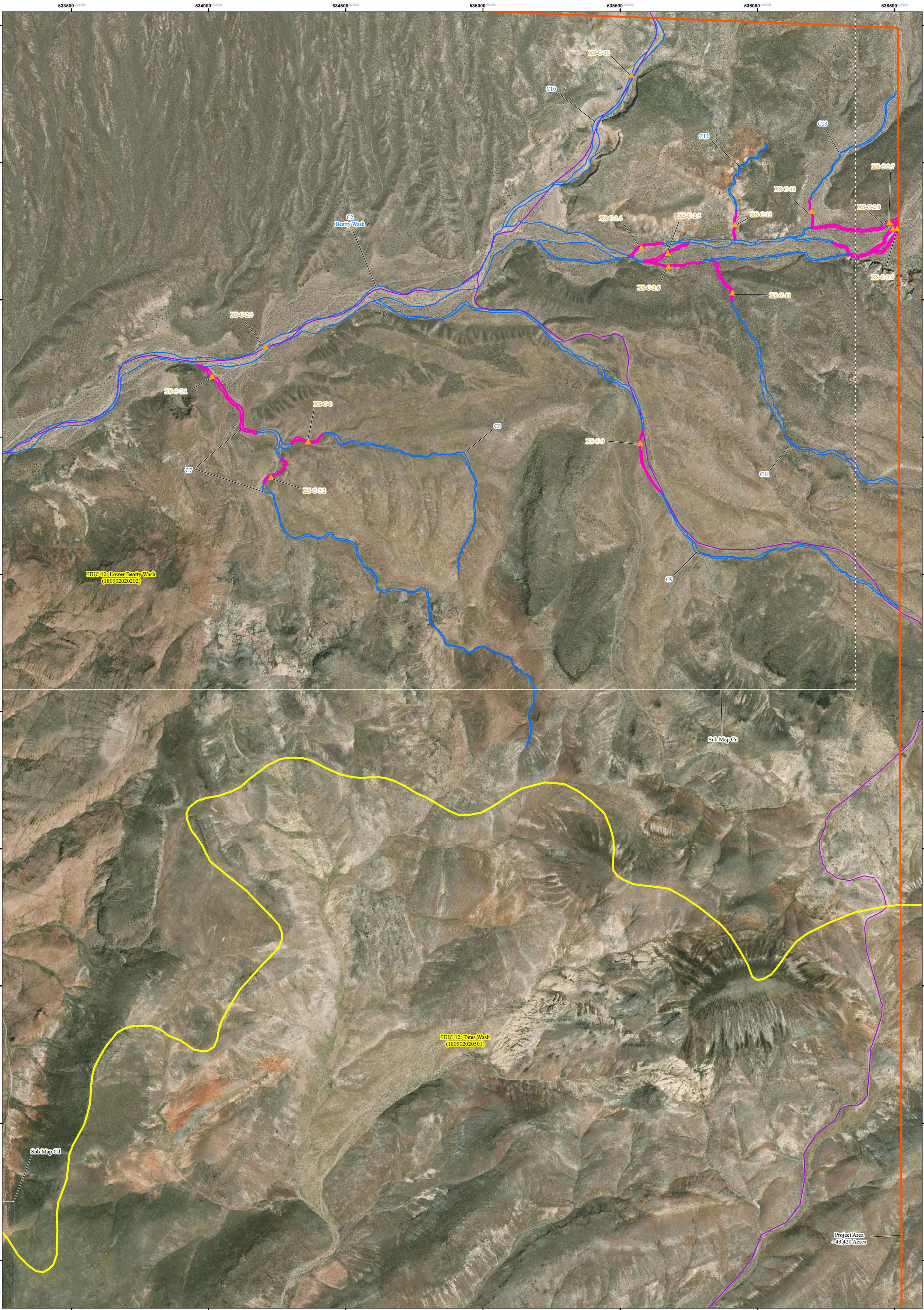
OHWM Sample Points

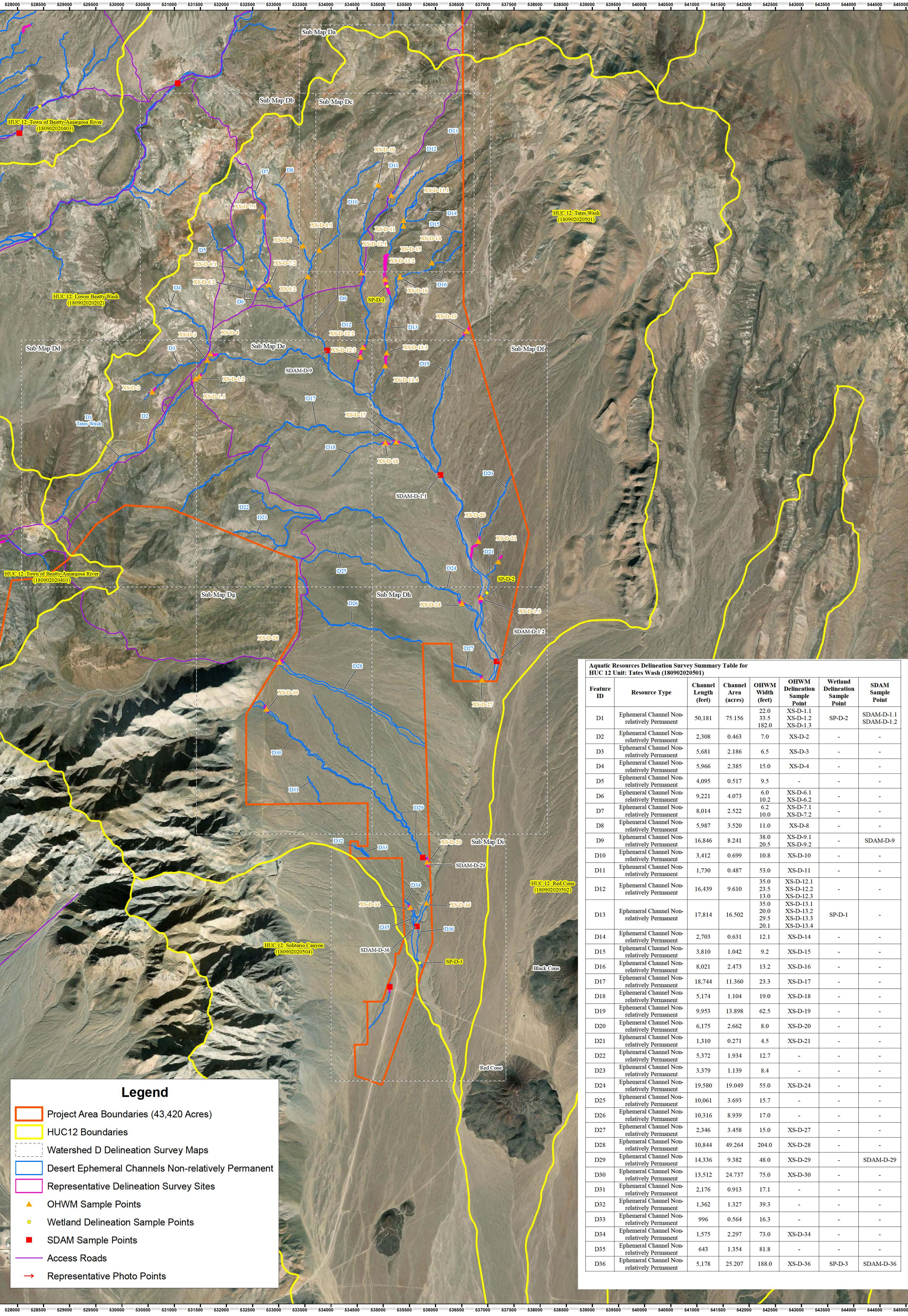
Wetland Delineation Sample Points

SDAM Sample Points

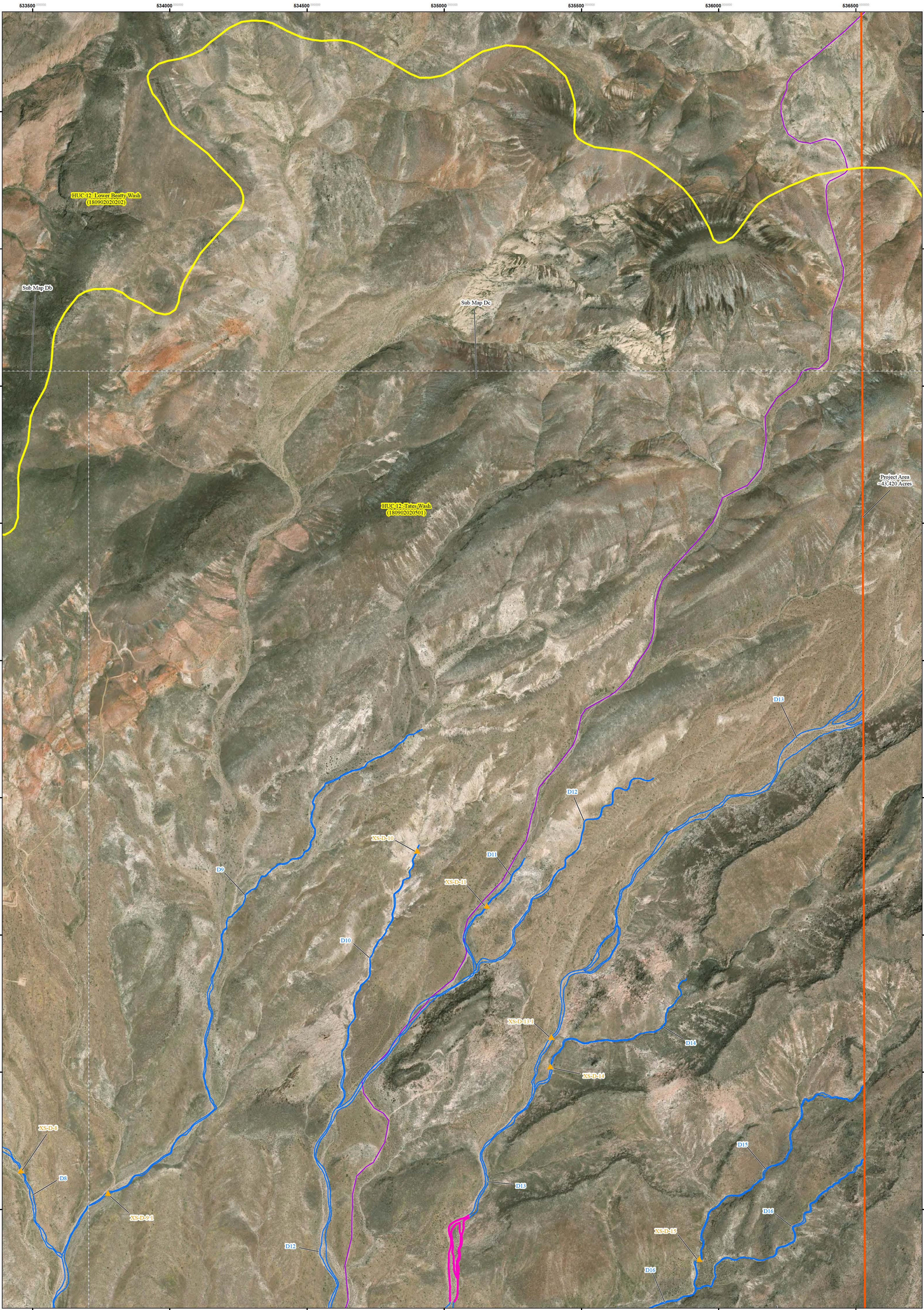
Access Roads

Representative Photo Points





Aquatic Resources Delineation Survey Summary Table for HUC 12 Unit: Tates Wash (180902020501)						
Feature ID	Resource Type	Channel Length (feet)	Channel Area (acres)	OHWM Width (feet)	OHWM Delineation Sample Point	Wetland Delineation Sample Point
D1	Ephemeral Channel Non-relatively Permanent	50,181	75.156	22.0 33.5 182.0	XS-D-1.1 XS-D-1.2 XS-D-1.3	SP-D-2
D2	Ephemeral Channel Non-relatively Permanent	2,308	0.463	7.0	XS-D-2	-
D3	Ephemeral Channel Non-relatively Permanent	5,681	2.186	6.5	XS-D-3	-
D4	Ephemeral Channel Non-relatively Permanent	5,966	2.385	15.0	XS-D-4	-
D5	Ephemeral Channel Non-relatively Permanent	4,095	0.517	9.5	-	-
D6	Ephemeral Channel Non-relatively Permanent	9,221	4.073	6.0 10.2	XS-D-6.1 XS-D-6.2	-
D7	Ephemeral Channel Non-relatively Permanent	8,014	2.522	6.2 10.0	XS-D-7.1 XS-D-7.2	-
D8	Ephemeral Channel Non-relatively Permanent	5,987	3.520	11.0	XS-D-8	-
D9	Ephemeral Channel Non-relatively Permanent	16,846	8.241	38.0 20.5	XS-D-9.1 XS-D-9.2	SDAM-D-9
D10	Ephemeral Channel Non-relatively Permanent	3,412	0.699	10.8	XS-D-10	-
D11	Ephemeral Channel Non-relatively Permanent	1,730	0.487	53.0	XS-D-11	-
D12	Ephemeral Channel Non-relatively Permanent	16,439	9.610	35.0 23.5 13.0	XS-D-12.1 XS-D-12.2 XS-D-12.3	-
D13	Ephemeral Channel Non-relatively Permanent	17,814	16.502	35.0 20.0 29.5 20.1	XS-D-13.1 XS-D-13.2 XS-D-13.3 XS-D-13.4	SP-D-1
D14	Ephemeral Channel Non-relatively Permanent	2,703	0.631	12.1	XS-D-14	-
D15	Ephemeral Channel Non-relatively Permanent	3,810	1.042	9.2	XS-D-15	-
