NEBO WATER PROJECT

Environmental Assessment for the Nebo Regional Water Project – Appendices

May 2026

U.S. Department of the Interior – CUPCA Office
Bureau of Reclamation
Utah Reclamation Mitigation and Conservation Commission
Central Utah Water Conservancy District

Mission Statements

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, Native Hawaiians, and affiliated island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Appendix 1-A. Spanish Fork River Historic River Data Technical Report

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Spanish Fork River Historic Data

Nebo Regional Water Project EA
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Abbreviations

Abbreviation	Definition
AF	acre-feet
cfs	cubic feet per second
CUP	Central Utah Project
SHLCC	Strawberry High Line Canal Company
SVP	Strawberry Valley Project
ULS	Utah Lake Drainage Basin Water Delivery System
USGS	U.S. Geological Survey
WY	water year

1.0 Introduction

This report documents the existing operating conditions of the Spanish Fork River and surface water flows for water years 2017 to 2024.

2.0 Spanish Fork River

The Spanish Fork River is about 22½ miles long and begins at the confluence of Soldier Creek and Thistle Creek. The river flows to the northwest in Spanish Fork Canyon and through the southern area of Utah County before discharging into Utah Lake. The largest creek that enters the Spanish Fork River is Diamond Fork Creek. Its confluence is located about 2¼ miles northwest of the location where the river begins (Figure 4-1). The natural streamflow of the Spanish Fork River consists primarily of tributary inflow from Diamond Fork, Soldier, and Thistle Creeks, which discharge spring runoff from snowmelt and from seasonal precipitation (CUWCD 1988, Volume 4, Chapter 3, page 3-1). In addition, Congress mandated instream flows in Sixth Water and Diamond Fork Creeks. These creeks drain into the Spanish Fork River and contribute to the flows in the river.

3.0 Instream Flows

Sixth Water and Diamond Fork Creeks have instream flows mandated in 1992 by Public Law 102-575 (known as the Central Utah Project Completion Act), Title III, Section 303(c). These mandated instream flows were modified as part of the Diamond Fork System Environmental Update Project Environmental Assessment and Finding of No Significant Impact in 2022. The updated and approved minimum instream flow for Sixth Water Creek is 22 cubic feet per second (cfs) as measured at the Sixth Water U.S. Geological Survey (USGS) stream gage (Figure 4-1). Minimum flow in Sixth Water Creek is achieved through natural stream flows in the creek and discharged import water delivered from Strawberry Reservoir through the Strawberry Tunnel. A minimum of 20 cfs is discharged into Strawberry Tunnel from Strawberry Reservoir.

The minimum instream flow in Diamond Fork Creek is 40 cfs measured at the Red Hollow near Thistle, UT USGS stream gage 10149400 (Figure 4-1). The minimum instream flow in Diamond Fork Creek is achieved through natural stream flows and delivered import water from Strawberry Reservoir through the Strawberry Tunnel (used to achieve minimum instream flows in Sixth Water), Sixth Water Flow Control Structure, and Monks Hollow Overflow Structure, which are part of the Central Utah Project (CUP) Bonneville Unit Diamond Fork System operated and maintained by the Central Utah Water Conservancy District (District). When Strawberry Valley Project (SVP) contract holders begin calling for their water allotment out of Strawberry

Reservoir, the volume of water imported to maintain minimum Sixth Water and Diamond Fork Creeks becomes part of their irrigation supply.

During the non-irrigation season and when SVP isn't calling for their Strawberry Reservoir water supply, CUP import water (defined as water delivered from Strawberry Reservoir) is used to meet the minimum Sixth Water and Diamond Fork Creeks instream flows that discharge into Spanish Fork River and eventually to Utah Lake. Once this water reaches Utah Lake, it becomes available to use as part of the Strawberry–Utah Lake–Jordanelle exchange.

4.0 Strawberry Valley Project Deliveries

Historically, SVP contract water was delivered from Strawberry Reservoir through the Strawberry Tunnel into Sixth Water and Diamond Fork Creeks and into the Spanish Fork River. Once in the Spanish Fork River, the SVP contract water was diverted at the Spanish Fork River Diversion into the Power Canal, which connects to the Strawberry High Line Canal. This continued until the completion of the Diamond Fork System in 2004, when most irrigation flows were shifted out of Sixth Water and Diamond Fork Creeks and into the constructed pipelines and tunnels. Currently, most of the SVP contract water is conveyed in the Diamond Fork System and discharged into Diamond Fork Creek at the Spanish Fork Flow Control Structure before flowing into the Spanish Fork River. However, up to 10,200 acre-feet (AF) of SVP contract water can be conveyed in the Diamond Fork System and the Spanish Fork Canyon Pipeline/Spanish Fork Santaquin Pipeline, part of the Utah Lake Drainage Basin Water Delivery System (ULS), for delivery to SVP contract holders in southern Utah County.

The flows in the section of the Spanish Fork River between the Diamond Fork Creek confluence and the Spanish Fork River Diversion are augmented by SVP water deliveries during the irrigation season and from Diamond Fork and Sixth Water Creek instream flows during the non-irrigation season. This section of the Spanish Fork River is about 4½ miles long.

The SVP contract water volume stored in Strawberry Reservoir is 61,000 AF annually. As shown in Figure 4-2, the Mapleton-Springville Irrigation District has 1/7th of the SVP contract water allocation, totaling about 8,700 AF; the River Companies (for example, South Fields and East Bench) have 2/7th, totaling 17,400 AF; and the Strawberry High Line Canal Company has 4/7th, totaling 34,900 AF. The Mapleton-Springville Irrigation District's SVP allocated water is delivered through the Diamond Fork System to the ULS pipelines for use in Mapleton and Springville. This water is not delivered into the Spanish Fork River. Most of the Strawberry High Line Canal Company and the River Company's SVP contract water allocation from Strawberry Reservoir is discharged from Diamond Fork System facilities into the Spanish Fork River and diverted at the Spanish Fork River Diversion.

Figure 4-1
Spanish Fork River, Instream Flow and SVP Delivery Locations, Diamond Fork System and ULS, and USGS Gaging Stations

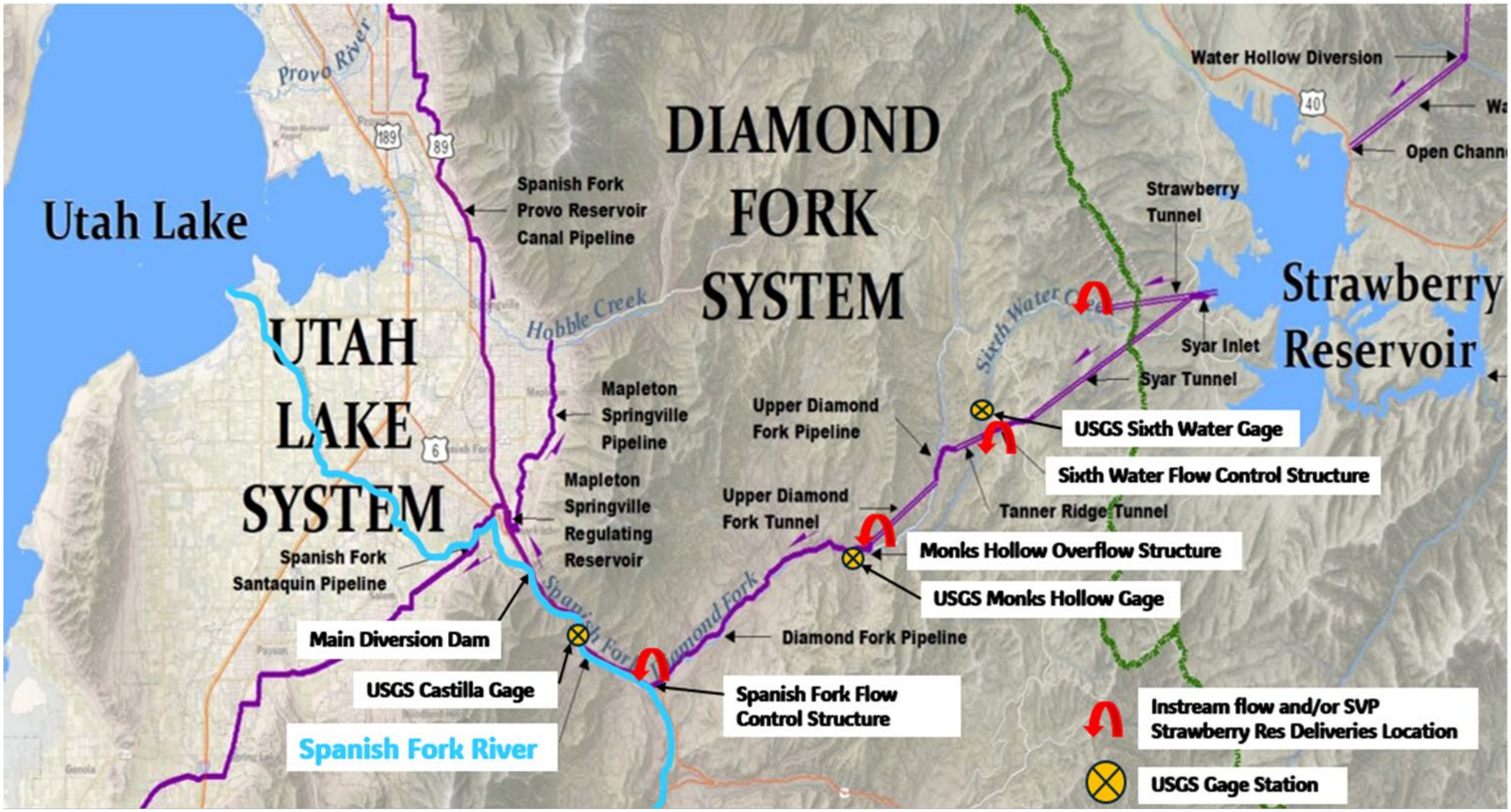
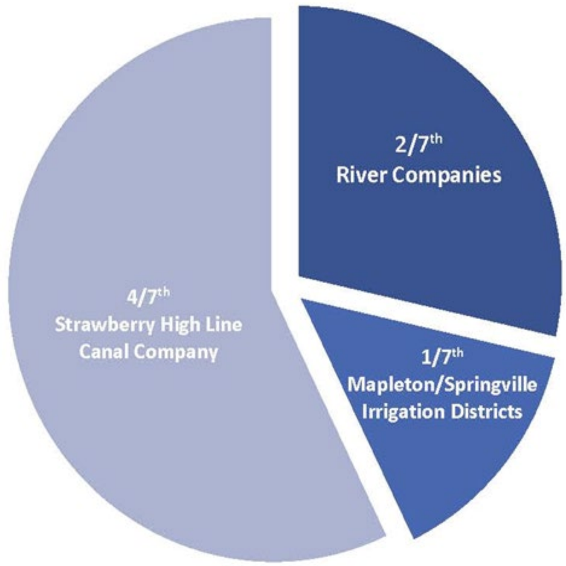


Figure 4-2
Current SVP Water Allocation



5.0 Spanish Fork River Natural Flows

To determine the Spanish Fork River's natural flows, eight water years between 2017 and 2024 were evaluated. The water year (WY) extends from November 1 to October 31 (for example, WY 2017 runs from November 1, 2016, through October 31, 2017). To determine the natural flows in the Spanish Fork River, the instream flows that are released to meet minimum flow requirements in Diamond Fork and Sixth Water Creeks and the SVP water delivered from Strawberry Reservoir were calculated and subtracted from the flows measured at the USGS Castilla Gage.

Water used to meet instream flows and the SVP contract water are considered import water because they are delivered from Strawberry Reservoir (located in the Colorado River Basin) and are not natural to the Spanish Fork River or the Utah Lake Drainage Basin. The *Annual Distribution Report of the Spanish Fork River Distribution System* for each water year that was evaluated (Utah Division of Water Rights 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024) and District Diamond Fork System and ULS distribution delivery data were used in compiling import water. The Spanish Fork River Commissioner's annual reports list a start date for SVP deliveries from Strawberry Reservoir; these dates are shown in Table 5-1.

The monthly average natural flow in the Spanish Fork River was calculated for water years 2017 through 2024. To calculate the natural river flow, the average monthly flow as recorded at the

USGS Castilla gage was used, then all import water delivered from Strawberry Reservoir was deducted. Table 5-2 shows the monthly average of the Spanish Fork River flows.

Table 5-1
SVP Contract Water Delivery Dates

Water Year	SVP Deliveries from Strawberry Reservoir		Snowpack
	Begin Date	End Date	
2017	June 1	September 28	Above average
2018	May 8	September 28	Below average
2019	June 20	September 26	Above average
2020	May 4	September 30	Average to below average
2021	April 12	September 30	Below average
2022	May 14	September 30	Slightly below average
2023	June 25	September 30	Above average
2024	June 8	September 30	Above average

Table 5-2
Monthly Average of Natural Flows (cfs) in the Spanish Fork River 2017–2024

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
58.9	67.7	100.6	267.9	459.4	205.8	102.1	82.2	63.2	72.0	58.6	55.6

6.0 Assumptions to Determine Spanish Fork River Natural Flows

The following assumptions were used to determine the Spanish Fork River's natural flows:

- Water years 2017 through 2024 were evaluated using a monthly timestep.
- Mean monthly Spanish Fork River flow data were downloaded from the Castilla USGS gaging station for each water year.
- Strawberry High Line Canal Company monthly deliveries from Strawberry Reservoir were obtained from the *Annual Distribution Report of the Spanish Fork River Distribution System* (Utah Division of Water Rights 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024) for each water year.

- To determine the River Companies' deliveries from Strawberry Reservoir, the District Diamond Fork System and ULS deliveries spreadsheets were used. The total SVP delivery volume (not including Mapleton-Springville Irrigation District's deliveries) was computed, then the Strawberry High Line Canal Company's volume was subtracted from the SVP volume, resulting in the total River Companies' deliveries.
- When SVP contract holders begin requesting deliveries from Strawberry Reservoir, the required instream flows in Sixth Water and Diamond Fork Creeks become part of the SVP supply.
- All volumes were converted to cubic feet per second.
- Figures for each water year show a graphical representation of the Spanish Fork River in cubic feet per second as follows:
    - Natural flow is shown in blue.
    - Sixth Water and Diamond Fork Creek instream flows are shown in brown.
    - Strawberry High Line Canal Company (SHLCC) flow is shown in green.
    - River Companies flow is shown in purple.

A discussion about each water year used in this evaluation is provided in Section 7.0. The USGS Castilla gage on the Spanish Fork River is located above the Spanish Fork River Diversion and below the Diamond Fork Creek confluence.

7.0 Water Year Results

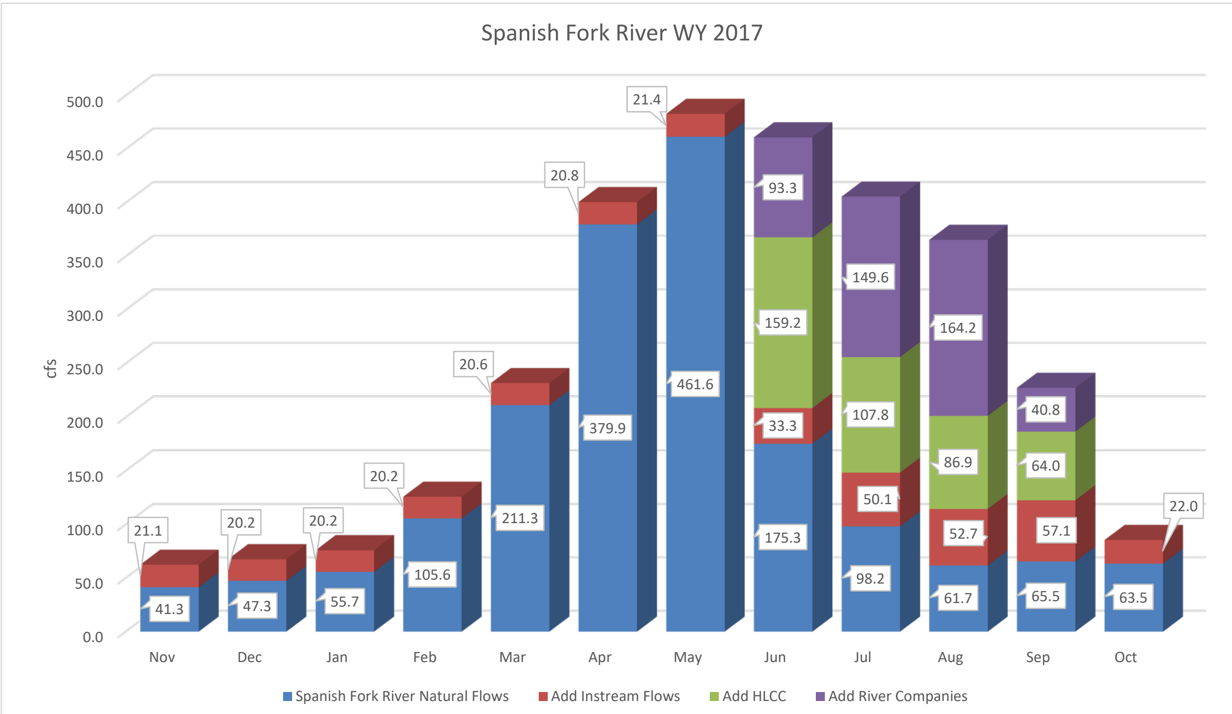
7.1 Water Year 2017

Water year 2017 was considered an above-average year for snowpack and stream runoff. SVP contract holders began requesting their water to be delivered from Strawberry Reservoir on June 1, 2017, and deliveries stopped on September 28, 2017.Without instream flows in Sixth Water and Diamond Fork Creeks along with the water added as part of the SVP contract holders, the natural Spanish Fork River flows for WY 2017 ranged from a low of 41.3 cfs in November 2016 to a high of 461.6 cfs in May 2017 (see Table 7-1). The SVP contract water (which includes instream flows) consists of between 62% and 83% of the Spanish Fork River flow between the Diamond Fork Creek confluence and the Spanish Fork River Diversion between June and September. See Figure 7-1 for flows in the Spanish Fork River for WY 2017.

Table 7-1
Spanish Fork River Flows (cfs) for WY 2017

Parameter	Nov	Dec	Jan	Feb	March	April	May	Jun	Jul	Aug	Sept	Oct
Spanish Fork River natural flows	41.3	47.3	55.7	105.6	211.3	379.9	461.6	175.3	98.2	61.7	65.5	63.5
Add instream flows	21.1	20.2	20.2	20.2	20.6	20.8	21.4	33.3	50.1	52.7	57.1	22.0
Add SHLCC	—	—	—	—	—	—	—	159.2	107.8	86.9	64.0	—
Add River Companies	—	—	—	—	—	—	—	93.3	149.6	164.2	40.8	—
Monthly average flow rate (cfs)	62.5	67.5	75.9	125.8	231.9	400.7	483.0	461.1	405.8	365.5	227.4	85.5
% of SVP water in Spanish Fork River	—	—	—	—	—	—	—	62%	76%	83%	71%	—

Figure 7-1
Spanish Fork River Flows for WY 2017



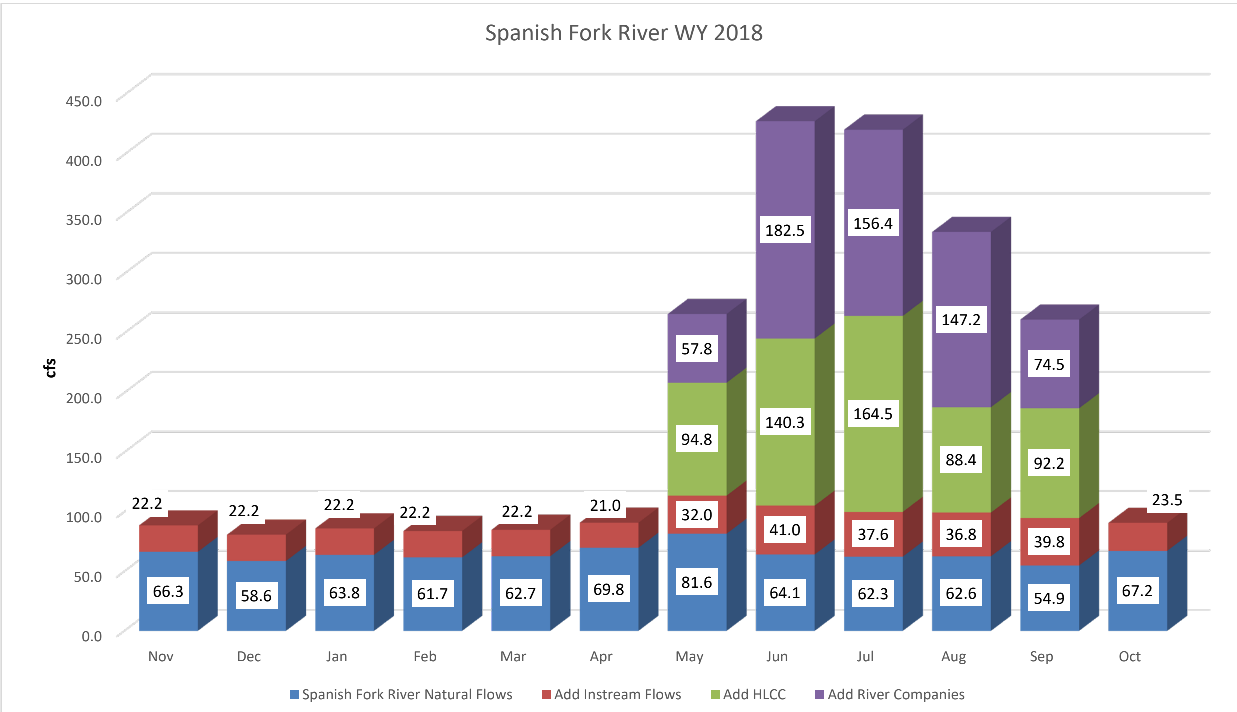
7.2 Water Year 2018

Water year 2018 was considered a below-average year for snowpack and stream runoff. SVP contract holders began requesting their water to be delivered from Strawberry Reservoir on May 8, 2018, and deliveries stopped on September 28, 2018. Without instream flows in Sixth Water and Diamond Fork Creeks along with the water added as part of the SVP contract holders, the natural Spanish Fork River flows for WY 2018 ranged from a low of 54.9 cfs in September 2018 to a high of 81.6 cfs in May (see Table 7-2). The SVP contract water (which includes instream flows) consists of between 69% and 85% of the flow in the Spanish Fork River between the Diamond Fork Creek confluence and the Spanish Fork River Diversion between May and September. See Figure 7-2 for flows in the Spanish Fork River for WY 2018.

Table 7-2
Spanish Fork River Flows (cfs) for WY 2018

Parameter	Nov	Dec	Jan	Feb	March	April	May	Jun	Jul	Aug	Sept	Oct
Spanish Fork River natural flows	66.3	58.6	63.8	61.7	62.7	69.8	81.6	64.1	62.3	62.6	54.9	67.2
Add instream flows	22.2	22.2	22.2	22.2	22.2	21.0	32.0	41.0	37.6	36.8	39.8	23.5
Add SHLCC	—	—	—	—	—	—	94.8	140.3	164.5	88.4	92.2	—
Add River Companies	—	—	—	—	—	—	57.8	182.5	156.4	147.2	74.5	—
Monthly average flow rate (cfs)	88.5	80.8	86.0	83.9	84.9	90.8	266.1	427.9	420.8	335.0	261.4	90.7
% of SVP water in Spanish Fork River	—	—	—	—	—	—	69%	85%	85%	81%	79%	—

Figure 7-2
Spanish Fork River Flows for WY 2018



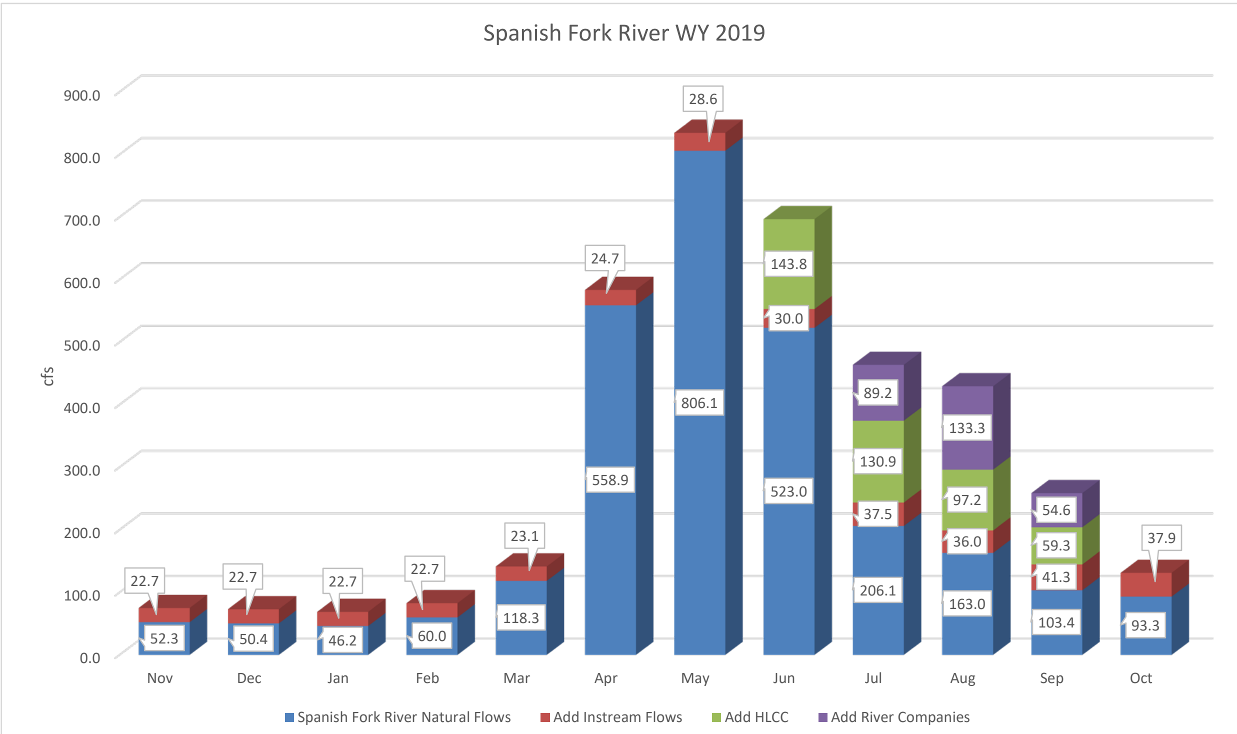
7.3 Water Year 2019

Water year 2019 was considered an above-average year for snowpack and stream runoff. SVP contract holders began requesting their water to be delivered from Strawberry Reservoir on June 20, 2019, and deliveries stopped on September 26, 2019. Without instream flows in Sixth Water and Diamond Fork Creeks along with the water added as part of the SVP contract holders, the natural Spanish Fork River flows for WY 2019 ranged from a low of 46.2 cfs in January to a high of 806.1 cfs in May 2019 (see Table 7-3). The SVP contract water (which includes instream flows) consists of between 25% and 62% of the flow in the Spanish Fork River between the Diamond Fork Creek confluence and the Spanish Fork River Diversion between June and September. See Figure 7-3 for flows in the Spanish Fork River for WY 2019.

Table 7-3
Spanish Fork River Flows (cfs) for WY 2019

Parameter	Nov	Dec	Jan	Feb	March	April	May	Jun	Jul	Aug	Sept	Oct
Spanish Fork River natural flows	52.3	50.4	46.2	60.0	118.3	558.9	806.1	523.0	206.1	163.0	103.4	93.3
Add instream flows	22.7	22.7	22.7	22.7	23.1	24.7	28.6	30.0	37.5	36.0	41.3	37.9
Add SHLCC	—	—	—	—	—	—	—	143.8	130.9	97.2	59.3	—
Add River Companies	—	—	—	—	—	—	—	—	89.2	133.3	54.6	—
Monthly average flow rate (cfs)	75.0	73.1	68.9	82.7	141.4	583.6	834.7	696.7	463.7	429.5	258.7	131.2
% of SVP water in Spanish Fork River	—	—	—	—	—	—	—	25%	56%	62%	60%	—

Figure 7-3
Spanish Fork River Flows for WY 2019



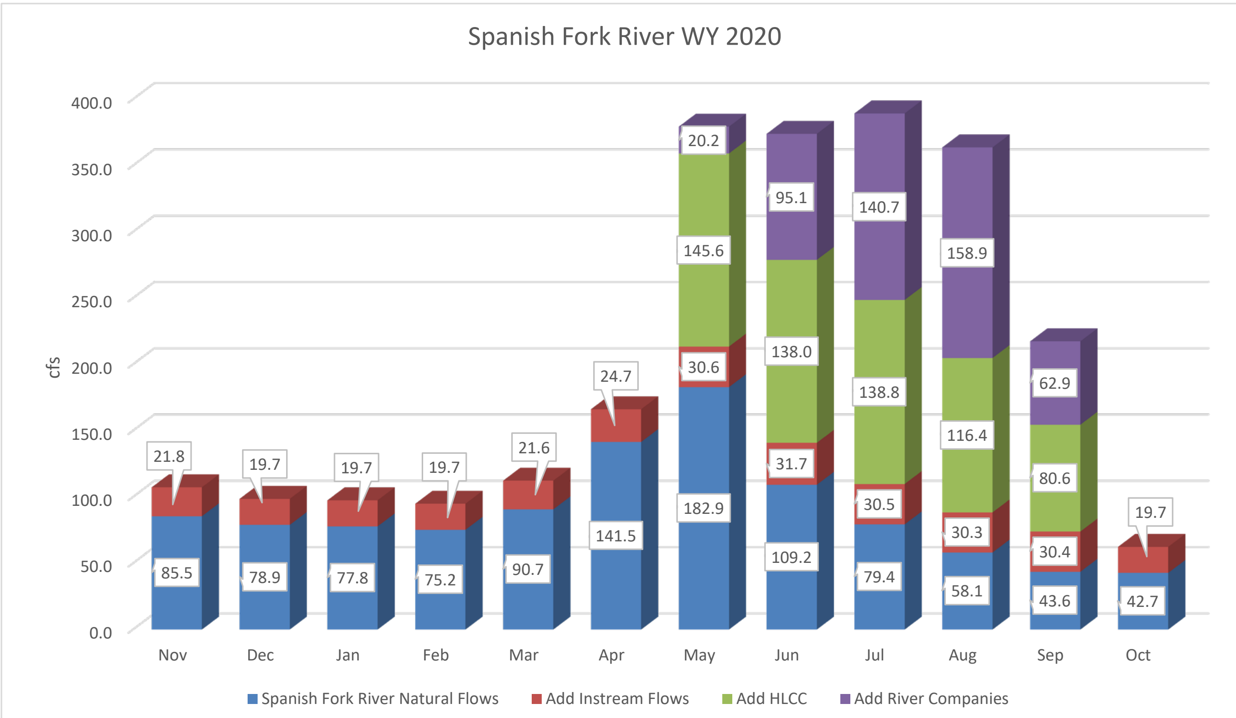
7.4 Water Year 2020

Water year 2020 was considered an average to below-average year for snowpack and stream runoff. SVP contract holders began requesting their water to be delivered from Strawberry Reservoir on May 4, 2020, and deliveries stopped on September 30, 2020. Without instream flows in Sixth Water and Diamond Fork Creeks along with the water added as part of the SVP contract holders, the natural Spanish Fork River flows for WY 2020 ranged from a low of 42.7 cfs in October to a high of 182.9 cfs in May 2020 (see Table 7-4). The SVP contract water (which includes instream flows) consists of between 52% and 84% of the flow in the Spanish Fork River between the Diamond Fork Creek confluence and the Spanish Fork River Diversion between May and September. See Figure 7-4 for flows in the Spanish Fork River for WY 2020.

Table 7-4
Spanish Fork River Flows (cfs) for WY 2020

Parameter	Nov	Dec	Jan	Feb	March	April	May	Jun	Jul	Aug	Sept	Oct
Spanish Fork River natural flows	85.5	78.9	77.8	75.2	90.7	141.5	182.9	109.2	79.4	58.1	43.6	42.7
Add instream flows	21.8	19.7	19.7	19.7	21.6	24.7	30.6	31.7	30.5	30.3	30.4	19.7
Add SHLCC	—	—	—	—	—	—	145.6	138.0	138.8	116.4	80.6	—
Add River Companies	—	—	—	—	—	—	20.2	95.1	140.7	158.9	62.9	—
Monthly average flow rate (cfs)	107.3	98.6	97.5	94.9	112.3	166.2	379.4	374.0	389.4	363.7	217.4	62.4
% of SVP water in Spanish Fork River	—	—	—	—	—	—	52%	71%	80%	84%	80%	—

Figure 7-4
Spanish Fork River Flows for WY 2020



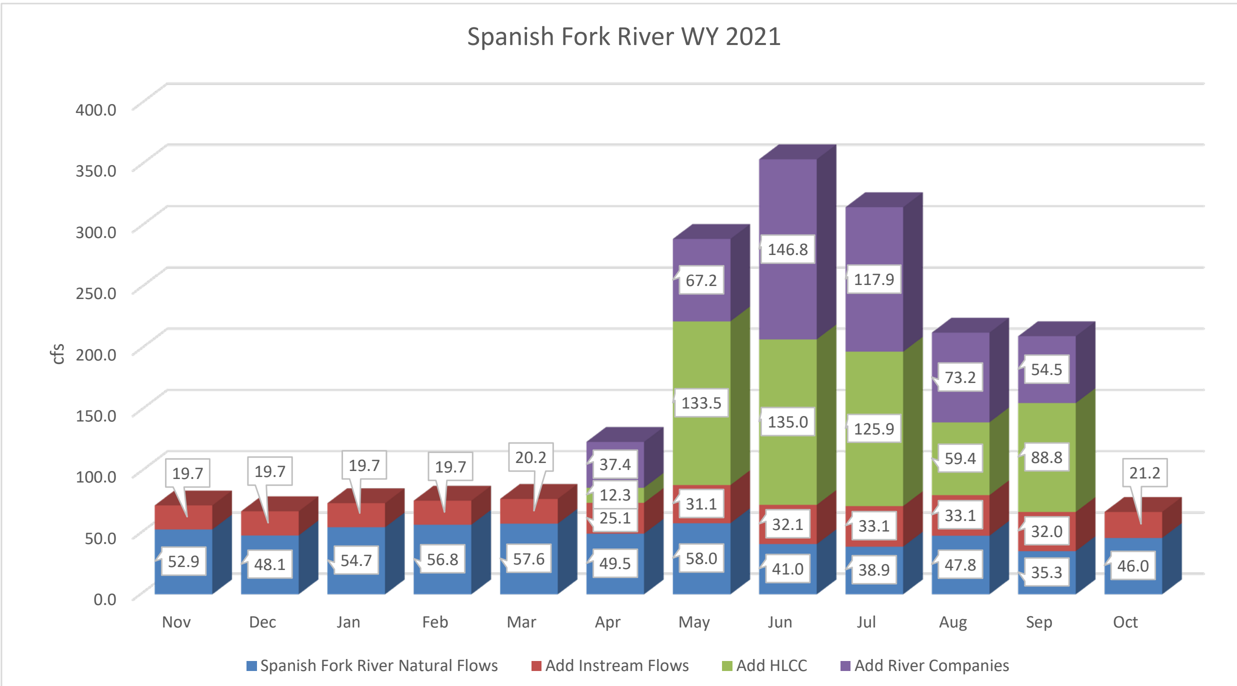
7.5 Water Year 2021

Water year 2021 was considered a below-average year for snowpack and stream runoff. SVP contract holders began requesting their water to be delivered from Strawberry Reservoir on April 12, 2021, and deliveries stopped on September 30, 2021. Without instream flows in Sixth Water and Diamond Fork Creeks along with the water added as part of the SVP contract holders, the natural Spanish Fork River flows for WY 2021 ranged from a low of 35.3 cfs in September to a high of 58.0 cfs in May 2021 (see Table 7-5). The SVP contract water (which includes instream flows) consists of between 60% and 88% of the flow in the Spanish Fork River between the Diamond Fork Creek confluence and the Spanish Fork River Diversion between May and September. See Figure 7-5 for flows in the Spanish Fork River for WY 2021.

Table 7-5
Spanish Fork River Flows (cfs) for WY 2021

Parameter	Nov	Dec	Jan	Feb	March	April	May	Jun	Jul	Aug	Sept	Oct
Spanish Fork River natural flows	52.9	48.1	54.7	56.8	57.6	49.5	58.0	41.0	38.9	47.8	35.3	46.0
Add instream flows	19.7	19.7	19.7	19.7	20.2	25.1	31.1	32.1	33.1	33.1	32.0	21.2
Add SHLCC	—	—	—	—	—	12.3	133.5	135.0	125.9	59.4	88.8	—
Add River Companies	—	—	—	—	—	37.4	67.2	146.8	117.9	73.2	54.5	—
Monthly average flow rate (cfs)	72.6	67.7	74.3	76.4	77.8	124.4	289.9	354.8	315.7	213.5	210.5	67.2
% of SVP water in Spanish Fork River	—	—	—	—	—	60%	80%	88%	88%	78%	83%	—

Figure 7-5
Spanish Fork River Flows for WY 2021



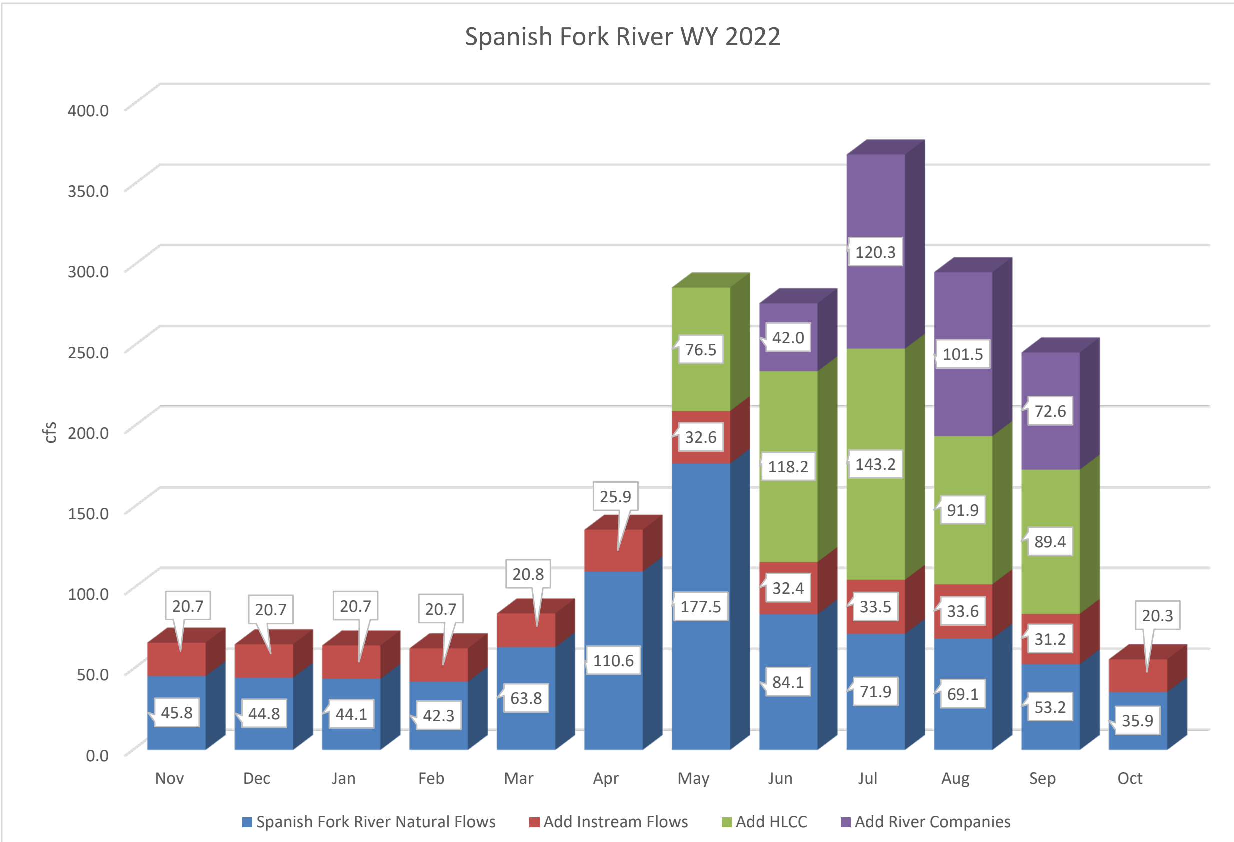
7.6 Water Year 2022

Water year 2022 was considered a slightly below-average year for snowpack and stream runoff. SVP contract holders began requesting their water to be delivered from Strawberry Reservoir on May 14, 2022, and deliveries stopped on September 30, 2022. Without instream flows in Sixth Water and Diamond Fork Creeks along with the water added as part of the SVP contract holders, the natural Spanish Fork River flows for WY 2022 ranged from a low of 35.9 cfs in October 2022 to a high of 177.5 in May (see Table 7-6). The SVP contract water (which includes instream flows) consists of between 38% and 81% of the flow in the Spanish Fork River between the Diamond Fork Creek confluence and the Spanish Fork River Diversion between May and September. See Figure 7-6 for flows in the Spanish Fork River for WY 2022.

Table 7-6
Spanish Fork River Flows (cfs) for WY 2022

Parameter	Nov	Dec	Jan	Feb	March	April	May	Jun	Jul	Aug	Sept	Oct
Spanish Fork River natural flows	45.8	44.8	44.1	42.3	63.8	110.6	177.5	84.1	71.9	69.1	53.2	35.9
Add instream flows	20.7	20.7	20.7	20.7	20.8	25.9	32.6	32.4	33.5	33.6	31.2	20.3
Add SHLCC	—	—	—	—	—	—	76.5	118.2	143.2	91.9	89.4	—
Add River Companies	—	—	—	—	—	—	—	42.0	120.3	101.5	72.6	—
Monthly average flow rate (cfs)	66.5	65.5	64.8	63.0	84.6	136.5	286.6	276.8	369.0	296.1	246.4	56.2
% of SVP water in Spanish Fork River	—	—	—	—	—	—	38%	70%	81%	77%	78%	—

Figure 7-6
Spanish Fork River Flows for WY 2022



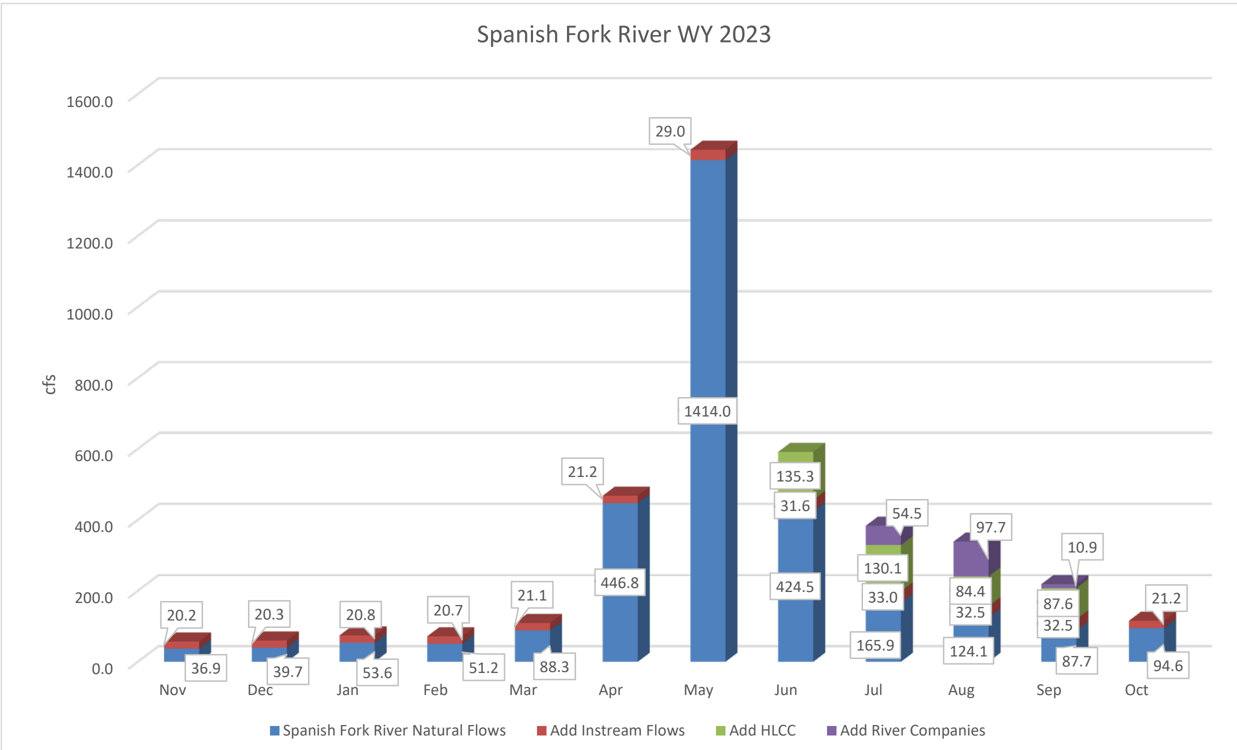
7.7 Water Year 2023

Water year 2023 was considered above-average year for snowpack and stream runoff. SVP contract holders began requesting their water to be delivered from Strawberry Reservoir on June 25, 2023, and deliveries stopped on September 30, 2023. Without instream flows in Sixth Water and Diamond Fork Creeks along with the water added as part of the SVP contract holders, the natural Spanish Fork River flows for WY 2023 ranged from a low of 36.9 cfs in November 2022 to a high of 1,414.0 in May 2023 (see Table 7-7). The SVP contract water (which includes instream flows) consists of between 28% and 63% of the flow in the Spanish Fork River between the Diamond Fork Creek confluence and the Spanish Fork River Diversion between June and September. See Figure 7-7 for flows in the Spanish Fork River for WY 2023.