D16	Ephemeral Channel Non-relatively Permanent	8,021	2.473	13.2	XS-D-16	-
D17	Ephemeral Channel Non-relatively Permanent	18,744	11.360	23.3	XS-D-17	-
D18	Ephemeral Channel Non-relatively Permanent	5,174	1.104	19.0	XS-D-18	-
D19	Ephemeral Channel Non-relatively Permanent	9,953	13.898	62.5	XS-D-19	-
D20	Ephemeral Channel Non-relatively Permanent	6,175	2.662	8.0	XS-D-20	-
D21	Ephemeral Channel Non-relatively Permanent	1,310	0.271	4.5	XS-D-21	-
D22	Ephemeral Channel Non-relatively Permanent	5,372	1.934	12.7	-	-
D23	Ephemeral Channel Non-relatively Permanent	3,379	1.139	8.4	-	-
D24	Ephemeral Channel Non-relatively Permanent	19,580	19.049	55.0	XS-D-24	-
D25	Ephemeral Channel Non-relatively Permanent	10,061	3.693	15.7	-	-
D26	Ephemeral Channel Non-relatively Permanent	10,316	8.939	17.0	-	-
D27	Ephemeral Channel Non-relatively Permanent	2,346	3.458	15.0	XS-D-27	-
D28	Ephemeral Channel Non-relatively Permanent	10,844	49.264	204.0	XS-D-28	-
D29	Ephemeral Channel Non-relatively Permanent	14,336	9.382	48.0	XS-D-29	SDAM-D-29
D30	Ephemeral Channel Non-relatively Permanent	13,512	24.737	75.0	XS-D-30	-
D31	Ephemeral Channel Non-relatively Permanent	2,176	0.913	17.1	-	-
D32	Ephemeral Channel Non-relatively Permanent	1,362	1.327	39.3	-	-
D33	Ephemeral Channel Non-relatively Permanent	996	0.564	16.3	-	-
D34	Ephemeral Channel Non-relatively Permanent	1,575	2.297	73.0	XS-D-34	-
D35	Ephemeral Channel Non-relatively Permanent	643	1.354	81.8	-	-
D36	Ephemeral Channel Non-relatively Permanent	5,178	25.207	188.0	XS-D-36	SP-D-3



Aquatic Resources Delineation Survey Sub Map Da

Watershed D: Tates Wash (180902020501)

Map Date: 8/26/2024
Map Author: [Redacted]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

1 inch = 500 feet

Project Area Boundaries (43,420 Acres)

HUC12 Boundaries

Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

OHWM Sample Points

Wetland Delineation Sample Points

SDAM Sample Points

Access Roads

Representative Photo Points

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Aquatic Resources Delineation Survey Sub Map Db

Watershed D: Tates Wash (180902020501)

Map Date: 8/26/2024
Map Author: [Redacted]
Imagery: MAXAR 2021
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OHWM Sample Points

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N

W

E

S



Aquatic Resources Delineation Survey Sub Map Dc

Watershed D: Tates Wash (180902020501)

Map Date: 8/26/2024
Map Author: [Redacted]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

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Project Area Boundaries (43,420 Acres)

HUC12 Boundaries

Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

OHWM Sample Points

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SDAM Sample Points

Access Roads

Representative Photo Points



Aquatic Resources Delineation Survey Sub Map Dd

Watershed D: Tates Wash (180902020501)

Map Date: 8/26/2024
Map Author: [REDACTED]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

1 inch = 500 feet

Project Area Boundaries (43,420 Acres)

HUC12 Boundaries

Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

OHWM Sample Points

Wetland Delineation Sample Points

SDAM Sample Points

Access Roads

Representative Photo Points



Aquatic Resources Delineation Survey Sub Map De
Watershed D: Tates Wash (180902020501)

Map Date: 8/26/2024
Map Author: [Redacted]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

1 inch = 500 feet

Project Area Boundaries (43,420 Acres)