Table 7-7
Spanish Fork River Flows (cfs) for WY 2023

Parameter	Nov	Dec	Jan	Feb	March	April	May	Jun	Jul	Aug	Sept	Oct
Spanish Fork River natural flows	36.9	39.7	53.6	51.2	88.3	446.8	1414.0	424.5	165.9	124.1	87.7	94.6
Add instream flows	20.2	20.3	20.8	20.7	21.1	21.2	29.0	31.6	33.0	32.5	32.5	21.2
Add SHLCC	—	—	—	—	—	—	—	135.3	130.1	84.4	87.6	—
Add River Companies	—	—	—	—	—	—	—	—	54.5	97.7	10.9	—
Monthly average flow rate (cfs)	57.1	60.0	74.4	71.9	109.4	468.0	1443.0	591.4	383.5	338.7	218.7	115.8
% of SVP water in Spanish Fork River	—	—	—	—	—	—	—	28%	57%	63%	60%	—

Figure 7-7
Spanish Fork River Flows for WY 2023



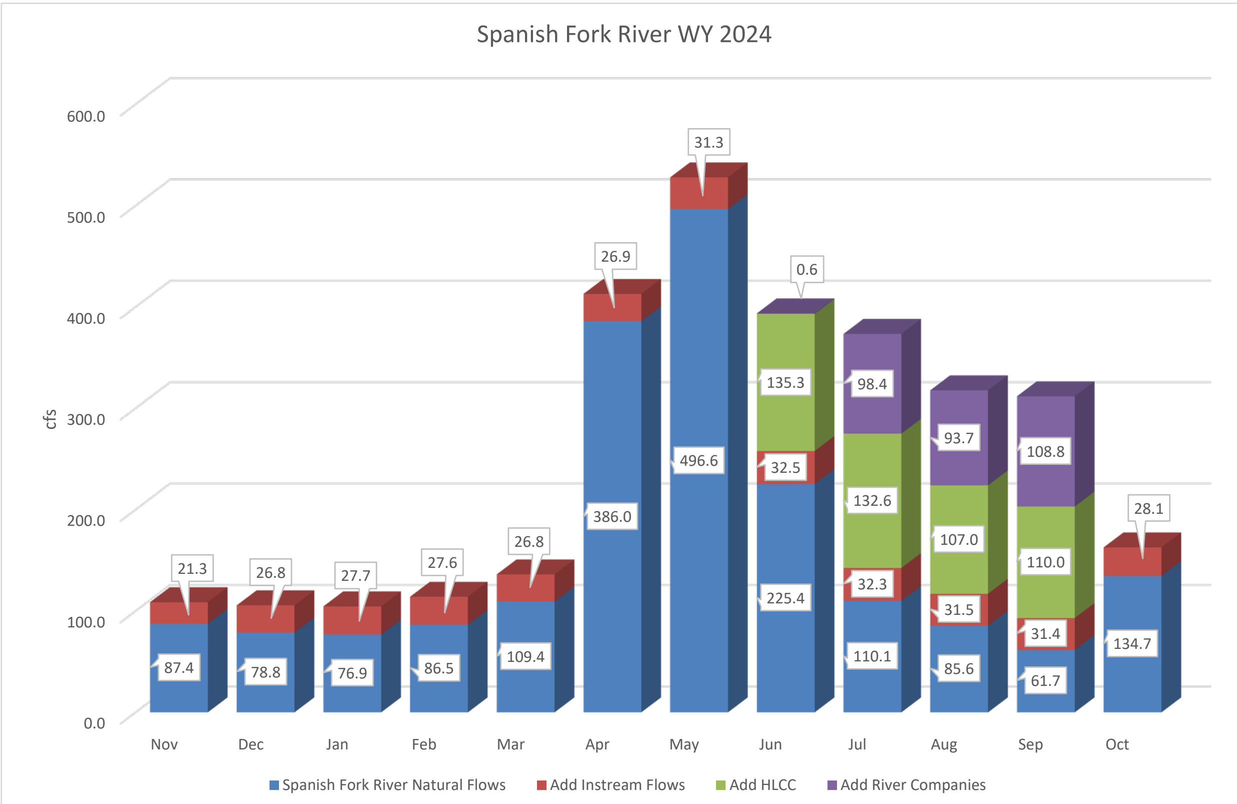
7.8 Water Year 2024

Water year 2024 was considered an above-average year for snowpack and stream runoff. SVP contract holders began requesting their water to be delivered from Strawberry Reservoir on June 8, 2024, and deliveries stopped on September 30, 2024. Without instream flows in Sixth Water and Diamond Fork Creeks along with the water added as part of the SVP contract holders, the natural Spanish Fork River flows for WY 2024 ranged from a low of 61.7 cfs in September to a high of 496.6 cfs in May (see Table 7-8). The SVP contract water (including the instream flows) consists of between 43% and 80% of the flow in the Spanish Fork River between the Diamond Fork Creek confluence and the Spanish Fork River Diversion between June and September. See Figure 7-8 for flows in the Spanish Fork River for WY 2024.

Table 7-8
Spanish Fork River Flows (cfs) for WY 2024

Parameter	Nov	Dec	Jan	Feb	March	April	May	Jun	Jul	Aug	Sept	Oct
Spanish Fork River natural flows	87.4	78.8	76.9	86.5	109.4	386.0	496.6	225.4	110.1	85.6	61.7	134.7
Add instream flows	21.3	26.8	27.7	27.6	26.8	26.9	31.3	32.5	32.3	31.5	31.4	28.1
Add SHLCC	—	—	—	—	—	—	—	135.3	132.6	107.0	110.0	—
Add River Companies	—	—	—	—	—	—	—	0.6	98.4	93.7	108.8	—
Monthly average flow rate (cfs)	108.7	105.6	104.6	114.1	136.2	412.9	528.0	393.7	373.5	317.8	311.9	162.8
% of SVP water in Spanish Fork River	—	—	—	—	—	—	—	43%	71%	73%	80%	—

Figure 7-8
Spanish Fork River Flows for WY 2024



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Appendix 2-A. Warren Act Contracts

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Appendix 2-A. Warren Act Contracts

Table 2-A-1
Potential Warren Act Agreements for Non-Project Water Rights through the Strawberry High Line Canal

Entity	Source	Quantity	Season
Payson City	Dry Creek runoff (Payson City water) near Lateral 20 of the Strawberry High Line Canal (SHLC)	150 CFS	March–June (spring runoff)
Strawberry High Line Canal Company	Two wells owned by Strawberry High Line Canal Company in Santaquin	11.5 CFS	April–October (irrigation season)
Summit Creek Irrigation and Canal Company	Summit Creek runoff between Lateral 31 and Lateral 33 of the SHLC	35 CFS	March–June (spring runoff)
Strawberry Water Users Association	Original Strawberry Tunnel flows in Spanish Fork Canyon	7 CFS	Year-round
Strawberry High Line Canal Company	Red Bridge diversion and pump station direct into Lateral 20	10 CFS	April–October (irrigation season)
Lakeshore Irrigation Company	Spanish Fork River water into SHLC	60 CFS	April–October (irrigation season)
East Bench Canal Company	Spanish Fork River water into SHLC	95 CFS	April–October (irrigation season)
Salem Irrigation and Canal Company	Spanish Fork River water into SHLC	55 CFS	April–October (irrigation season)
Spanish Fork South Field Irrigation Company	Spanish Fork River water into SHLC	75 CFS	April–October (irrigation season)
Mill Race User: Spanish Fork City	Spanish Fork River water into SHLC	4 CFS	April–October (irrigation season)
Mill Race User: Spanish Fork South East Field Irrigation Company	Spanish Fork River water into SHLC	8 CFS	April–October (irrigation season)
Mill Race User: Spanish Fork West Field Irrigation Company	Spanish Fork River water into SHLC	43 CFS	April–October (irrigation season)

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Appendix 2-B. Existing SVP and Proposed NWP Service Area

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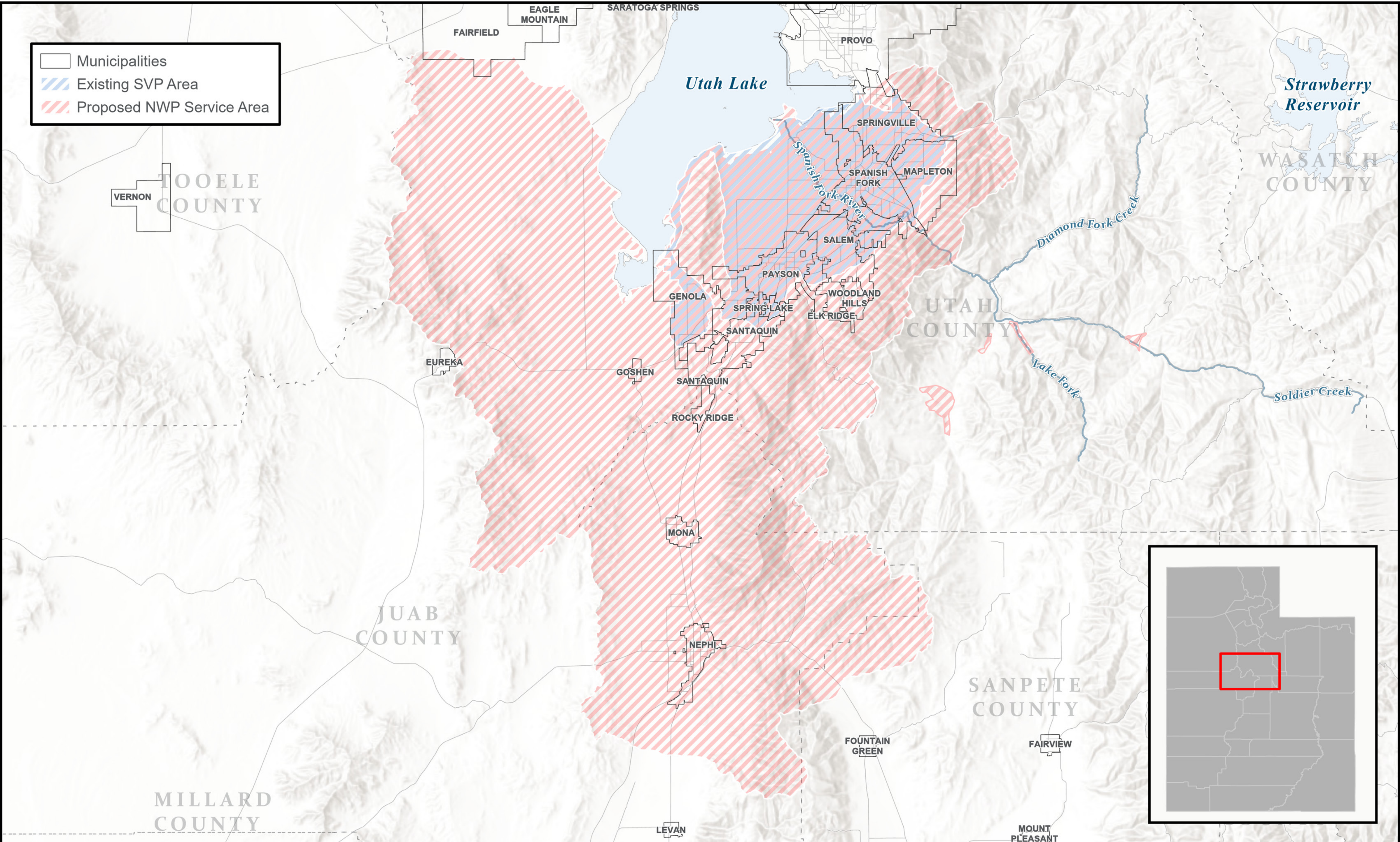

EXISTING SVP AND PROPOSED NWP SERVICE AREAS

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Appendix 3-A. Spanish Fork River Gage Height Analysis Technical Memorandum

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MEMORANDUM

Date:	Tuesday, February 24, 2026
Project:	Nebo Regional Water Project
To:	Central Utah Water Conservancy District
From:	HDR
Subject:	Spanish Fork River Gage Height Analysis with the Nebo Regional Water Project's Preferred Alternative

Introduction

The Central Utah Water Conservancy District (District) is a regional wholesale provider that serves seven counties (all of Utah, Salt Lake, Wasatch, Duchesne, and Uintah Counties, as well as part of Juab and Summit Counties) in central Utah and collaborates with other agencies to serve its constituents. The District's primary responsibility is to deliver a safe and secure water supply to its customers by managing the federal Central Utah Project and the District's network of non-federal water facilities. The District is a water wholesaler to various cities and irrigation districts. The Central Utah Project Completion Act (Public Law 102-575, Section 205) required that the District enter into an agreement with the U.S. Department of the Interior to act as a federal agency for compliance with environmental laws, including the National Environmental Policy Act (NEPA).

As Joint Lead Agencies (JLAs), the District, the U.S. Bureau of Reclamation, the U.S. Department of the Interior – Central Utah Project Completion Act Office, and the Utah Reclamation Mitigation and Conservation Commission are preparing an environmental assessment (EA) in accordance with NEPA, 42 *United States Code* Section 4321 and subsequent sections, and applicable regulations for the proposed Nebo Regional Water Project (Proposed Project).

The Proposed Project would develop an integrated raw (or untreated) water and finished (or treated) water delivery system that is reliable, resilient, and able to serve current and future municipal and industrial and agricultural water demands in southern Utah County and eastern Juab County.

This memorandum was prepared to evaluate and predict how the gage height for the Spanish Fork River could change with reduced flows resulting from the Preferred Alternative for the Proposed Project. Historic discharge (water flow) and gage height (water level) in the Spanish Fork River were used to help better understand the indirect effects of the Preferred Alternative's reduction of water flow and water level in the Spanish Fork River.

Methodology

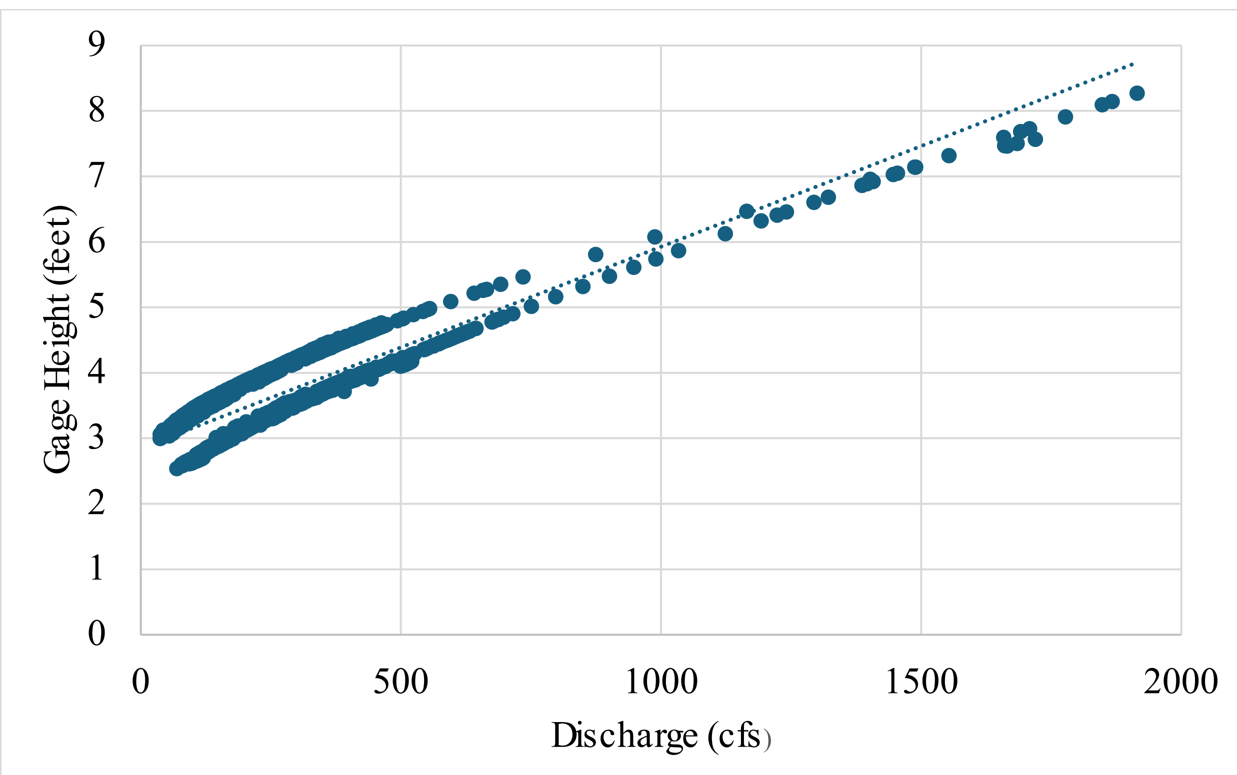
Continuous historic data from a U.S. Geological Survey (USGS) monitoring location—Spanish Fork at Castilla, Utah (USGS-10150500)—were used to evaluate how the gage height for the Spanish Fork River could change with reduced flows resulting from the Preferred Alternative. At this monitoring location, USGS collects continuous data of discharge (in cubic feet per second [cfs]) and gage height (in feet) every 15 minutes using automated sensors. For this analysis, the continuous data were compiled for every day between 2020 and 2025, and average discharges and gage heights were calculated for each day. A simple linear regression was then used to evaluate the relationship between discharge and gage height in the compiled data (sample size [n]) = 2,170).

The results showed a strong relationship between discharge and gage height; discharge explained 79% of the variation in gage height (R2 = 0.79, p <0.01). Figure 1 provides the graphical results of the regression. The line of best fit is reflected in the following equation:

$$y = 0.0031x + 2.8511$$

where: x = discharge (cfs)
y = gage height (feet)

Figure 1
Linear Regression Relationship of Paired Daily Discharge (cfs) and Gage Height (feet) Readings from 2020 to 2025 (n = 2,170)



With the Preferred Alternative, stream flow would decrease in the Spanish Fork River between Diamond Fork Creek and the Spanish Fork River Diversion because the Preferred Alternative would convey water from Strawberry Reservoir in the Spanish Fork Canyon Pipeline and Loafer Pipeline instead of this water being conveyed in the river. To determine what stream flows might occur with the Preferred Alternative, the JLAs prepared a report for the Nebo Regional Water Project EA to determine what the historic river flows for the Spanish Fork River would have been from 2017 to 2024 without the added instream flows that are expected to be removed with the Preferred Alternative (see Appendix A, *Spanish Fork River Historic Data*, of the EA for the Proposed Project). The results of this analysis were averaged and are shown in Figure 2 and Table 1.

To better understand how the gage height might change with reduced stream flows resulting from the Preferred Alternative, the line of best fit from the regression analysis was used to predict the gage height based on the stream flow data provided in Table 1.

Figure 2
Spanish Fork River Monthly Average Discharge (2017–2024) with the No Action Alternative and the Preferred Alternative

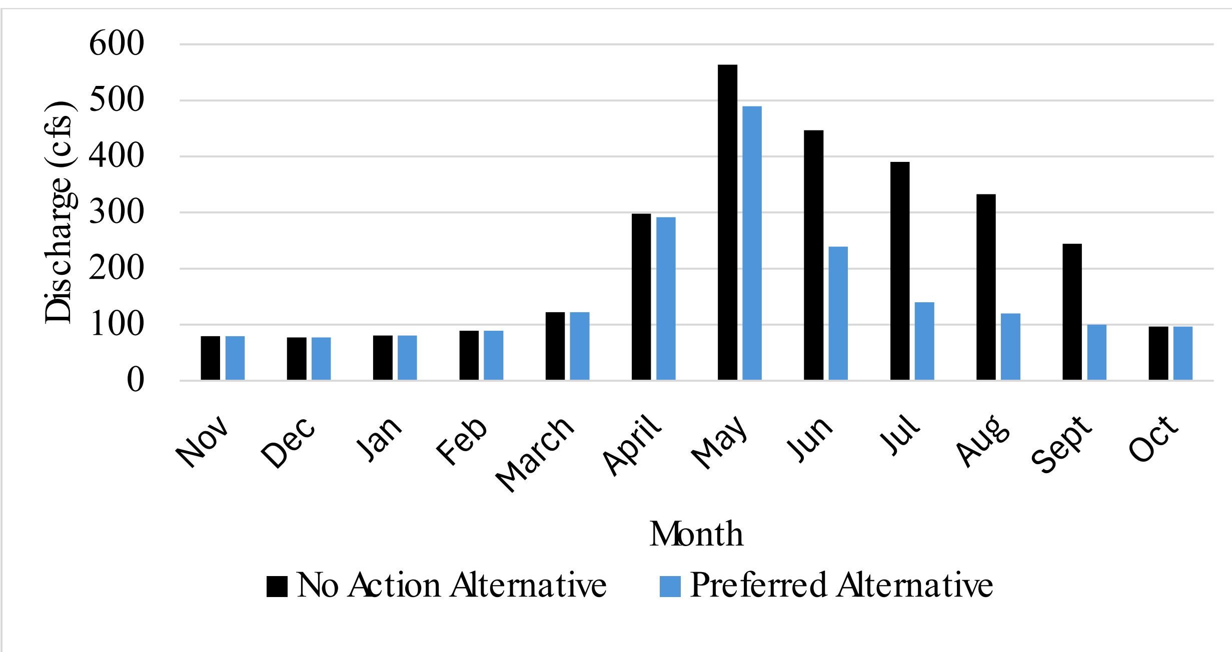


Table 1
Spanish Fork River Monthly Average Discharge (2017–2024) with the No Action Alternative and the Preferred Alternative

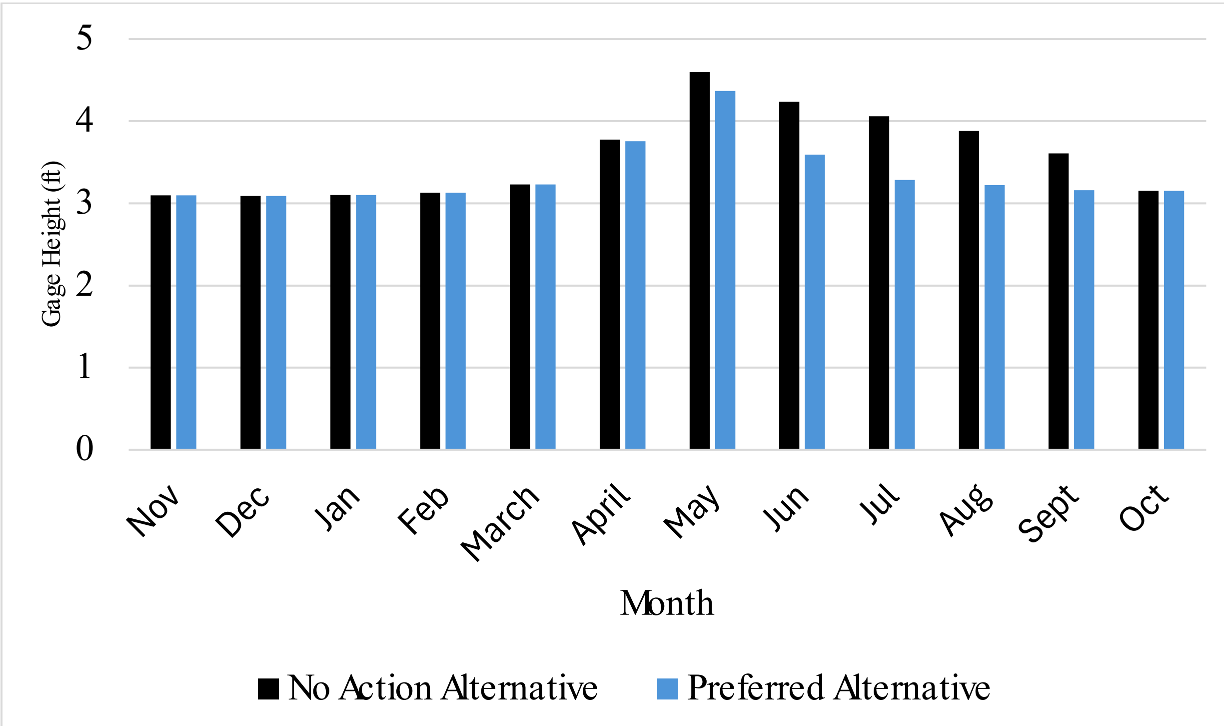
Month	No Action Alternative[a]	Preferred Alternative[a]	Reduction[a]	Difference
November	79.76	79.76	0	0%
December	77.36	77.36	0	0%
January	80.81	80.81	0	0%
February	89.10	89.10	0	0%
March	122.31	122.31	0	0%
April	297.89	291.66	−6.23	−5%
May	563.83	489.36	−74.47	−25%
June	447.05	238.90	−208.15	−51%
July	390.18	140.05	−250.13	−65%
August	332.48	119.81	−212.67	−64%
September	244.05	100.13	−143.92	−59%
October	96.48	96.48	0	0%

[a] Discharge unit is in cfs.

Results

With the Preferred Alternative, the average monthly water flow in the Spanish Fork River (using 2017 to 2024 historic data) could decrease by about 74 to 250 cfs (25% to 65%) between May and September. Reductions in flow would lead to accompanying reductions in gage height. The predicted gage height could decrease by about 0.23 to 0.78 foot (6% to 18%) between May and September. Figure 3 and Table 2 provide graphical and tabular output of the predicted gage height.

Figure 3
Spanish Fork River Monthly Average Gage Height (2017–2024) with the No Action Alternative and the Preferred Alternative



NEBO WATER PROJECT

Table 2
Spanish Fork River Monthly Average Gage Height (2017–2024) with the No Action Alternative and the Preferred Alternative

Month	No Action Alternative[a]	Preferred Alternative[a]	Reduction[a]	Difference
November	3.10	3.10	0	0%
December	3.09	3.09	0	0%
January	3.10	3.10	0	0%
February	3.13	3.13	0	0%
March	2.23	2.23	0	0%
April	3.77	3.76	−0.01	−1%
May	4.60	4.37	−0.23	−6%
June	4.24	3.59	−0.65	−15%
July	4.06	3.29	−0.77	−19%
August	3.88	3.22	−0.66	−17%
September	3.61	3.16	−0.45	−12%
October	3.15	3.15	0	0%

[a] Gage height unit is in feet.

Appendix 3-B. PWRE Modeling Technical Memorandum

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Subject: Nebo Regional Water Project RiverWare Modeling, In Support of the NEBO RWP EA

For: Central Utah Water Conservancy District

By: Precision Water Resources Engineering

Please use the following document as a reference to understand the simulation of a Baseline scenario and Alternative scenario in support of the Nebo Regional Water Project Environmental Assessment.

The intended audience of this document is the Central Utah Water Conservancy District and their contractors and should not be considered in any way an Environmental Assessment. Material from this document may be used in support of the official Environmental Assessment.

For any questions, clarifications, or edits, please contact Tony Powell at tony@precisionwre.com.

1 CONTENTS

2 TABLE OF FIGURES

3 TABLE OF TABLES

4 INTRODUCTION

Central Utah Water Conservancy District (District) asked Precision Water Resources Engineering (Precision) to evaluate a potential change to the operations along the Utah Lake System (ULS) in concert with infrastructure and users adjacent to and south of the Spanish Fork River. The potential operations change, also known as the Nebo Regional Water Project (NEBO RWP), would alter the way water is delivered to customers by taking advantage of new infrastructure and a new water treatment plant to supply a changed in water use type into the future. The Precision team simulated a baseline and an alternative scenario using a RiverWare© simulation model and compared the results in support of an Environmental Assessment (EA) for the NEBO RWP. This document covers model inputs, assumptions, rule logic and comparison of the two scenarios.

Inputs to the model include three major items. The first is hydrology. The historical hydrology from 1985 through 2024 (a forty-year period) was used as the hydrology input for this model simulation.

Demand inputs, the second major item, were derived from two different sources. The first is demands that are to be simulated as contracts off of the ULS. These data were provided by the District as annual demands with different monthly distribution patterns applied based on the scenario and the customer. The second was data that was pulled out of Spanish Fork River Commissioner reports that represents the demands of users along the Spanish Fork River.

The third item is model rule logic. This is logic that simulates the implementation of the desired operation policy. This logic allows for multiple scenarios to be developed and is the main driver of differences between the operations in the scenarios.

Each of the input items will be discussed further in **Section 5**. **Section 6** will discuss model assumptions and cover some of the output that ensures the model differences between scenarios are understood. Results and the comparison between scenarios are covered in **Section 7**.

The modeling extents span from Strawberry Reservoir to Utah Lake. The model includes the Diversion from Strawberry Reservoir into the Strawberry Tunnel, the Syar Tunnel, the turnouts to the Diamond Fork System, and the ULS. The Natural system is simulated from the headwaters of Sixth Water Creek, Diamond Fork Creek, and the Spanish Fork River to the Spanish River at Castilla. Diversions from the natural system occur at City Dam to the Power Canal and to users along and from the Power Canal and the Spanish Fork River. The ULS is simulated from the Spanish Fork Flow Control to the Mapleton-Springville Pipeline (MSP), the Spanish Fork Santaquin Pipeline (SFSP) and along the Provo River Canal Pipeline (PRC). Natural Flow and flow from the ULS are simulated along Hobble Creek. Operational flow and flow from ULS are simulated into the Provo River, with the model ending in Utah Lake.

The model simulates the physical system and has an overlaid accounting system that accounts for the types of water within the model extent. Examples of the types of water include:

- ULS – Central Utah Project (CUP) and Strawberry Valley Project (SVP) water
- Sixth Water, Diamond Fork, and Spanish Fork River – Natural, CUP, and SVP water
- Hobble Creek – Natural, CUP, and SVP water
- Provo River – Natural, CUP

The two types of project water defined are the CUP and SVP accounts; where CUP is water that is operated by the District, and SVP water is water which is released from Strawberry Reservoir to Strawberry Water User Association (SWUA) members.

Utah Lake has storage accounts that collect water as water flows through the physical system to Utah Lake and through different accounts. The Utah Lake accounts include:

- Inactive – the 160,000 AF of storage in Utah Lake that is considered inactive.
- NonCUWCDPrimary – is the primary storage in Utah Lake that is not part of CUWCD water rights in Utah Lake. Up to 100,238 AF.
- E3419Primary – is primary storage operated by the District in Utah Lake for use in the Utah Lake Jordanelle Exchange (**Section 6.2**). Up to 7,900 AF.
- E3101Primary – is District's primary storage in Utah Lake used for the Utah Lake Jordanelle Exchange. Up to 16,862.
- E3100Secondary – is the District's secondary storage in Utah Lake. This storage is used in the Utah Lake Jordanelle Exchange.
- System storage is all other secondary storage in Utah Lake. The storages listed here sum to be the total System storage in Utah Lake and is what is used to determine if Utah Lake crosses the Upper Conversion Line. The Lower Conversion Line is crossed when the accounts owned or operated by the District are converted to the System account and the remaining system accounts cross the Lower Conversion Line.
- CUWCDImport is the District's Strawberry Reservoir water that has flowed to Utah Lake. This water is accounted for in Utah Lake from water that was released to meet minimum flows in the Sixth Water and Diamond Fork basins, June Sucker flows in the Hobble Creek and Provo basins, and from return flow of CUP water delivered in Utah County. This account supplements the Natural accounts in the Utah Lake Jordanelle Exchange.
- PRWUAImport is import water owned by the Provo River Water User Association. This water is not used in this effort.
- SHLCCImport is other imported water owned by Strawberry Highline Canal Company that is not used in this effort.
- SVP StrawbHigh Returns is an account that is used in this model to understand the amount of Strawberry Highline SVP returns that make it to Utah Lake.

Strawberry Reservoir also has accounting. The two storage accounts in Strawberry Reservoir include:

- SVP – Strawberry Valley Project water. This water is accounted for with an initial storage volume. Water is debited from this account when SVP demands call for this water to meet demands. Each year 61,000 AF of water is transferred into the

SVP account at the beginning of the water year and up to 50,000 AF is allowed to be carried over if it is not used.

- CUP – is the District's water in Strawberry Reservoir. This is the storage on top of the SVP water.

The water is tracked in Strawberry Reservoir to account for storage and allow the model to know how to distribute shortage to customers of each type. SVP water users experience shortage when the sum of demand is greater than the available storage. CUP water users experience shortage when the physical level of Strawberry Reservoir approaches 7,525 feet or the top of the Syar Tunnel Inlet elevation.

Figure 1 shows the model space as it is represented in RiverWare. Note that blue colored lines represent the natural systems of the Spanish Fork River, Hobble Creek, and Provo Rivers. Orange lines represent the ULS. The following objects were used in the RiverWare model.

 Reach Object

 Gage Object

 Diversion Object

 Water User Object

 Reservoir Object

.

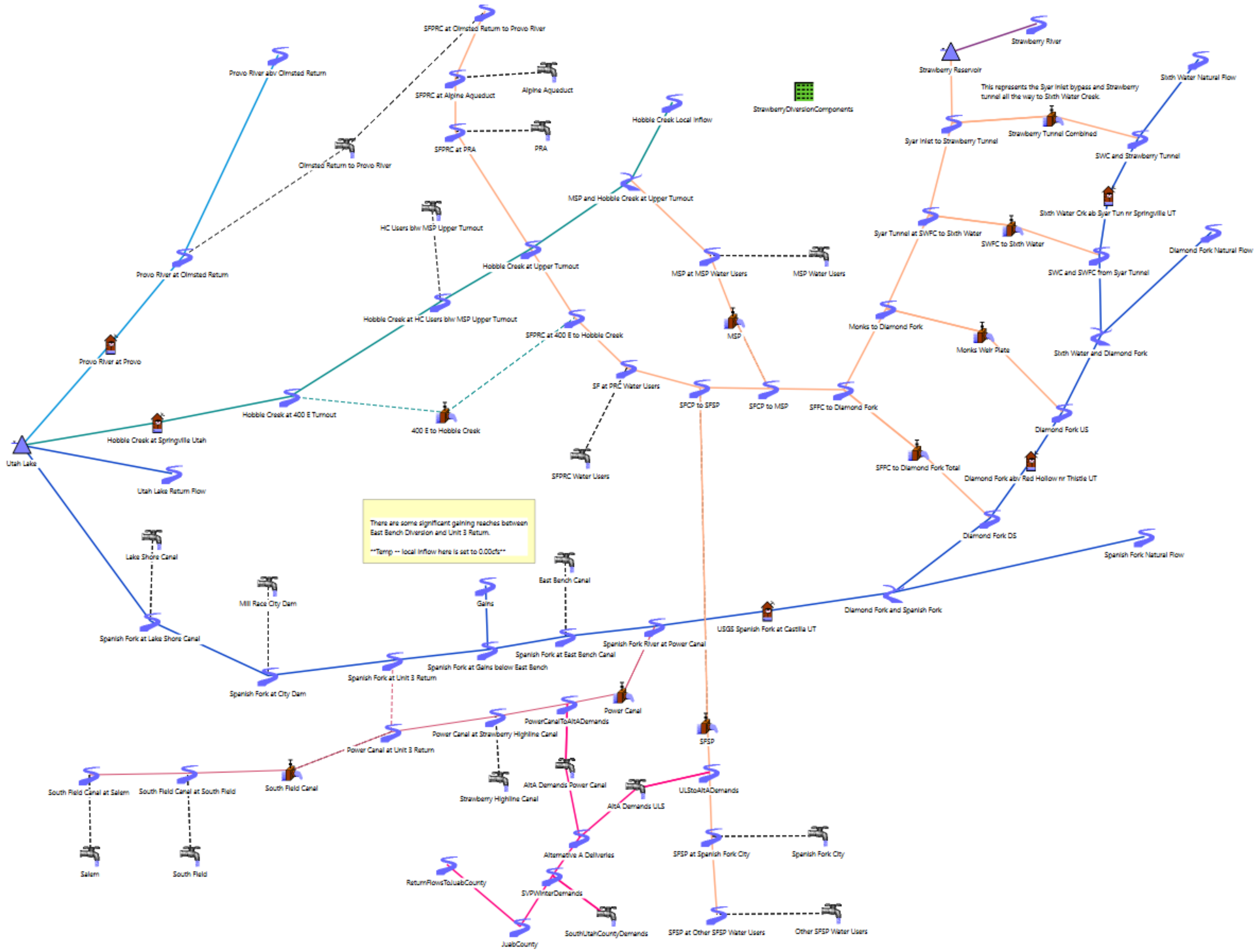

***Figure 1** Nebo Regional Water Project EA RiverWare workspace*

5 Model Inputs

Model inputs drive the model simulation. These inputs are hydrology, demand of water users, and rule logic. This section discusses the input used for modeling simulations and result comparison.

5.1 Hydrology – 1985 to 2024

The hydrology data used to drive the input of physical water to the model system is daily timestep inflow for the following locations:

- Natural Inflow to Sixth Water Creek that enters the system above the inflow from the Strawberry Tunnel and the USGS gage on Sixth Water Creek near Springville, UT (USGS 10149000)
- Natural Inflow to Diamond Fork Creek that enters the system above the inflow from Monks Weir Plate and above the USGS gage on the Diamond Fork Creek above Red Hollow near Thistle, UT (USGS 10149400)
- Natural Inflow to the Spanish Fork River that enters the system above the confluence with the Diamond Fork Creek and the USGS gage on the Spanish Fork River at Castilla. (USGS 10153100)
- Operational inflow on the Provo River that is derived from the USGS gage on the Provo River near Provo and by removing any observed flow to the Provo River from the ULS. (USGS 10163000)

Figure 2 shows the time series of each of the natural inflow nodes for the simulation water year in water year inflow volumes in thousands of acre-feet (KAF). Also included in **Figure 2** are the water year types that are used to determine variability in water user demand that will be discussed in **Section 5.2** . Note that there are 12 years of dry (designation of 0), 12 years of wet (designation of 2), and 16 years of normal (designation of 1) in the 40 years of simulation.

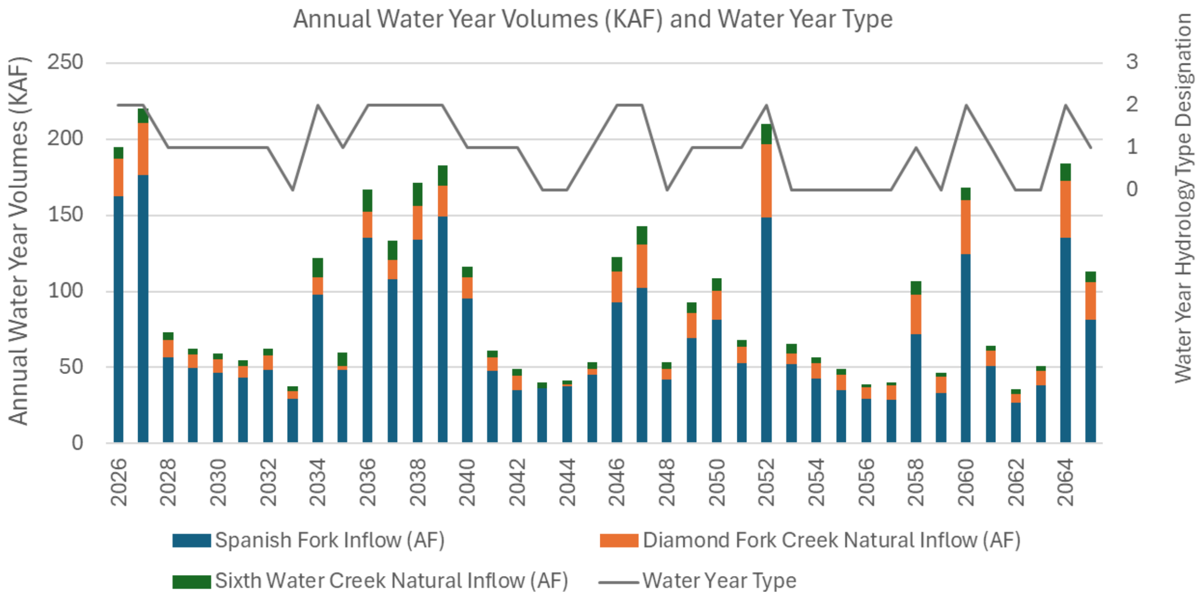

***Figure 2** Hydrology Sequencing for the Spanish Fork River, Diamond Fork Creek, and Sixth Water Creek (KAF) with Water Year Hydrology Designation*

5.2 Demand Inputs

Demands are input through demand requests of different water users. An individual water user has a request for water that is satisfied with the water that is available to that water user. In this effort, users are broken into two main groups. The first is SVP water users that can receive Natural flow and SVP water in the river to satisfy their demand. Those users in the model are:

- East Bench Canal
- Mill Race City Dam
- Lake Shor Canal
- South Field
- Salem
- Strawberry Highline Canal

The demand requests for these users were developed using historical records from Spanish Fork River Commissioner data. Historical data from 2008 to 2024 was used to determine the total Natural and SVP demand for each water user. Then, a method of determining year types using the historical natural flow record was used to calculate demands for years that are outside the historical record. This allows the model to determine demand requests derived from historical data by similar year type.

The second demand group are water users not on the ULS. These could be both SVP and CUP water users. The SVP water users include those uses from the MSP and those that receive water from the SFSP. The data for the ULS SVP water users was derived from Table 3-7 of the 2004 Supplement to the 1988 Definite Plan Report (DPR). The ULS CUP water uses are also based on that table, but some volumes are different. The water users who receive water from the ULS include:

- Mapleton-Springville Water Users from the MSP (SVP and CUP)
- Mapleton Springville Water Users who receive water from the PRC (CUP)
- Spanish Fork City who receives water from the SFSP (SVP and CUP)
- Other SFSP Water users who receive water from the SFSP (CUP)
- Salt Lake County water demands delivered through the Provo River Aqueduct (PRA) and the Alpine Aqueduct (CUP)
- June Sucker Delivery at the following Locations
    - MSP Upper Turnout to Hobble Creek (CUP)
    - 400 E to Hobble Creek Turnout from the PRC (CUP)
    - Olmsted Return Flow to the Provo River (CUP)

Table 1 shows the annual demands that will be input to the model. Discussion on monthly patterns and the category of water user is in subsequent sections.

Baseline demands use an agricultural monthly demand pattern. This requires water to meet a 20 cubic foot per second (cfs) minimum flow through the Strawberry Tunnel to be released from Strawberry Reservoir in winter months. In the alternative scenario, as M&I demand converts to indoor use from agriculture, some of that demand is required in winter months. When demands in winter months satisfy the 20 cfs minimum flow from Strawberry Reservoir, the water used in the Baseline simulation is not released. This will ultimately be a savings in the Spanish Fork River Column for the Utah Lake Delivery of Bonneville Unit Water (CUP) in the Alternative scenario.

Similarly, changing the demand pattern from agriculture to M&I Indoor with the SVP water decreases the Total Spanish Fork River to Irrigated Lands volume for the SVP water. Approximately 10,600 AF of conversion to South Utah County Cities occurs out of that agricultural water in the Baseline Scenario.

Table 1 Baseline Demands from the ULS all units are in Acre-Feet (AF), some values are modeled output from the Baseline scenario

	Spanish Fork - Santaquin Pipeline	Mapleton-Springville Lateral Pipeline	Spanish Fork - Provo Reservoir Canal Pipeline	Spanish Fork River	Total
	SFSP	MSP	SFPRC	SFR	
Bonneville Unit Water					
SLC M&I	0	0	22,000	0	22,000
S. Utah County M&I	15,982	4,763	2,346	0	23,090
Utah Lake Delivery	0	*6,500*[1]	*15,500*[1]	*11,555*	33,155
Subtotal - B.U.	15,982	11,263	39,846	11,555	**78,646**
SVP Irrigation Water					
S. Utah County Cities	7,320	2,880	0	0	10,200
Irrigated Lands	0	7,380	0	40,180[3]	47,561
Subtotal - SVP	7,320	10,260	0	40,180	**57,761**
Total	**23,302**	**21,523**	**39,846**	**51,735**	**136,407**

[1] These are allocation amounts for June Sucker Recovery Implementation Program (JSRIP). In any given year, there could be more or less than the 22,000 AF released from Strawberry Reservoir but the model attempts to use as much as possible to meet JSRIP flows while maintaining an average of or less than the 22,000 AF.

[2] This value of 11,555 AF is a model simulated need of CUP water to meet minimum flows from Strawberry Tunnel, in the Sixth Water Creek and Diamond Fork Creek basins.

3 The Alternative Scenario will convert from the 40,180 AF of irrigated volume that is computed as necessary to meet Baseline demand for agriculture. This value will decrease on average with approximately 10,600 AF on average converting to M&I Water in the Alternative simulation.

5.2.1.1 Monthly Demand Distribution

For any demand that was given an annual volume from **Table 1**, a corresponding monthly pattern was required to distribute it to monthly volumes. For some uses, the demand pattern changed based on the conversion from Agricultural (Ag) to Municipal and Industrial uses (M&I). The demands in both the Baseline scenario and the Alternative scenario convert from Ag to M&I uses; **Figure 3** and **Figure 4** demonstrate this.