HUC12 Boundaries

Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

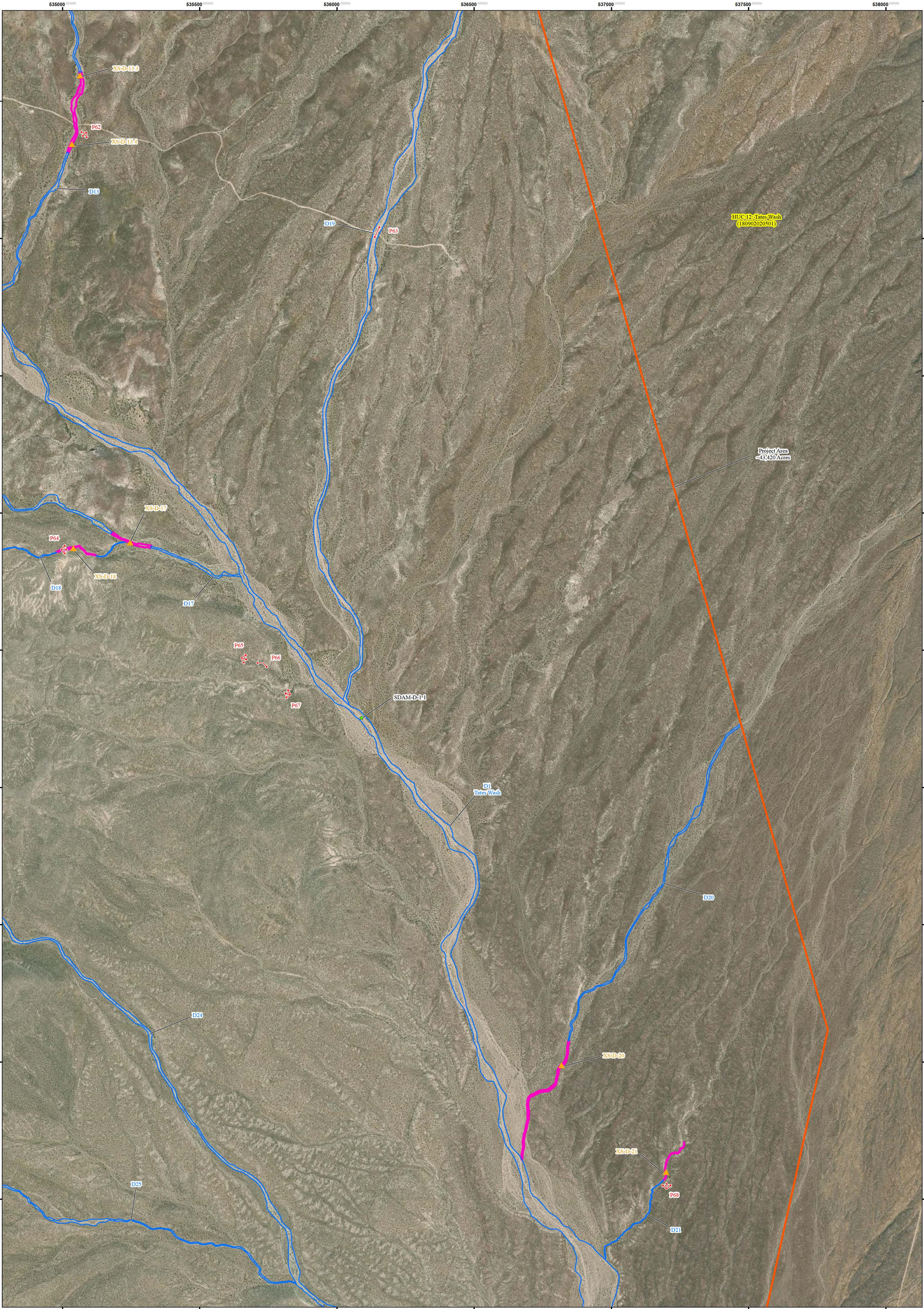
OHWM Sample Points

Wetland Delineation Sample Points

SDAM Sample Points

Access Roads

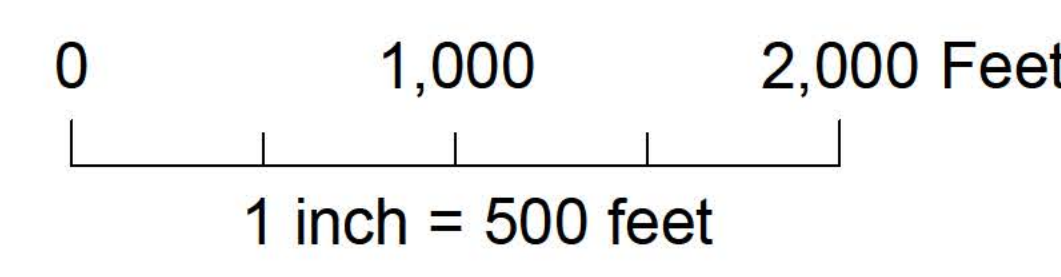
Representative Photo Points



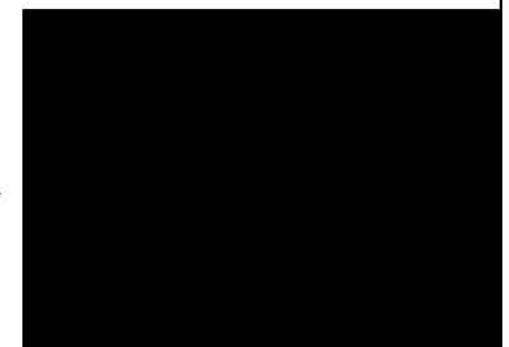
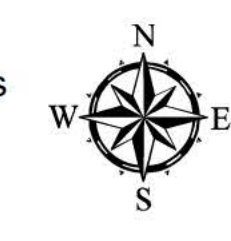
Aquatic Resources Delineation Survey Sub Map Df

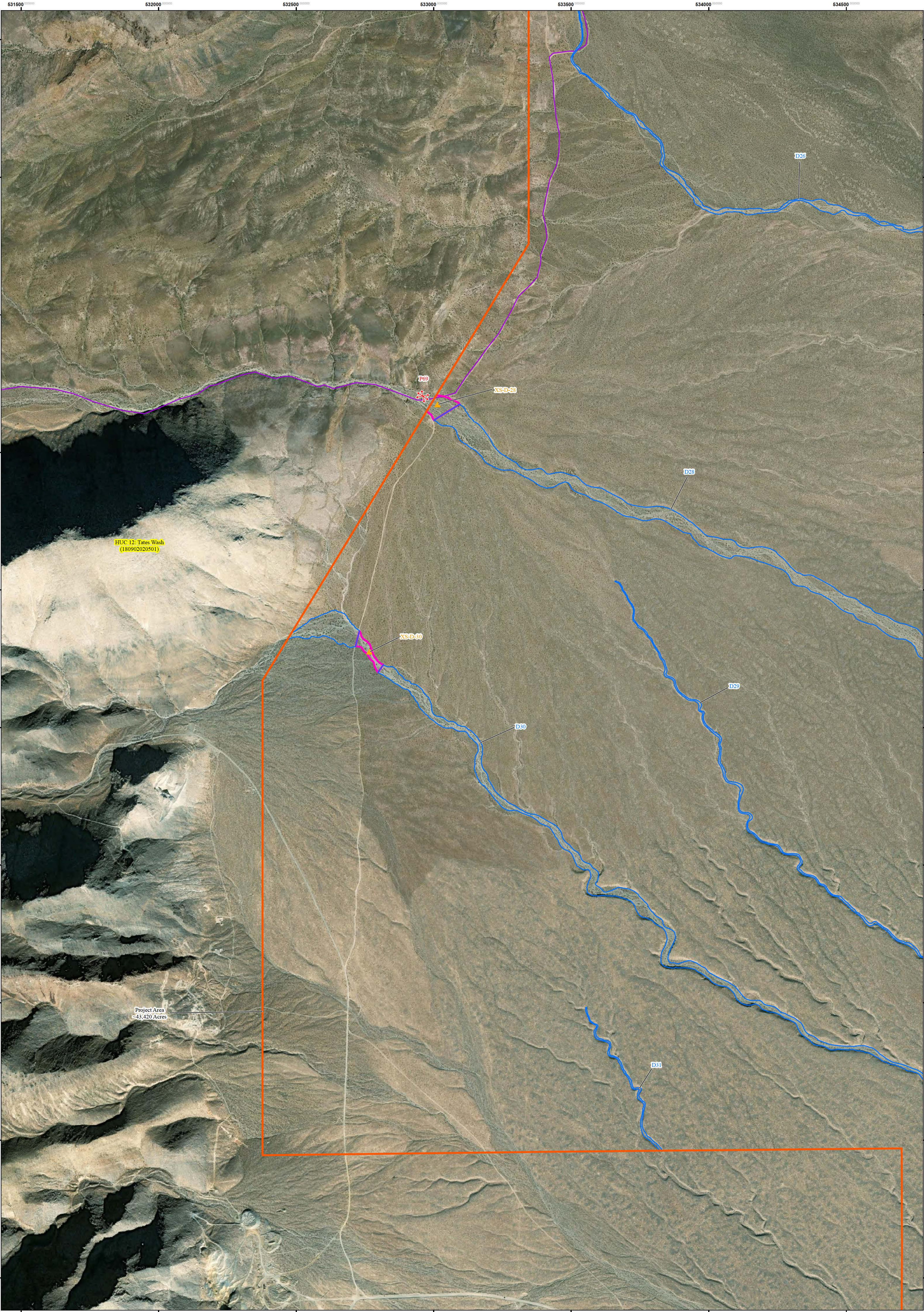
Watershed D: Tates Wash (180902020501)

Map Date: 8/26/2024
Map Author: [REDACTED]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83



- Project Area Boundaries (43,420 Acres)
- HUC12 Boundaries
- Desert Ephemeral Channels Non-relatively Permanent
- Representative Delineation Survey Sites
- OHWM Sample Points
- Wetland Delineation Sample Points
- SDAM Sample Points
- Access Roads
- Representative Photo Points





Aquatic Resources Delineation Survey Sub Map Dg

Watershed D: Tates Wash (180902020501)

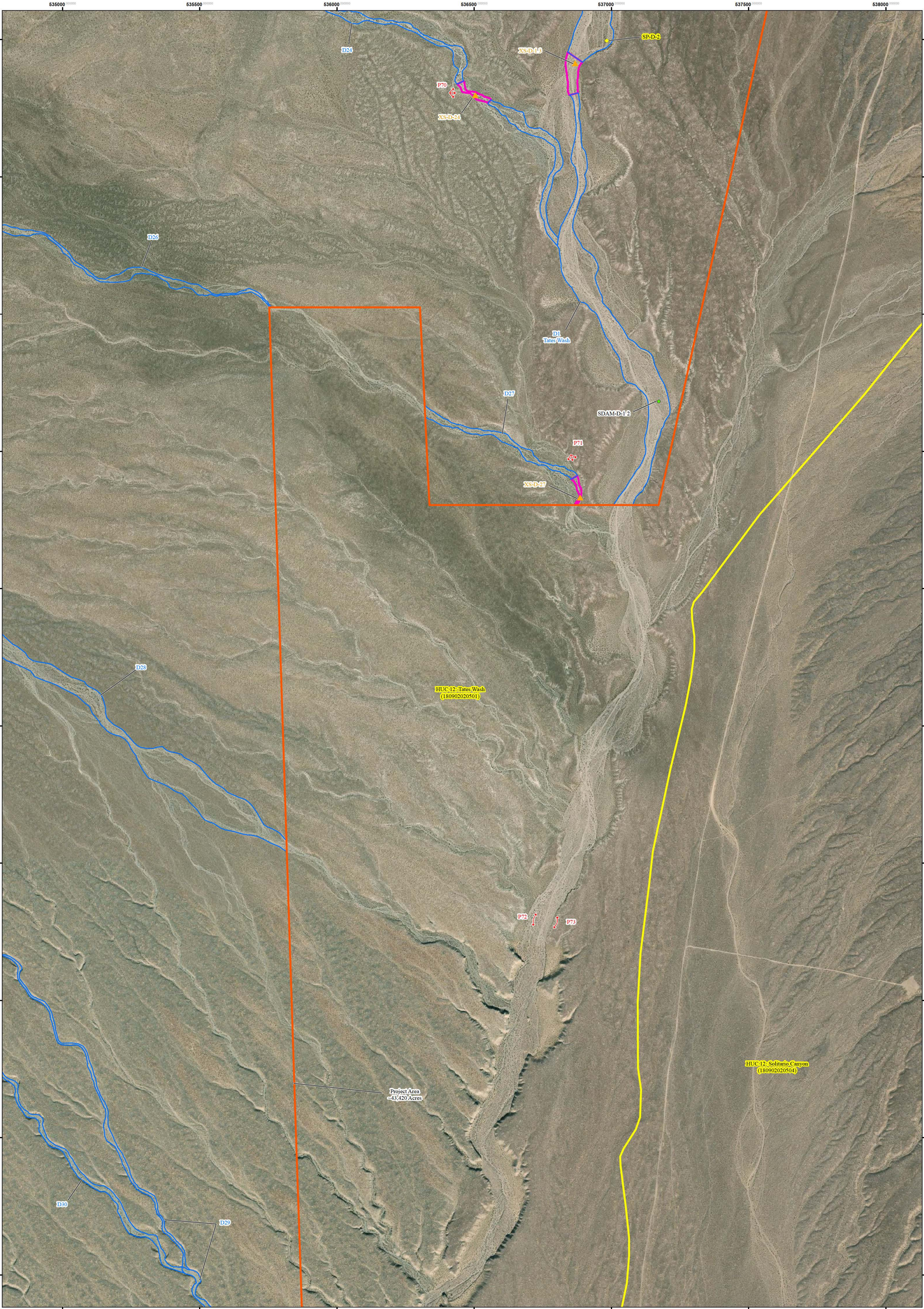
Map Date: 8/26/2024
Map Author: [Redacted]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