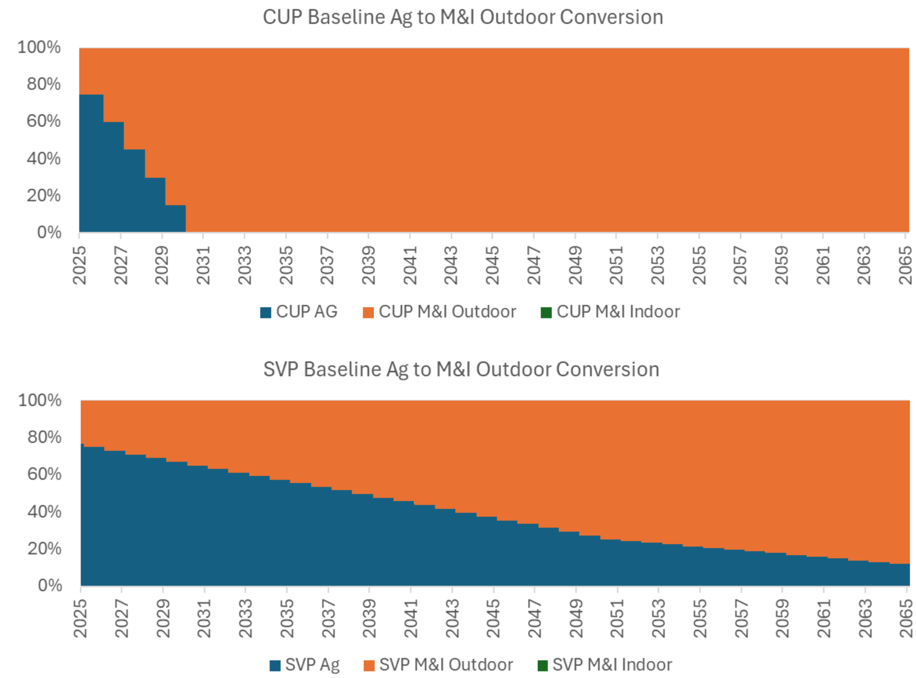

Figure 3 *Baseline Conversion from Ag to M&I Outdoor Use for CUP and SVP Demands*

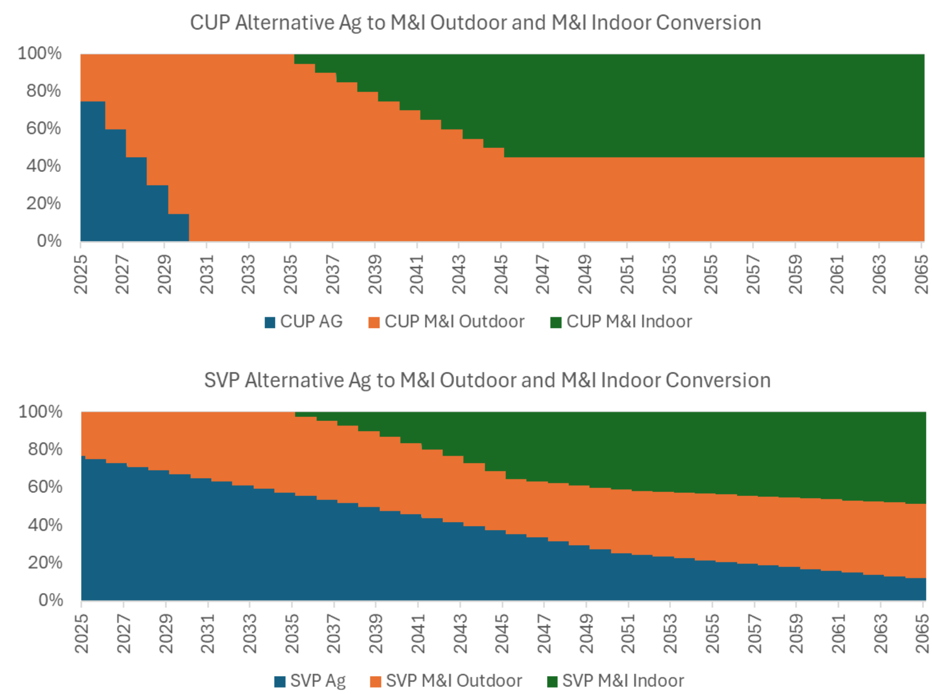

Figure 4 *Alternative Conversion from Ag to M&I Outdoor and M&I Indoor Use*

The monthly patterns for each type of water based on conversion are shown in **Table 2** and **Table 3**.

Table 2 Baseline Monthly Distribution to Different uses

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Salt Lake County ULS M&I	4%	4%	4%	5%	10%	8%	20%	18%	15%	5%	4%	4%
South Utah County ULS Ag (SFSP)	0%	0%	0%	2%	11%	18%	24%	26%	18%	0%	0%	0%
MSP Water Users ULS	3%	2%	2%	15%	13%	17%	16%	15%	6%	4%	3%	3%

Table 3 Alternative Monthly Distribution to Different uses

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Salt Lake County ULS M&I	4%	4%	4%	5%	10%	8%	20%	18%	15%	5%	4%	4%
South Utah County ULS Ag (MSP and SFSP)	0%	0%	0%	2%	11%	18%	24%	26%	18%	0%	0%	0%
South Utah County ULS M&I Outdoor (MSP and SFSP)	0%	0%	0%	4%	11%	18%	24%	22%	17%	5%	0%	0%
South Utah County ULS M&I Indoor (MSP and SFSP)	8%	7%	8%	7%	9%	10%	11%	10%	9%	8%	7%	7%

The SVP water users that receive water from the Spanish Fork River have a historic volume that is spread out across the year in a monthly pattern as well. **Figure 5** and **Figure 6** show examples of simulated years from Water Years 2039 to 2041 from the Baseline scenario and the Alternative scenario, respectfully.

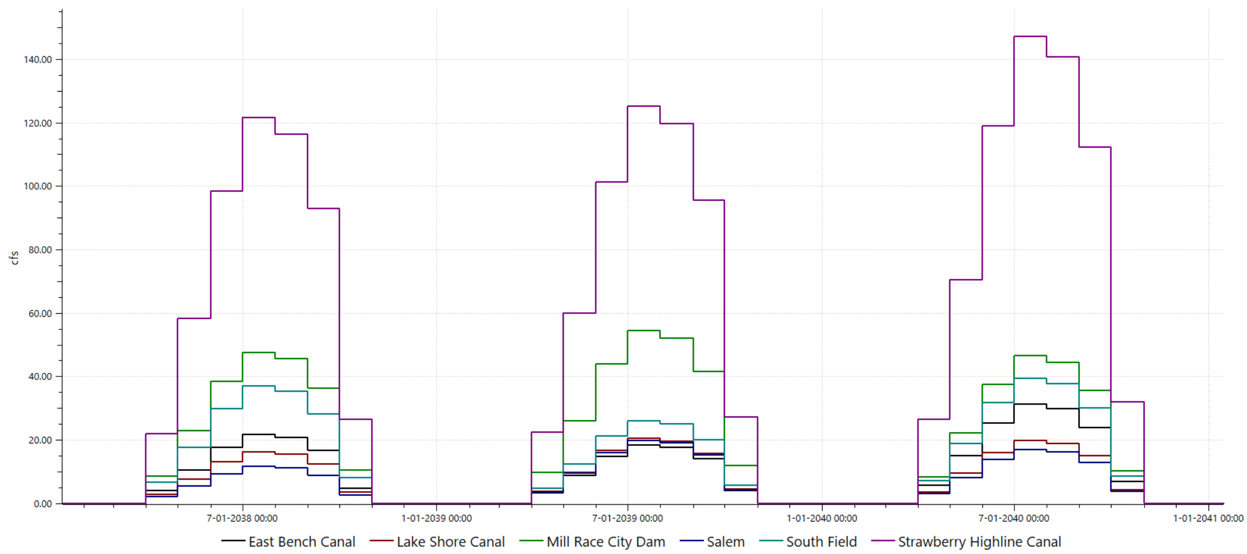

Figure 5 *Example SVP Natural Flow users total demand over different years in the Baseline scenario. Notice that there is no Winter Demand for those users in the Baseline scenario.*

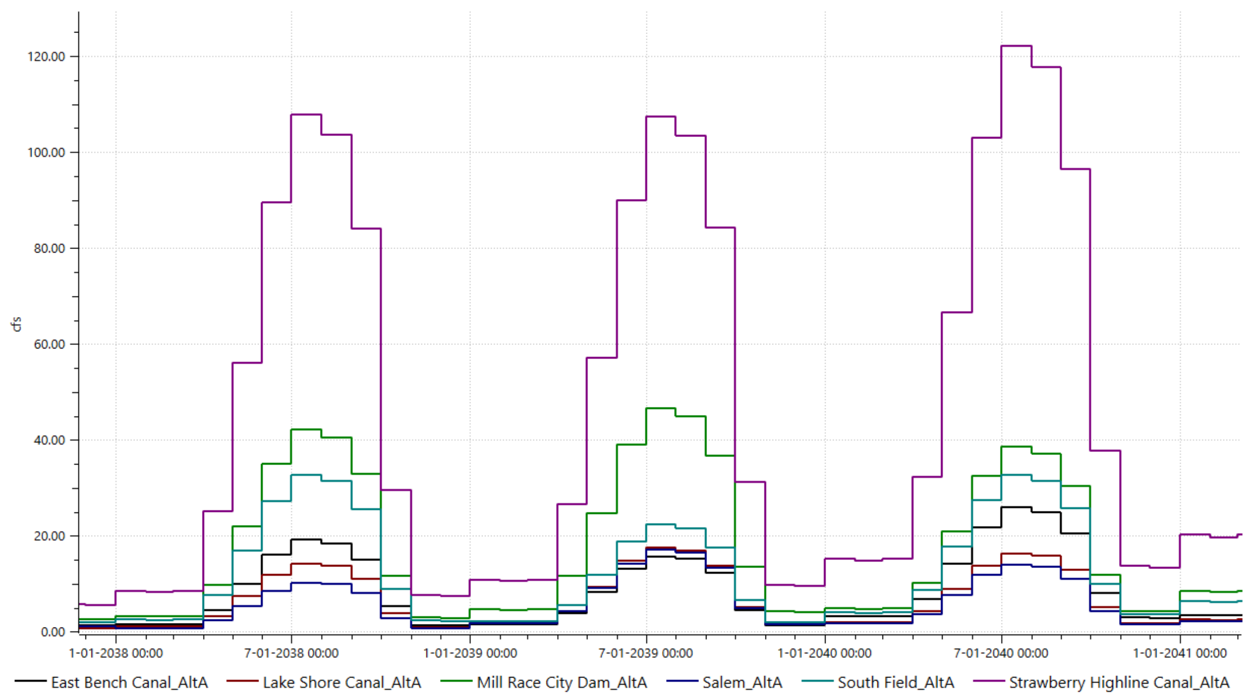

Figure 6 *Example SVP Natural Flow users total demand over different years in the Alternative scenario. Winter Demands have started based on the conversion from Ag to M&I Indoor demand.*

5.2.1.2 Return Flow Percentages

Each of the different kinds of water use (Ag, M&I Outdoor, M&I Indoor) results in a different consumptive use and a resulting return flow assumption for the return flows to Utah Lake. Only water users in Utah County can return water to Utah Lake. Users in Salt Lake County are assumed to be 100% consumptive in their use.

***Table 4** Return Flow Fractions by water type of water that returns to Utah Lake*

Agriculture	35%
M&I Outdoor	9%
M&I Indoor	80%

When water returns to Utah Lake, it does so differently in the Baseline Scenario than in the Alternative Scenario. SVP returns to Utah Lake in the Baseline Scenario return water to the System account in Utah Lake. SVP returns to Utah Lake in the Alternative scenario return water to the CUWCD Import account in Utah Lake. All CUP returns to Utah Lake go to the CUWCD Import account in Utah Lake. The CUWCD Import account has a much greater volume in the Alternative Scenario as a result. As the CUWCD Import account is greater, the System account has less volume.

5.3 Policy Logic

The last item of model input is the policy logic that operates the system. The policy logic for this analysis sets water user demands, reservoir releases and diversions to meet demands, minimum flows and June Sucker flow request, the physical and accounting flows in the system, and checks tunnel capacities. There are three different policy sets in the model. These include:

- Initialization Rules – rules that set information in the model prior to the model solving the first timestep. These rules set diversion requests, initialize storages, and set the model to solve with information that is available.
- Object Level Accounting Methods – rule logic that helps the accounting solution solve. These methods allow for a generic solution to reconcile physical flows into the accounting space. Object Level Accounting Methods are used to set evaporation to accounts on reservoirs, local inflows to accounts on reach objects, and other accounting solution methods.
- Ruleset – rules that execute in a prescribed order on each timestep. These rules solve the model solution and set various variables in the system. Each rule can set physical and or accounting variables in the system. RiverWare executes these rules in the specified order and executes rules as many times as allowed by the rule logic.

6 Model Assumptions and Scenario Reviews

Modeling assumptions were made for these scenarios that are discussed in the following section.

6.1 Flow Constraints in the ULS

Constraints for the various tunnels and pipelines were used to limit the amount of flow through those systems. **Table 5** shows those limitations. See **Section 7.3** for results of flows through these pipelines.

Table 5 *Pipeline Capacities used in the modeling of scenarios*

Capacities	cfs
Mapleton Springville Pipeline	125
Provo River Canal	120
Syar Diversion	660
Diamond Fork Pipeline	560
Spanish Fork Canyon Pipeline	365

6.2 Utah Lake Jordanelle Exchange

The model computes the need for Utah Lake Jordanelle Exchange if the total System water does not cross either the Normal Conversion Line or the Lower Conversion Line. The Normal Conversion line is crossed when the total storage less import accounts cross the line. The District can elect to forego their storage rights and lower the conversion line. In that case, the total storage less import accounts less the District's system accounts are used to know if the Lower Conversion Line is crossed. In either case a volume of System water is needed to be exchanged in Utah Lake from District accounts to the general system account. The volumes of System water exchanged were either retrieved from historical records or created using similar year types based on hydrology where they were not in historical records. In both the Baseline and the Alternative scenarios, the need for exchange occurs in similar years. **Table 6** shows the results of the exchanges for each of those years and further discussion follows.

Table 6 Utah Lake Jordanelle Exchange Results, all unites are in Acre-Feet

Year	Scenario	System Water to be Exchanged	District System Accounts Exchanged	CUWCD Import Exchanged	Required Supplemental Water
2054	Baseline	67,779	67,779	0	0
	Alternative	67,779	67,779	0	0
2055	Baseline	68,158	41,131	27,027	0
	Alternative	68,158	36,986	31,172	0
2056	Baseline	27510	27,510	0	0
	Alternative	27,510	26,783	727	0
2057	Baseline	59,731	39,217	20,514	0
	Alternative	59,731	37,304	22,427	0
2058	Baseline	180,305	81,835	66,866	31,604
	Alternative	180,305	72,790	107,515	0
2061	Baseline	80,995	80,995	0	0
	Alternative	80,995	80,995	0	0
2062	Baseline	33,321	33,321	0	0
	Alternative	33,321	33,321	0	0
2063	Baseline	37,695	37,695	0	0
	Alternative	37,695	37,695	0	0

Due to the change in return flow to Utah Lake, the Alternative scenario has less overall System storage which is realized in the available System storage the District can use for exchange. Notice the colored cells in 2055, 2056, 2057 and 2058, the years when CUWCD Import water is required for exchange. In each of the years, the amount of System water available for exchange is higher in the Baseline scenario. In the 2058 simulation, the Baseline scenario shows a need for additional water from either Strawberry Reservoir or Jordanelle Reservoir release to make up for the System water in the Provo Reservoirs. The Alternative has enough CUWCD Import water to make up for the exchange where the Baseline scenario does not. This is related to the amount of return flow going to the CUWCD Import account in the Alternative Scenario.

6.3 Juab County Deliveries in the Alternative Scenario

In the Alternative Scenario, 6,000 AF of water is sent to Juab County. This water is conserved from piping the Strawberry Highline Canal and reducing losses. In the RiverWare model, this is taken out of return flows to Utah Lake. For a given year, the return flow to Utah Lake is reduced by 6,000 AF. When compared to the Baseline return flows, the Alternative return flows are 6,000 AF less in the first ten years of model simulation when the Ag to M&I Indoor ratios are the same between the two scenarios.

When the M&I Indoor demand in the Alternative scenario starts consuming less water the return flow to Utah Lake increases. Over time, that increase is greater than the 6,000 AF of water that goes to Juab County and the return flow volume to Utah Lake is greater in the alternative scenario. .

Figure 7 shows the comparison of consumptive use that is computed using diversion data multiplied by the assumed return flow percentages for each water use type. The figure also shows the amount of water going to Juab County each year (6,000 AF) and the difference in return flow to Utah Lake. Notice that when the consumptive use is equal (the first ten years), the difference in return flow is the same as the delivery of water to Juab County indicating that return flow is captured and delivered.

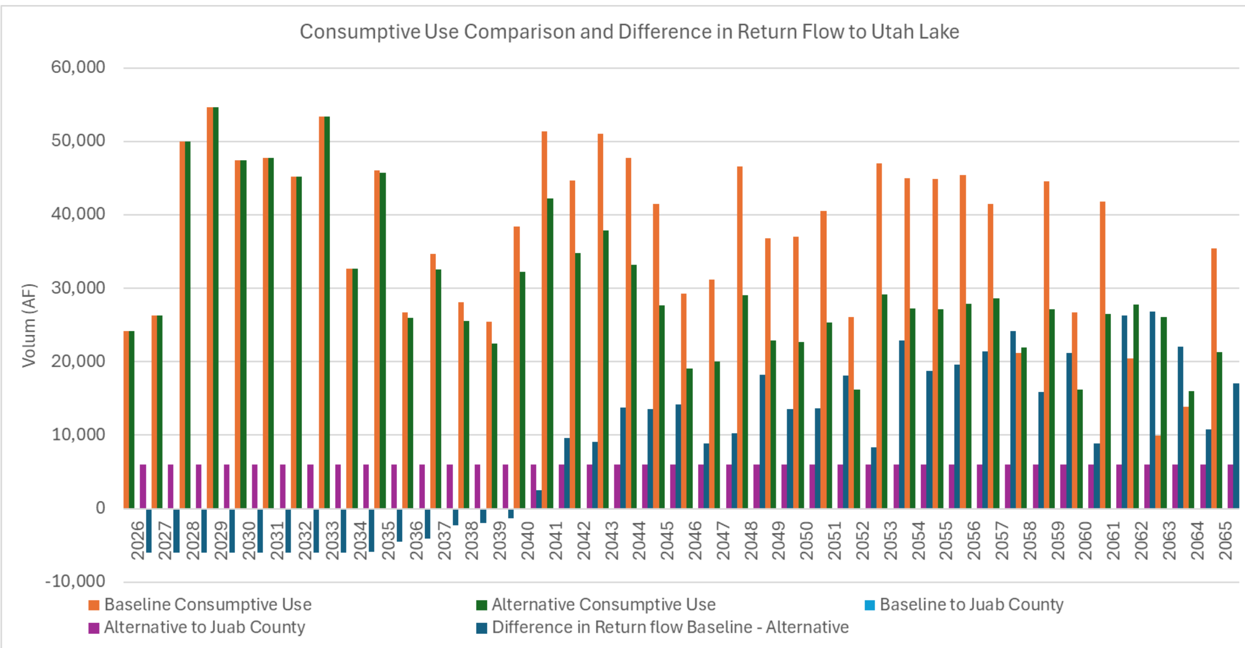

***Figure 7** Consumptive Use Comparison, Delivery to Juab County, and Difference in Annual Return Flow Amounts to Utah Lake*

6.4 Annual Delivery Comparisons

To summarize average annual deliveries, tabular data similar to the format of **Table 1** can be used. **Table 7** and **Table 8** show the delivery volumes from each of the scenarios with notable differences in the average annual volumes to help explain the savings in consumption.

Table 7 Baseline Average Annual Delivery Volumes by Location and Use

	Spanish Fork - Santaquin Pipeline	Mapleton-Springville Lateral Pipeline	Spanish Fork - Provo Reservoir Canal Pipeline	Spanish Fork River	Total
	SFSP	MSP	SFPRC	SFR	
Bonneville Unit Water					
SLC M&I	0	0	19,982	0	19,982
S. Utah County M&I	14,582	4,346	2,141	0	21,069
Utah Lake Delivery	0	5,941	10,914	11,555	28,410
Spilled to Utah Lake	0	0	0	4,803	4,803
Subtotal - B.U.	14,582	10,287	33,037	16,358	**74,265**
SVP Irrigation Water					
S. Utah County Cities	7,320	2,880	0	0	10,200
Irrigated Lands	0	7,380	0	38,500	45,881
Subtotal - SVP	7,320	10,260	0	38,500	**56,081**
Total	**21,902**	**20,547**	**33,037**	**54,859**	**130,345**

The Baseline annual average delivery values shown in **Table 7** are less than the demands that were presented in **Table 1**. Some of this has to do with reductions placed on water users due to low Strawberry Reservoir storage. For instance, the 38,500 AF of SVP Irrigated Lands volume is less than the 40,180 AF for the demand of that SVP water in **Table 1**. This is due to several reasons. First, the hydrology available to the SVP water users requires less SVP water delivered as supplement, and two, reductions in demands being placed on SVP water users when the Strawberry Reservoir SVP account volume is not enough to meet all SVP water requests. The CUP Utah Lake Delivery is less in **Table 7** than in **Table 1**. This is due to less June Sucker Recovery Implementation Program (JSRIP) water being required than was made available.

Moving to **Table 8**, notable differences are highlighted and underlined when there is a departure from Baseline results. The Spanish Fork Utah Lake Delivery of CUP water is reduced due to the M&I Indoor demands in winter months that can satisfy the minimum Strawberry Tunnel flow. The Baseline scenario uses more CUP water to satisfy that flow than the Alternative scenario. The other notable difference is the conversion of Irrigated Lands SVP to M&I Indoor SVP. Similar average total volumes of SVP are shown between the two alternatives; however, the demand is shifted to different uses. Note that the total demand to cities and irrigated lands is slightly higher for every location but the total delivery from Strawberry Reservoir is less due to reduction of Spanish Fork River CUP deliveries.

Table 8 Alternative Average Annual Delivery Volumes by Location and Use

	Spanish Fork - Santaquin Pipeline	Mapleton-Springville Lateral Pipeline	Spanish Fork - Provo Reservoir Canal Pipeline	Spanish Fork River	M&I Indoor Treated SVP	Total
	SFSP	MSP	SFPRC	SFR		
Bonneville Unit Water						
SLC M&I	0	0	21,678	0		21,678
S. Utah County M&I	15,745	4,693	2,311	0		22,749
Utah Lake Delivery	0	6,223	11,332	5,762		23,317
Spilled to Utah Lake	0	0	0	4,803		4,803
Subtotal - B.U.	15,745	10,916	35,320	10,566		**72,546**
SVP Irrigation Water						
S. Utah County Cities	7,322	2,880	0	0	10,593	20,795
Irrigated Lands	0	7,381	0	27,973		35,354
Subtotal - SVP	7,322	10,261	0	27,973	10,593	**56,149**
Total	**23,066**	**21,177**	**35,320**	**38,538**	**10,593**	**128,695**

6.5 Strawberry Shortage Discussion for CUP and SVP diversions

Reductions to both categories of water (CUP and SVP) were allowed to occur if Strawberry Reservoir approached low levels. A summary of the logic to implement those reductions is described here:

- SVP reductions occur when the SVP demand at the beginning of the water year is greater than the storage of SVP water after 61,000 AF of water is transferred into the SVP bank. If the demand is greater than the available Strawberry Reservoir SVP storage, a reduction fraction is applied, and deliveries are reduced by that fraction.
- CUP reductions occur at two levels in Strawberry Reservoir.
  - First, if Strawberry elevation is lower than the top of the Syar Inlet (7,525 feet), CUP Deliveries are cut off entirely for the period of time Strawberry pool elevation is below the inlet.
  - Second, if Strawberry Reservoir CUP Storage is less than 95,000 AF on January 1 of a year, CUP Deliveries are assigned a 50% reduction for that

year. If the Strawberry Reservoir CUP Storage in the subsequent January is greater than 95,000 AF, the reduction is removed.

SVP reductions occur in both the Baseline and Alternative scenarios. For CUP, reduction only occurs in the Baseline scenario (both types). **Figure 8** shows the comparison between allocation fractions for both types of water and both scenarios.

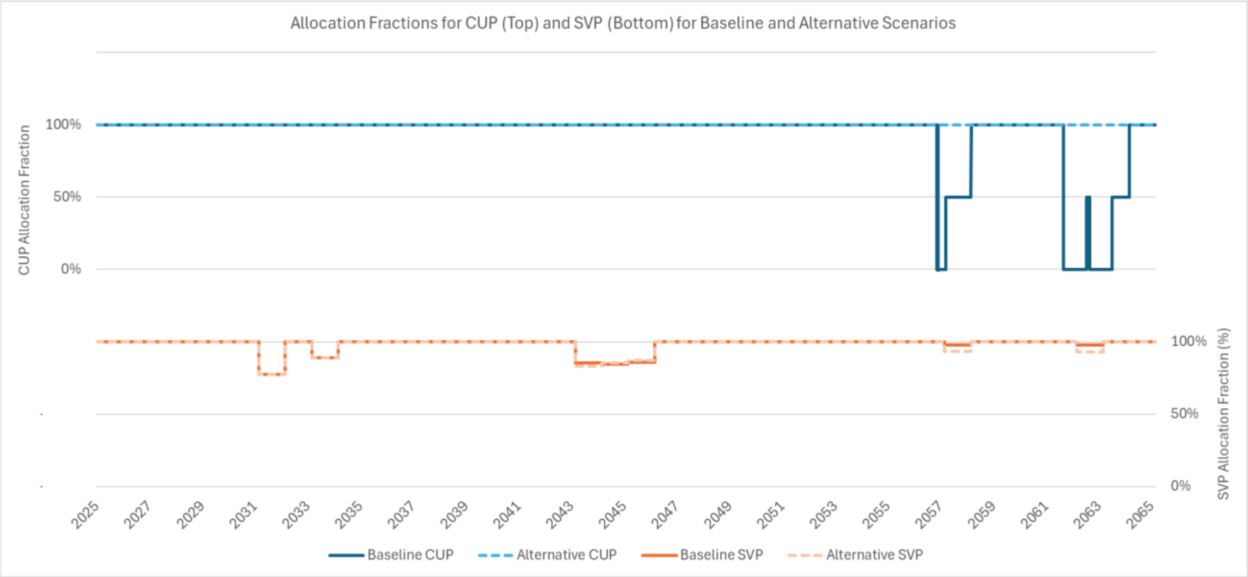

Figure 8 *Reduction Fractions due to Low Storage in Strawberry Reservoir*

7 RESULTS AND COMPARISON

The Results section provides figures and brief narrative for use in the EA. The figures and narrative explain how water from the top of the system, starting at Strawberry Reservoir, flows through the various locations to Utah Lake.

7.1 STRAWBERRY RESERVOIR COMPARISON – POOL ELEVATION

Strawberry Reservoir is higher in the Alternative scenario. Deviation in pool elevation begins when indoor use in the Alternative starts. In the winter months, this indoor demand allows for diversion from Strawberry Reservoir to meet the Strawberry Tunnel minimum flow. This displaces any need for more stored water, that was released in the Baseline scenario, to be released in the alternative. This accumulation of saved storage results in Strawberry Reservoir being higher in the Alternative simulation (**Figure 9**).

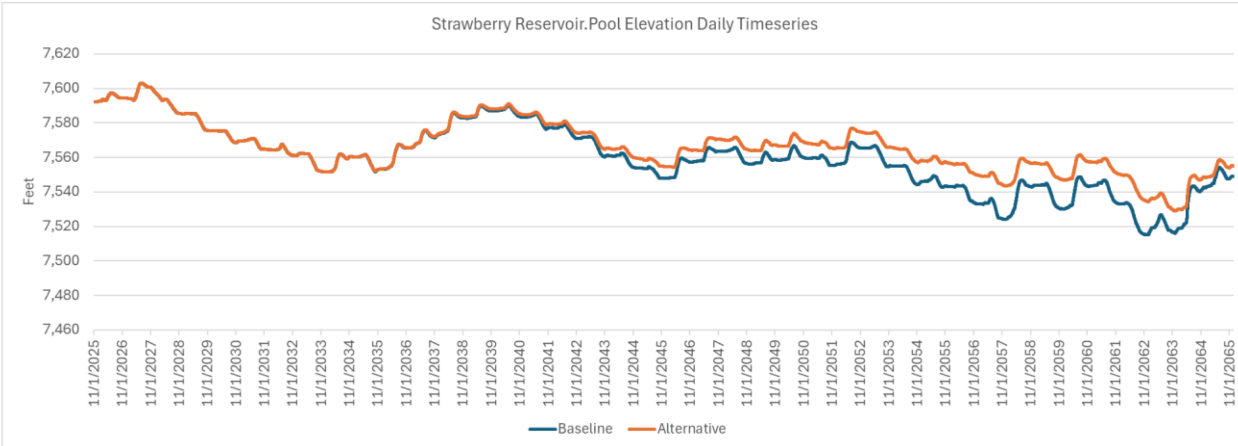

Figure 9 *Timeseries Comparison of Strawberry Reservoir Pool Elevation*

Viewing an exceedance probability plot of Strawberry Reservoir's pool elevation (**Figure 10**), Strawberry Reservoir is always above the 7,525 foot Syar Tunnel inlet elevation in the Alternative scenario under these demand and hydrology sequencing inputs. The Baseline scenario release of water through the winter results in elevations below the inlet elevation.

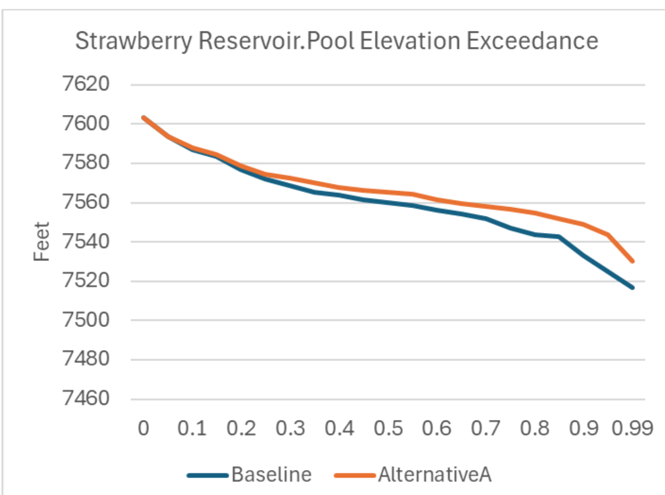

Figure 10 *Exceedance Probability Comparison of Strawberry Reservoir Pool Elevation*

Table 9 shows the annual water surface fluctuations in feet per year. This ignores the difference in elevation and evaluates the amount of change between the maximum and minimum elevations of a year.

Table 9 *Strawberry Reservoir Annual Water Surface Fluctuations by Water Year*

	Annual Water Surface Fluctuations in Strawberry Reservoir Baseline		Annual Water Surface Fluctuations in Strawberry Reservoir Alternative A		Difference Between Baseline and Alternative A	
Simulated Water Year	***ft***	***in***	***ft***	***in***	***ft***	***in***
2026	5.17	61.99	5.17	61.99	0.000	0.000
2027	9.97	119.69	9.97	119.69	0.000	0.000
2028	15.24	182.94	15.24	182.94	0.000	0.000
2029	9.96	119.49	9.96	119.49	0.000	0.000
2030	7.08	85.00	7.08	85.00	0.000	0.000
2031	6.32	75.84	6.32	75.84	0.000	0.000
2032	6.45	77.43	6.45	77.43	0.000	0.000
2033	10.40	124.74	10.40	124.74	0.000	0.000
2034	10.46	125.53	10.46	125.53	0.000	0.000
2035	10.03	120.35	9.83	117.94	-0.201	-2.413
2036	14.81	177.67	14.78	177.39	-0.023	-0.278
2037	10.50	126.05	10.45	125.38	-0.056	-0.673
2038	14.42	173.10	14.33	171.91	-0.099	-1.189
2039	7.20	86.40	7.05	84.63	-0.148	-1.771
2040	6.56	78.67	5.71	68.50	-0.847	-10.164
2041	8.87	106.42	7.49	89.88	-1.378	-16.536
2042	8.16	97.88	6.78	81.41	-1.372	-16.470
2043	11.91	142.98	9.96	119.55	-1.952	-23.428
2044	8.22	98.62	6.24	74.84	-1.982	-23.783
2045	6.94	83.29	5.14	61.72	-1.798	-21.575
2046	11.85	142.16	11.18	134.19	-0.665	-7.977
2047	8.36	100.36	7.63	91.58	-0.732	-8.781
2048	9.30	111.61	6.88	82.57	-2.419	-29.034
2049	6.99	83.84	6.05	72.66	-0.932	-11.179
2050	8.50	101.99	7.50	90.02	-0.997	-11.968
2051	6.01	72.16	3.88	46.50	-2.138	-25.657
2052	13.67	164.08	11.88	142.59	-1.790	-21.483
2053	12.32	147.79	9.16	109.89	-3.158	-37.901
2054	11.04	132.42	8.77	105.28	-2.262	-27.144
2055	6.72	80.60	3.99	47.84	-2.730	-32.762
2056	9.96	119.46	6.75	81.00	-3.205	-38.464
2057	11.77	141.23	6.97	83.58	-4.804	-57.653
2058	22.79	273.44	16.07	192.79	-6.721	-80.649
2059	14.22	170.62	8.95	107.36	-5.272	-63.263
2060	18.65	223.76	14.62	175.47	-4.024	-48.287
2061	13.08	156.95	8.27	99.21	-4.812	-57.738
2062	18.41	220.97	15.86	190.29	-2.557	-30.687
2063	11.84	142.08	9.68	116.20	-2.157	-25.886
2064	27.34	328.09	20.79	249.49	-6.550	-78.604
2065	13.57	162.81	11.45	137.41	-2.117	-25.401

7.2 Strawberry Reservoir Comparison – Diversion

Strawberry Reservoir diversion differences are shown in **Figure 11** and **Figure 12**

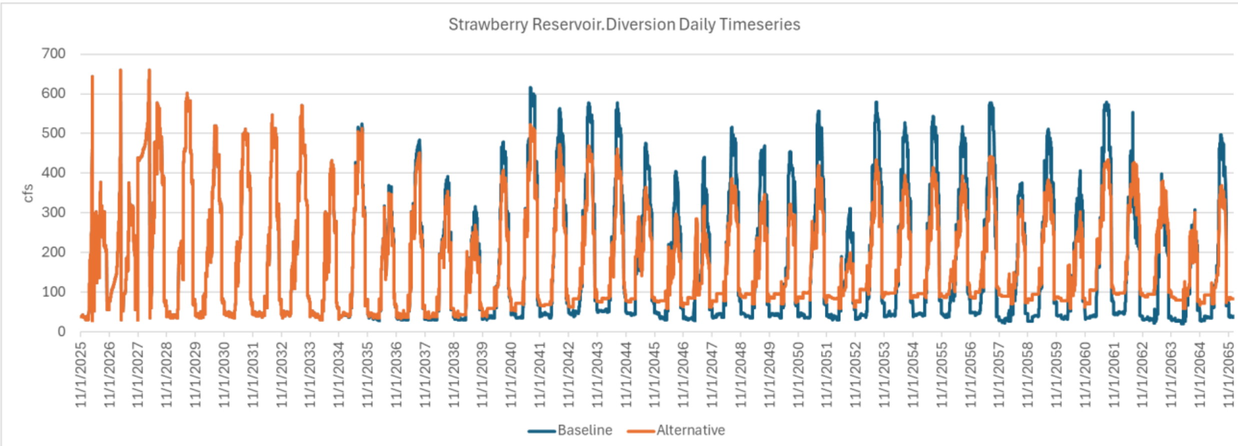

Figure 11 Strawberry Reservoir Diversion Time series Comparison

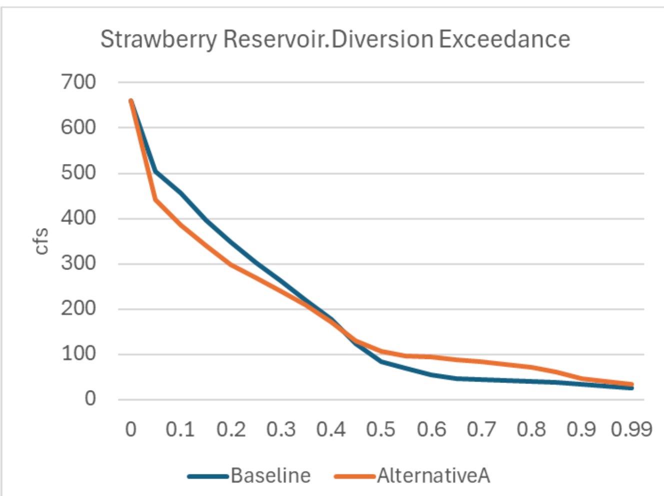

Figure 12 Exceedance Probability Comparison of Strawberry Diversion

7.3 Flow in Each of the Pipelines (Canyon, SFSP, MSP, PRC)

Flows downstream of the Spanish Fork Flow Control Structure are limited to the capacities of those pipes. Changes in the flows in the pipes are limited to the Canyon Pipeline (**Figure 13**), the MSP (**Figure 14**), and the SFSP (**Figure 15**). Differences are not observed in the flows to the PRC (**Figure 16**).

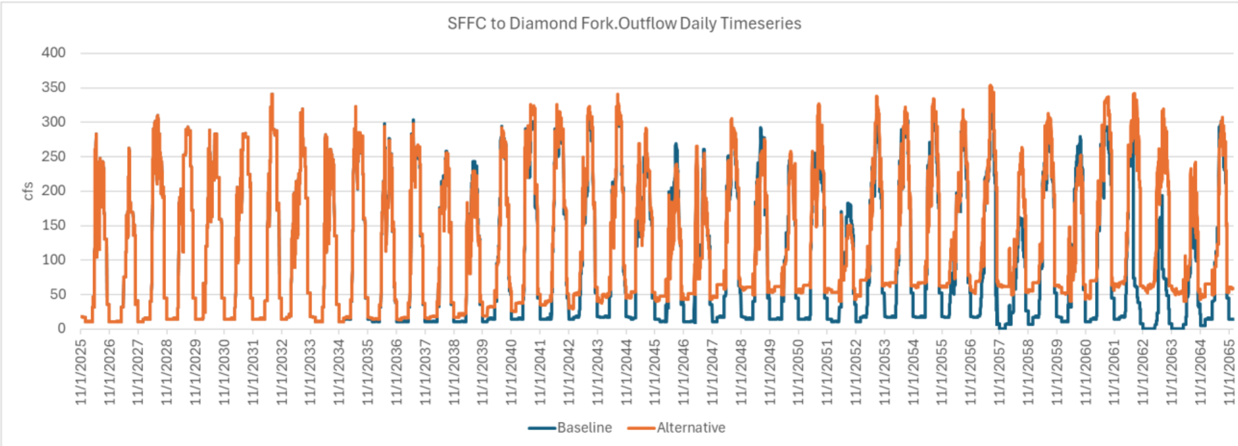

Figure 13 *ULS flows in the Canyon Pipeline downstream of the Spanish Fork Flow Control Structure*

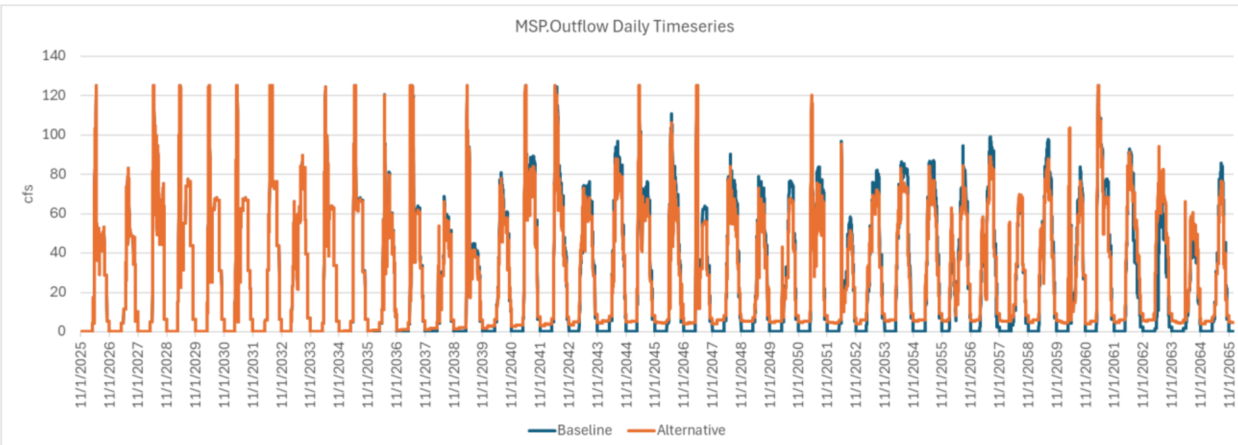

Figure 14 *Flows into the MSP*

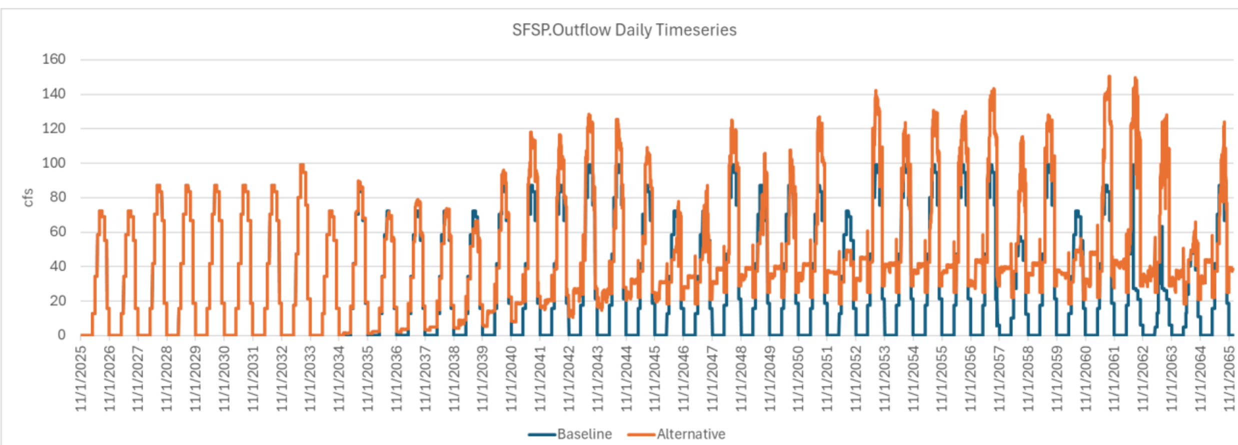

Figure 15 *Flows into the Spanish Fork Santaquin Pipeline*

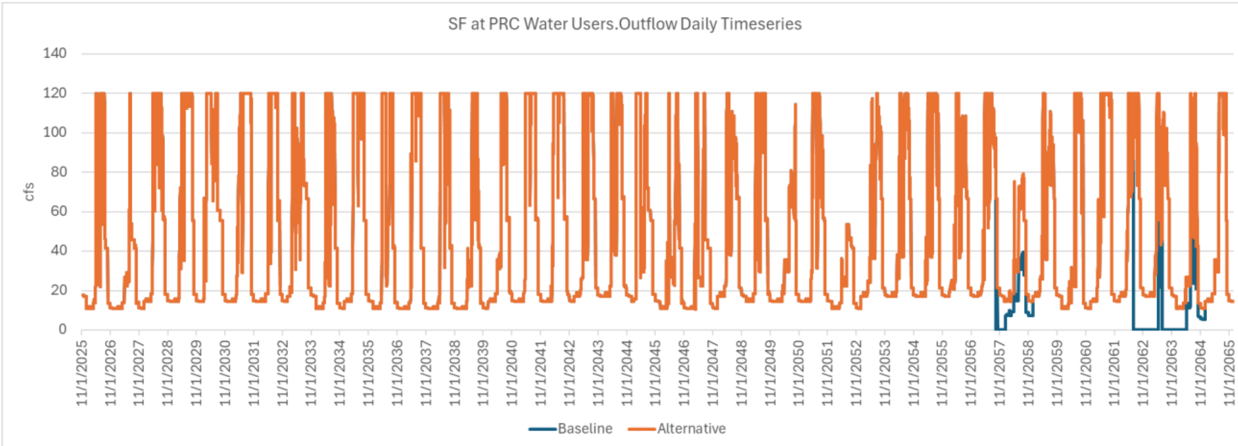

Figure 16 *Flows into the Provo River Canal Pipeline*

7.4 Total Natural Flow Use

Natural flow use changes between the Baseline and Alternative scenarios. When consumptive use is the same in the first decade of model simulation, the Natural flow use is the same. As the M&I Indoor demands conversion occurs in the Alternative scenario, Natural flow is used in different amounts – generally less. This is due to a lower summer demand and lack of Natural flow being used to meet winter demands. Generally, when the Alternative scenario uses less Natural flow, it is in wetter hydrological periods where Natural flow meets higher Baseline demands in the irrigation season. This is the opposite in dry hydrology years. In drier years, the demand pattern for the Alternative scenario allows for more Natural flow to be delivered during periods of higher demand for indoor use than a traditional irrigation demand. Thus, more Natural water is used in the Alternative scenario. Evaluation of each year is shown in **Figure 17**.

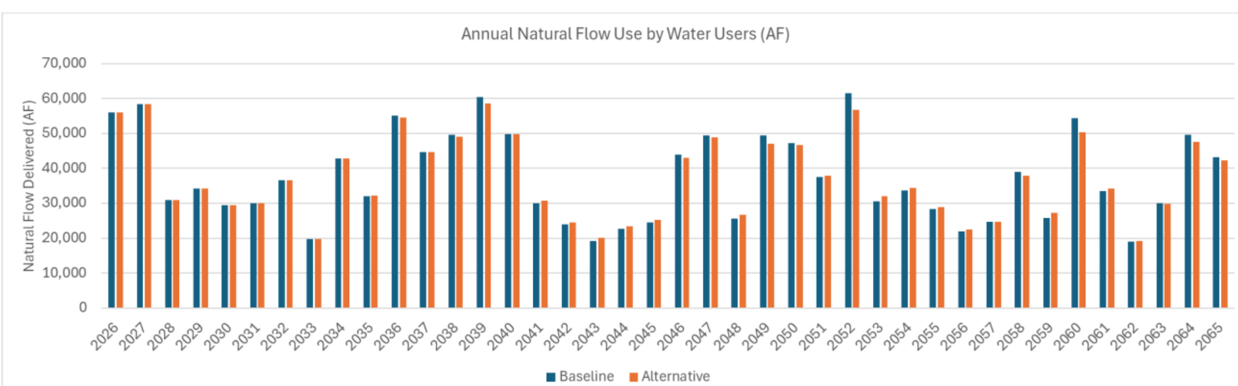

Figure 17 *Natural Flow Delivered to Water Users*

7.5 Flow Comparisons (Castilla, Inflow to Utah Lake)

Flows in the Spanish Fork River are different in the Alternative scenario. Flows at Castilla are reduced due to more water flowing in the ULS resulting in less flow during summer months (**Figure 18** and **Figure 19**).. Flows into Utah Lake are different due to less winter flow making it to Utah Lake (**Figure 20** and **Figure 21**)

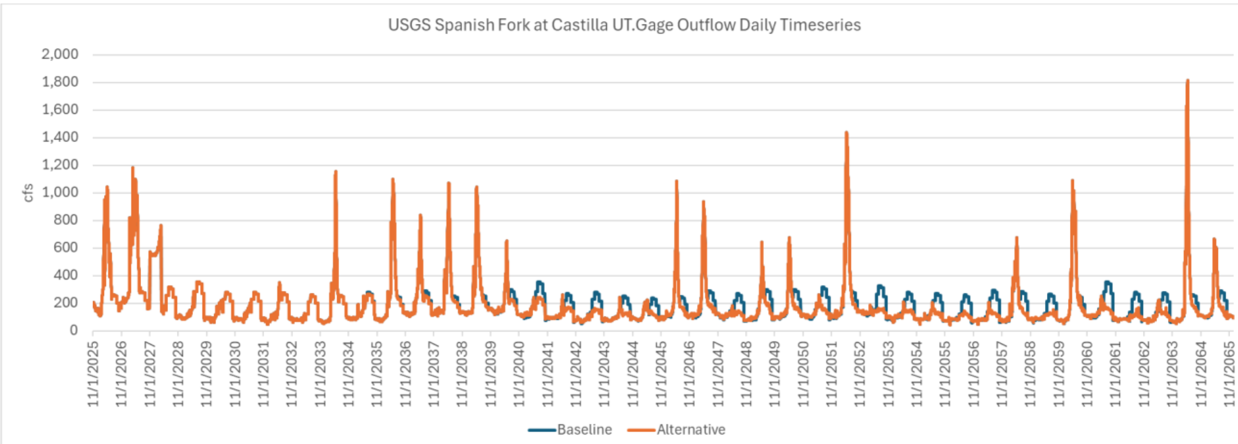

Figure 18 Spanish Fork River at Castilla Flow

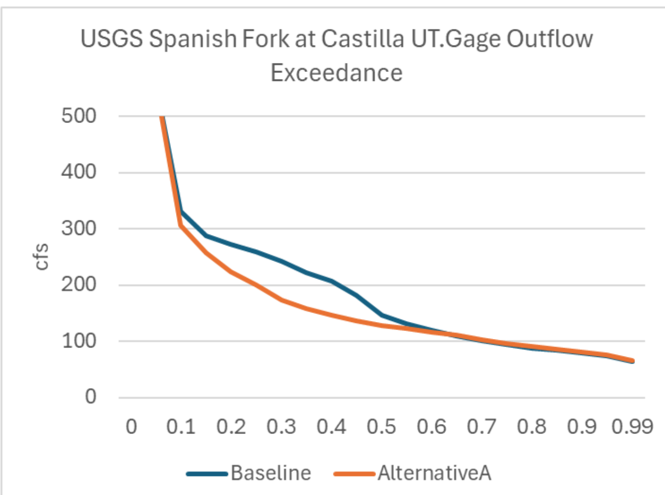

Figure 19 Exceedance Probability Comparison of flows on the Spanish Fork River at Castilla

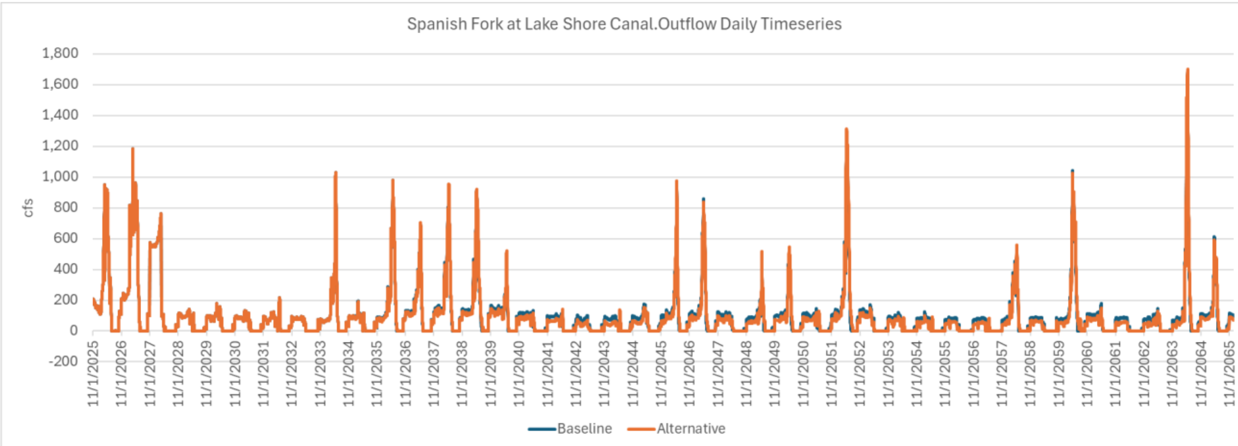

Figure 20 Flows in the Spanish Fork River to Utah Lake downstream of all users.

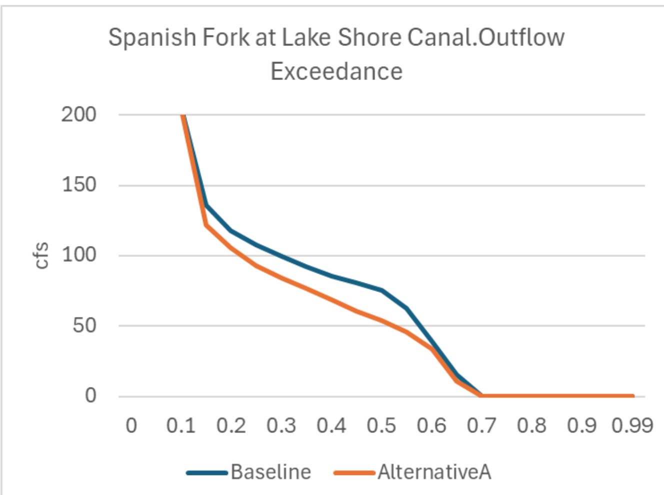

Figure 21 Exceedance Probability Comparison of flows in the Spanish Fork River to Utah Lake

Return flows to Utah Lake change due to the changing use patterns used in the Alternative scenario. Two main differences appear in **Figure 22 and Figure 23**The first difference is a decrease in overall returns to Utah Lake for the first ten years of comparison. This is due to similar consumptive use amounts before indoor use starts and the use of return flow for delivery to Juab County flows. The second difference is after indoor uses start, the efficiency of the 80% return of those volumes adds more return flow consistently through the year back to Utah Lake. Overall, there is less consumptive use in the basin and more return to Utah Lake.

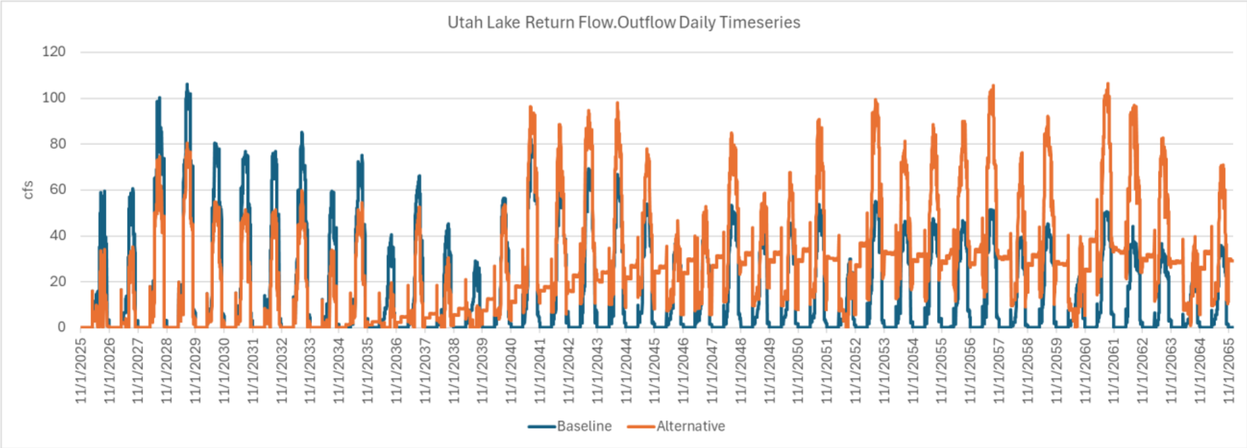

Figure 22 Utah Lake Return Flow as computed with change in consumptive use

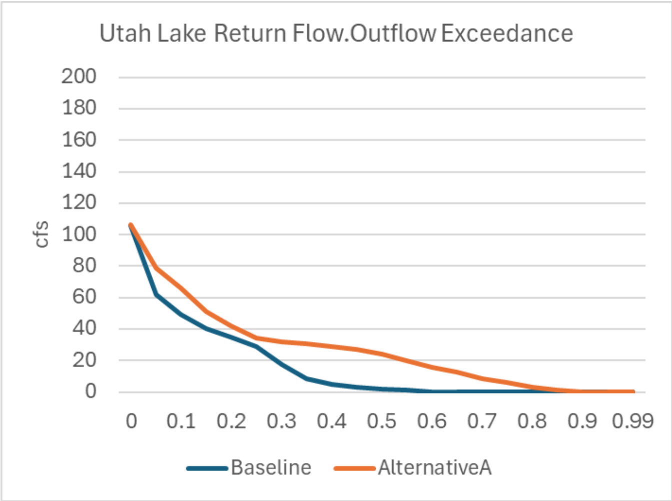

Figure 23 Exceedance Probability Comparison of Return flow to Utah Lake

7.6 Utah Lake Comparison

Comparison of Utah Lake pool elevation are shown in **Figure 24** and **Figure 25**. There is very little change in the beginning of the scenario where Utah Lake is slightly lower in the alternative due to the Juab County deliveries coming from return flows to Utah Lake. When the return flows are greater later in the simulation, the Utah Lake pool Elevation is higher. Annual Fluctuations between the annual maximum elevation and the annual minimum for each year are shown in **Table 10**.

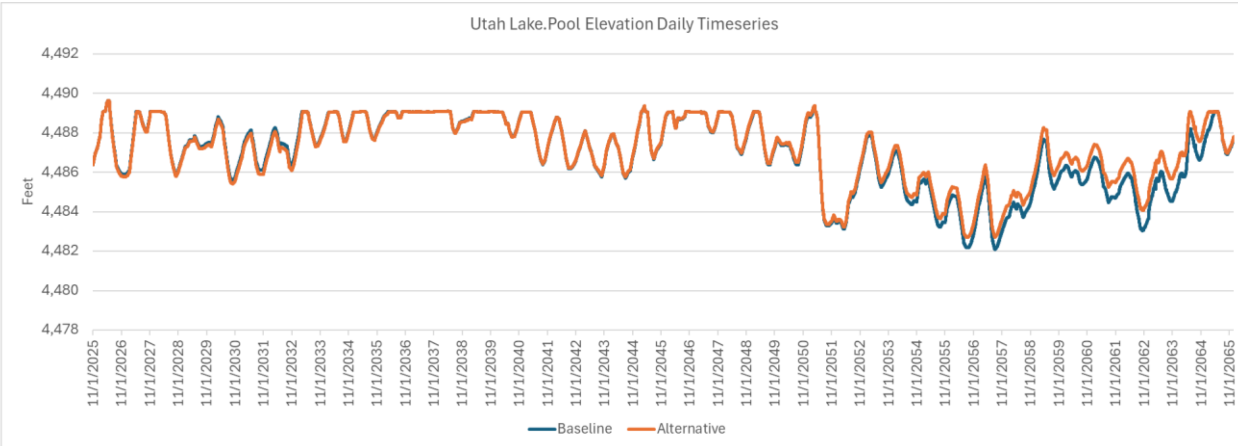

Figure 24 Utah Lake Pool Elevation comparison

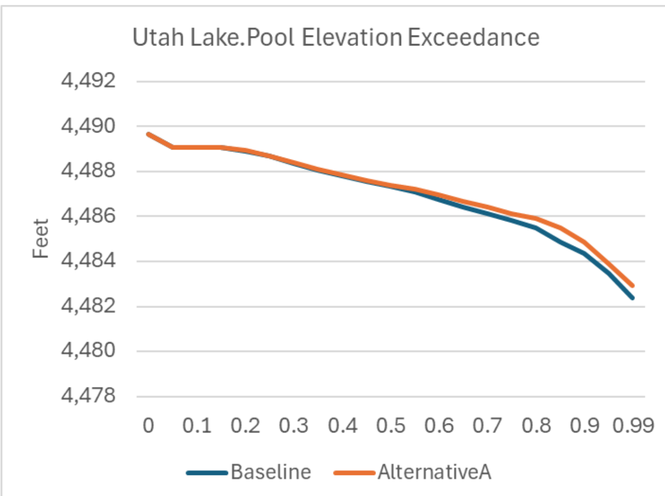

Figure 25 Probability Exceedance Comparison of Utah Lake Pool Elevation

Table 10 Annual Fluctuation for water years on Utah Lake

	Annual Water Surface Fluctuations in Utah Lake **Baseline**		Annual Water Surface Fluctuations in Utah Lake **Alternative A**		Difference Between **Baseline** and **Alternative A**	
Simulated Water Year	***ft***	***in***	***ft***	***in***	***ft***	***in***
2026	3.73	44.77	3.84	46.05	0.107	1.282
2027	3.22	38.60	3.32	39.89	0.108	1.293
2028	3.24	38.83	3.30	39.62	0.065	0.783
2029	1.77	21.24	1.77	21.25	0.001	0.015
2030	3.22	38.61	3.28	39.42	0.067	0.803
2031	2.42	29.01	2.43	29.17	0.014	0.167
2032	2.17	26.00	2.18	26.20	0.016	0.197
2033	2.71	32.52	2.98	35.72	0.266	3.198
2034	1.50	17.97	1.55	18.56	0.049	0.588
2035	1.45	17.39	1.49	17.93	0.046	0.547
2036	1.07	12.85	1.12	13.41	0.047	0.567
2037	0.04	0.44	0.04	0.44	0.000	0.004
2038	1.13	13.55	1.14	13.64	0.007	0.088
2039	0.52	6.18	0.55	6.58	0.033	0.396
2040	1.27	15.27	1.28	15.36	0.008	0.092
2041	2.67	32.01	2.64	31.62	-0.032	-0.388
2042	2.63	31.54	2.60	31.21	-0.027	-0.325
2043	2.34	28.11	2.29	27.48	-0.052	-0.630
2044	2.24	26.86	2.20	26.39	-0.039	-0.470
2045	2.70	32.41	2.67	32.01	-0.033	-0.400
2046	1.58	18.97	1.53	18.39	-0.048	-0.580
2047	1.07	12.80	1.03	12.31	-0.041	-0.486
2048	2.17	26.03	2.10	25.24	-0.066	-0.792
2049	2.68	32.13	2.62	31.44	-0.058	-0.692
2050	1.33	15.90	1.26	15.08	-0.068	-0.821
2051	6.07	72.79	6.01	72.15	-0.053	-0.642
2052	3.01	36.17	3.05	36.61	0.036	0.435
2053	2.64	31.68	2.55	30.64	-0.087	-1.038
2054	2.73	32.77	2.64	31.65	-0.093	-1.113
2055	2.47	29.63	2.38	28.51	-0.093	-1.122
2056	2.67	32.00	2.57	30.82	-0.099	-1.184
2057	3.80	45.59	3.66	43.92	-0.139	-1.673
2058	1.50	17.99	1.48	17.73	-0.022	-0.263
2059	3.26	39.12	3.21	38.56	-0.047	-0.559
2060	0.99	11.92	0.94	11.28	-0.054	-0.648
2061	2.29	27.48	2.17	26.06	-0.119	-1.423
2062	2.92	35.06	2.66	31.93	-0.261	-3.136
2063	2.90	34.77	2.91	34.93	0.013	0.162
2064	3.65	43.83	3.42	41.07	-0.230	-2.762
2065	2.36	28.27	2.13	25.50	-0.231	-2.773

Appendix 3-C. Water Quality Supporting Information

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Appendix 3-C. Water Quality Supporting Information

This appendix summarizes the water quality data that the Central Utah Water Conservancy District (District) collected in the area around the confluence of the Spanish Fork River and Diamond Fork Creek, as well as the water quality data that were collected from the Utah Lake Drainage Basin Water Delivery System (ULS) Mapleton-Springville Pipeline that is representative of the 1991 Contract Water from Strawberry Reservoir. This appendix also provides the mass balance calculations that were done to understand the impacts to the Spanish Fork River as a result of implementing the Preferred Alternative. Some narrative to understand the anticipated impacts of the Preferred Alternative is also included.

3-C.1 Water Quality Period of Record

Each summary of water quality data is provided in terms of a period of record. The period of record for a water quality dataset generally gives the date range when samples were collected, the number of samples, and basic statistics about the dataset such as the average, standard deviation, minimum value, and maximum value for each constituent.

Table 3-C-1 shows the period of record for the water quality dataset that was collected for the Spanish Fork River above Diamond Fork Creek. The water quality samples were generally collected monthly from March 2022 to October 2025.

Table 3-C-2 shows the period of record for the water quality dataset that was collected for Diamond Fork Creek above the Spanish Fork River. The water quality samples were generally collected monthly from as early as February 2017 to October 2025.

Table 3-C-3 shows the period of record for the water quality dataset that was collected from the ULS Mapleton-Springville Pipeline, which is representative of the 1991 Contract Water from Strawberry Reservoir. The water quality samples were generally collected monthly from July 2022 to September 2025 during months when this water was delivered.

Table 3-C-4 shows the period of record for the water quality dataset that was collected for the Spanish Fork River below Diamond Fork Creek. This data is from an in-situ water quality meter that continuously monitors various parameters from February 2024 to October 2025.

Table 3-C-1
Period of Record for Spanish Fork River above Diamond Fork Creek

Constituent	Units	Date Range	Number of Samples	Average	Standard Deviation	Minimum	Maximum
Total alkalinity, as $CaCO_3$	mg/L	3/30/2022 – 10/20/2025	30	253	30.0	128	291
Conductivity	µmho/cm	3/30/2022 – 10/20/2025	30	694	111	303	853
Dissolved Kjeldahl nitrogen	mg/L	3/30/2022 – 10/20/2025	26	0.258	0.446	0.100[a]	1.60
Dissolved nitrogen	mg/L	3/30/2022 – 10/20/2025	26	0.329	0.568	0.100[a]	1.94
Dissolved oxygen[b]	mg/L	7/23/2013 – 2/11/2026	40	9.82	1.21	7.50	12.4
Hardness, dissolved	mg/L	5/31/2022 – 10/20/2025	30	276	24.4	217	327
Nitrate + nitrite, dissolved, as N	mg/L	3/30/2022 – 10/20/2025	26	0.285	0.248	0.100[a]	1.00
pH	—	3/30/2022 – 10/20/2025	30	8.26	0.161	7.90	8.50
Phosphorus, dissolved, as P	mg/L	3/30/2022 – 10/20/2025	26	0.025	0.014	0.020[a]	0.090
Phosphorus, total, as P	mg/L	3/30/2022 – 10/20/2025	27	0.518	1.65	0.020[a]	8.50
TDS	mg/L	3/30/2022 – 10/20/2025	30	433	77.4	208	612
TOC	mg/L	3/30/2022 – 10/20/2025	29	3.65	3.17	1.70	16.3
TSS	mg/L	3/30/2022 – 10/20/2025	30	825	2,734	4.00[a]	12,000
Turbidity	NTU	3/30/2022 – 10/20/2025	30	372	1,614	2.20	8,900
Water temperature[b]	°C	7/23/2013 – 2/11/2026	40	9.81	5.50	0.78	18.5

Definitions: $CaCO_3$ = calcium carbonate; mg/L = milligrams per liter; N = nitrogen; NTU = nephelometric turbidity units; P = phosphorus; TDS = total dissolved solids; TOC = total organic carbon; TSS = total suspended solids; µmho/cm = micromhos per centimeter

[a] Value represents the minimum reporting limit, which was used for all samples for which the constituent was not detected.

[b] Water temperature and dissolved oxygen data were collected using an in-situ water quality meter.

Table 3-C-2
Period of Record for Diamond Fork Creek above Spanish Fork River

Constituent	Units	Date Range	Number of Samples	Average	Standard Deviation	Minimum	Maximum
Total alkalinity, as $CaCO_3$	mg/L	4/29/2020 – 10/20/2025	46	156	36.5	10.0[a]	210
Conductivity	µmho/cm	4/29/2020 – 10/20/2025	46	395	84.5	286	541
Dissolved Kjeldahl nitrogen	mg/L	7/31/2019 – 10/20/2025	30	0.297	1.08	0.100[a]	6.00[b]
Dissolved nitrogen	mg/L	7/31/2019 – 10/20/2025	30	0.300	1.10	0.100[a]	6.10[b]
Dissolved oxygen[c]	mg/L	12/8/2022 – 3/30/2026	91,961	9.88	1.06	7.54	12.7
Hardness, dissolved	mg/L	11/22/2019 – 10/20/2025	33	163	39.8	5.00[a]	216
Hardness, dissolved, as $CaCO_3$	mg/L	2/23/2017 – 2/25/2022	20	174	78.1	123	471
Nitrate + nitrite, dissolved, as N	mg/L	5/30/2019 – 10/20/2025	30	0.117	0.038	0.100[a]	0.200
pH	—	7/31/2019 – 10/20/2025	46	8.10	0.168	7.60	8.40
Phosphorus, dissolved, as P	mg/L	4/29/2020 – 10/20/2025	30	0.028	0.012	0.020[a]	0.060
Phosphorus, total, as P	mg/L	7/31/2019 – 10/20/2025	28	0.058	0.059	0.020[a]	0.300
TDS	mg/L	4/29/2020 – 10/20/2025	46	234	54.3	128	328
TOC	mg/L	4/29/2020 – 10/20/2025	27	3.24	0.404	2.30	4.10
TSS	mg/L	3/30/2017 – 10/20/2025	64	26.7	50.2	4.00[a]	316
Turbidity	NTU	2/23/2017 – 10/20/2025	64	15.5	34.5	0.550	240
Water temperature[c]	°C	12/8/2022 – 3/30/2026	91,961	7.99	4.35	0.074	18.9

Definitions: $CaCO_3$ = calcium carbonate; mg/L = milligrams per liter; N = nitrogen; NTU = nephelometric turbidity units; P = phosphorus; TDS = total dissolved solids; TOC = total organic carbon; TSS = total suspended solids; µmho/cm = micromhos per centimeter

[a] Value represents the minimum reporting limit, which was used for all samples for which the constituent was not detected.

[b] The District believes this value may be an outlier in the data set, but did not exclude it from the analysis.

[c] Water temperature and dissolved oxygen data were collected using an in-situ water quality meter.

Table 3-C-3
Period of Record for ULS Mapleton-Springville Pipeline

Constituent	Units	Date Range	Number of Samples	Average	Standard Deviation	Minimum	Maximum
Total alkalinity, as $CaCO_3$	mg/L	7/26/2022 – 9/15/2025	12	115	3.18	110	119
Conductivity	µmho/cm	7/26/2022 – 9/15/2025	12	268	7.72	255	280
Dissolved Kjeldahl nitrogen	mg/L	7/26/2022 – 9/15/2025	12	0.175	0.260	0.100[a]	1.00
Dissolved nitrogen	mg/L	7/26/2022 – 9/15/2025	12	0.200	0.346	0.100[a]	1.30
Dissolved oxygen[b]	mg/L	7/26/2022 – 9/15/2025	13	9.02	0.379	8.06	9.41
Hardness, dissolved	mg/L	7/26/2022 – 9/15/2025	12	126	7.37	116	136
Nitrate + nitrite, dissolved, as N	mg/L	7/26/2022 – 9/15/2025	12	0.183	0.083	0.100[a]	0.300
pH	—	7/26/2022 – 9/15/2025	12	7.73	0.374	6.80	8.00
Phosphorus, dissolved, as P	mg/L	7/26/2022 – 9/15/2025	12	0.045	0.022	0.020[a]	0.090
Phosphorus, total, as P	mg/L	7/26/2022 – 9/15/2025	12	0.048	0.029	0.020[a]	0.100
TDS	mg/L	7/26/2022 – 9/15/2025	12	159	39.6	100	244
TOC	mg/L	7/26/2022 – 9/15/2025	11	3.75	0.238	3.20	4.20
TSS	mg/L	7/26/2022 – 9/15/2025	12	4.75	1.86	4.00[a]	10.0
Turbidity	NTU	7/26/2022 – 9/15/2025	12	1.76	1.16	0.790	4.70
Water temperature[b]	°C	7/26/2022 – 9/15/2025	13	12.6	1.93	11.1	17.6

Definitions: µmho/cm = micromhos per centimeter; $CaCO_3$ = calcium carbonate; mg/L = milligrams per liter; N = nitrogen; NTU = nephelometric turbidity units; P = phosphorus; TDS = total dissolved solids; TOC = total organic carbon; TSS = total suspended solids

[a] Value represents the minimum reporting limit, which was used for all samples for which the constituent was not detected.

[b] Water temperature and dissolved oxygen data were collected using an in-situ water quality meter.

Table 3-C-4
Period of Record for Spanish Fork River below Diamond Fork Creek

Constituent	Units	Date Range	Number of Data Points	Average	Standard Deviation	Minimum	Maximum
Dissolved oxygen	%	2/1/2024 – 10/15/2025	41,091	99.0	6.05	83.4	115
Dissolved oxygen	mg/L	2/1/2024 – 10/15/2025	41,091	9.16	0.779	6.83	11.7
fDOM	RFU	2/1/2024 – 10/15/2025	41,091	5.99	1.85	−0.240	48.5
pH	—	2/1/2024 – 10/15/2025	41,091	8.20	0.135	7.80	9.54
Salinity	PSU	2/1/2024 – 10/15/2025	41,091	0.239	0.071	0.010	0.430
Specific conductivity	µS/cm	2/1/2024 – 10/15/2025	41,091	492	143	33	872
Temperature	°C	2/1/2024 – 10/15/2025	41,091	10.7	3.68	0.596	17.7
TDS	mg/L	2/1/2024 – 10/15/2025	41,091	320	93.3	21.0	567
Turbidity	FNU	2/1/2024 – 10/15/2025	41,091	42.8	140	3.51	5,712

Definitions: °C = degrees Celsius; µS/cm = microsiemens per centimeter; fDOM = fluorescent dissolved organic matter; FNU = formazin nephelometric units; mg/L = milligrams per liter; PSU = practical salinity units; RFU = relative fluorescence units; TDS = total dissolved solids

3-C.2 Mass Balance Calculations

The water quality data from the Spanish Fork River above Diamond Fork Creek, from Diamond Fork Creek above the Spanish Fork River, and from the ULS Mapleton-Springville Pipeline (to represent the 1991 Contract Water from Strawberry Reservoir) were used to calculate monthly average pollutant concentrations for the Spanish Fork River below Diamond Fork Creek using a mass balance approach for both the No Action Alternative and the Preferred Alternative. The equation below shows how the mass balance was calculated.

$$C_{DS} = \frac{(Q_1 C_1) + (Q_2 C_2) + (Q_3 C_3)}{(Q_1 + Q_2 + Q_3)}$$

Where:

C_{DS} = monthly average concentration in the Spanish Fork River below Diamond Fork Creek
Q_1 = monthly average Spanish Fork River flow rate above Diamond Fork Creek
Q_2 = monthly average Diamond Fork Creek flow rate above the Spanish Fork River
Q_3 = monthly average 1991 Contract Water flow rate
C_1 = monthly average Spanish Fork River concentration above Diamond Fork Creek
C_2 = monthly average Diamond Fork Creek concentration above the Spanish Fork River
C_3 = monthly average ULS Mapleton-Springville Pipeline concentration

Table 3-C-5 and Table 3-C-6 provide the input values and the resulting concentrations in the Spanish Fork River below Diamond Fork Creek for a subset of constituents that the District believes are of most consequence under the Preferred Alternative. The flow rates used in the calculation are discussed in Section 3.2, *Hydrology*, of the EA. It is assumed that the future instream flow rate from each source would mirror the historic average flow rate from each source. Water quality data for the ULS Mapleton-Springville Pipeline for the months of April and May represent the average concentrations from June through September because the District does not have any data for the months of April and May.

Table 3-C-5
Mass Balance for Spanish Fork River below Diamond Fork Creek by Month – No Action Alternative

Month	Q_1	Q_2	Q_3	C_1	C_2	C_3	C_{DS}	C_1	C_2	C_3	C_{DS}	C_1	C_2	C_3	C_{DS}
January	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	59.1	21.7	0.0	0.100	0.100	--	0.100	0.035	0.020	--	0.031	8.15	8.00	--	8.11
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				434	288	--	395	57.0	13.5	--	45.3	34.5	8.80	--	27.6
February	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	67.4	21.7	0.0	0.100	0.100	--	0.100	0.030	0.030	--	0.030	8.35	8.15	--	8.30
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				504	286	--	451	31.5	15.0	--	27.5	23.0	7.83	--	19.3
March	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	100.3	22.1	0.0	0.550	0.100	--	0.469	0.275	0.075	--	0.239	8.40	8.13	--	8.35
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				461	266	--	426	216	39.8	--	184	39.0	22.2	--	36.0
April	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	267.9	23.8	6.2	0.100	0.100	0.200	0.102	0.300	0.097	0.045	0.278	8.20	8.08	7.74	8.18
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				346	252	155	335	288	81.4	4.69	266	235	59.6	1.76	216
May	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	459.8	29.6	74.5	0.990	0.100	0.200	0.839	0.300	0.055	0.045	0.253	8.30	8.20	7.74	8.22
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				386	214	155	346	452	33.0	4.69	371	180	16.2	1.76	148

Month	Q_1	Q_2	Q_3	C_1	C_2	C_3	C_{DS}	C_1	C_2	C_3	C_{DS}	C_1	C_2	C_3	C_{DS}
June	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	205.8	33.1	208.2	0.100	0.100	0.100	0.100	0.040	0.027	0.020	0.030	8.37	8.18	8.00	8.18
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				375	199	128	247	61.0	7.00	4.00	30.5	91.7	4.36	1.85	43.4
July	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	104.1	36.0	250.1	0.460	0.100	0.100	0.196	0.518	0.038	0.043	0.169	8.25	7.97	7.93	8.02
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				475	193	160	247	3,014	11.4	6.00	809	126	4.79	2.30	35.5
August	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	84.0	35.8	212.7	0.713	2.10	0.500	0.726	2.87	0.175	0.067	0.787	8.00	7.90	7.23	7.50
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				491	182	151	240	3,255	45.3	4.00	830	3,010	21.4	1.06	763
September	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	63.2	37.0	143.9	0.100	0.100	0.100	0.100	0.068	0.045	0.060	0.060	8.25	8.10	7.80	7.96
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				407	201	181	243	82.0	18.6	4.75	26.8	53.4	6.69	1.85	15.9
October	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	72.2	24.2	0.0	0.100	0.100	--	0.100	0.023	0.053	--	0.031	8.30	8.22	--	8.28
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				415	300	--	386	19.7	12.8	--	17.9	16.0	8.32	--	14.1
November	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	58.6	21.2	0.0	0.100	0.100	--	0.100	0.020	0.035	--	0.024	8.35	8.23	--	8.32

Month	Q_1	Q_2	Q_3	C_1	C_2	C_3	C_{DS}	C_1	C_2	C_3	C_{DS}	C_1	C_2	C_3	C_{DS}
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				446	272	--	400	22.0	9.40	--	18.6	15.5	6.10	--	13.0
December	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	55.8	21.5	0.0	--	--	--	--	--	--	--	--	--	8.10	--	--
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				--	280	--	--	--	8.00	--	--	--	5.00	--	--

Definitions: cfs = cubic feet per second; mg/L = milligrams per liter; TDS = total dissolved solids; TSS = total suspended solids

Table 3-C-6
Mass Balance for Spanish Fork River below Diamond Fork Creek by Month – Preferred Alternative

Month	Q_1	Q_2	Q_3	C_1	C_2	C_3	C_{DS}	C_1	C_2	C_3	C_{DS}	C_1	C_2	C_3	C_{DS}
January	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	59.1	21.7	0.0	0.100	0.100	--	0.100	0.035	0.015	--	0.030	8.15	8.00	--	8.11
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				434	288	--	395	57.0	13.5	--	45.3	34.5	8.80	--	27.6
February	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	67.4	21.7	0.0	0.100	0.100	--	0.100	0.030	0.030	--	0.030	8.35	8.15	--	8.30
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				504	286	--	451	31.5	15.0	--	27.5	23.0	7.83	--	19.3
March	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	100.3	22.1	0.0	0.550	0.100	--	0.469	0.275	0.075	--	0.239	8.40	8.13	--	8.35
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				461	266	--	426	216	39.8	--	184	39.0	22.2	--	36.0
April	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	267.9	23.8	0.0	0.100	0.100	--	0.100	0.300	0.097	--	0.283	8.20	8.08	--	8.19
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				346	252	--	338	288	81.4	--	271	235	59.6	--	221
May	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	459.8	29.6	0.0	0.990	0.100	--	0.936	0.300	0.055	--	0.285	8.30	8.20	--	8.29
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				386	214	--	376	452	33.0	--	427	180	16.2	--	170

Month	Q_1	Q_2	Q_3	C_1	C_2	C_3	C_{DS}	C_1	C_2	C_3	C_{DS}	C_1	C_2	C_3	C_{DS}
June	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	205.8	33.1	0.0	0.100	0.100	--	0.100	0.040	0.027	--	0.038	8.37	8.18	--	8.34
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				375	199	--	350	61.0	7.00	--	53.5	91.7	4.36	--	79.6
July	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	104.1	36.0	0.0	0.460	0.100	--	0.368	0.518	0.038	--	0.394	8.25	7.97	--	8.18
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				475	193	--	403	3,014	11.4	--	2,243	126	4.79	--	94.8
August	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	84.0	35.8	0.0	0.713	2.10	--	1.13	2.87	0.175	--	2.07	8.00	7.90	--	7.97
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				491	182	--	399	3,255	45.3	--	2,295	3,010	21.4	--	2,116
September	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	63.2	37.0	0.0	0.100	0.100	--	0.100	0.068	0.045	--	0.059	8.25	8.10	--	8.19
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				407	201	--	331	82.0	18.6	--	58.6	53.4	6.69	--	36.2
October	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	72.2	24.2	0.0	0.100	0.100	--	0.100	0.023	0.053	--	0.031	8.30	8.22	--	8.28
				TDS (mg/L)				TSS (mg/L)				Turbidity			
				415	300	--	386	19.7	12.8	--	17.9	16.0	8.32	--	14.1
November	Flow Rates (cfs)			Dissolved nitrogen (mg/L)				Total phosphorus (mg/L)				pH			
	58.6	21.2	0.0	0.100	0.100	--	0.100	0.020	0.035	--	0.024	8.35	8.23	--	8.32

<table>
<tr><th>Month</th><th>Q_1</th><th>Q_2</th><th>Q_3</th><th>C_1</th><th>C_2</th><th>C_3</th><th>C_{DS}</th><th>C_1</th><th>C_2</th><th>C_3</th><th>C_{DS}</th><th>C_1</th><th>C_2</th><th>C_3</th><th>C_{DS}</th></tr>
<tr><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td><td colspan="4">TDS (mg/L)</td><td colspan="4">TSS (mg/L)</td><td colspan="4">Turbidity</td></tr>
<tr><td>446</td><td>272</td><td>--</td><td>400</td><td>22.0</td><td>9.40</td><td>--</td><td>18.6</td><td>15.5</td><td>6.10</td><td>--</td><td>13.0</td></tr>
<tr><td rowspan="4">December</td><td colspan="3">Flow Rates (cfs)</td><td colspan="4">Dissolved nitrogen (mg/L)</td><td colspan="4">Total phosphorus (mg/L)</td><td colspan="4">pH</td></tr>
<tr><td rowspan="3">55.8</td><td rowspan="3">21.5</td><td rowspan="3">0.0</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>8.10</td><td>--</td><td>--</td></tr>
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Definitions: cfs = cubic feet per second; mg/L = milligrams per liter; TDS = total dissolved solids; TSS = total suspended solids

Table 3-C-7 presents the average annual concentration in the Spanish Fork River downstream of Diamond Fork for each of the selected constituents based on the average monthly concentration in the Spanish Fork River. The month of December was excluded from this calculation since there is no water quality data that could be used to calculate the monthly average concentration. Based on this analysis, the average annual concentrations of most pollutants is anticipated to increase under the Preferred Alternative compared to the No Action Alternative.

Table 3-C-7
Average Annual Concentrations in the Spanish Fork River below Diamond Fork Creek with the No Action Alternative and the Preferred Alternative

Constituent	Units	Average Annual Concentration	
		No Action Alternative	Preferred Alternative
Dissolved nitrogen	mg/L	0.270	0.332
Total phosphorus	mg/L	0.178	0.322
pH	--	8.13	8.23
TDS	mg/L	337	387
TSS	mg/L	242	522
Turbidity	NTU	123	261

Definitions: mg/L = milligrams per liter; NTU = nephelometric turbidity units; TDS = total dissolved solids; TSS = total suspended solids

The following potential water quality impacts are anticipated based on the water volume changes in the Spanish Fork River between the Spanish Fork River Flow Control Structure and the Spanish Fork River Diversion. With the removal of the 1991 Contract Water from the Spanish Fork River channel, it is anticipated that the water quality would be more similar to the water quality of the Spanish Fork River channel upstream of Diamond Fork Creek with some improvement due to the inflow from Diamond Fork Creek (both natural and in-stream flows).

Dissolved Nitrogen. The average annual concentration of dissolved nitrogen is anticipated to increase about 23% from about 0.270 milligrams per liter (mg/L) with the No Action Alternative to about 0.332 mg/L under the Preferred Alternative. Both of these concentrations are below the state water quality standard of 10 mg/L for beneficial use 3A (cold-water fishery and aquatic life). These concentrations are also below the pollution indicator of 4 mg/L that has been established.

Total Phosphorus. The average annual concentration of total phosphorus is anticipated to increase about 81% from about 0.178 mg/L with the No Action Alternative to about 0.322 mg/L under the Preferred Alternative. Soldier Creek, an upstream tributary of the Spanish Fork River, is impaired for total phosphorus due to the presence of highly erodible soils in the upstream watershed (UDEQ 2006). This impairment likely contributes to the average annual total phosphorus concentration of about 0.410 mg/L in the Spanish Fork River upstream of Diamond Fork. The 1991 Contract Water from Strawberry Reservoir has an average annual total phosphorus concentration of about 0.05 mg/L which matches the state water quality pollution indicator for total phosphorus. The Preferred Alternative would remove this source of dilution from the Spanish Fork River during the summer months and increase the average annual total phosphorus concentration.

pH. Levels of pH in the Spanish Fork River downstream of Diamond Fork would remain about the same under the Preferred Alternative (8.23) as with the No Action Alternative (8.13). The state water quality standard for surface water is between 6.5 and 9.0.

Total Dissolved Solids. The average annual TDS concentration is anticipated to increase about 15% from about 337 mg/L with the No Action Alternative to about 387 mg/L under the Preferred Alternative. Both of these concentrations are below the state water quality standard of 2,000 mg/L for agricultural beneficial uses, including irrigation and stock watering.

Total Suspended Solids. The average annual TSS concentration is anticipated to increase from 242 mg/L with the No Action Alternative to about 522 mg/L under the Preferred Alternative. The average annual TSS concentration in the Spanish Fork River upstream of Diamond Fork is more than 25 times the average annual TSS concentration in Diamond Fork Creek and more than 140 times the 1991 Contract Water average annual TSS concentration. There is no established water quality standard for TSS.

Turbidity. The average annual turbidity level is anticipated to increase from about 123 NTU with the No Action Alternative to about 261 NTU under the Preferred Alternative. The average annual turbidity in the Spanish Fork River upstream of Diamond Fork is about 25 times the average annual turbidity in Diamond Fork Creek and about 200 times the average annual 1991 Contract Water turbidity. There is no established water quality standard for turbidity outside of an increase of 10 NTU during runoff events.

Pathogens. The District did not sample for *Escherichia coli* (*E. coli*) or other pathogen concentrations in the upstream assessment unit (Spanish Fork River-2), which is not impaired for *E. coli* like the downstream assessment unit (Spanish Fork River-1) is. Without this information, it is not known whether sources of *E. coli* upstream of the Spanish Fork River Diversion might be contributing to the *E. coli* impairment downstream of the diversion. It is possible that the reduction of water that is available for mixing could increase pathogen concentrations in both Spanish Fork River assessment units.

Water Temperature. Mass balance calculations of average annual water temperature show that the water temperature in the Spanish Fork River downstream of Diamond Fork would increase from about 8.3 degrees Celsius (°C) for the No Action Alternative to about 8.6 °C under the Preferred Alternative. With less water in the Spanish Fork River channel during the summer months, the water would be exposed to the same amount of solar radiation from the sun, and this increased intensity of sunlight could further elevate water temperatures. The lower water depth could also increase the magnitude of temperature swings because less instream water would heat up faster during the day and cool down faster overnight. Maximum water temperature is anticipated to remain below the 20 °C water quality standard for cold-water fisheries and other aquatic life.

Dissolved Oxygen. Mass balance calculations of average annual dissolved oxygen concentration show that the dissolved oxygen concentration in the Spanish Fork River is anticipated to decrease from about 9.30 mg/L with the No Action Alternative to about 9.26 mg/L under the Preferred Alternative. The dissolved oxygen concentration could decrease further in the channel as a result of the anticipated decrease in velocity because there would be less natural aeration (mixing with air due to turbulence). Decreased water volumes could also provide less support to naturally occurring plants, which provide oxygen to the system through photosynthesis. Increased temperature and nutrient concentrations could also decrease the dissolved oxygen concentrations. Elevated nutrient levels can cause high algae growth, and, when the algae die, oxygen is consumed as the organisms decompose.

All of these potential impacts to the Spanish Fork River as a result of the Preferred Alternative would make the water quality in the water quality in the Spanish Fork River below the Diamond Fork Creek confluence more representative of the natural water quality. For over 100 years, this reach has artificially had higher water quantity volumes during irrigation season due to the 1991 Contract Water from Strawberry Reservoir being discharged to and conveyed in the Spanish Fork River. Some degree of water quality improvement over the natural flows would still be provided because the Diamond Fork Creek instream flows would remain in the river between the Diamond Fork Creek confluence and the Spanish Fork River Diversion.