1 inch = 500 feet

- Project Area Boundaries (43,420 Acres)
- HUC12 Boundaries
- Desert Ephemeral Channels Non-relatively Permanent
- Representative Delineation Survey Sites
- OHWM Sample Points

- Wetland Delineation Sample Points
- SDAM Sample Points
- Access Roads
- Representative Photo Points



Aquatic Resources Delineation Survey Sub Map Dh

Watershed D: Tates Wash (180902020501)

Map Date: 8/26/2024
Map Author: [REDACTED]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83

0 1,000 2,000 Feet

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Project Area Boundaries (43,420 Acres)

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Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

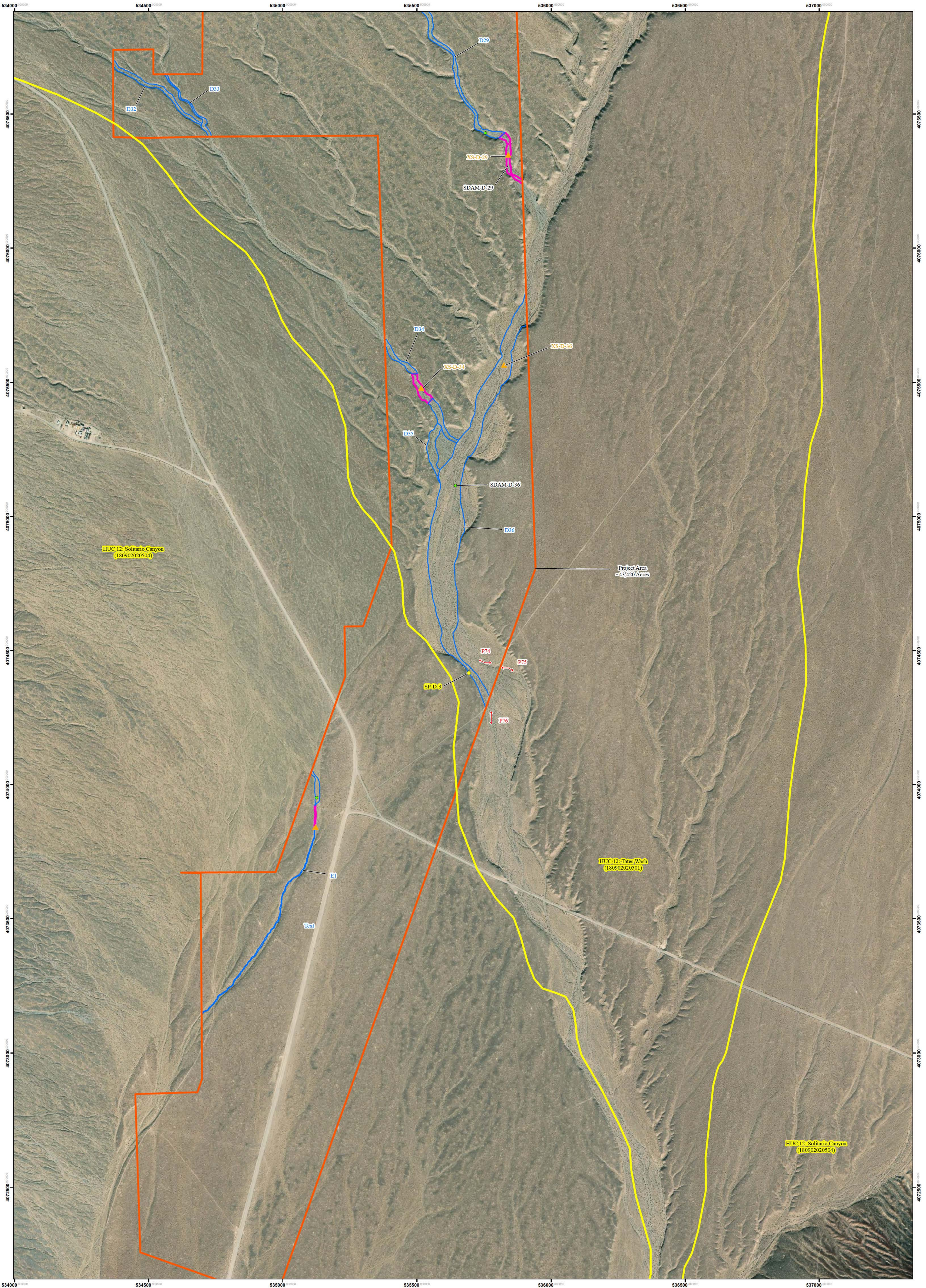
OHWM Sample Points

Wetland Delineation Sample Points

SDAM Sample Points

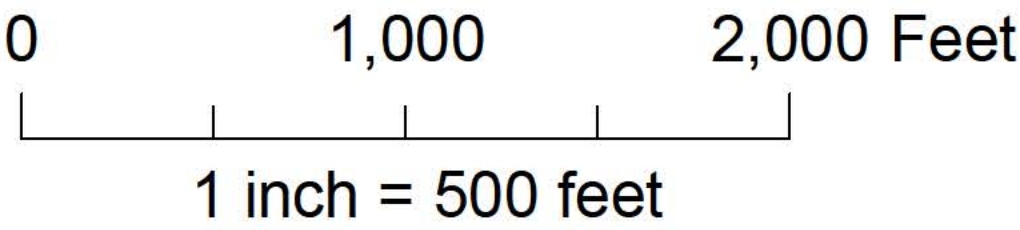
Access Roads

Representative Photo Points



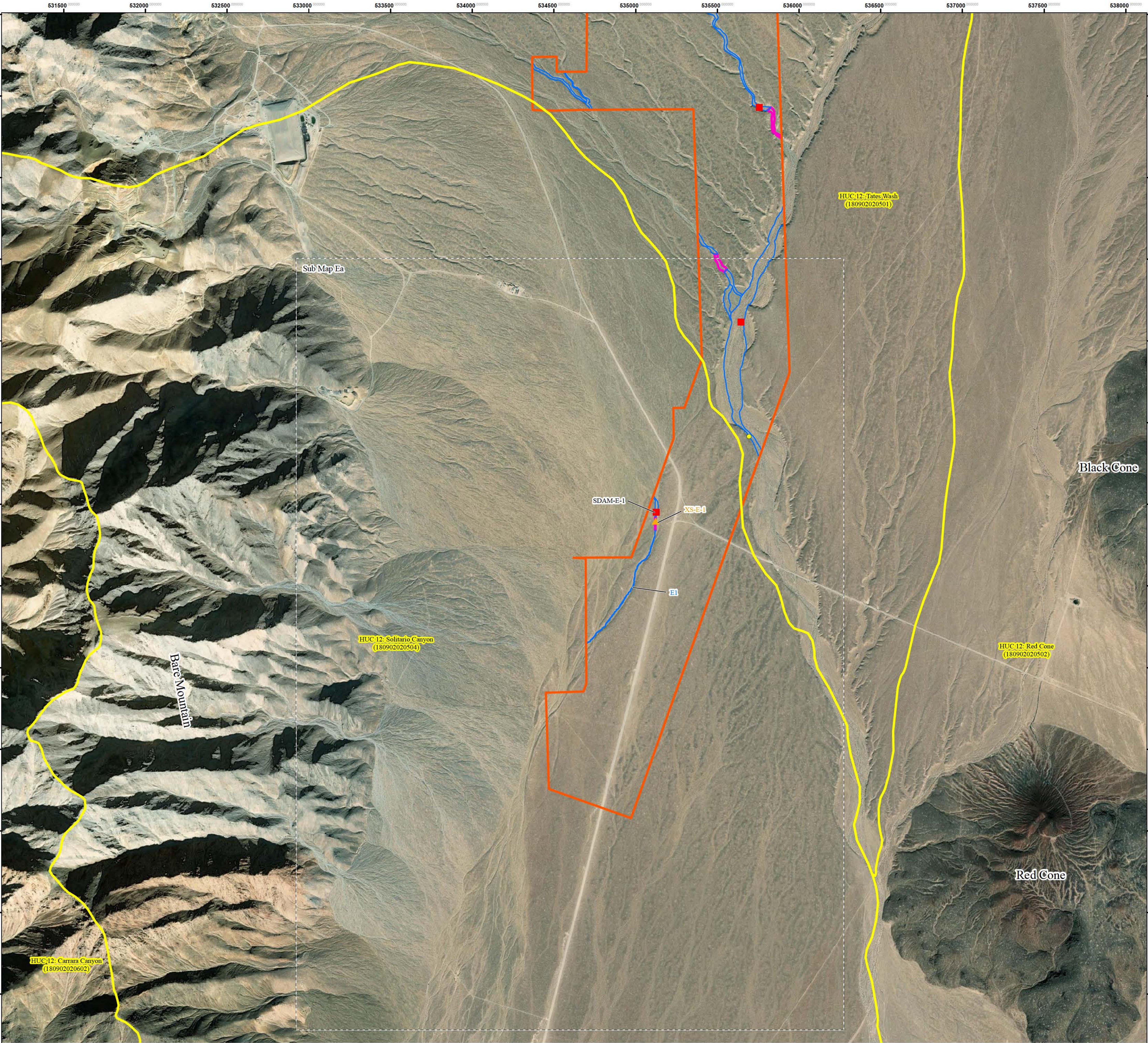
Aquatic Resources Delineation Survey Sub Map Di
Watershed D: Tates Wash (180902020501)

Map Date: 8/26/2024
Map Author: [Redacted]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83



- | | | |
|--|---|-----------------------------------|
| Project Area Boundaries (43,420 Acres) | HUC12 Boundaries | Wetland Delineation Sample Points |
| Desert Ephemeral Channels Non-relatively Permanent | Representative Delineation Survey Sites | SDAM Sample Points |
| OHWM Sample Points | | Access Roads |
| | | Representative Photo Points |





Legend

Project Area Boundaries (43,420 Acres)

HUC12 Boundaries

Watershed E Delineation Survey Maps

Desert Ephemeral Channels Non-relatively Permanent

Representative Delineation Survey Sites

OHWM Sample Points

Wetland Delineation Sample Points

SDAM Sample Points

Access Roads

Representative Photo Points

Aquatic Resources Delineation Survey Summary Table for HUC 12 Unit: Solitario Canyon (180902020504)							
Feature ID	Resource Type	Channel Length (feet)	Channel Area (acres)	OHWM Width (feet)	OHWM Delineation Sample Point	Wetland Delineation Sample Point	SDAM Sample Point
E1	Ephemeral Channel Non-relatively Permanent	3,489	1.084	11.0	XS-E-1	-	SDAM-E-1