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Appendix 3-D. Figures and Data Tables

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Appendix 3-D.1. Proposed Action

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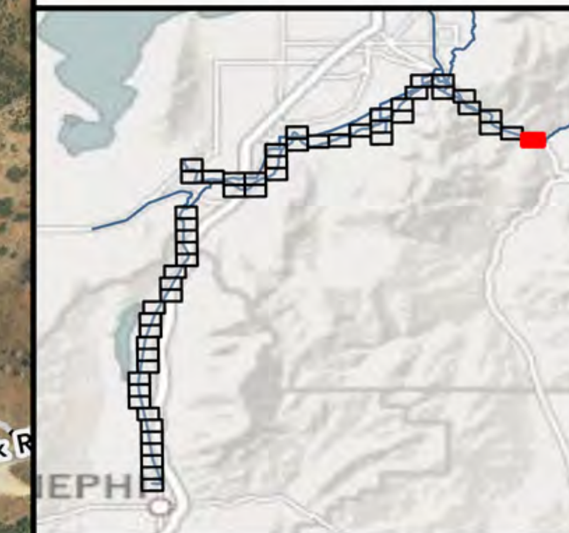

LEGEND

- Indirect Impact Area
- Control Points
- Survey Area

PROPOSED ACTION

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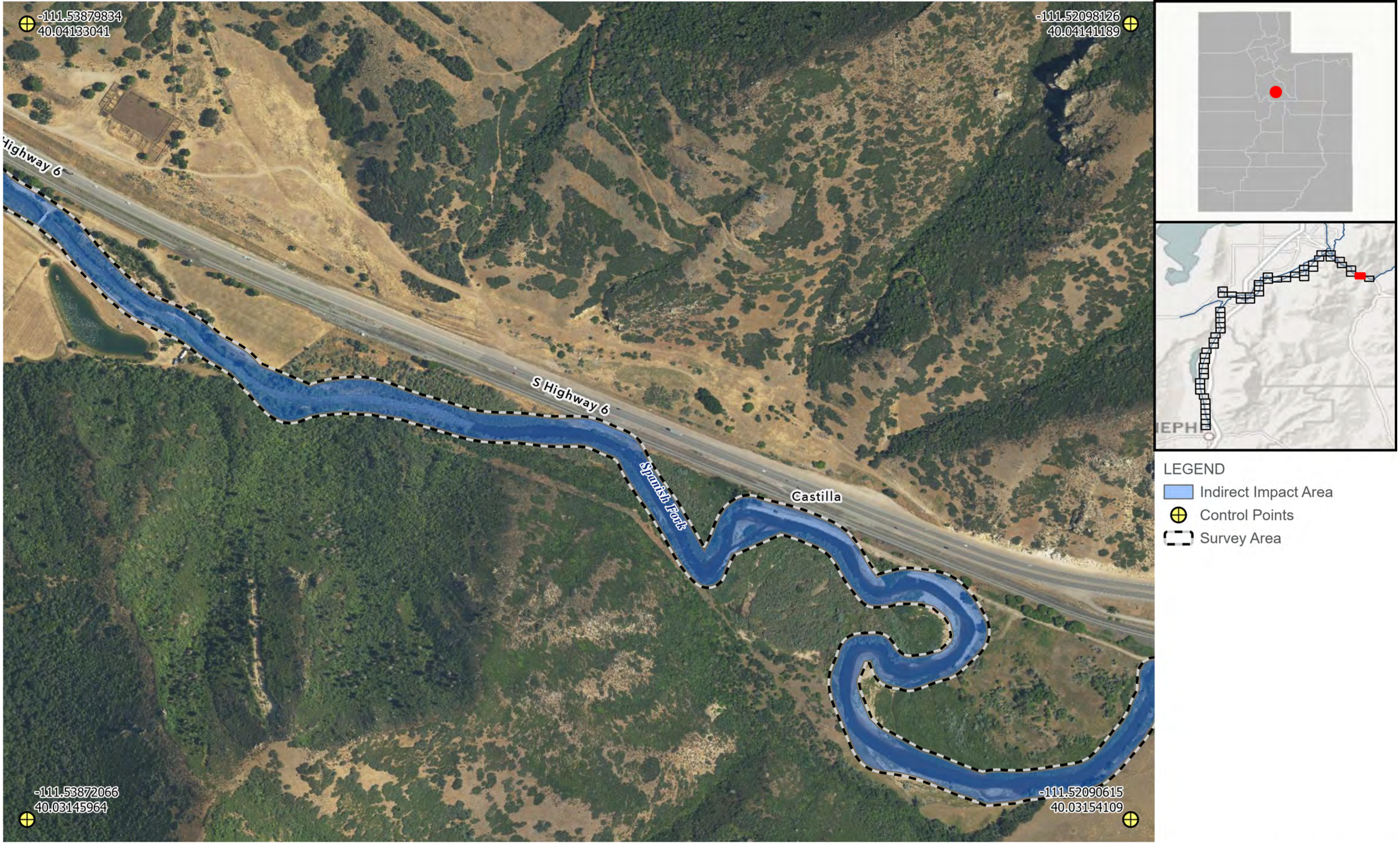

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 2 OF 54

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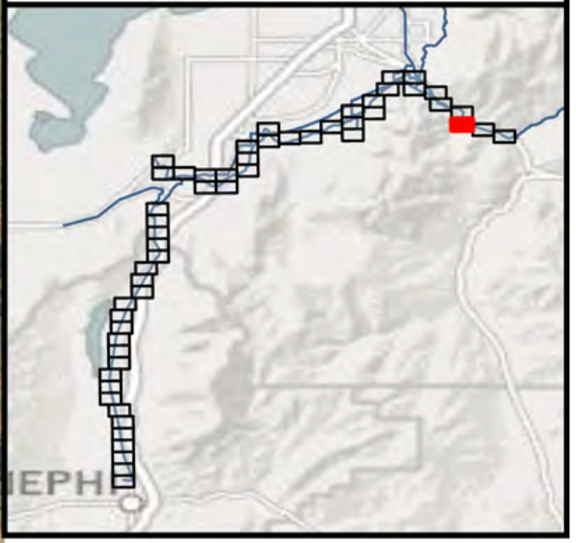

LEGEND

- Indirect Impact Area
- Control Points
- Survey Area

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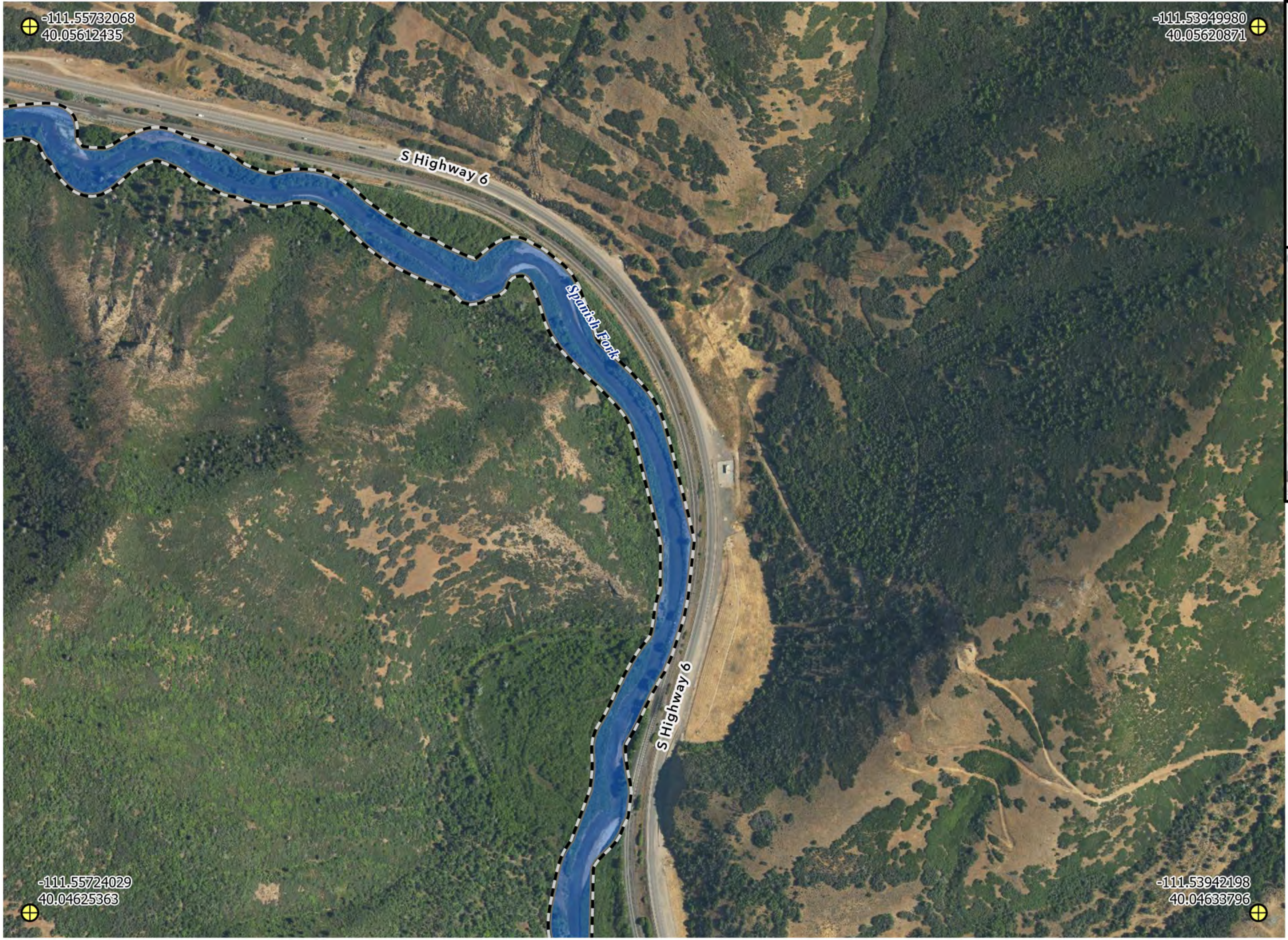
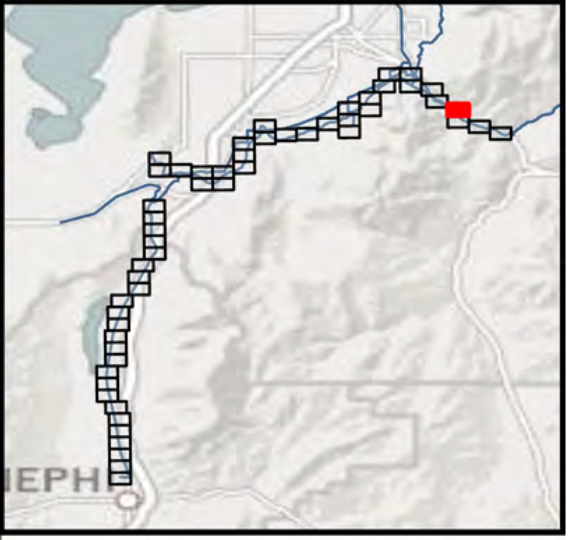
PROPOSED ACTION

PROPERTY IMPACTS | PAGE 3 OF 54





LEGEND
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- Control Points
- Survey Area

0 0.1 mi

PROPOSED ACTION

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PROPOSED ACTION

PROPOSED ACTION

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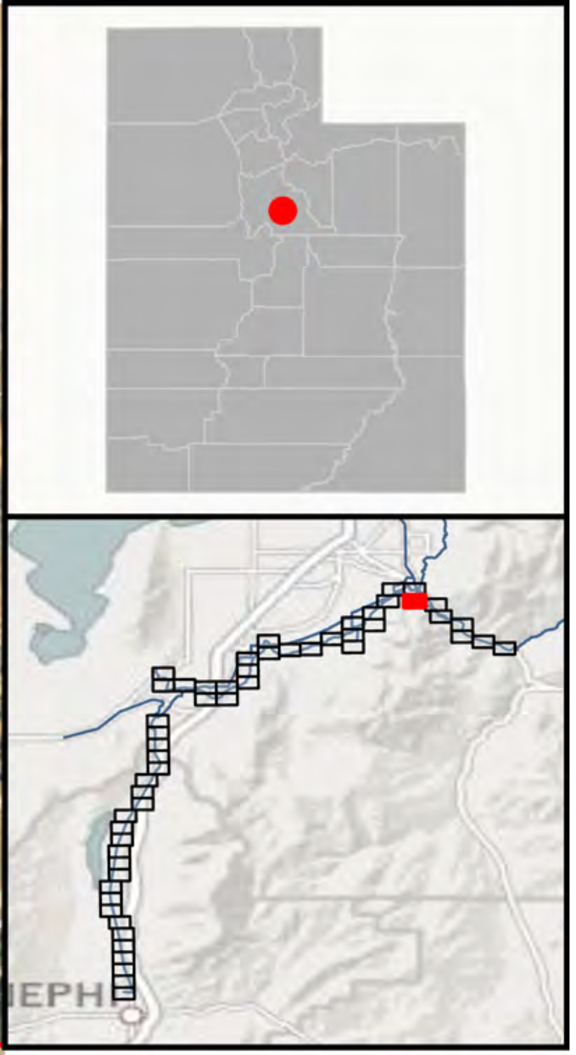

LEGEND

- Permanent Impact Area
- Temporary Impact Area
- Control Points
- Survey Area

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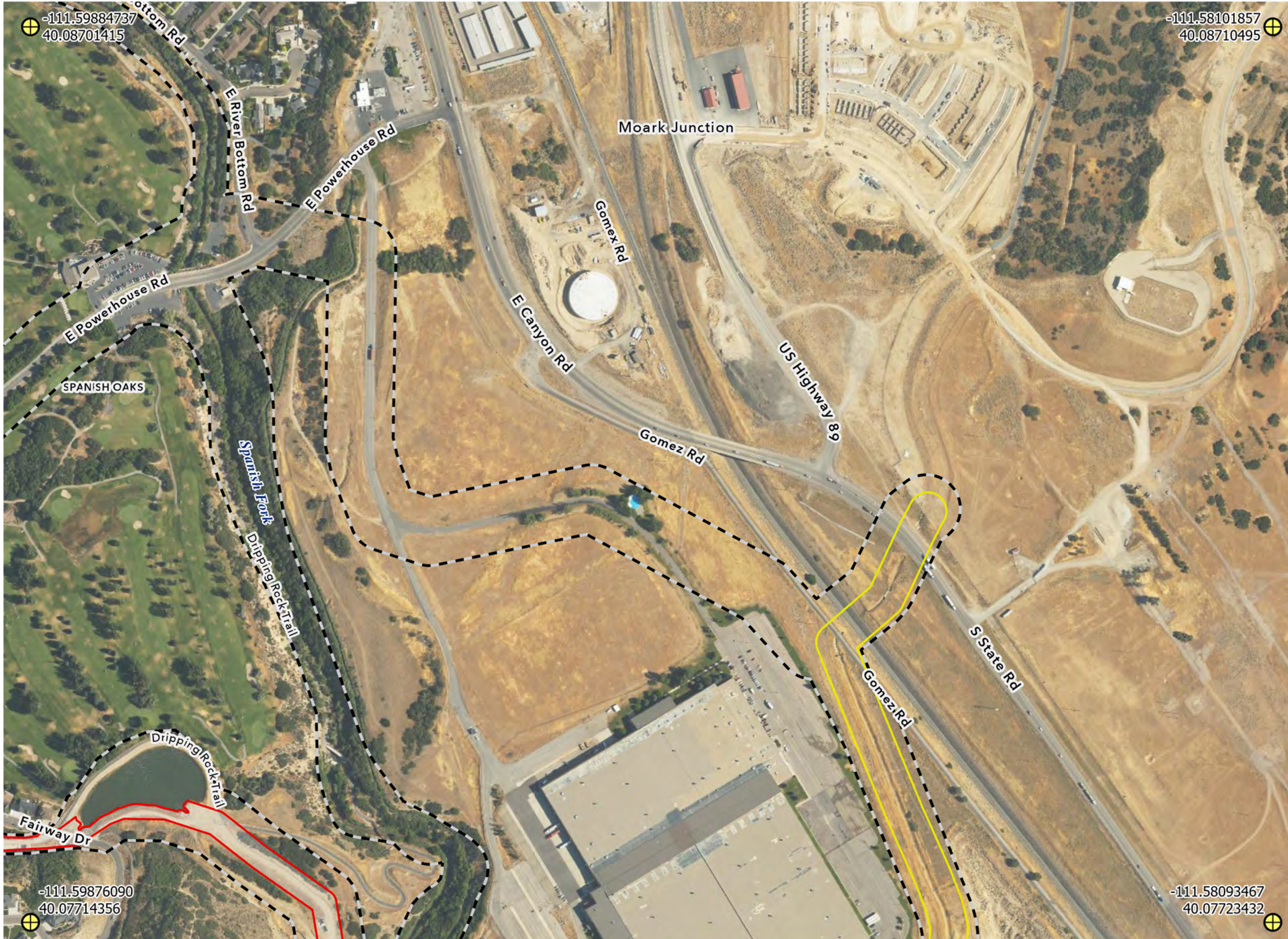
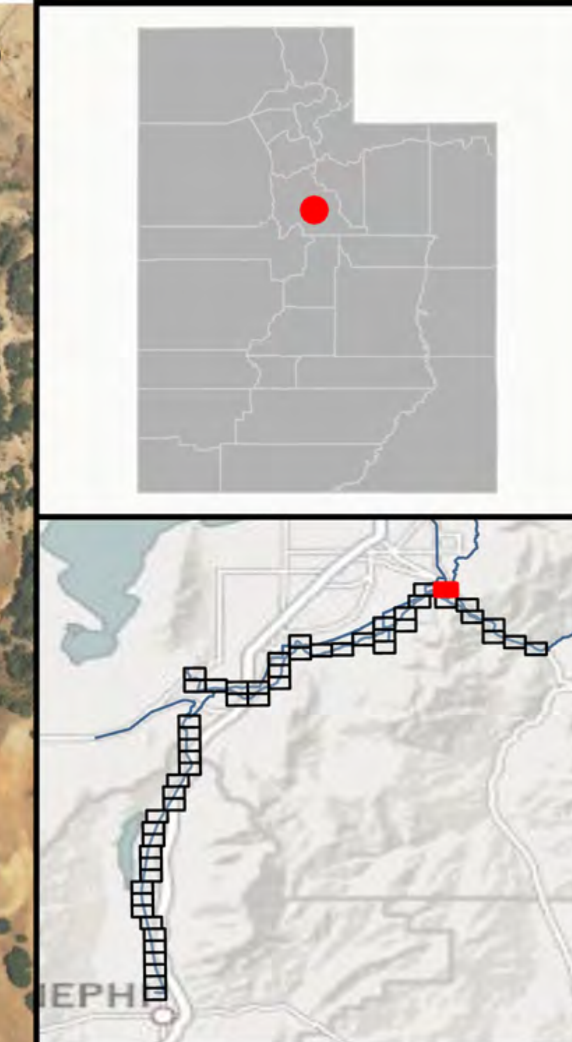
PROPOSED ACTION

PROPERTY IMPACTS | PAGE 7 OF 54





LEGEND

- Permanent Impact Area
- Temporary Impact Area
- Control Points
- Survey Area

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PROPOSED ACTION

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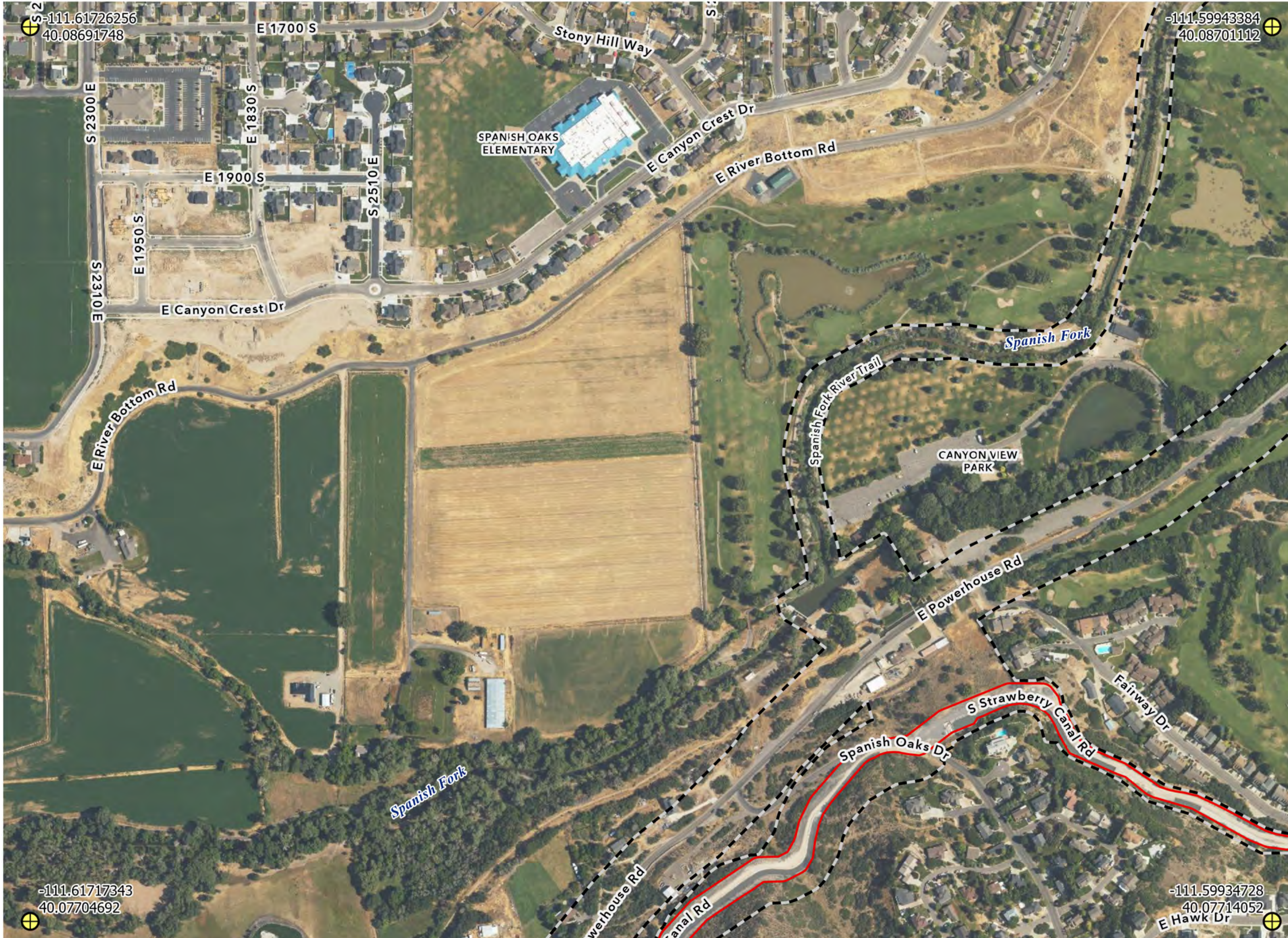

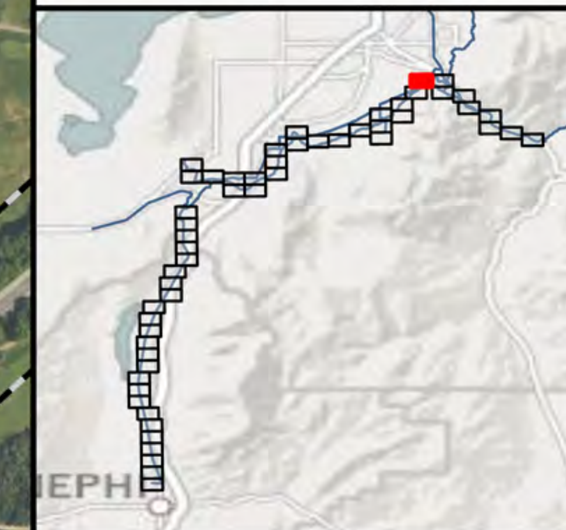

LEGEND

Permanent Impact Area

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Survey Area

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PROPOSED ACTION

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PROPOSED ACTION

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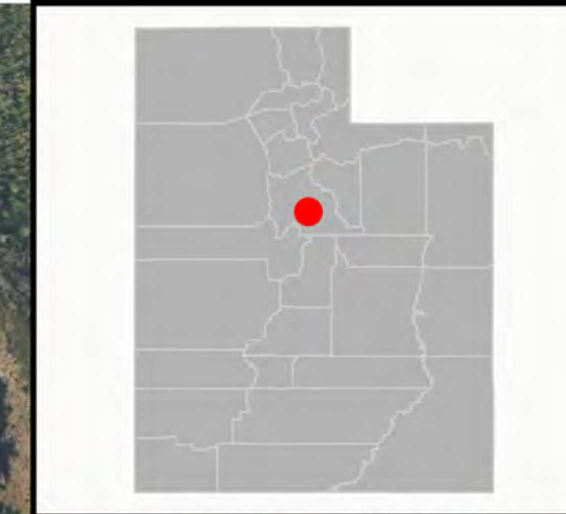

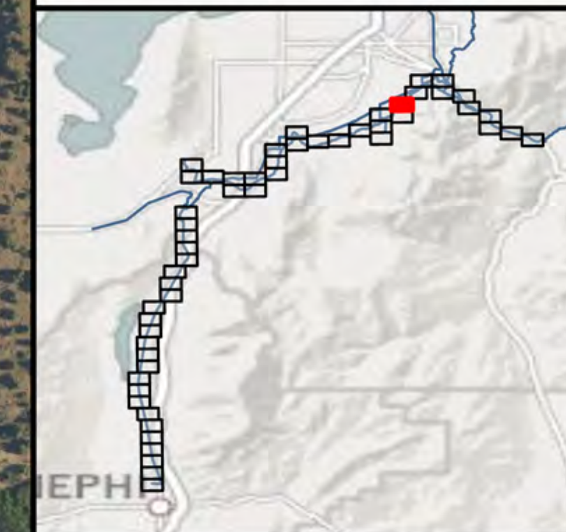

LEGEND

Permanent Impact Area

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Survey Area

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PROPOSED ACTION

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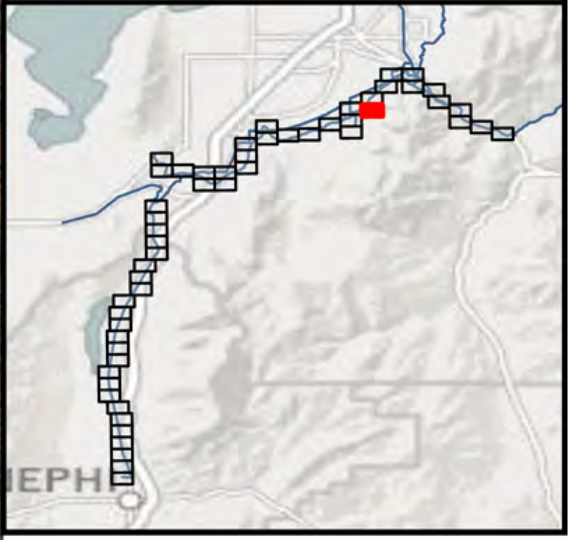

LEGEND

- Permanent Impact Area
- Temporary Impact Area
- Control Points
- Survey Area

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PROPOSED ACTION

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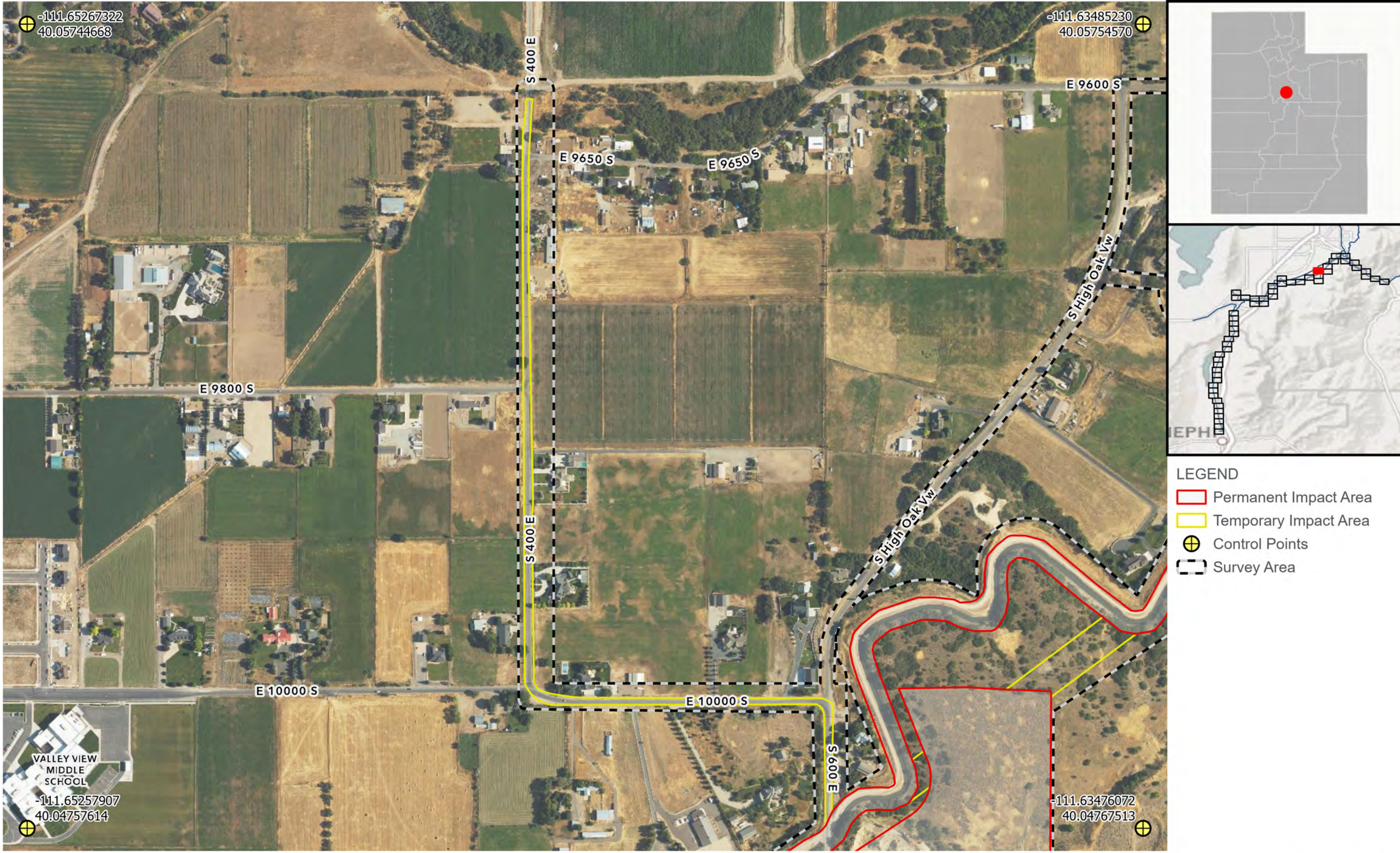

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PROPOSED ACTION

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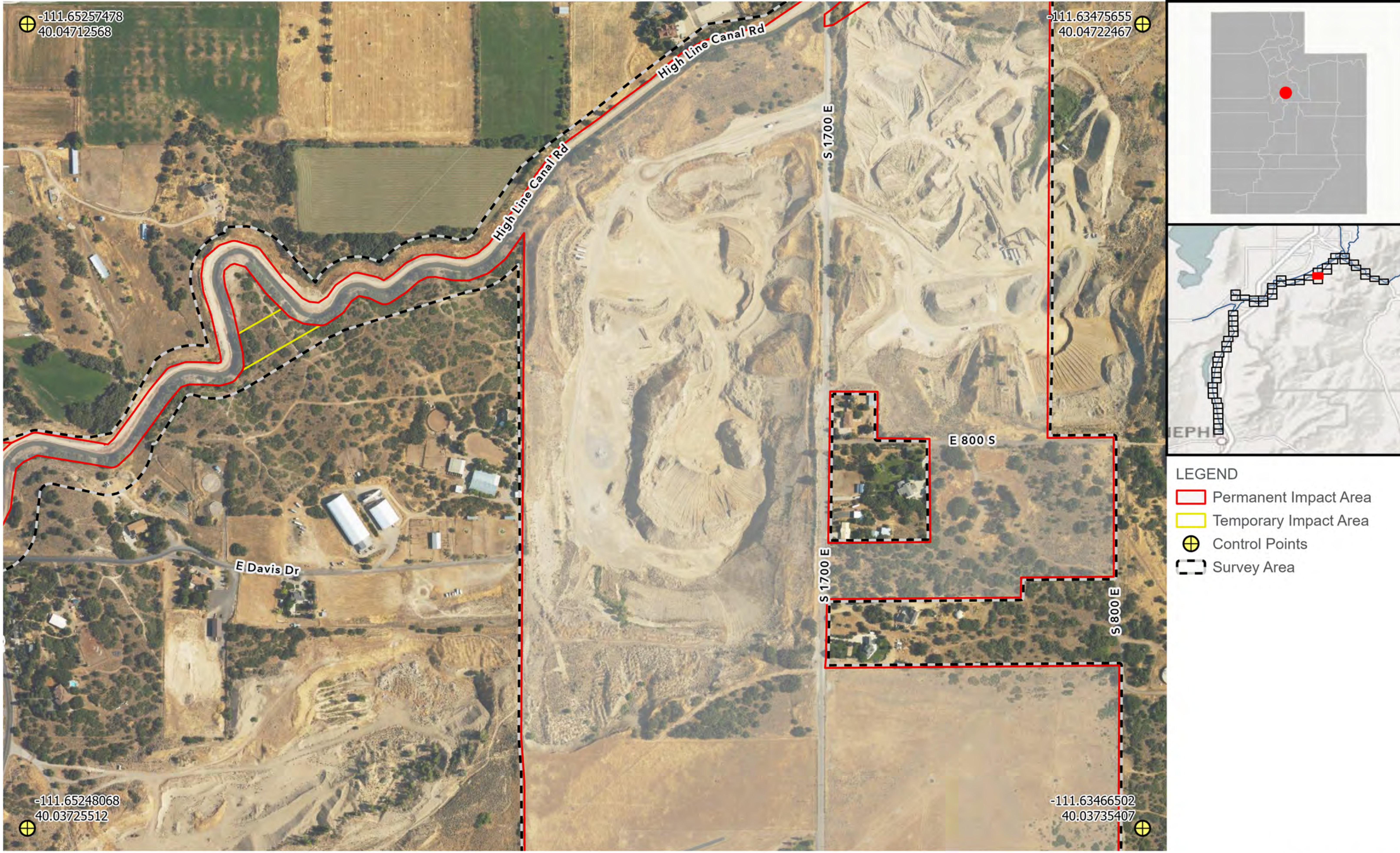

PROPOSED ACTION

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LEGEND

- Permanent Impact Area
- Control Points
- Survey Area

0 0.1 mi

PROPOSED ACTION

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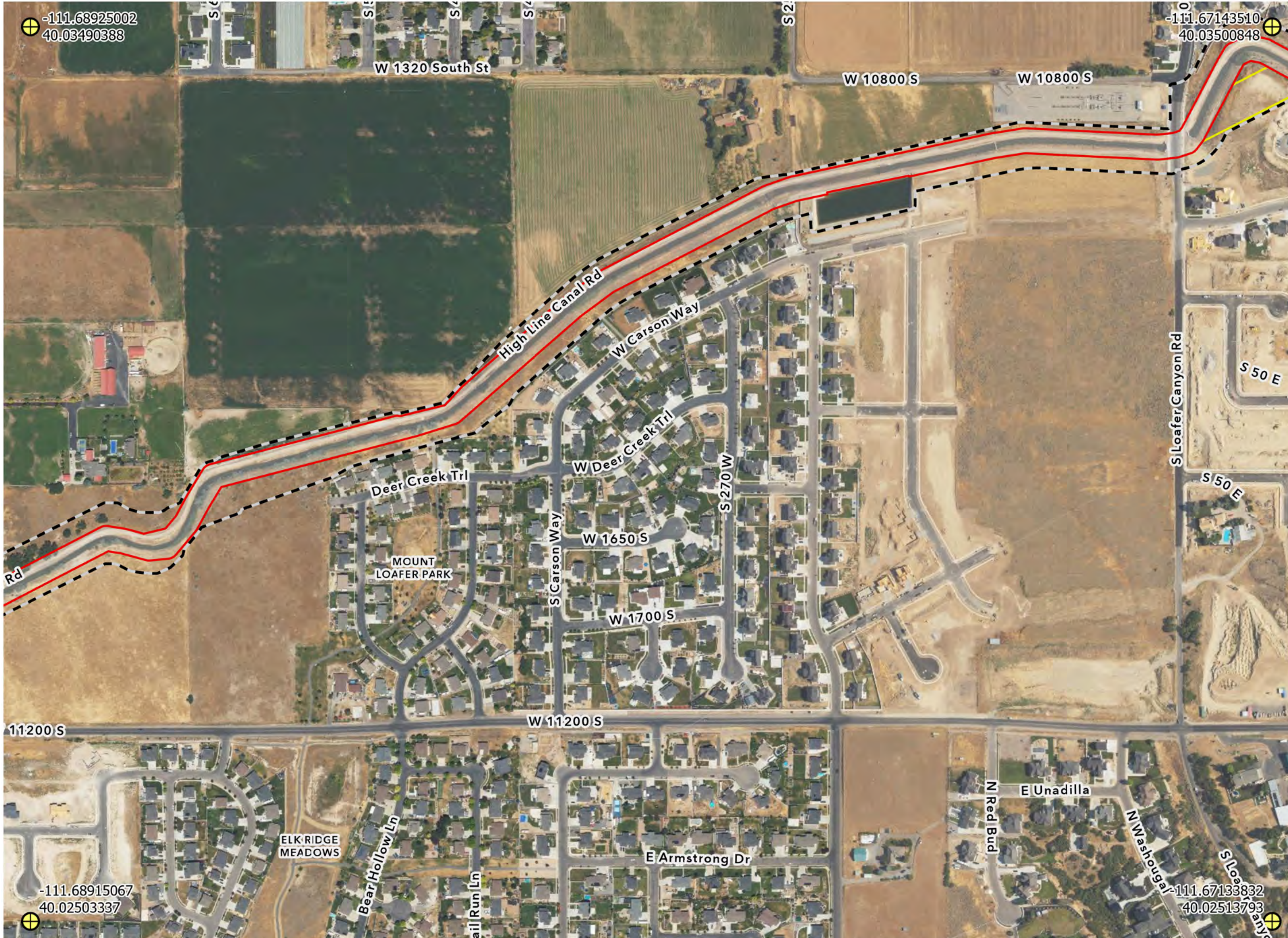

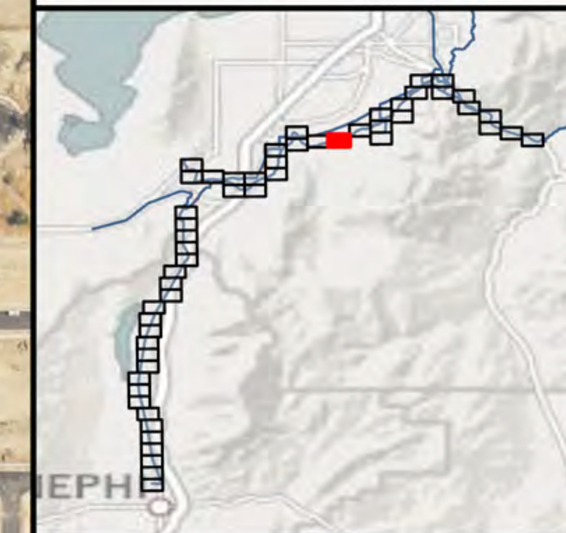

LEGEND

- Permanent Impact Area
- Temporary Impact Area
- Control Points
- Survey Area

0 0.1 mi

PROPOSED ACTION

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PROPOSED ACTION

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HDR

NEBO WATER PROJECT

PROPOSED ACTION

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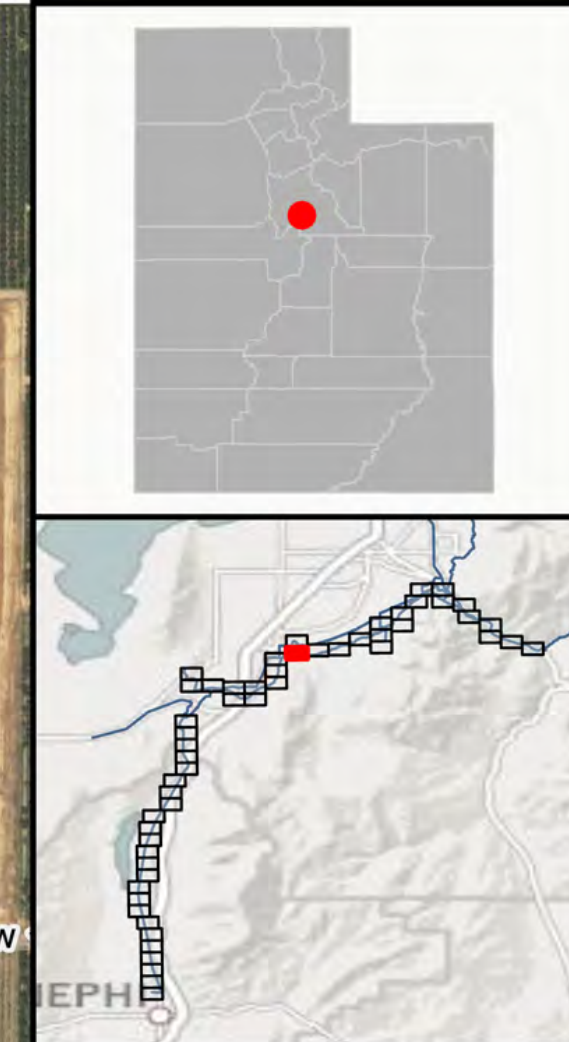

LEGEND

Permanent Impact Area

Control Points

Survey Area

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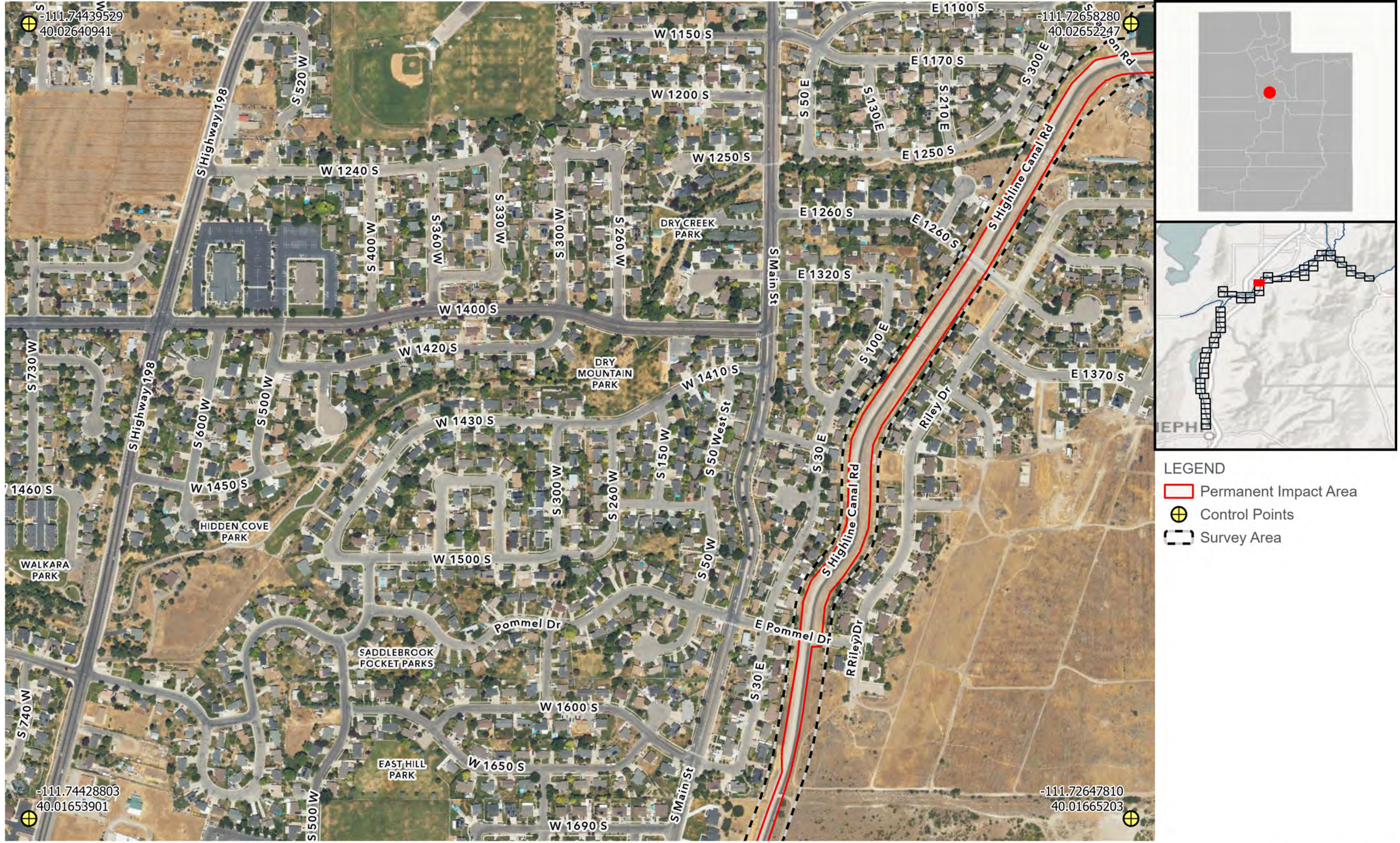

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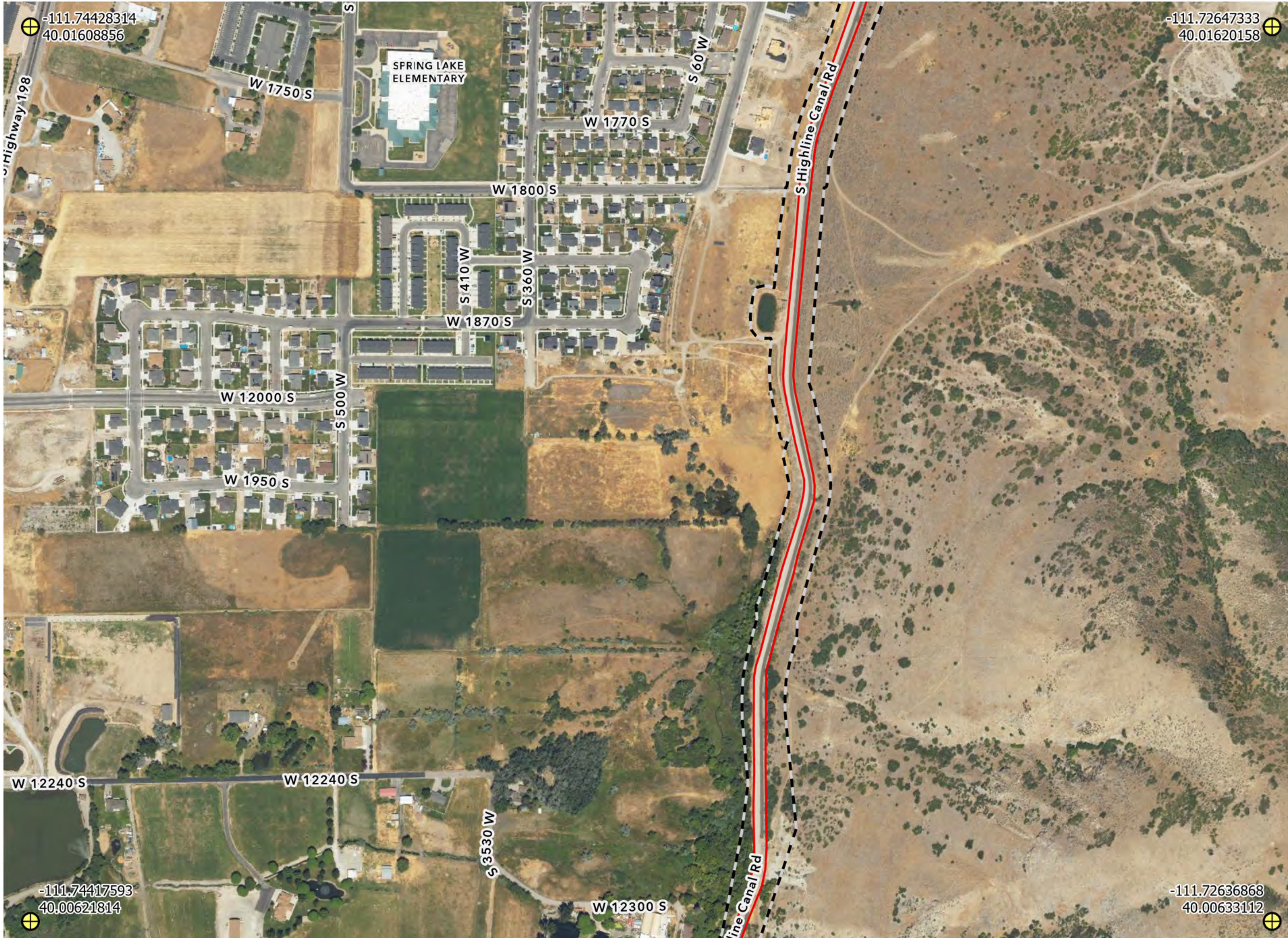

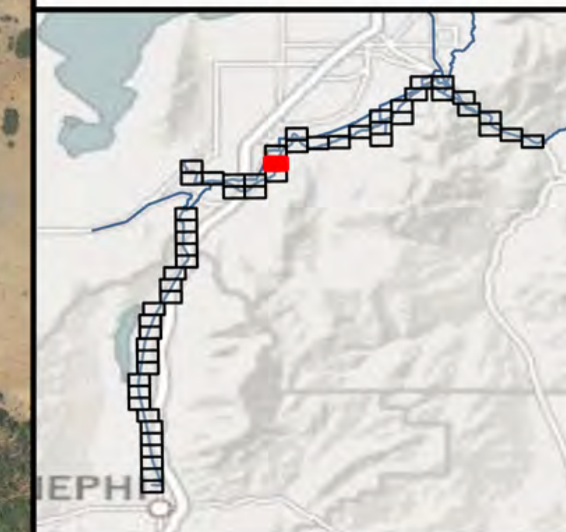

LEGEND

- Permanent Impact Area
- Control Points
- Survey Area

0 0.1 mi

PROPOSED ACTION

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PROPOSED ACTION

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PROPOSED ACTION

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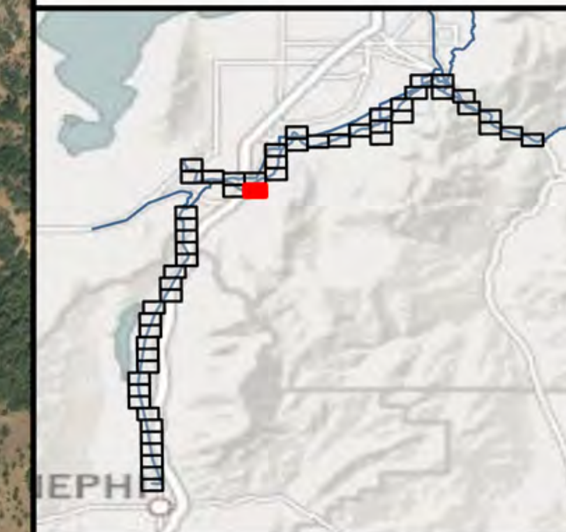

LEGEND

Permanent Impact Area

Control Points

Survey Area

HDR NEBO WATER PROJECT 0 0.1 mi

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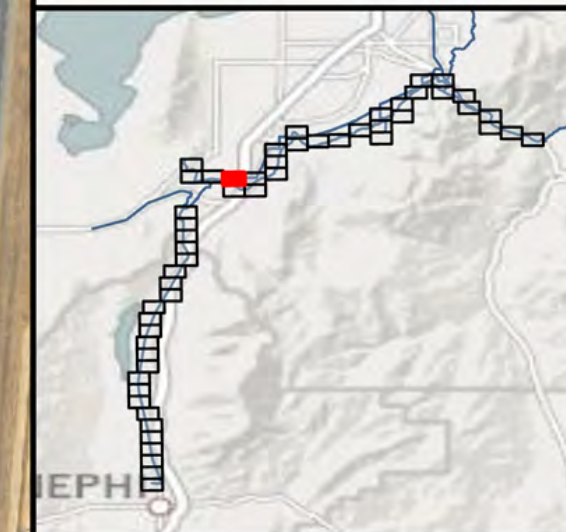

LEGEND

Permanent Impact Area

Control Points

Survey Area

0 0.1 mi

PROPOSED ACTION

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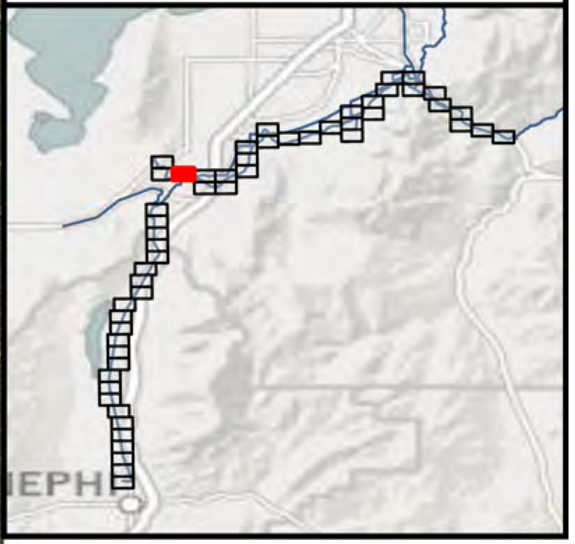

LEGEND

Permanent Impact Area

Control Points

Survey Area

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PROPOSED ACTION

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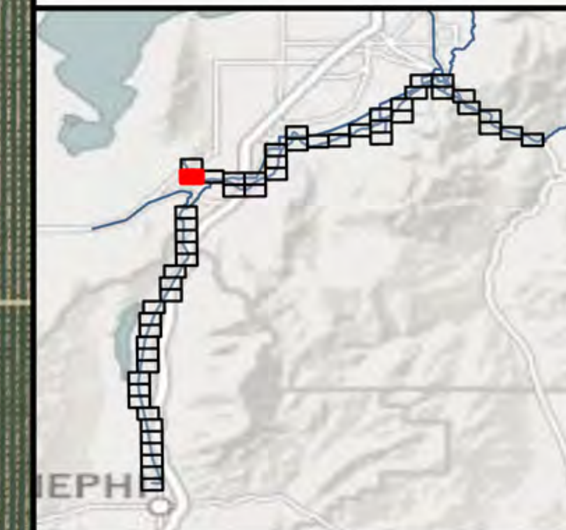

LEGEND

Permanent Impact Area

Control Points

Survey Area

HDR NEBO WATER PROJECT

0 0.1 mi

PROPOSED ACTION

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PROPOSED ACTION

PROPERTY IMPACTS | PAGE 30 OF 54

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PROPOSED ACTION

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PROPOSED ACTION

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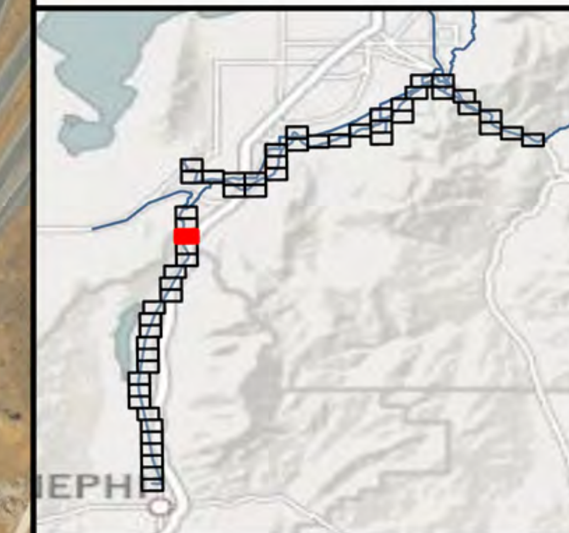

LEGEND

Temporary Impact Area

Control Points

Survey Area

0 0.1 mi

PROPOSED ACTION

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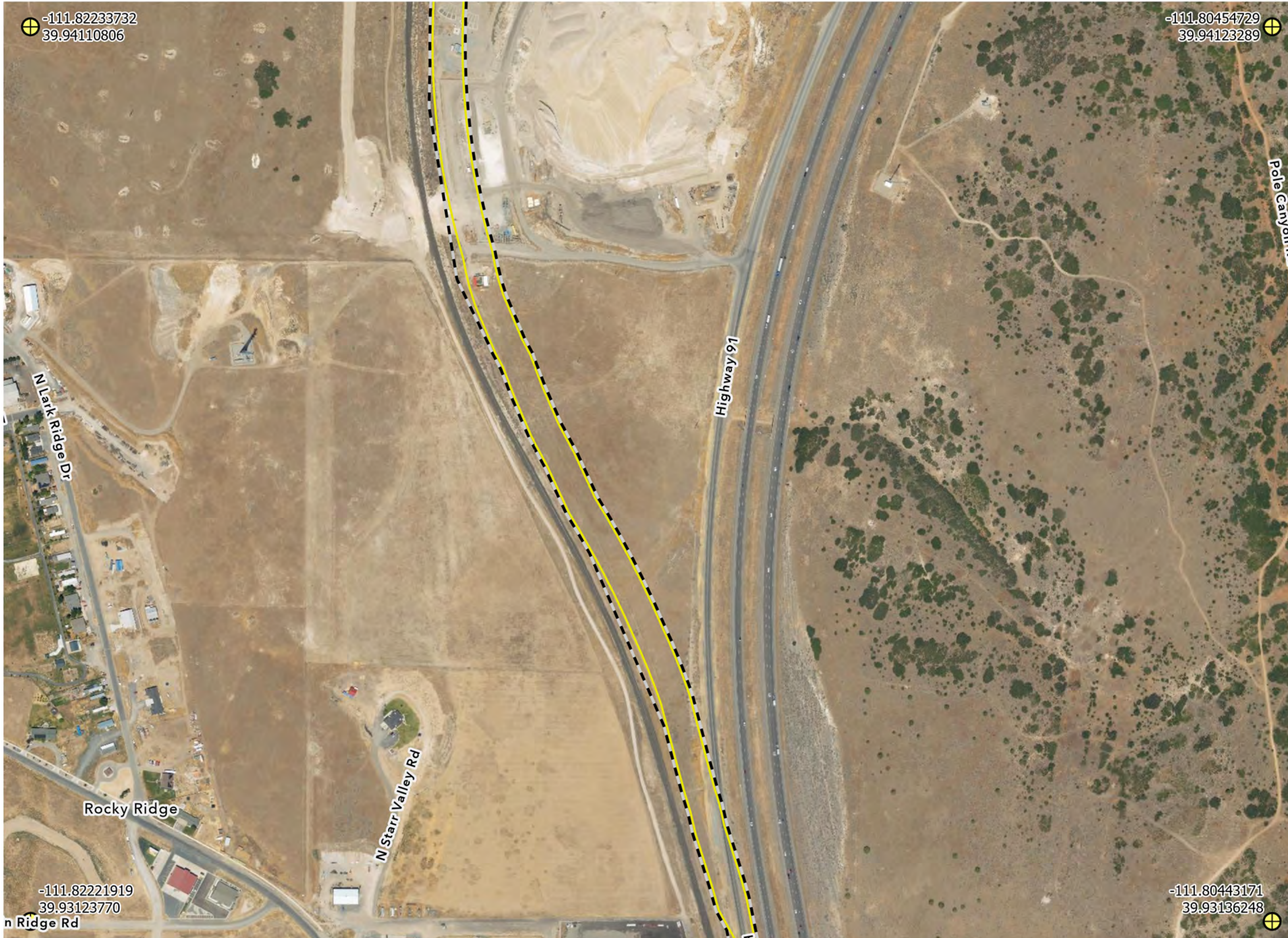

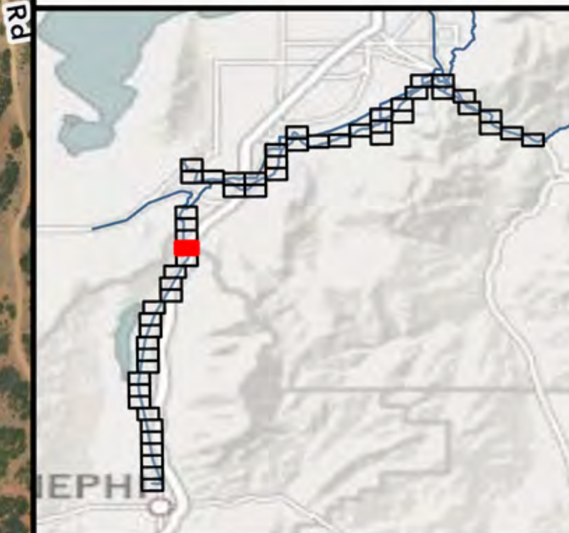

LEGEND

- Temporary Impact Area
- Control Points
- Survey Area

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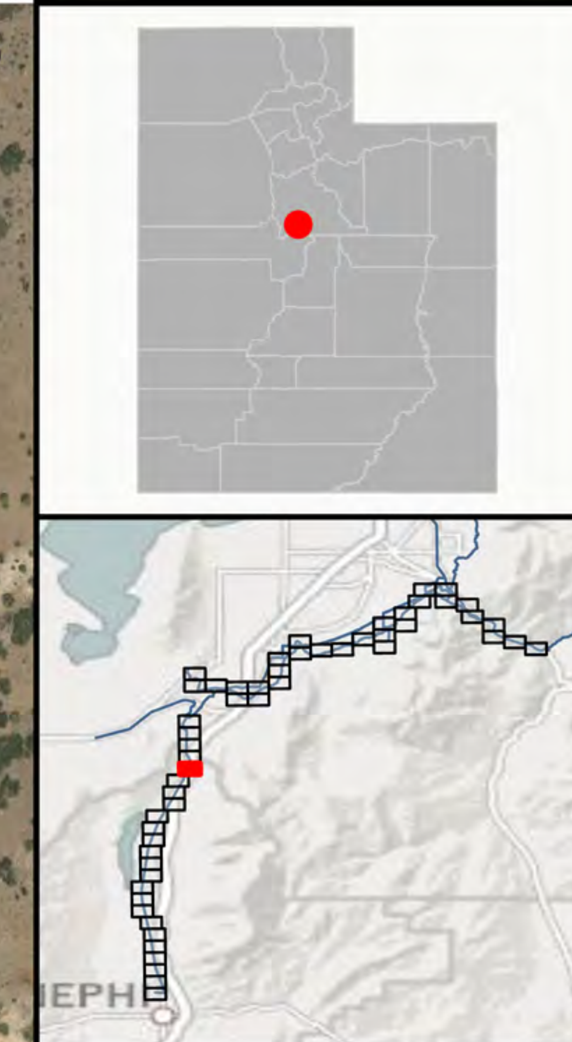
PROPOSED ACTION



LEGEND

- Temporary Impact Area
- Control Points
- Survey Area

PROPOSED ACTION

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PROPOSED ACTION

PROPERTY IMPACTS | PAGE 36 OF 54

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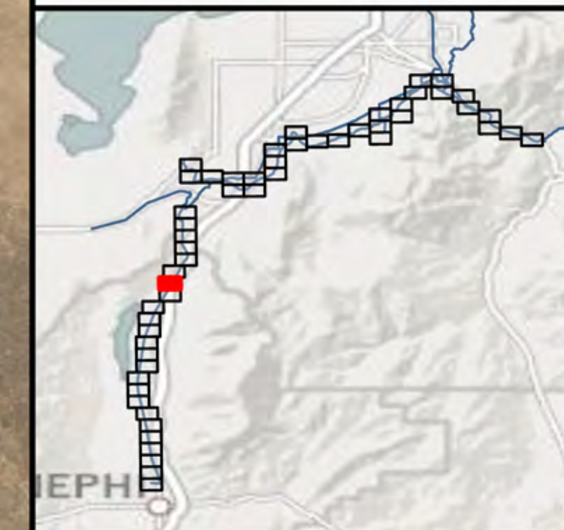


LEGEND

- Temporary Impact Area
- Control Points
- Survey Area

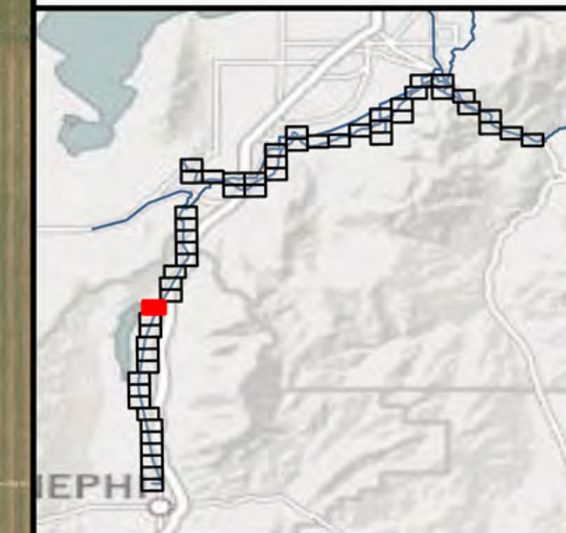
0 0.1 mi

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 37 OF 54

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 38 OF 54



LEGEND

Temporary Impact Area

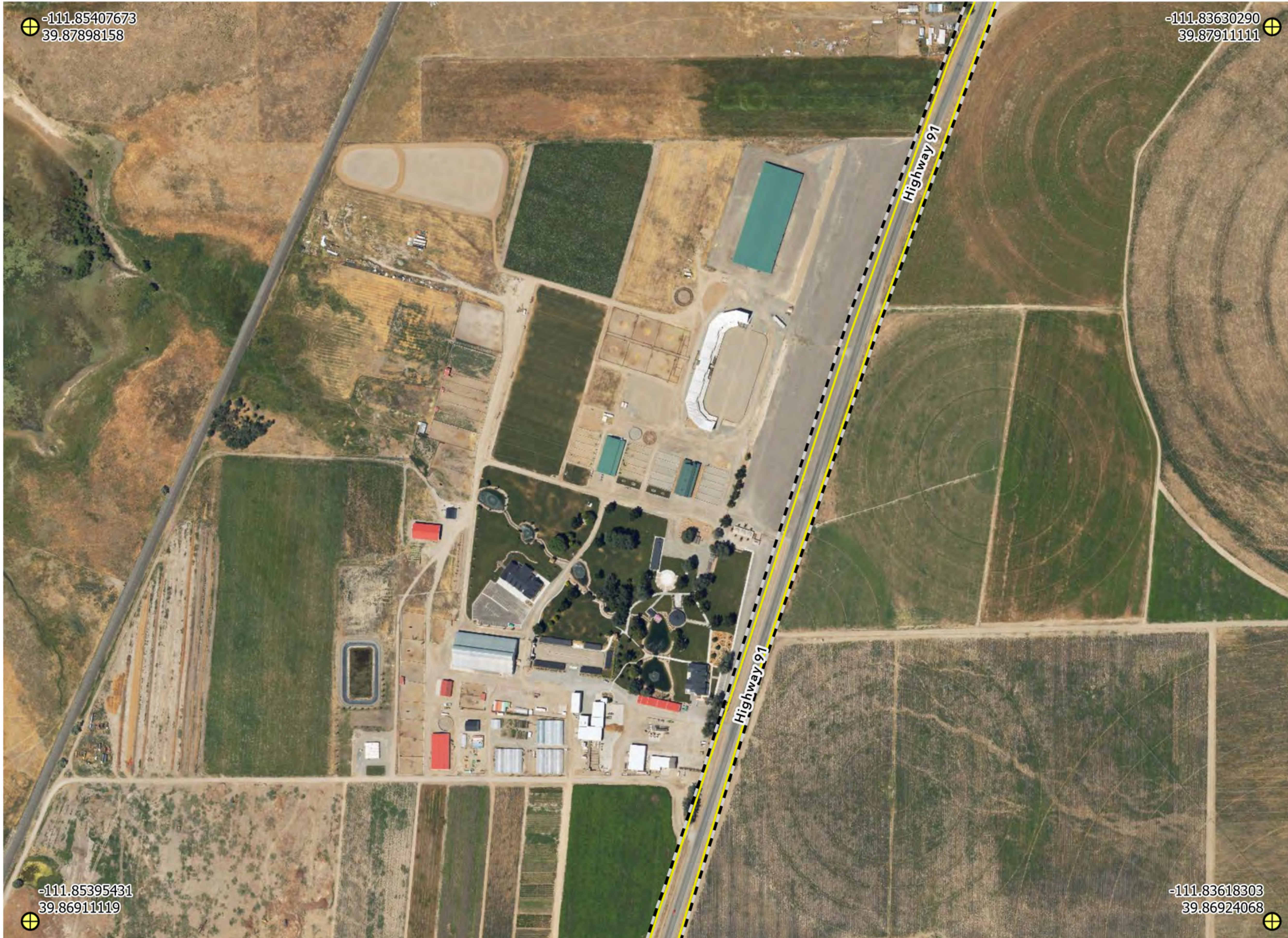
Control Points

Survey Area

0 0.1 mi

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 39 OF 54



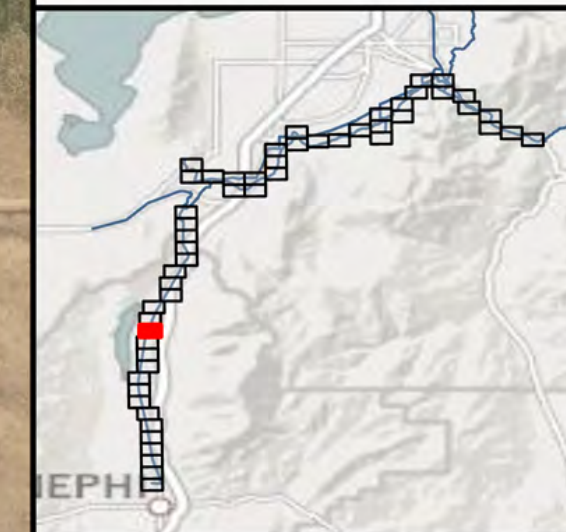
LEGEND

- Temporary Impact Area
- Control Points
- Survey Area

0 0.1 mi

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 40 OF 54



LEGEND

- Temporary Impact Area
- Control Points
- Survey Area

HDR NEBO WATER PROJECT

0 0.1 mi

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 41 OF 54


-111.85632003
39.85832146
-111.83855155
39.85845128
Highway 91
E 2300 N
E 2300 N
N Canyon Ln
-111.85619738
39.84845104
-111.83843144
39.84858081
NEPHI
LEGEND
Temporary Impact Area
Control Points
Survey Area
0
0.1 mi

LEGEND

- Temporary Impact Area
- Control Points
- Survey Area

0 0.1 mi

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 43 OF 54

O:\PROJECTS\CUWCD\10418956_NEBOREGIONALWATER_EIS\7.2_WIP\APRX\NEBO_FIGURES_LINEWORKTEST.APRX DATE: 4/16/2026

LEGEND

Temporary Impact Area

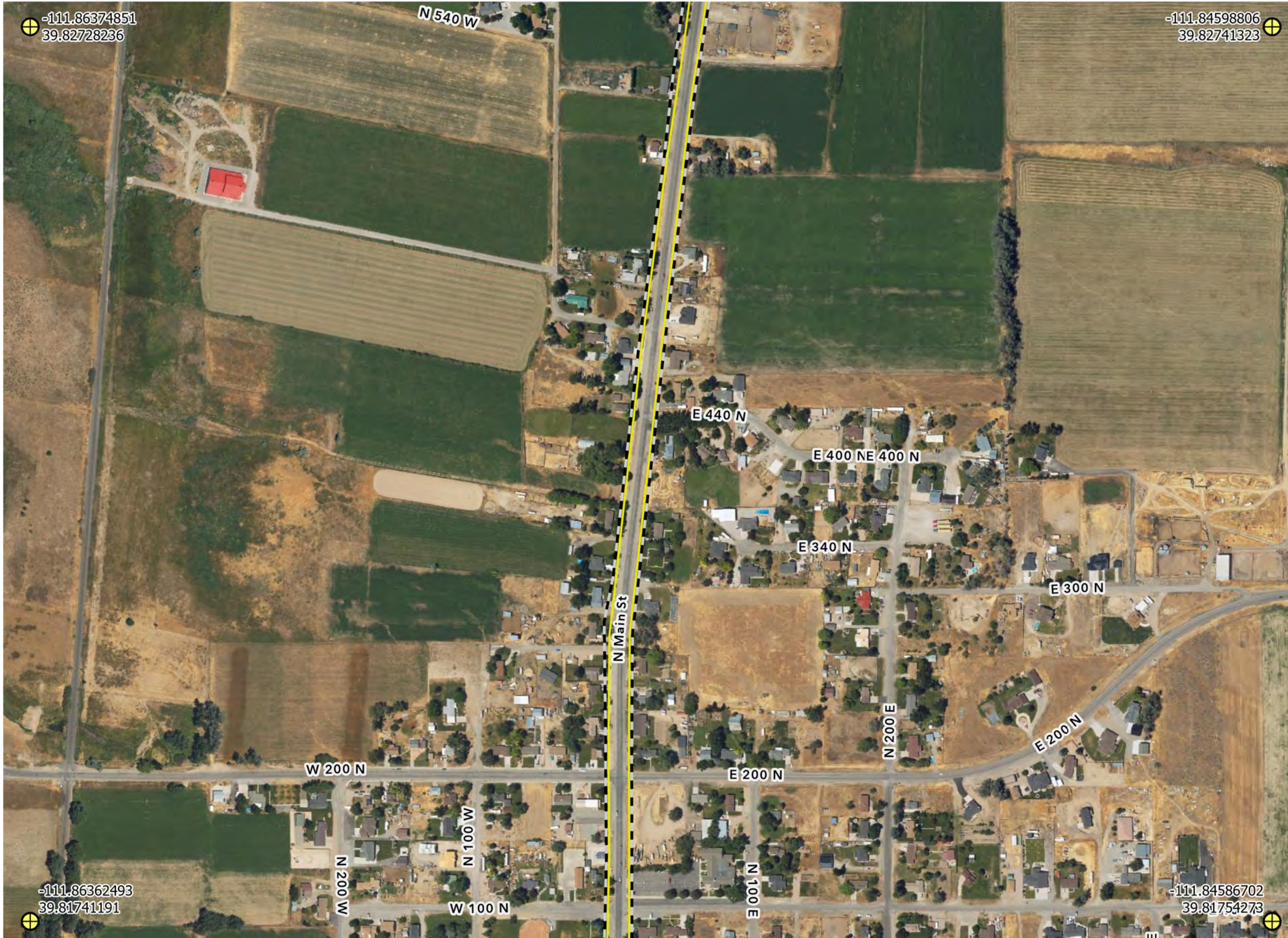
Control Points

Survey Area

0 0.1 mi

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 44 OF 54



LEGEND

Temporary Impact Area

Control Points

Survey Area

0 0.1 mi

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 45 OF 54

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LEGEND

Temporary Impact Area

Control Points

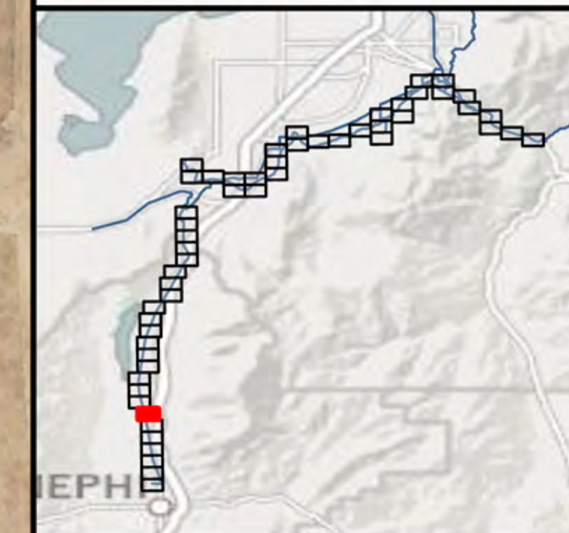
Survey Area

0 0.1 mi

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 46 OF 54

-111.86349014
39.80664053
-111.84573500
39.80677130
W 700 S
E Cemetery Ln
S 100 W
W 800 S
S 200 W
S 50 W
W 900 S
The Mona Rd
S 200 West St
W 980 S
S Highway 91
S 200 W
The Mona Rd
-111.86336668
39.79677004
-111.84561408
39.79690077
W 1370 S
S 50 E
LEGEND
Temporary Impact Area
Control Points
Survey Area



LEGEND

- Temporary Impact Area
- Control Points
- Survey Area

0 0.1 mi

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 48 OF 54

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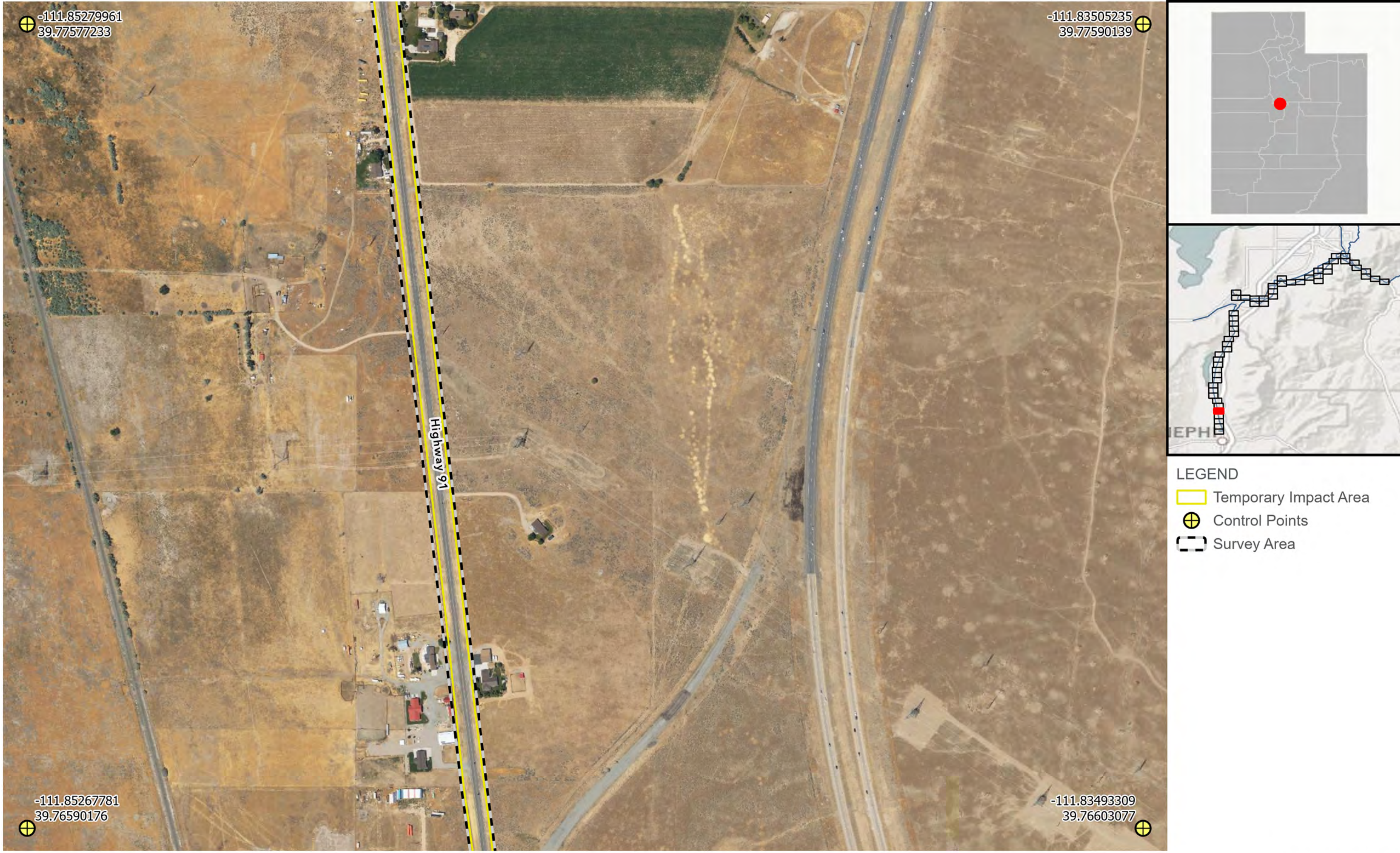
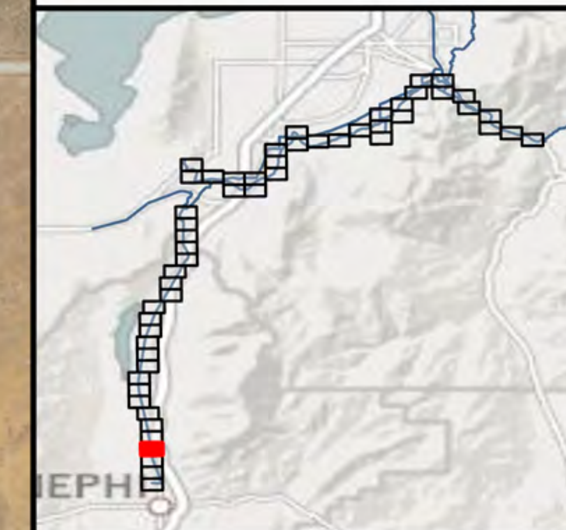
-111.85292702
39.78609334
-111.83517712
39.78622244
Ostler Ln
Ostler Ln
Highway 91
Highway 91
-111.85280517
39.77622279
-111.83505779
39.77635185
LEGEND
Temporary Impact Area
Control Points
Survey Area
0
0.1 mi



0 0.1 mi

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 50 OF 54



LEGEND

- Temporary Impact Area
- Control Points
- Survey Area

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 51 OF 54

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 52 OF 54

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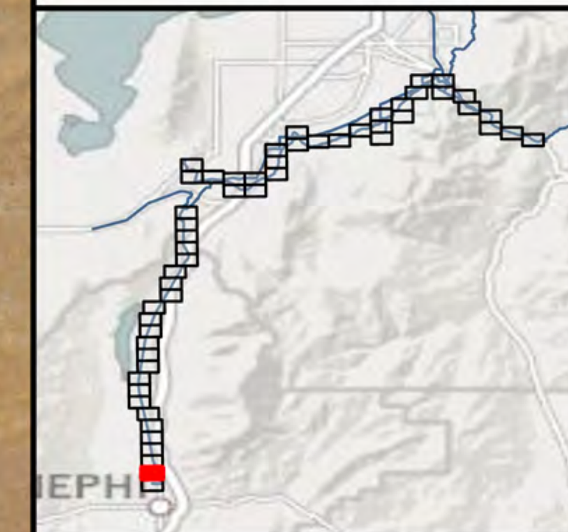

LEGEND

- Temporary Impact Area
- Control Points
- Survey Area

0 0.1 mi

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 53 OF 54

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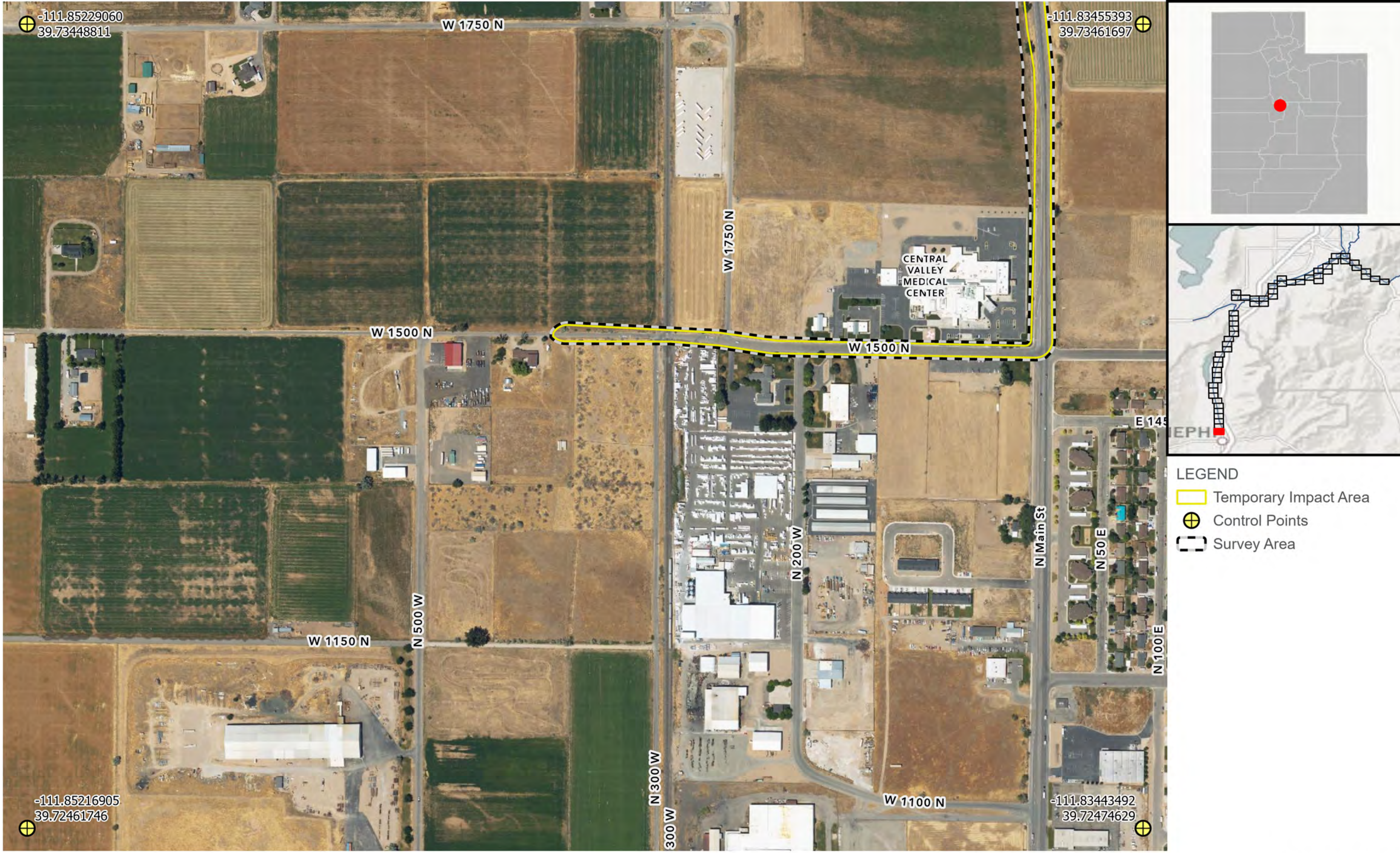

HDR NEBO WATER PROJECT

0 0.1 mi

PROPOSED ACTION

PROPERTY IMPACTS | PAGE 54 OF 54

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Appendix 3-D.2. Wetland Tables

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Appendix 3-D.2. Wetland Tables

Impacts to Aquatic Resources

Aquatic Resource	Preferred Alternative Components with Impacts to Aquatic Resources	Description of Effects[a]
Canal	Strawberry High Line Pipeline Power Canal	The Strawberry High Line Pipeline would permanently impact 38.76 acres of canal segment C-2 (a segment of the Strawberry High Line Canal) from Spanish Fork to east of Genola, where the canal exits the survey area. Enclosing two segments of the Power Canal would permanently impact 0.53 acre of canal C-1 (a segment of the Power Canal) between Fairway Drive and Spanish Oaks Drive in Spanish Fork. If any canal impacts are considered jurisdictional, impacts would be exempt from permitting (USACE and EPA 2020).
Ditch	Strawberry High Line Pipeline	The Strawberry High Line Pipeline would permanently impact 0.02 acre of likely not jurisdictional ditch segment D-1 north of Strawberry High Line Canal Road between 600 East and Peteetneet Creek in Payson.
Palustrine emergent wetland	Strawberry High Line Pipeline	The Strawberry High Line Pipeline would permanently impact about 0.04 acre of likely nonjurisdictional wetland PEM-3 located south of Mountain Road in Genola.
Intermittent streams	Strawberry High Line Pipeline Santaquin-Nephi Pipeline	The Strawberry High Line Pipeline would temporarily impact 0.02 acre of likely jurisdictional, intermittent stream segments I-1 (Peteetneet Creek) and I-2 (Dry Creek) located between 600 East and Canyon Road in Payson.

Aquatic Resource	Preferred Alternative Components with Impacts to Aquatic Resources	Description of Effects[a]
		The Santaquin-Nephi Pipeline would temporarily impact 0.03 acre of likely nonjurisdictional, unnamed, intermittent stream segment I-3 located northwest of Cedar Hollow Reservoir near Santaquin.
Perennial stream	Power Canal sediment screening improvements at the Spanish Fork River Diversion Loafer Pipeline Water diversion of the Spanish Fork River	Filtration improvements at the Spanish Fork River Diversion, located about 1 mile southeast of Spanish Fork Wind Park, would temporarily impact up to 0.52 acre of jurisdictional, perennial stream segment P-2 (Spanish Fork River). Construction of the Loafer Pipeline would temporarily impact about 0.08 acre of jurisdictional, perennial stream segment P-2 south of the Spanish Fork Wind Park where it would cross under the Spanish Fork River.

[a] Displayed values are rounded to two decimal places, so the totals might not match the sum of the reported values exactly.