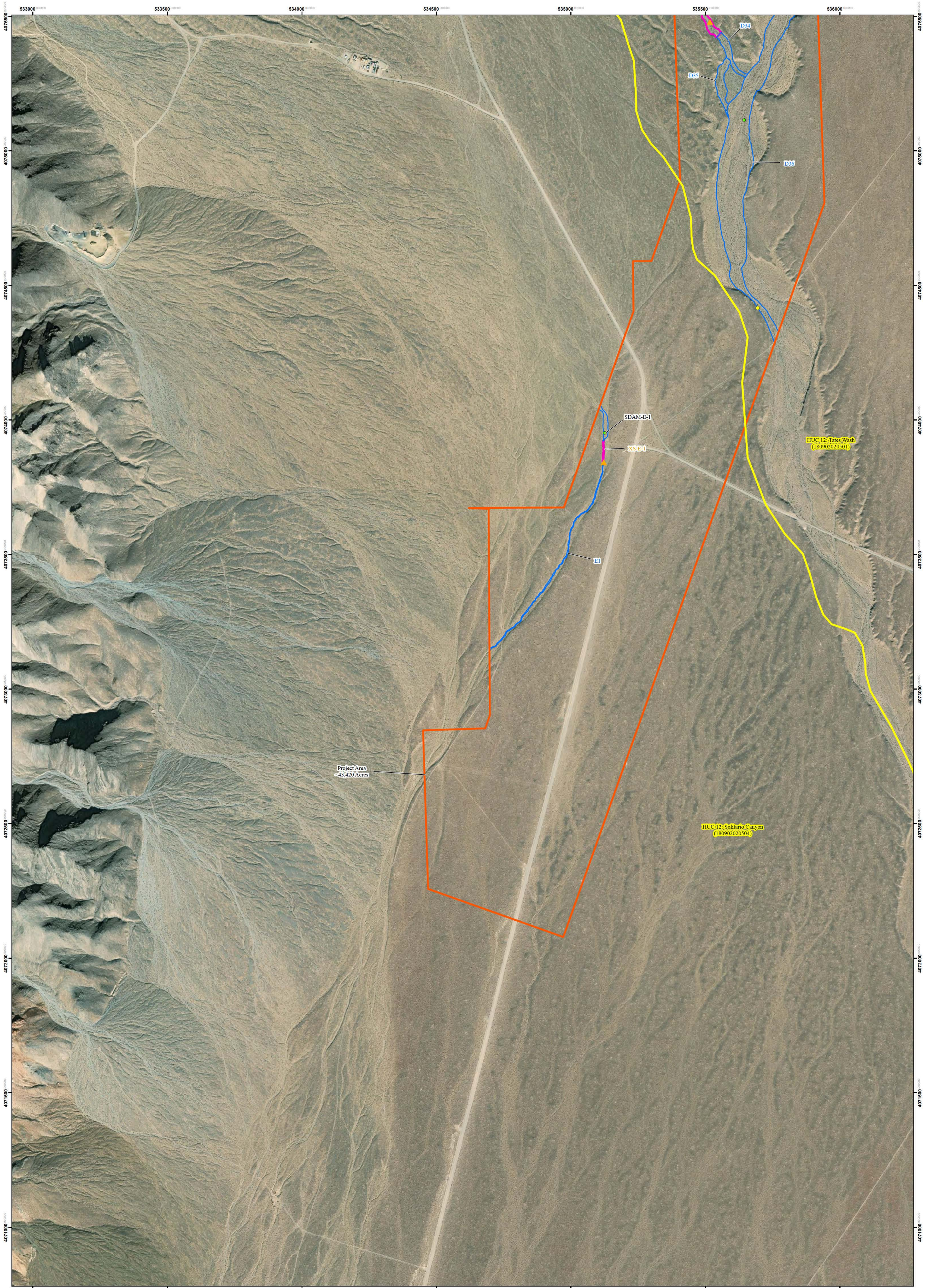
Aquatic Resources Delineation Survey Map E

HUC 12: Solitario Canyon (180902020504)

Map Date: 8/26/2024
Map Author:
Imagery: MAXAR 2021
Coordinates: UTM Zone 11 N NAD 83

02,0004,000 Feet

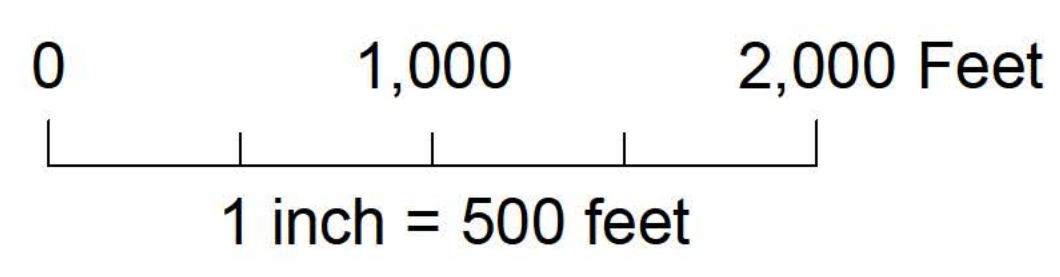
1 inch = 1,000 feet



Aquatic Resources Delineation Survey Sub Map Ea

Watershed E: Solitario Canyon (180902020504)

Map Date: 8/26/2024
Map Author: [REDACTED]
Imagery: MAXAR 2021
Coordinates: UTM Zone 11N Nad 83



- Project Area Boundaries (43,420 Acres)
- HUC12 Boundaries
- Desert Ephemeral Channels Non-relatively Permanent
- Representative Delineation Survey Sites
- Wetland Delineation Sample Points
- SDAM Sample Points
- Access Roads
- Representative Photo Points
- OHWM Sample Points