Appendix 3-D.3. Riparian Impact Figures

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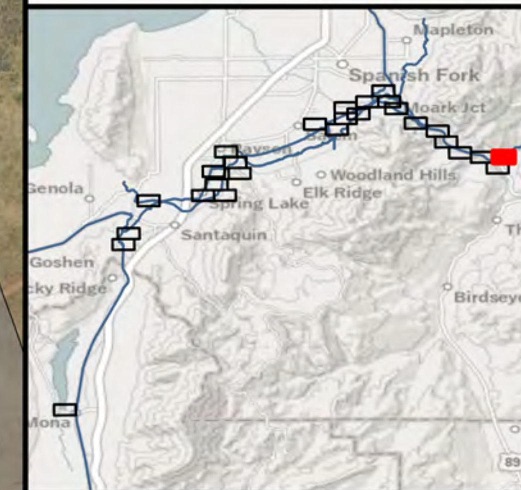

LEGEND

- Control Points
- Riparian Vegetation
- Survey Area Boundary
- Riparian Vegetation Survey Area

0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

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O:\PROJECTS\CUWCD\10418956_NEBOREGIONALWATER_EIS\7.2_WIP\APRX\NEBO_FIGURES_LINEWORKTEST.APRX DATE: 4/20/2026

LEGEND

- Control Points
- Riparian Vegetation
- Survey Area Boundary
- Riparian Vegetation Survey Area

HDR NEBO WATER PROJECT

0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

MAP SERIES | PAGE 2 OF 27

LEGEND

- Control Points
- Riparian Vegetation
- Survey Area Boundary
- Riparian Vegetation Survey Area

0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

RIPARIAN HABITAT CONSERVATION AREAS

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O:\PROJECTS\CUWCD\10418956_NEBOREGIONALWATER_EIS\7.2_WIP\APRX\NEBO_FIGURES_LINEWORKTEST.APRX DATE: 4/20/2026

LEGEND

- Control Points
- Riparian Vegetation
- Survey Area Boundary
- Riparian Vegetation Survey Area

0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

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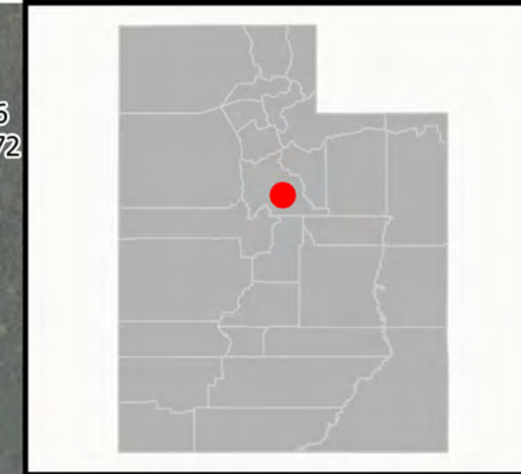

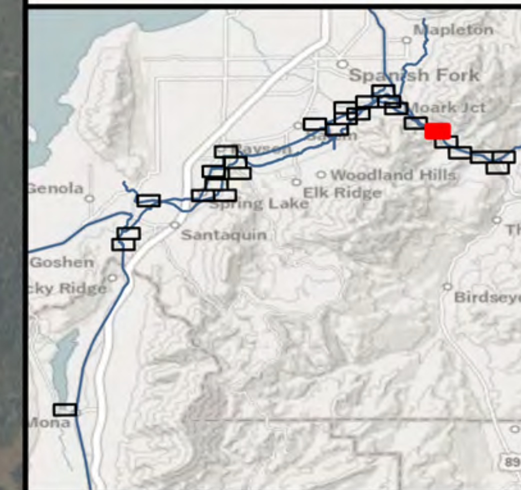

LEGEND

- Control Points
- Riparian Vegetation
- Survey Area Boundary
- Riparian Vegetation Survey Area

HDR NEBO WATER PROJECT

0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

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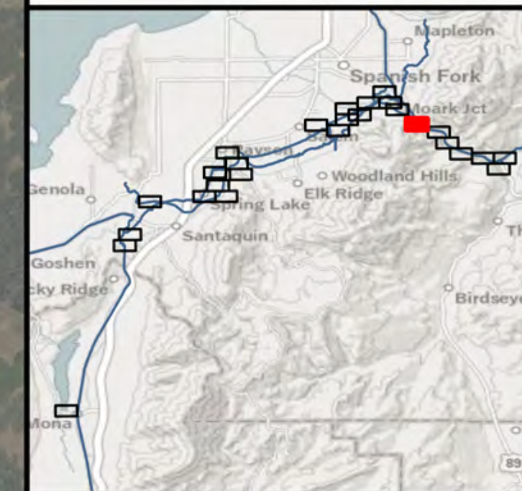

LEGEND
- Control Points
- Riparian Vegetation
- Survey Area Boundary
- Riparian Vegetation Survey Area

HDR NEBO WATER PROJECT

0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

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LEGEND

- Control Points
- Riparian Vegetation
- Survey Area Boundary
- Riparian Vegetation Survey Area

HDR NEBO WATER PROJECT

0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

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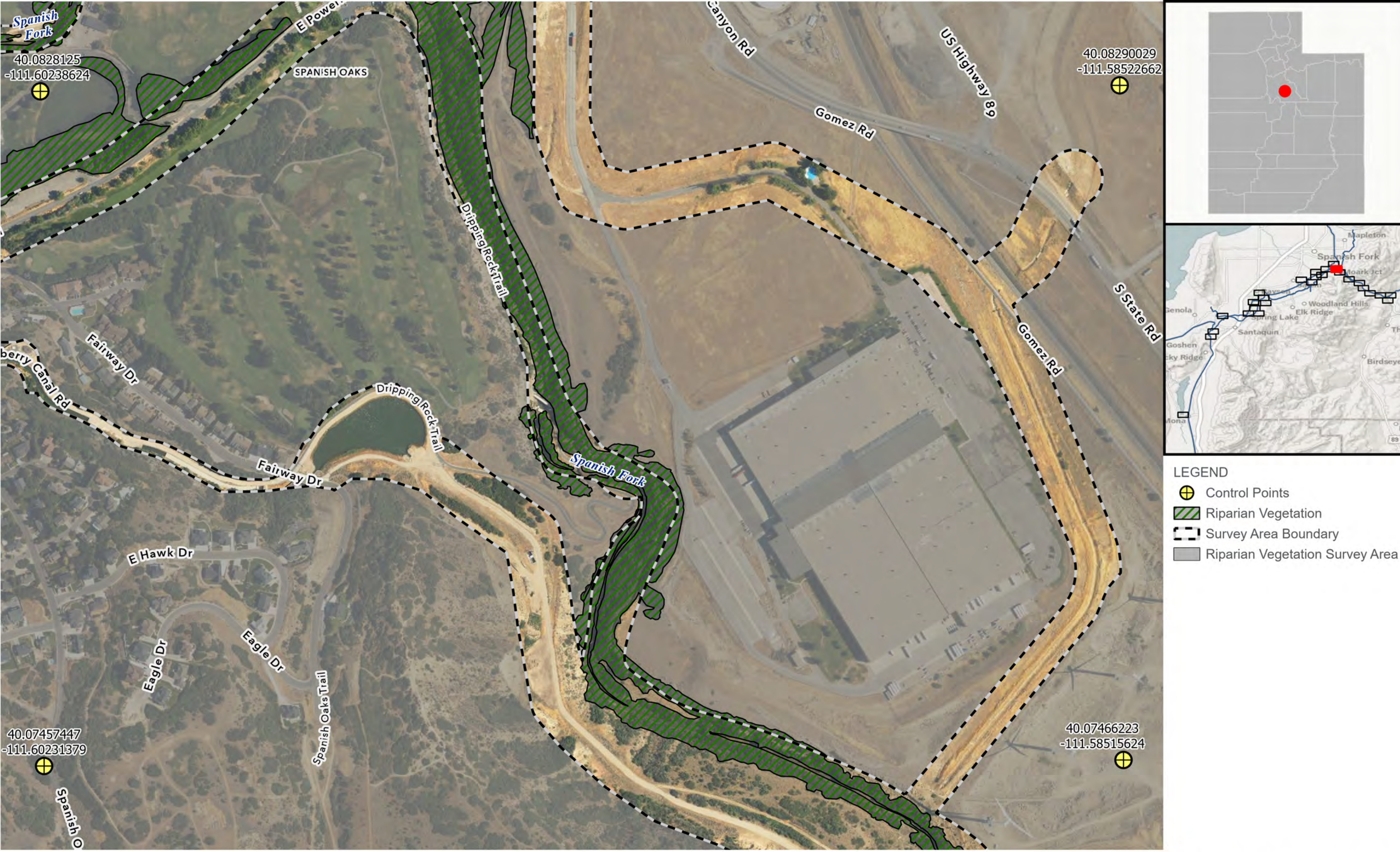

HDR NEBO WATER PROJECT

0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

MAP SERIES | PAGE 9 OF 27

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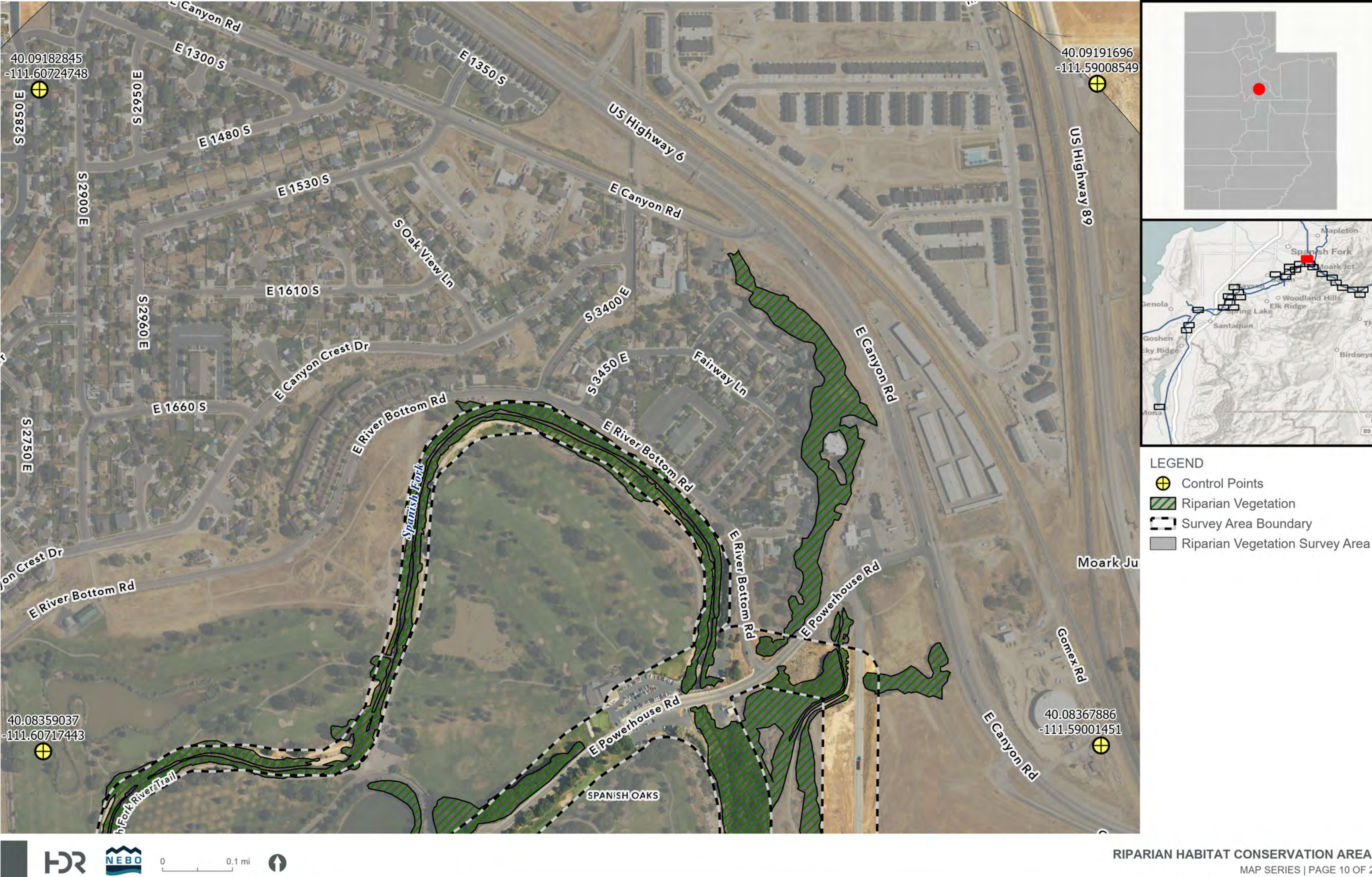

RIPARIAN HABITAT CONSERVATION AREAS

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RIPARIAN HABITAT CONSERVATION AREAS

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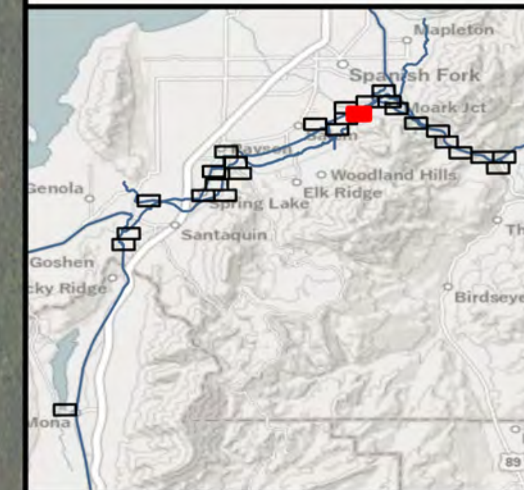
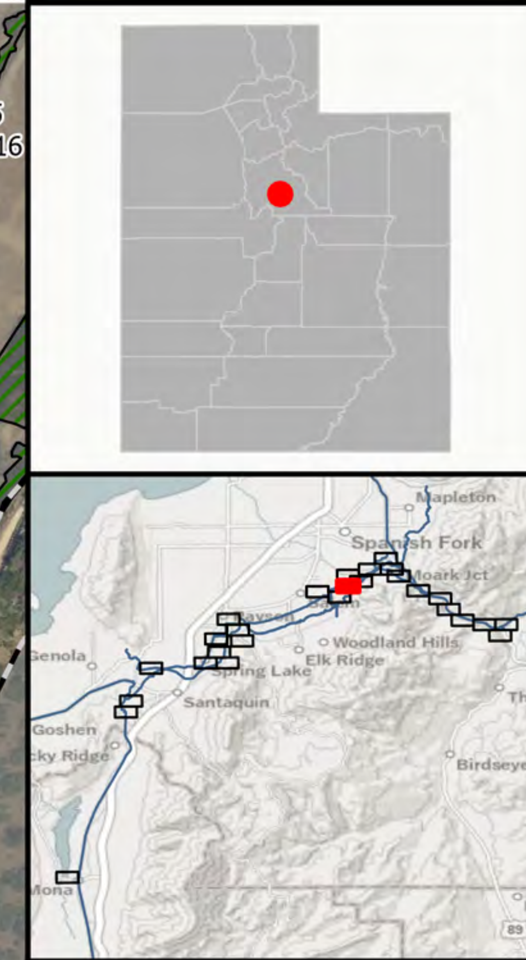


LEGEND
- Control Points
- Riparian Vegetation
- Survey Area Boundary
- Riparian Vegetation Survey Area

0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

MAP SERIES | PAGE 13 OF 27



LEGEND
- Control Points
- Riparian Vegetation
- Survey Area Boundary
- Riparian Vegetation Survey Area

HDR NEBO WATER PROJECT

0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

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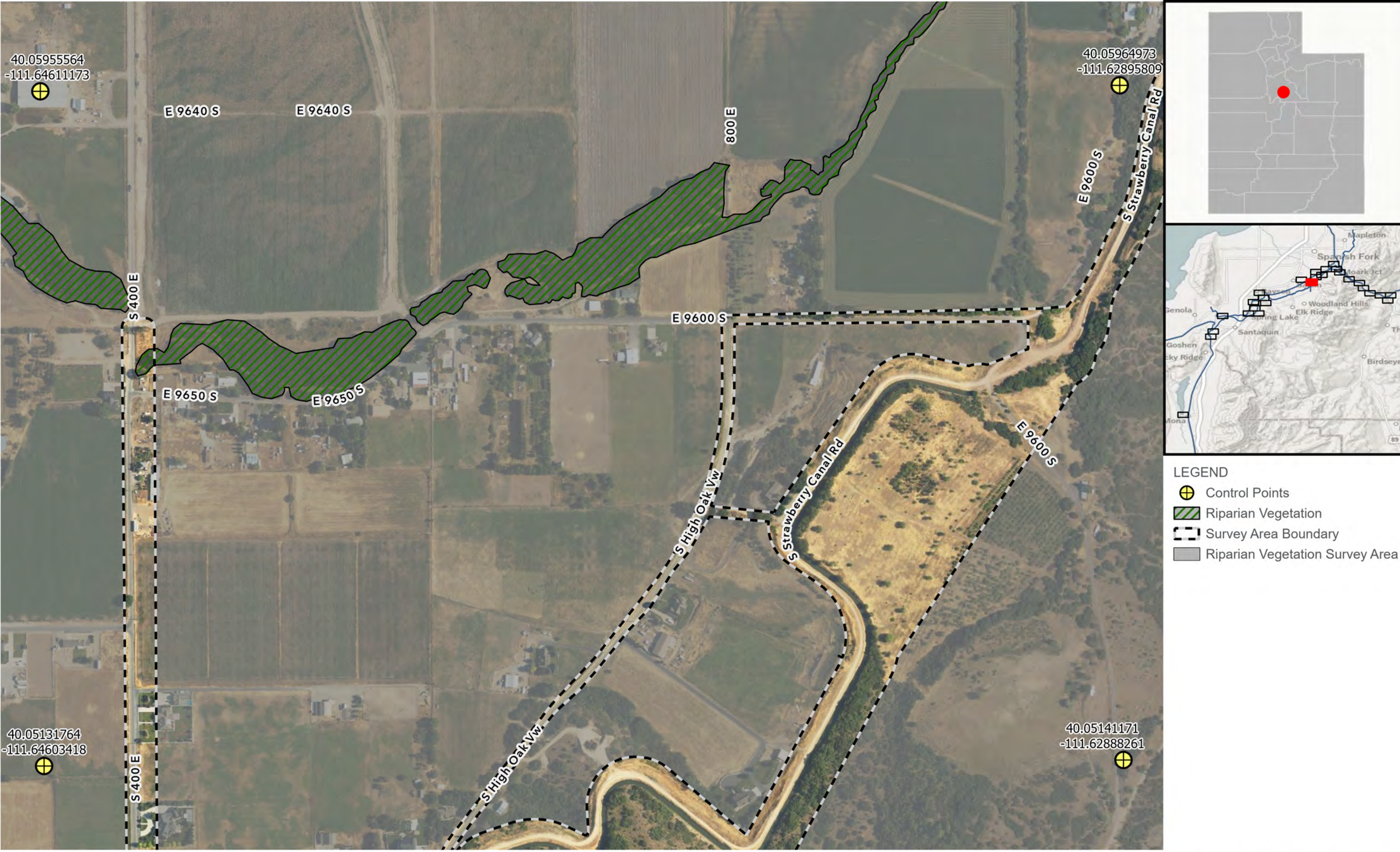

0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

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LEGEND

- Control Points
- Riparian Vegetation
- Survey Area Boundary
- Riparian Vegetation Survey Area

HDR NEBO WATER PROJECT 0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

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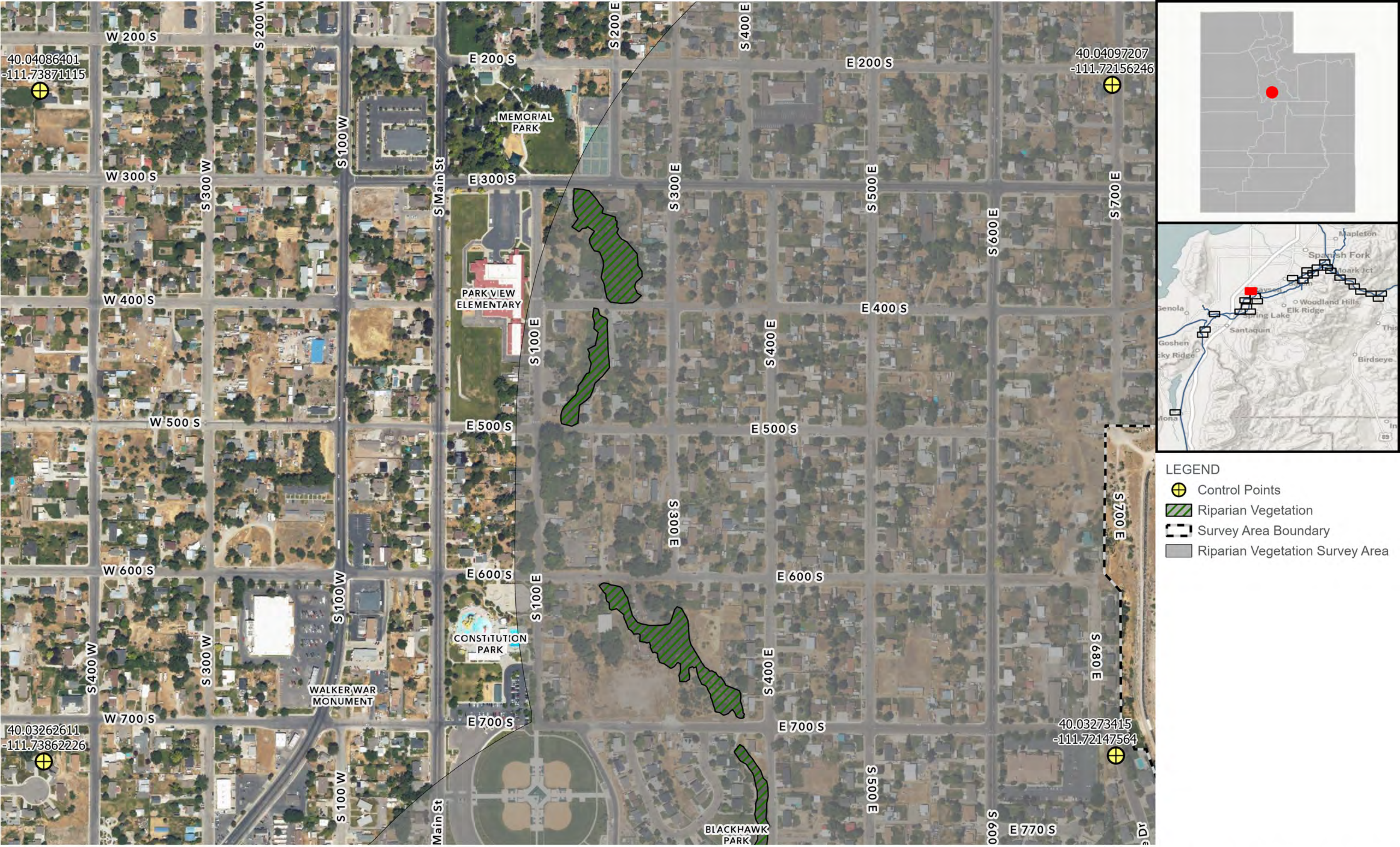

LEGEND
- Control Points
- Riparian Vegetation
- Survey Area Boundary
- Riparian Vegetation Survey Area

0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

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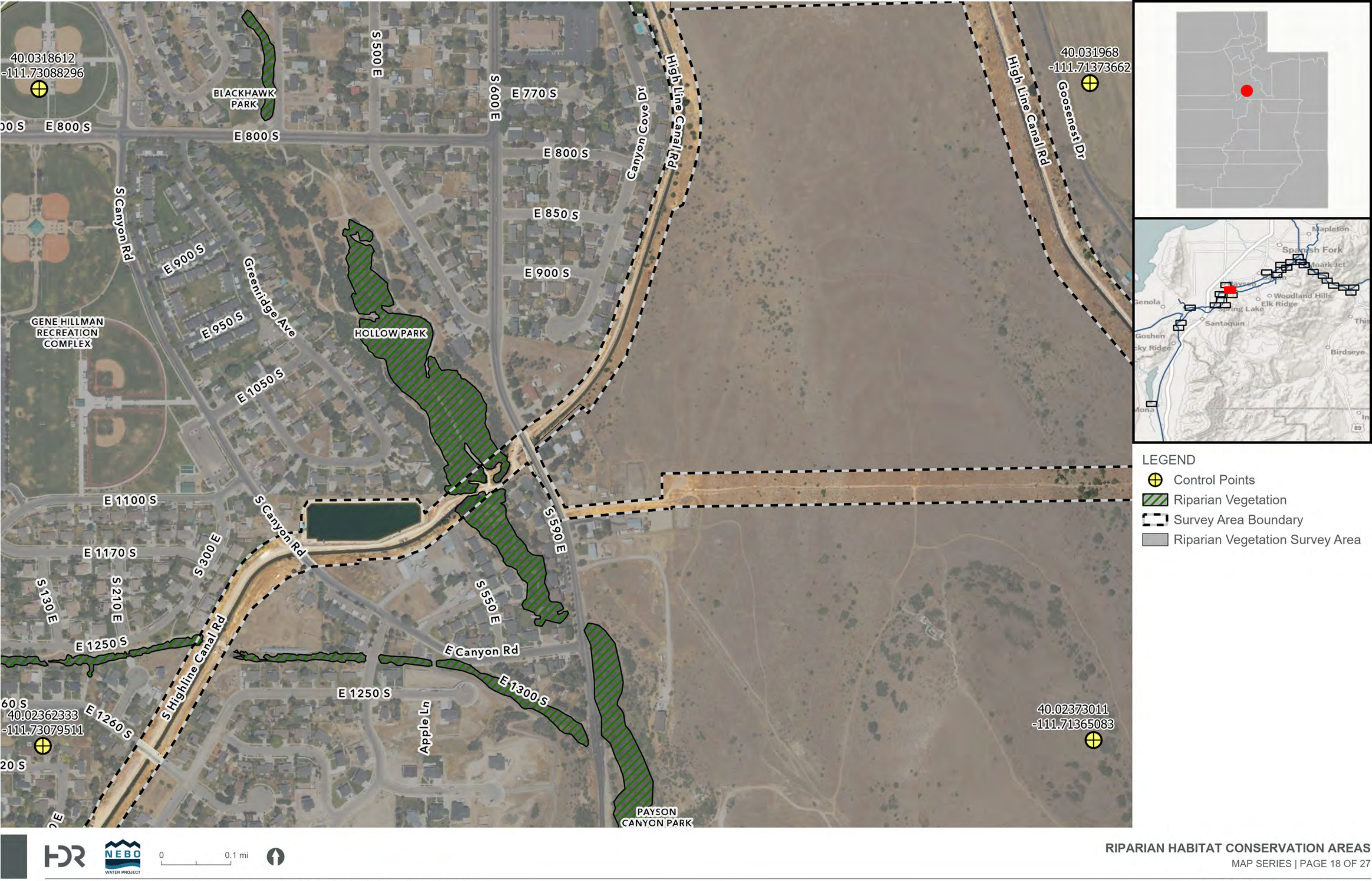

RIPARIAN HABITAT CONSERVATION AREAS

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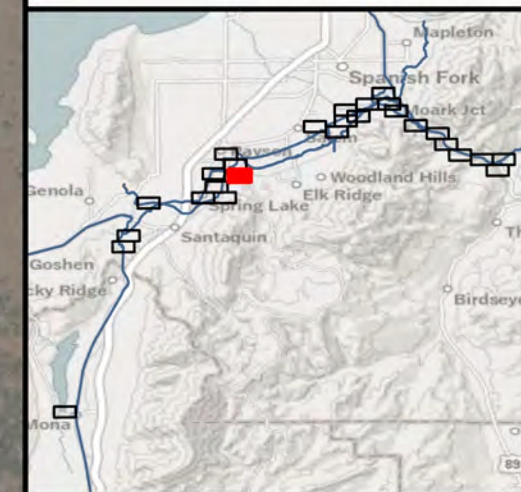
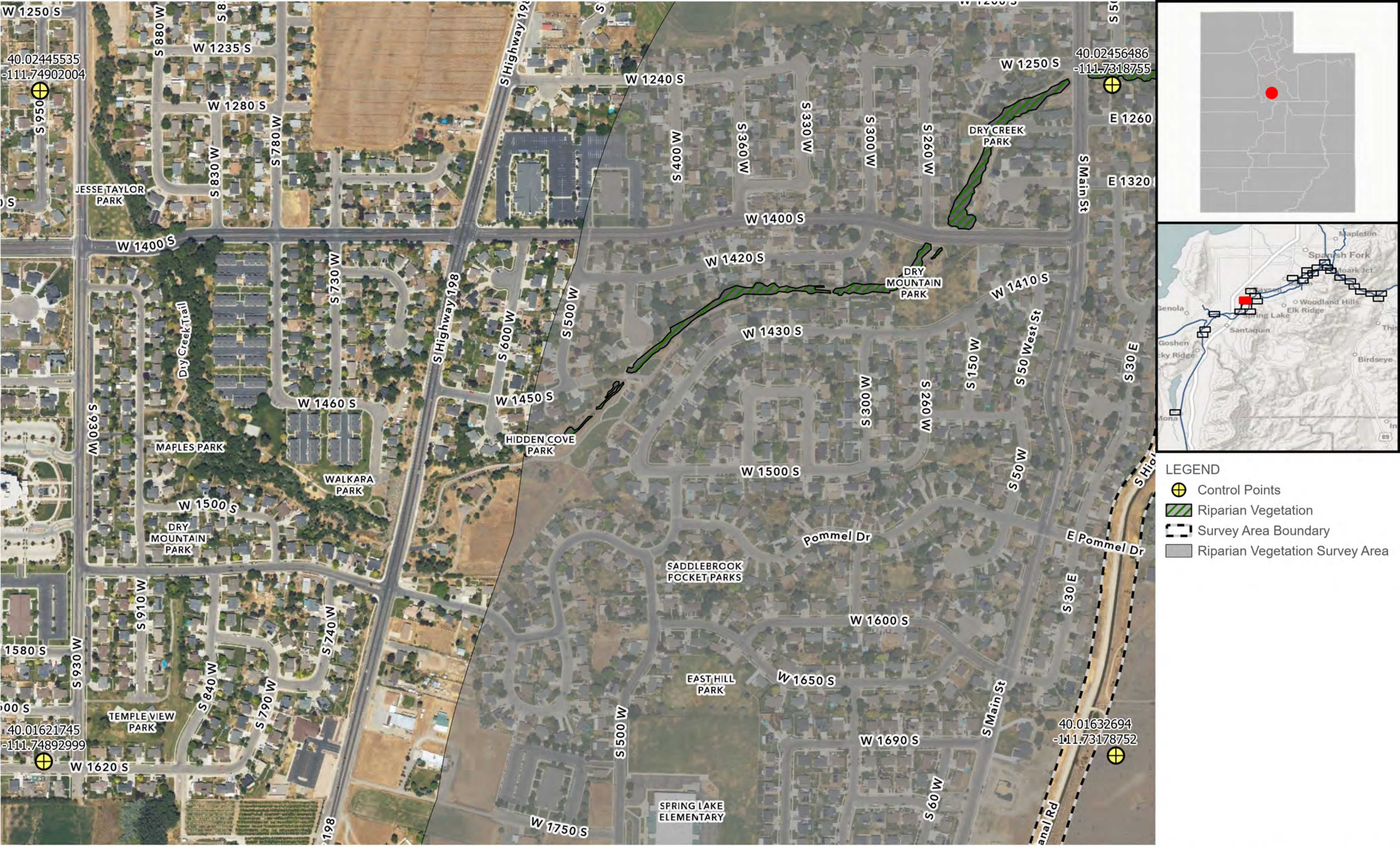


LEGEND

- Control Points
- Riparian Vegetation
- Survey Area Boundary
- Riparian Vegetation Survey Area

0 0.1 mi



HDR NEBO WATER PROJECT

RIPARIAN HABITAT CONSERVATION AREAS

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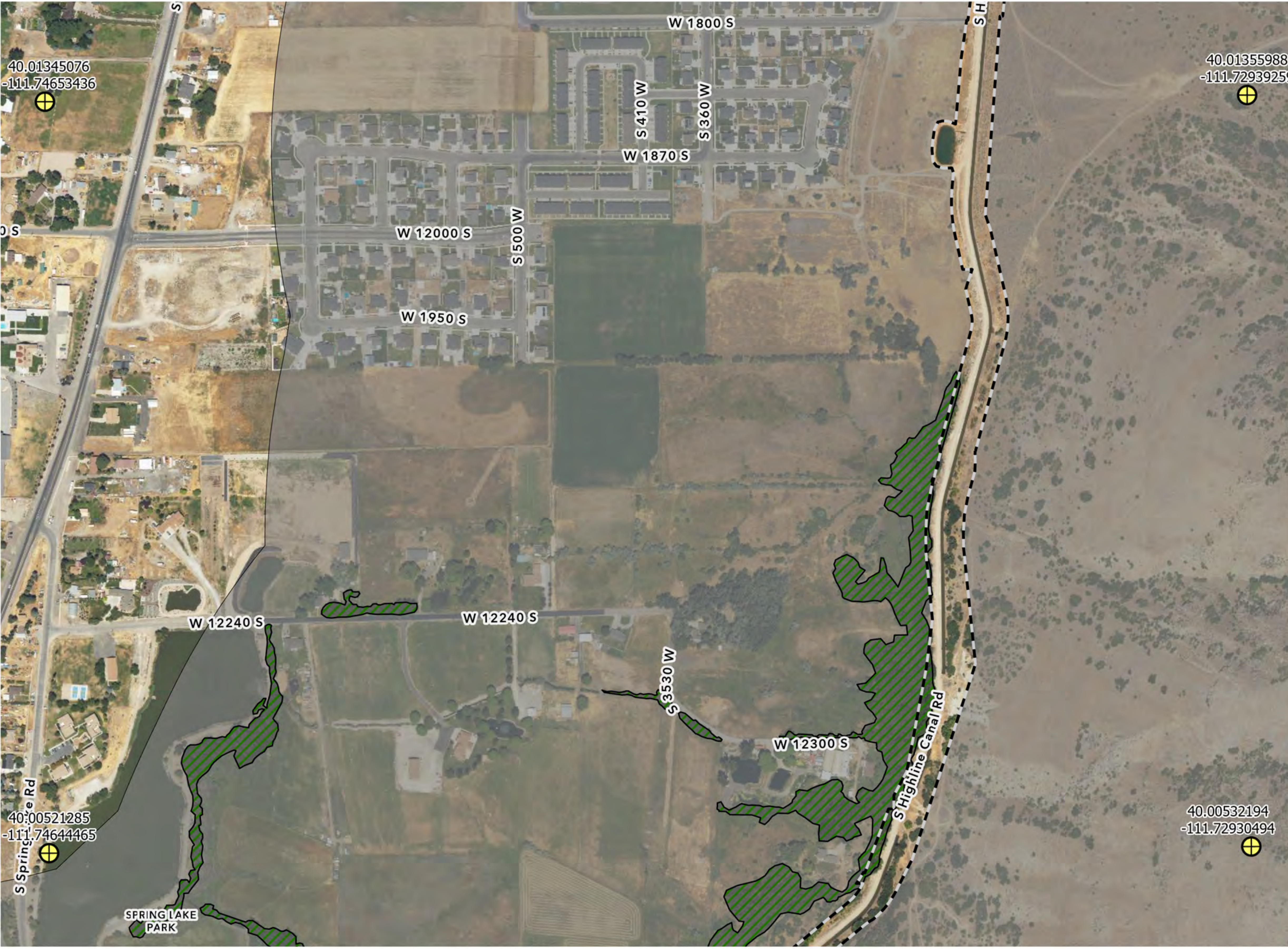

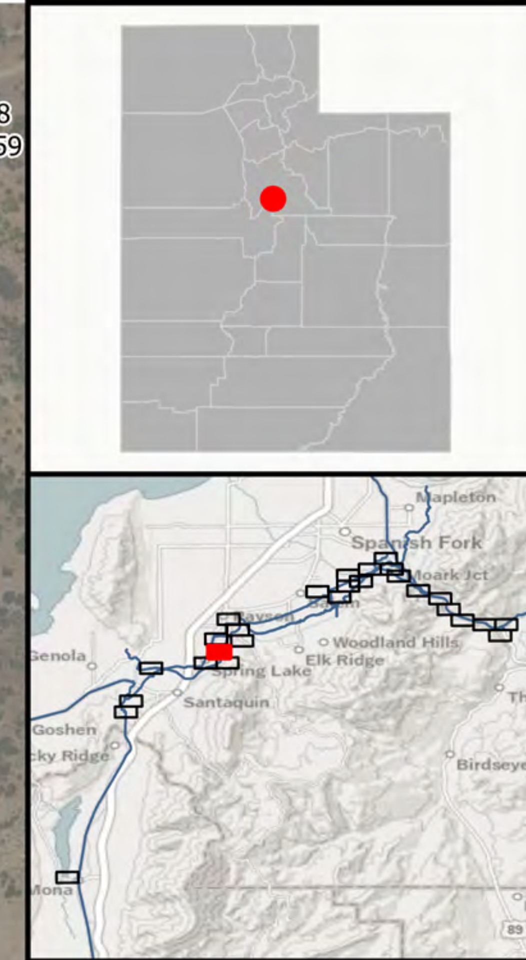

LEGEND

- Control Points
- Riparian Vegetation
- Survey Area Boundary
- Riparian Vegetation Survey Area

0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

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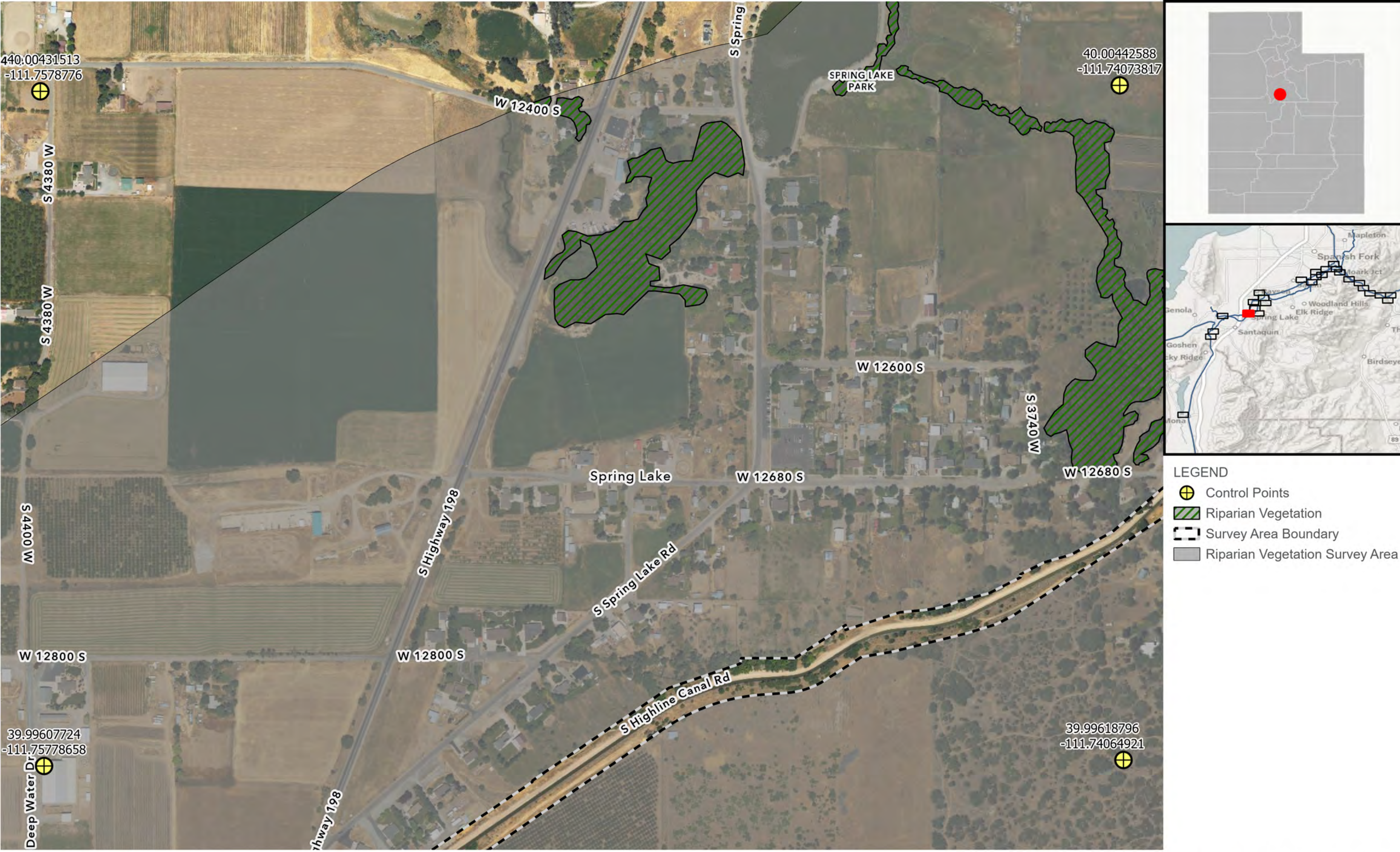
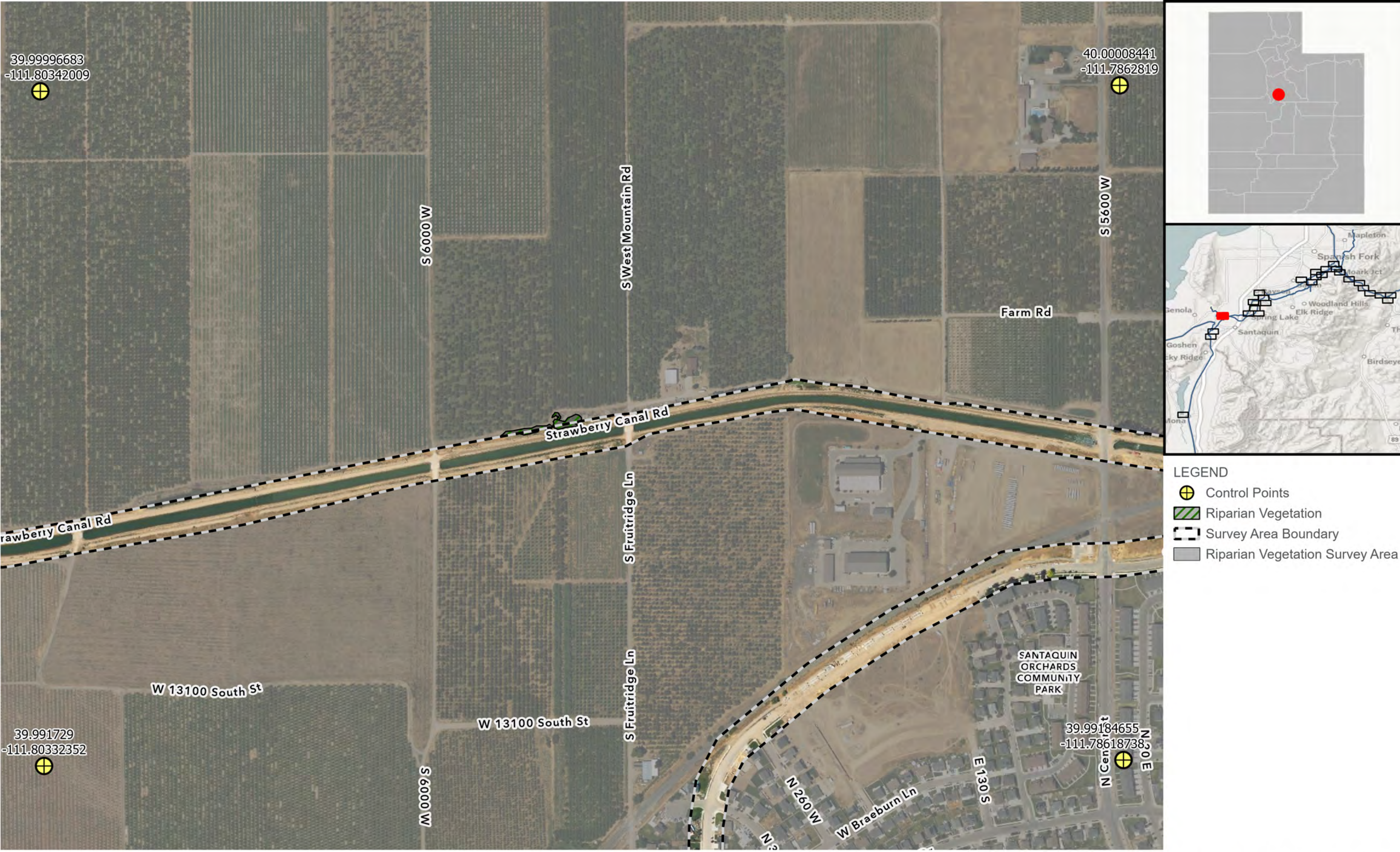
RIPARIAN HABITAT CONSERVATION AREAS

MAP SERIES | PAGE 22 OF 27



RIPARIAN HABITAT CONSERVATION AREAS



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39.99184655
-111.78618738
S 6000 W
S West Mountain Rd
S 5600 W
Farm Rd
Strawberry Canal Rd
S Fruitridge Ln
W 13100 South St
SANTAQUIN ORCHARDS COMMUNITY PARK
N 260 W
W Braeburn Ln
E 130 S
N Center St
N 20 E
Mapleton
Spanish Fork
Woodland Hills
Elk Ridge
Spring Lake
Santaquin
Genola
Goshen
Birdseye
Mona
LEGEND
Control Points
Riparian Vegetation
Survey Area Boundary
Riparian Vegetation Survey Area
0
0.1 mi

HDR NEBO WATER PROJECT

0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

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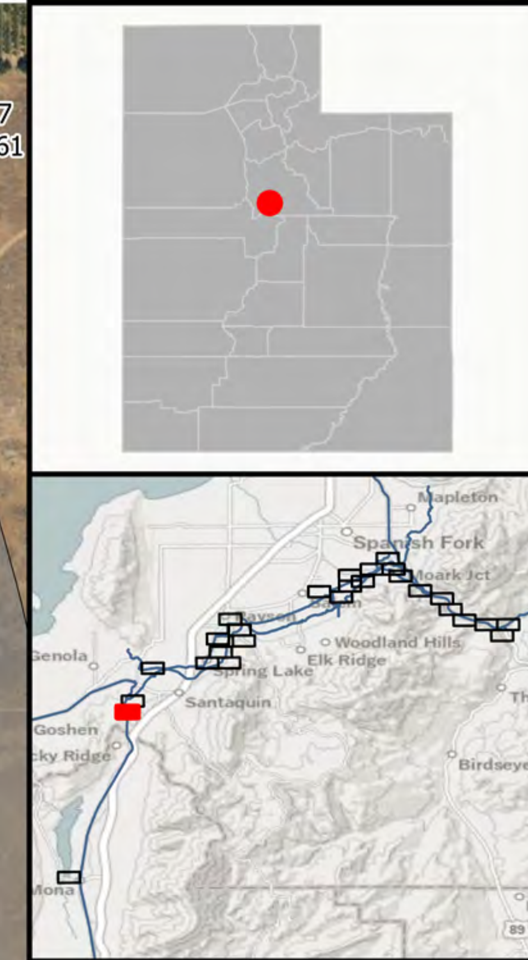

LEGEND

- Control Points
- Riparian Vegetation
- Survey Area Boundary
- Riparian Vegetation Survey Area

0 0.1 mi

RIPARIAN HABITAT CONSERVATION AREAS

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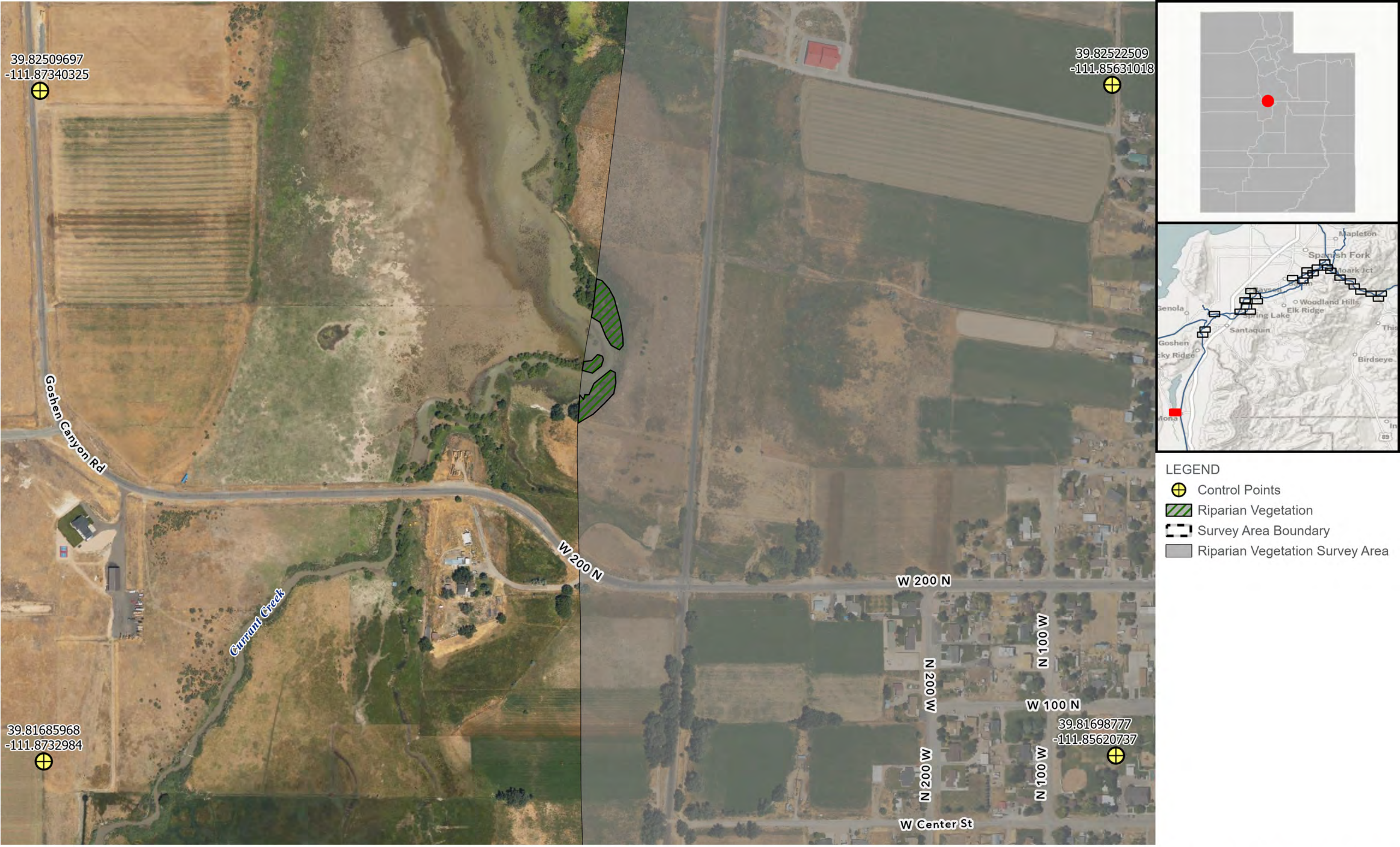

HDR NEBO WATER PROJECT

RIPARIAN HABITAT CONSERVATION AREAS

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RIPARIAN HABITAT IMPACT AREAS

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RIPARIAN HABITAT IMPACT AREAS

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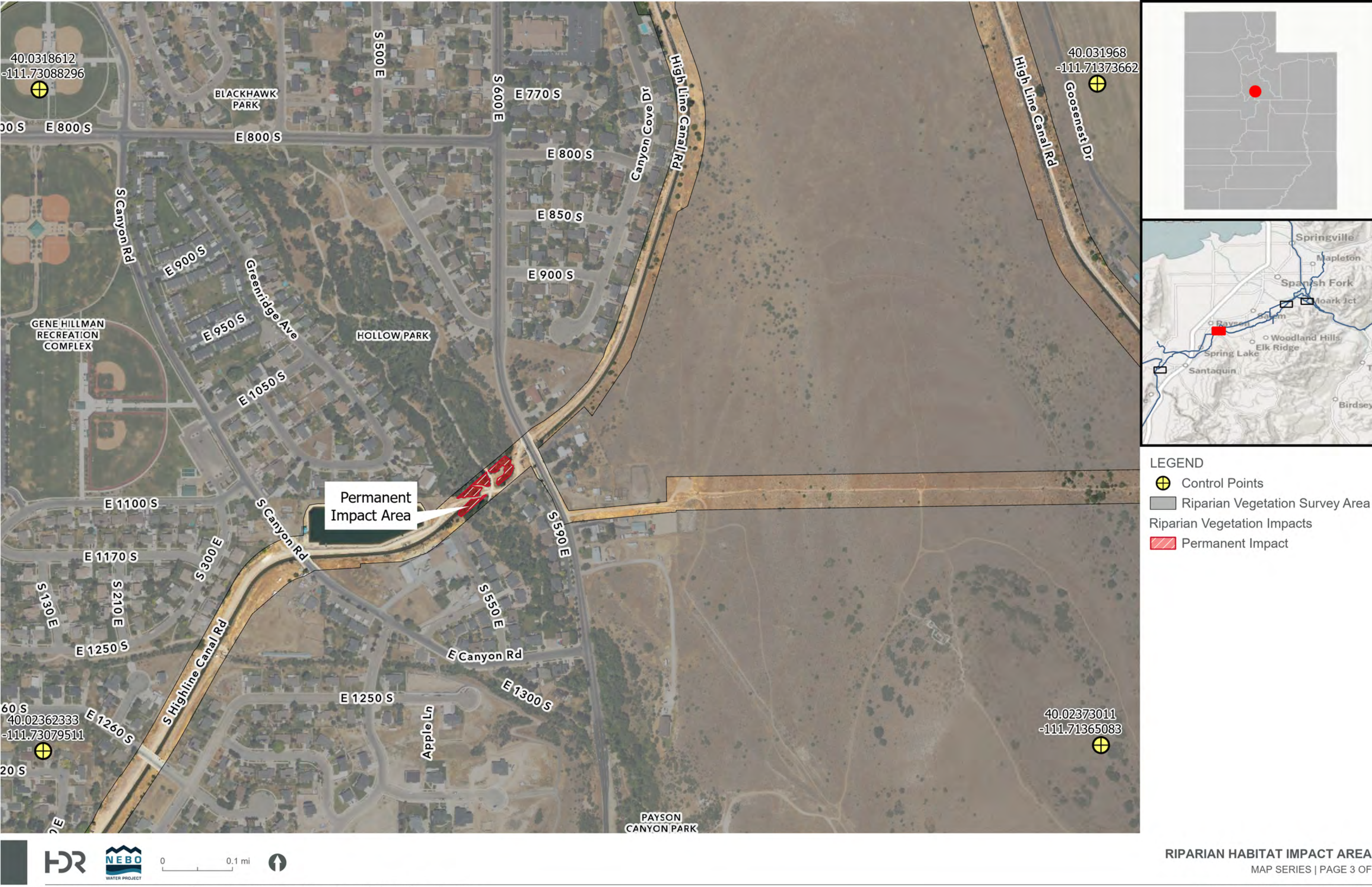

HDR NEBO WATER PROJECT

RIPARIAN HABITAT IMPACT AREAS

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NEBO ENVIRONMENTAL ASSESSMENT

RIPARIAN HABITAT IMPACT AREAS

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Appendix 3-D.4. Cultural Properties

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Appendix 3-D.4. Cultural Properties

Archaeological Sites in the Project APE

Site/Resource	NRHP Eligibility	New Site or Previously Documented?	Effect
Farm and homestead (42JB815)	Not eligible	Previously identified	N/A
Utah Southern Extension Railroad (42JB1057)	Eligible (Criterion A)	Previously identified	No adverse effect
Old Highway 91 – abandoned alignment (42JB1058)	Eligible (Criterion A)	Previously identified	No adverse effect
County Road Payson to Nephi (42JB1352)	Not eligible	Previously identified	N/A
Mona General Store (42JB1356)	Not eligible	Previously identified	N/A
Historic U.S. Highway 91 (42JB1448)	Eligible (Criterion A)	Previously identified	No adverse effect
Ranch and homestead (42UT463)	Not eligible	Previously identified	N/A
Spanish Fork Diversion Dam (42UT469)	Not eligible	Previously identified	N/A
Strawberry Power Canal (42UT470)	Not eligible	Previously identified	N/A
South Field Canal (42UT935)	Eligible (Criterion A)	Previously identified	No historic properties affected
Mapleton Lateral Canal (42UT471)	Not eligible	Previously identified	N/A
Mapleton Siphon (42UT472)	Not eligible	Previously identified	N/A

Site/Resource	NRHP Eligibility	New Site or Previously Documented?	Effect
Strawberry High Line Canal (42UT473)	Eligible (Criteria A, C, and D)	Previously identified	Adverse effect
Strawberry Water Users Association Power Station (42UT475)	Eligible (Criteria A and C)	Previously identified	Adverse effect
Salem Canal (42UT936)	Eligible (Criterion A)	Previously identified	No adverse effect
Utah Southern/Union Pacific Railroad (42UT1029)	Eligible (Criteria A and B)	Previously identified	No adverse effect
D&RGW Railroad (42UT1031)	Eligible (Criterion A)	Previously identified	No adverse effect
U.S. Highway 6 (42UT1124)	Eligible (Criterion A)	Previously identified	No adverse effect
East Bench Canal (42UT1135)	Eligible (Criterion A)	Previously identified	No historic properties affected
D&RGW Tintic Branch Railroad (42UT1194)	Eligible (Criterion A)	Previously identified	No adverse effect
Artifact scatter (42UT1209)	Not eligible	Previously identified	N/A
Mill Race Canal (42UT1485)	Eligible (Criterion A)	Previously identified	No adverse effect
Dry Creek Channel (42UT1604)	Not eligible	Previously identified	N/A
Diamond Fork Road (42UT1954)	Eligible (Criterion A)	Previously identified	No historic properties affected
East 9800 South Road (42UT2141)	Not eligible	Previously identified	N/A
East 9600 & 9650 South Road (42UT2142)	Not eligible	Previously identified	N/A
South 400 East Road (42UT2143)	Not eligible	Previously identified	N/A

Site/Resource	NRHP Eligibility	New Site or Previously Documented?	Effect
Irrigation ditch (42UT2553)	Not eligible	Previously identified	N/A
Utility line (42UT2608)	Not eligible	Newly recorded site	N/A
Road (42UT2609)	Not eligible	Newly recorded site	N/A
Water management infrastructure (42UT2610)	Not eligible	Newly recorded site	N/A
Nebo Mounds (42JB109)	Eligible (Criterion D)	Site not relocated (likely associated with site 42JP2 outside the APE)	No historic properties affected
Payson Hydroelectric Facility (42UT476)	Eligible (Criteria A and C)	Previously identified	Adverse effect

Definitions: D&RGW = Denver & Rio Grande Western Railroad; N/A = not applicable; NRHP = National Register of Historic Places

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Appendix 3-D.5. Recreation

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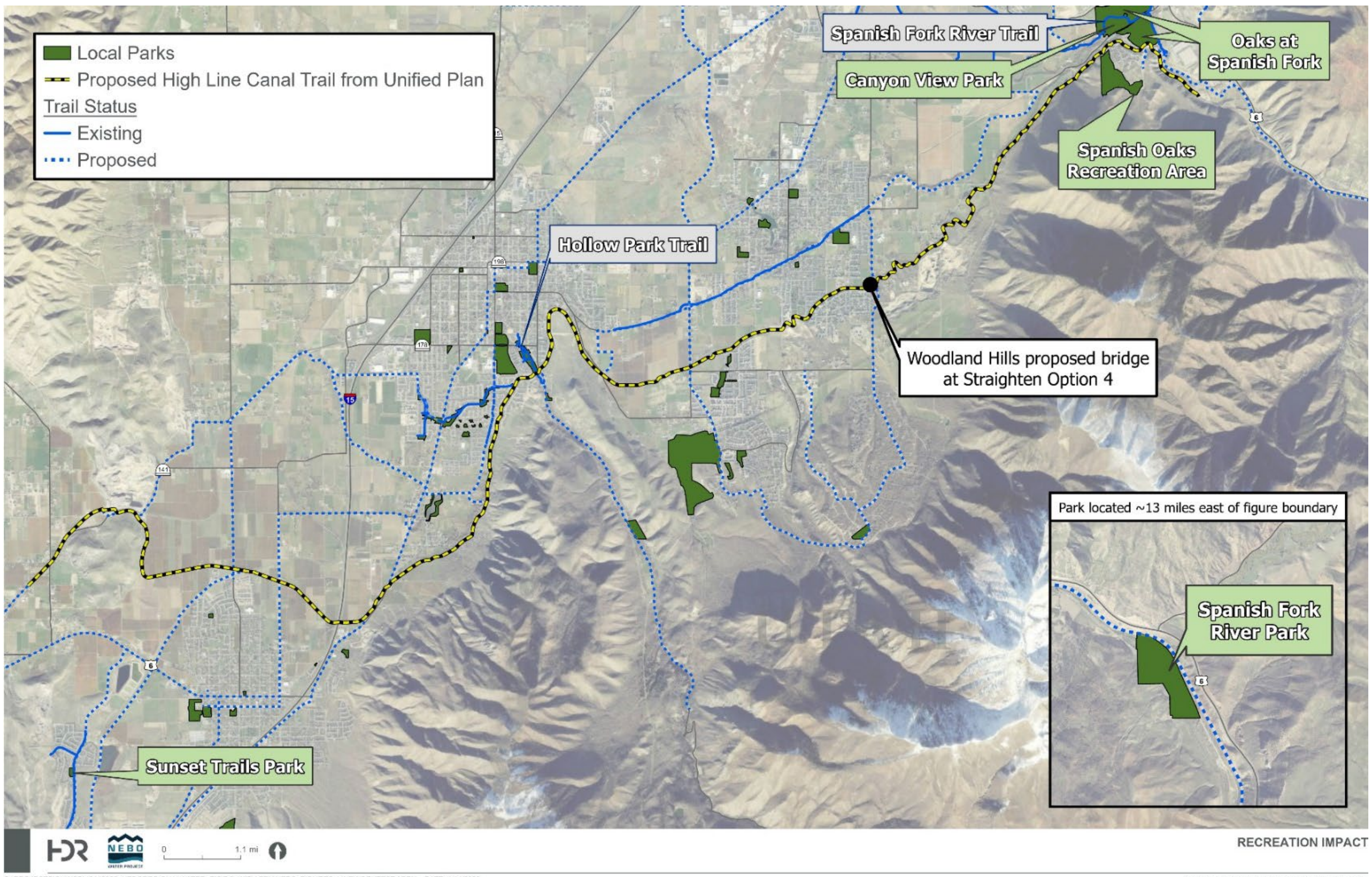
Appendix 3-D.5. Recreation

Recreation Resources



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Appendix 3-D.6. Right-of-Way

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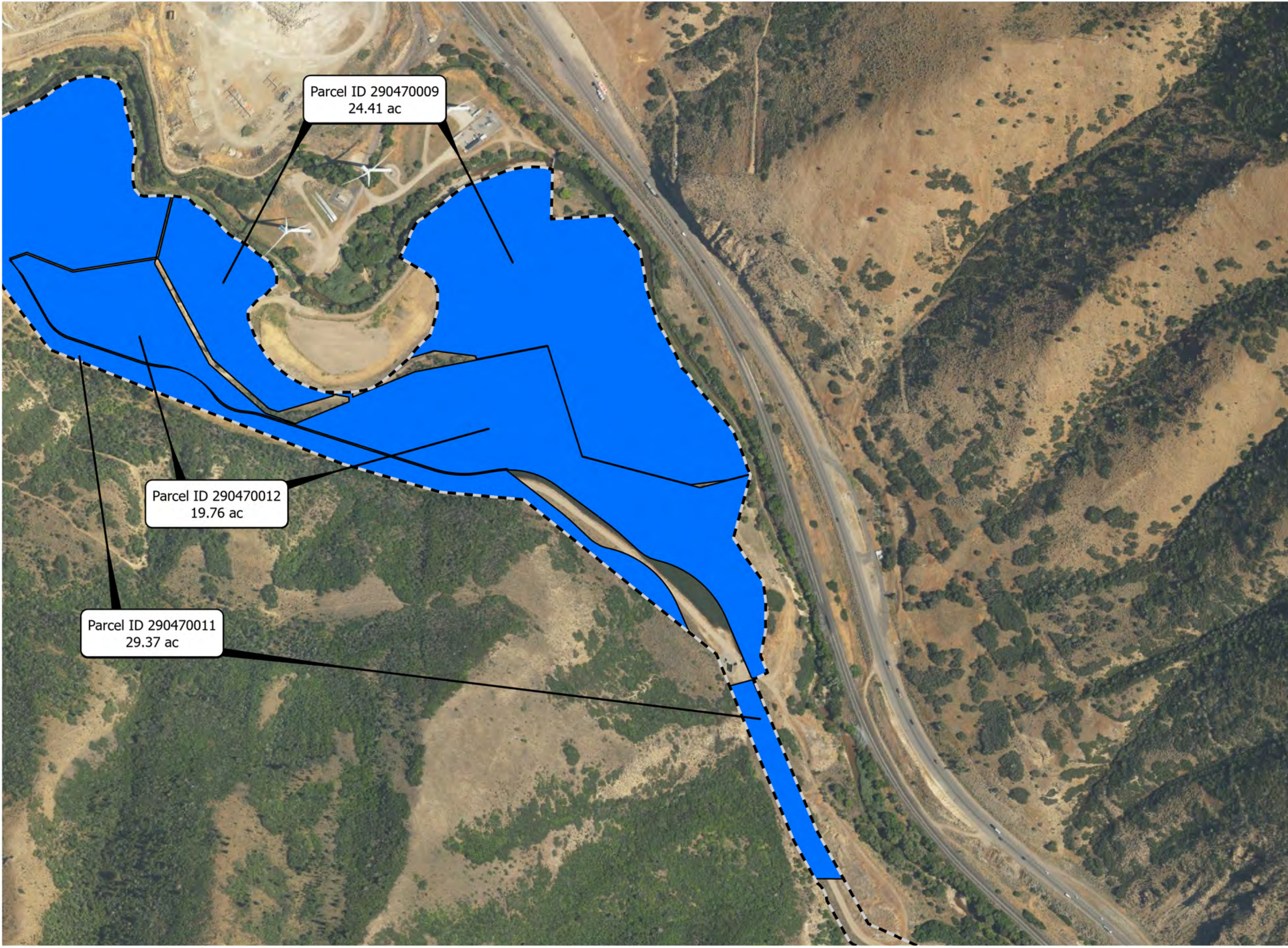

LEGEND

Permanent Easements

Proposed ROW Line

0 0.1 mi

PREFERRED ALTERNATIVE

PROPERTY IMPACTS | PAGE 1 OF 13

PREFERRED ALTERNATIVE
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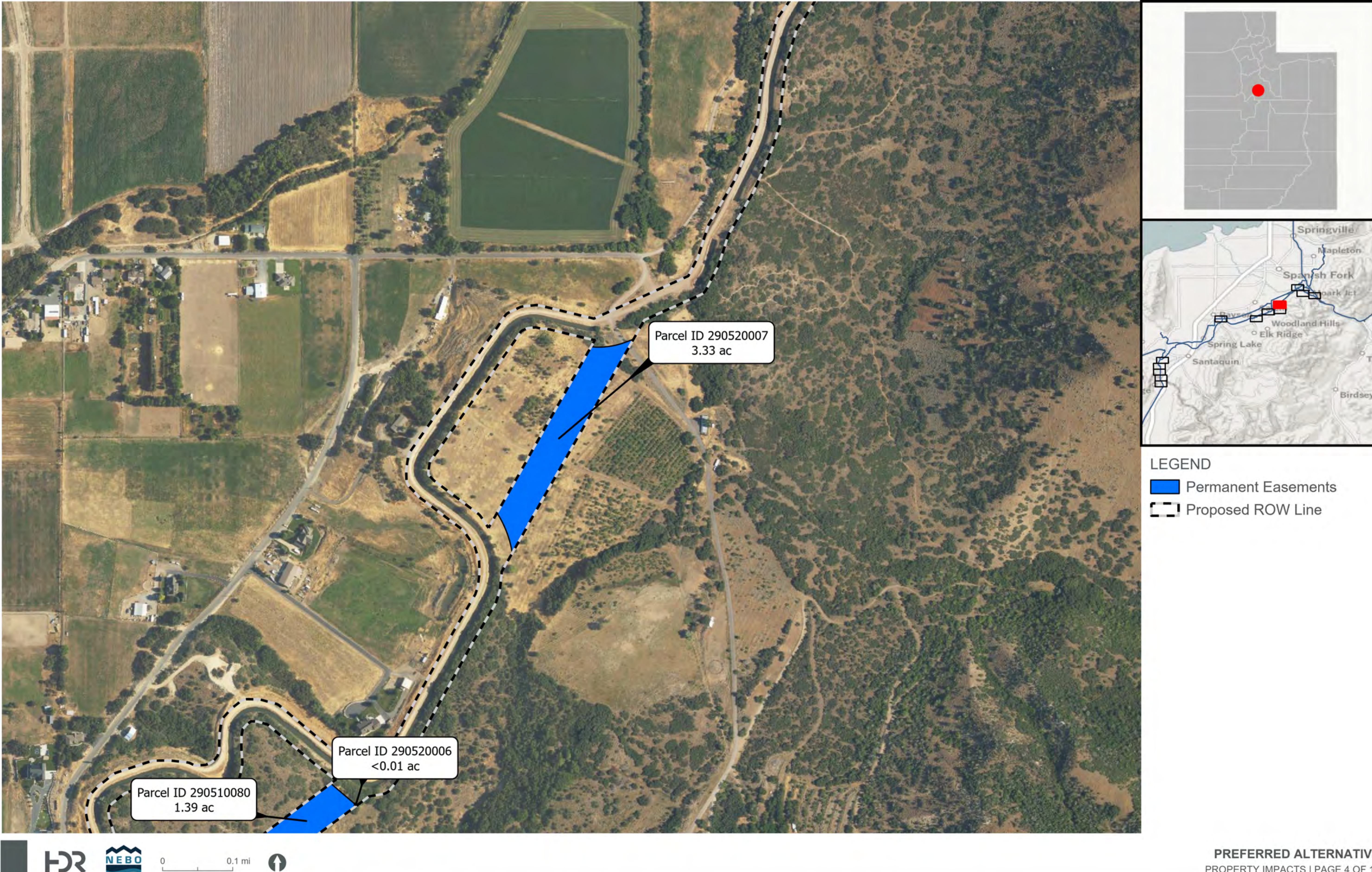
PROPERTY IMPACTS | PAGE 3 OF 13



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PROPERTY IMPACTS | PAGE 5 OF 13

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PROPERTY IMPACTS | PAGE 6 OF 13

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PREFERRED ALTERNATIVE

PROPERTY IMPACTS | PAGE 7 OF 13

LEGEND

Permanent Easements

Proposed ROW Line

HDR NEBO WATER PROJECT 0 0.1 mi

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PROPERTY IMPACTS | PAGE 8 OF 13

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PREFERRED ALTERNATIVE

PROPERTY IMPACTS | PAGE 9 OF 13

LEGEND

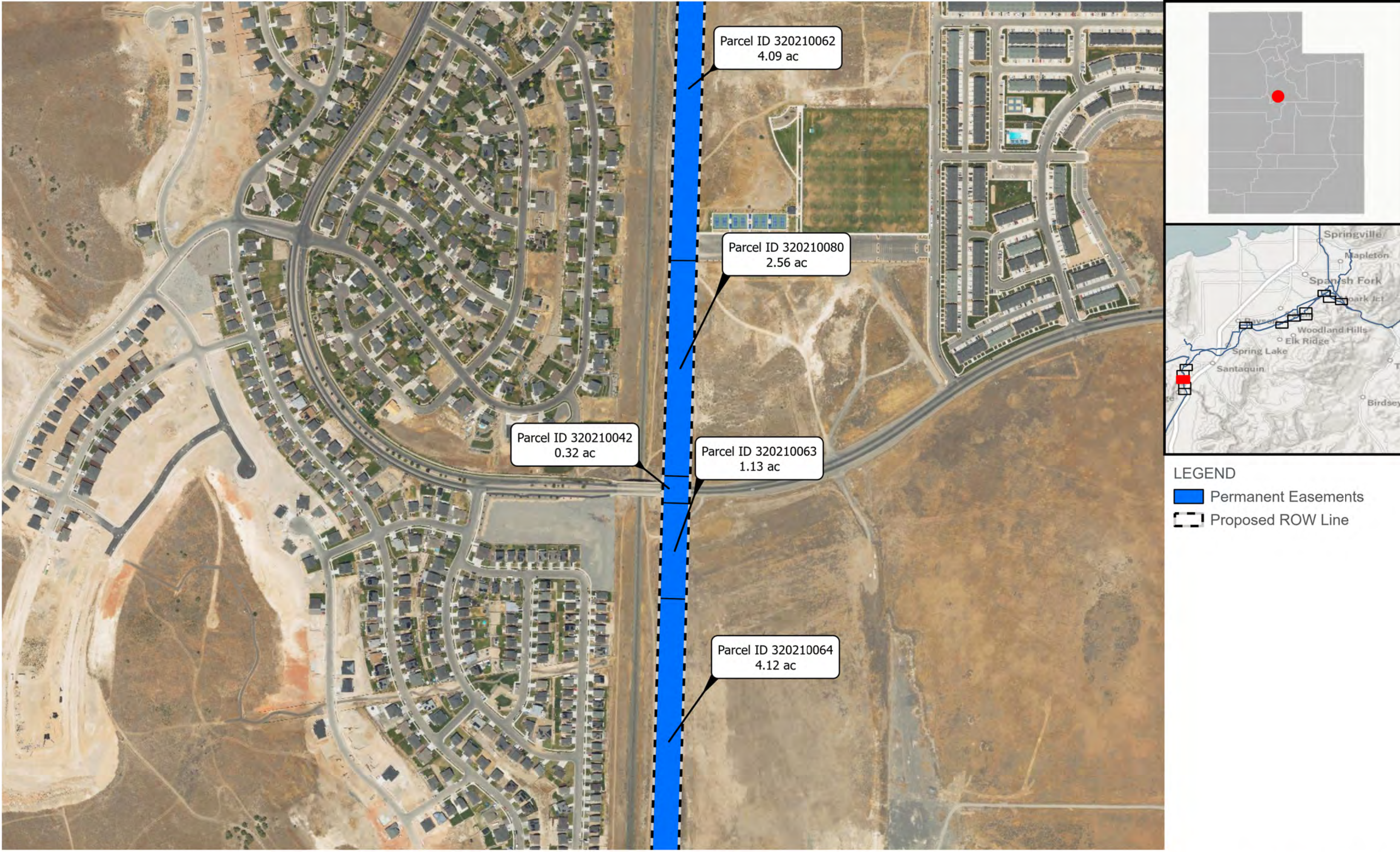
Permanent Easements

Proposed ROW Line

0 0.1 mi

PREFERRED ALTERNATIVE

PROPERTY IMPACTS | PAGE 10 OF 13



HDR

NEBO WATER PROJECT

PREFERRED ALTERNATIVE

PROPERTY IMPACTS | PAGE 11 OF 13

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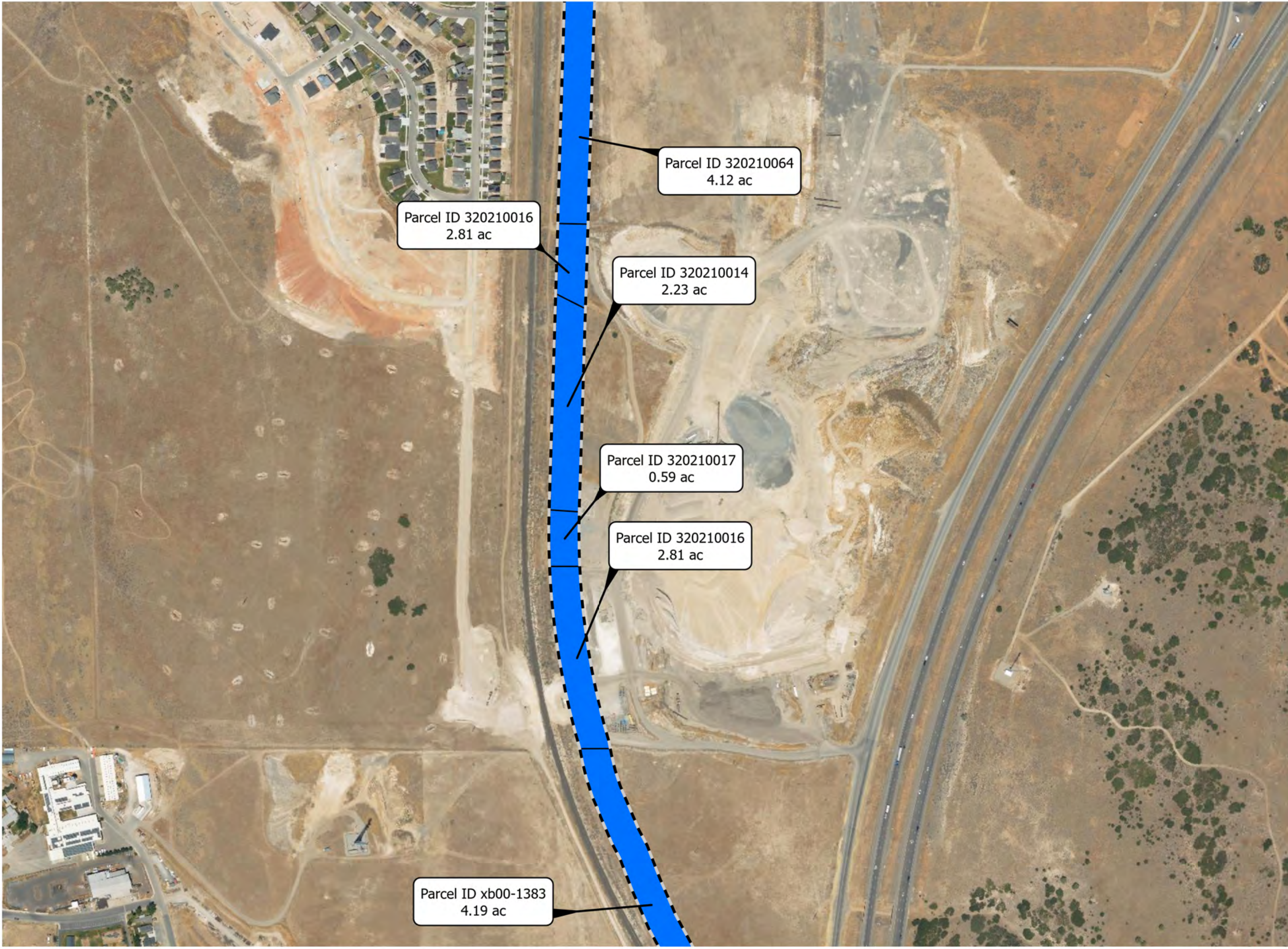
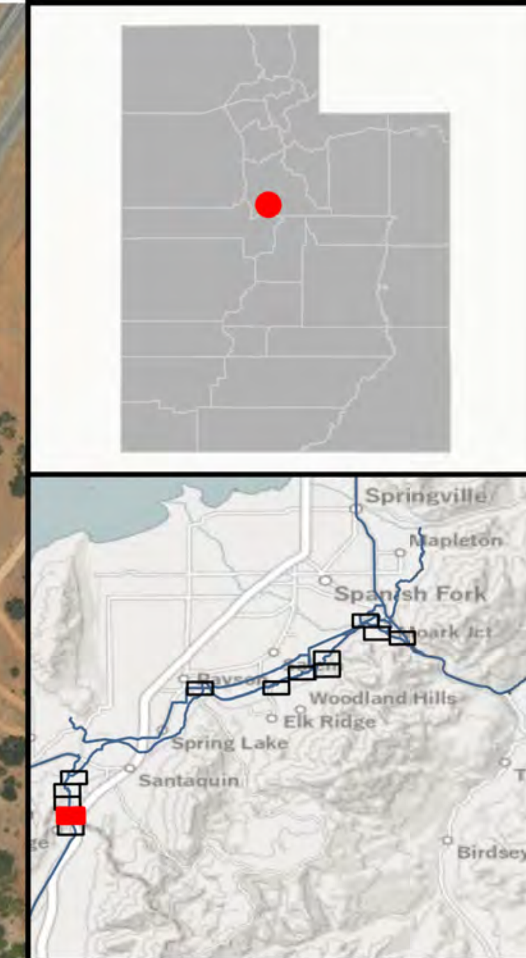




LEGEND

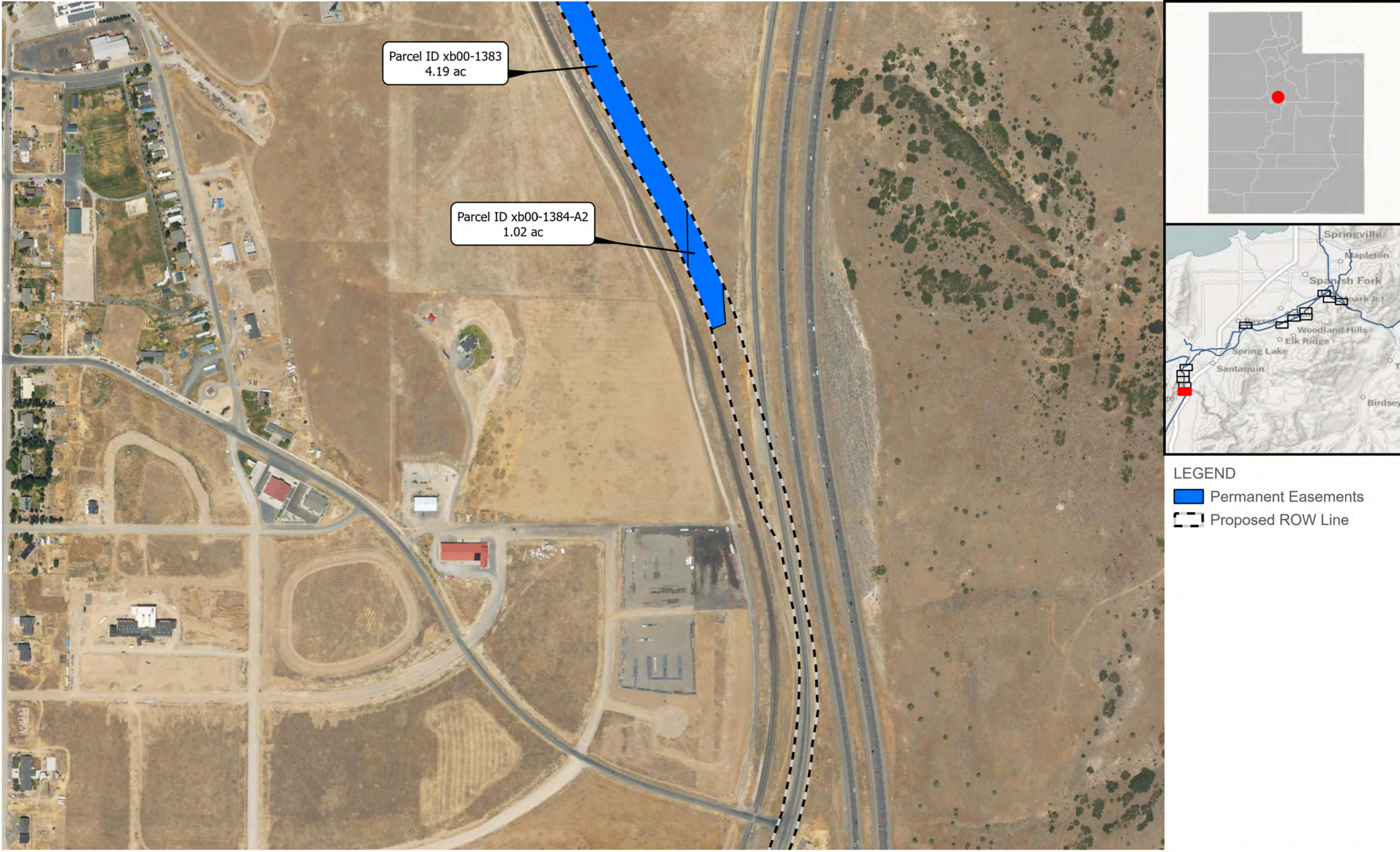
Permanent Easements

Proposed ROW Line

0 0.1 mi

PREFERRED ALTERNATIVE

PROPERTY IMPACTS | PAGE 12 OF 13



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PROPERTY IMPACTS | PAGE 13 OF 13

Appendix 3-D.7. Roads, Rail Lines, and Trails Temporarily Closed or Delayed during Construction

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Appendix 3-D.7. Roads, Rail Lines, and Trails Temporarily Closed or Delayed during Construction

This analysis evaluates roads, rail lines, and trails that could be temporarily closed or subject to delays during construction of the Preferred Alternative.

Table 3-D.7-1
Potential Temporary Closures or Delays during Construction of the Strawberry High Line Pipeline

Road, Rail Line, or Trail	City or County
Spanish Fork River Trail	Spanish Fork
Fairway Drive	Spanish Fork
Spanish Oaks Drive	Spanish Fork
9600 South	Spanish Fork
1700 East	Salem
Woodland Hills Drive	Salem
750 East/Loafer Rim Drive	Salem
500 East	Salem
50 East/Loafer Canyon Road	Salem
Loafer Mountain Parkway/Elk Ridge Drive	Payson
2170 West (farm property road)	Payson
Goosenest Drive	Payson
Hollow Park Trail Crossing (40.026889, −111.723561)	Payson
Payson Canyon Road/Canyon Road	Payson
1330 South	Payson
Pommel Drive/1500 South	Payson
12680 South Street/Barnett Lane	Payson
State Street/SR-198	Payson
I-15 between mileposts 246 and 245	Santaquin

Road, Rail Line, or Trail	City or County
4800 West	Santaquin
5200 West/400 East	Santaquin
5350 West/200 East	Santaquin
Union Pacific Railroad (39.995420, −111.783642)	Utah County
5600 West	Santaquin
5950 West/420 West	Santaquin
6000 West	Santaquin
6250 West	Santaquin
Orchard View Drive	Utah County
Mountain Road	Santaquin
1175 East Street/400 North	Payson

Table 3-D.7-2
Potential Temporary Closures or Delays during Construction of the Loafer Pipeline

Road or Rail Line	City
Gomez Road	Spanish Fork
Union Pacific Railroad (two rail lines) (40.080550, −111.586968)	Spanish Fork
US-6 (milepost 178)	Spanish Fork
Spanish Oaks Drive	Spanish Fork
9600 South	Spanish Fork
1700 East	Salem
10000 South	Salem
400 East	Salem

Table 3-D.7-3
Potential Temporary Closures or Delays during Construction of the Santaquin-Nephi Pipeline

Road or Rail Line	City or County
Summit Ridge Parkway South	Santaquin
Park Lane	Santaquin
Valley View Drive	Santaquin
Tanner Road	Santaquin
Union Pacific Railroad (39.959199, −111.816432)	Utah County
6800 West	Santaquin
Summit Ridge Parkway East	Santaquin
Old Highway 91	Utah County
Little Valley Road/Ridge Road	Mona
Sutherland/2300 North/Canyon Lane	Mona
200 North/SR-54	Mona
100 North	Mona
Center Street	Mona
100 South	Mona
200 South	Mona
300 South	Mona
700 South/Cemetery Road	Mona
I-15 Business Loop (milepost 43)/Main Street	Nephi
1500 North	Nephi

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Appendix 3-D.8. Construction Best Management Practices

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Appendix 3-D.8. Construction Best Management Practices

Construction activities of the NWP may have temporary impacts to human and environmental resources. The contractor would be required adhere to the standards and specifications as outlined in contract documents. Resources anticipated to be impacted and the best management practices (BMPs) to minimize effects are discussed below.

3-D.8.1 Air Quality

Temporary and localized construction impacts to air quality may result from fugitive dust emissions, carbon monoxide (CO) emissions, NO_X and volatile organic compounds (VOC) emissions, $PM_{2.5}$ and PM_{10} emissions. NWP construction would include the use of mechanized construction equipment and vehicles, which would result in a temporary increase in motor vehicle exhaust emissions in the project study area. Such impact would be temporary and would not have a long-lasting impact on air quality in the area. The contractor will be required to implement BMPs as follows:

- Periodic and routine watering or applying dust suppressants of borrow and spoil material areas, and access roads to minimize fugitive dust emissions
- The methods of mixing, handling, and storing cement and concrete aggregate would include means of eliminating atmospheric discharges of dust
- Minimizing the extent of disturbed surfaces
- Restricting earthwork activities during times of abnormal high wind
- Limiting the use of and speeds on unimproved road surfaces
- All vehicles and equipment will be maintained and licensed in accordance with local, state, and federal laws to minimize exhaust pollution
- The contractor would comply with all applicable federal, state, and local laws and regulations, regarding the prevention, control, and abatement of dust pollution.

- The contractor will be required to prepare and implement a fugitive dust–control plan approved by the Utah Division of Air Quality and will apply dust-suppressing measures to reduce increased fugitive dust emissions during construction.

3-D.8.2 Noise and Vibration

Residents and businesses near the construction of the NWP may experience temporary inconvenience due to construction related noise and vibration. Extended disruption of normal activities is not anticipated, since no single area would be exposed to construction noise for long duration. Temporary construction noise would be minimized through adherence to standard specifications for noise levels in the construction area:

- **Noise Levels in the construction area:** the contractor will comply with applicable federal, state, and local laws, orders, and regulations concerning the prevention, control, and abatement of excessive noise. The contractor will monitor construction noise levels within the construction area. Mufflers on construction equipment shall be checked regularly to minimize noise.

Vibration may be generated during construction of the NWP and could be an inconvenience to nearby residents and businesses. However, the impacts would be temporary and only occur during the construction phase of this project. The majority of construction vibration is a result of heavy equipment use and shoring practices. The contractor would be required to adhere to standard specifications for compliance with laws and regulations.

3-D.8.3 Waters of the U.S. and Wetlands

Depending on the acreage of impact resulting from the NWP, a stream channel alteration permit, administered by the State of Utah, or a Clean Water Act Section 404 Permit, administered by the Army Corps of Engineers, would be needed prior to disturbance and crossing of waters of the U.S. These include the Spanish Fork River, Peteetneet Creek, and potential others depending on final design considerations. The contractor will be required to protect wetlands and waters of the U.S. to the extent possible and to minimize impacts to these crossings through the application of BMPs.

3-D.8.4 Hazardous Waste

The contractor would be required to implement BMPs for hazardous wastes generated from construction-related activities. The BMPs may include:

- All hazardous waste materials, including wastes, petroleum products, and solid wastes, would be handled, stored, and disposed of in conformance with federal and state regulations to prevent soil, groundwater, or surface water contamination.
- The Utah Division of Environmental Response and Remediation (DERR) would be contacted immediately if any contaminated soil or hazardous material is discovered during construction, including petroleum hydrocarbons or other previously unidentified hazardous materials or contaminated soils. The appropriate characterization and handling of the material would be conducted in accordance with DERR guidance.
- Absorbent pads or sheets would be readily available onsite. If onsite maintenance of construction equipment is required, absorbent pads would be placed under likely leak or spill sources. Mitigation for incidental spills or leaks of hydraulic fluid or diesel fuel from construction equipment would be implemented, including cleaning up the spill immediately, removing contaminated soil from the site, and properly disposing of it in conformance with federal and state regulations.

3-D.8.5 Transportation

There would be temporary travel delays, temporary changes in roadway alignments, and road closures along certain roadways during construction due to the movement of heavy machinery, construction of pipelines across roadways, and other equipment and supplies. Travel in the area to and from private property or for other public purposes would be maintained throughout construction. Prior to construction, the contractor would be required to prepare and submit a Traffic Control Plan to address traffic concerns and approved.

3-D.8.6 Water Resources

Construction activities in the project study area would disturb the soils and increase the potential for temporary soil erosion and sedimentation/siltation impacts. In order to prevent construction impacts, the contractor would be required to comply with all federal and state laws and regulations regarding control and abatement of water pollution. All waste materials and sewage from construction activities or project-constructed features would be disposed of as specified by federal and state health and pollution control regulations.

Construction specifications would require construction activities to be performed using methods that would prevent entrance or accidental spillage of solid matter, contaminants, debris, and other objectionable pollutants and wastes into flowing or dry watercourses and underground water sources. Potential pollutants and wastes include refuse, garbage, cement, concrete, sewage effluent, industrial waste, oil, and other petroleum products, aggregate processing tailings, mineral salts, and thermal pollution. Excavated materials would not be stockpiled or deposited near or on surface waters or other watercourse perimeters where they could be washed away by storm runoff or encroach upon the sensitive area.

The contractor will be required to develop and submit a Storm Water Pollution Prevention Plan (SWPPP) to comply with the Utah Pollutant Discharge Elimination System permit (UPDES). The SWPPP may include such measures as using silt fences, fiber mesh rolls, check-dams, or other techniques to minimize impacts to the surrounding receiving waters. The contractor will be required to adhere to standard specifications for drainage and sediment control.

The construction of the NWP may encounter groundwater which would require dewatering. A dewatering plan would be developed during the design phase of this project.

3-D.8.7 Wildlife

Tree removal would be performed outside of the nesting season to avoid the potential for impacts to migratory bird nests or fledglings. If it is necessary to remove vegetation during the migratory bird nesting season a qualified biologist would conduct nesting surveys, prior to construction activities, to verify that no migratory birds are nesting in the vegetation to be removed. These pre-construction nesting bird surveys would be conducted for the construction footprint and 100 feet on either side of the footprint and would not occur more than seven days prior to vegetation alteration or surface disturbance. The survey area for active bird nests would include areas where vegetation removal and disturbance would be necessary. These surveys would be conducted in consultation with the appropriate agency(ies).

If occupied nests are located, construction activities would not occur within the species-specific spatial and seasonal buffer zones as outlined in the *Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances*. Coordination with USFWS and UDWR would also be reinitiated to discuss monitoring and reporting.

All records of observation of any state sensitive or federally protected species would be reported to UDWR and USFWS.

3-D.8.8 Cultural Resources

During construction there is the potential to discover previous, unknown, cultural resources and Native American artifacts. In the event of cultural resources or Native American artifacts being discovered during construction, all work would cease until a qualified archaeologist was able to evaluate the site, document cultural resources, and coordinate with SHPO.

The contractor would be required to be trained on the procedures and protocol for discovery of cultural resources during construction prior to ground-disturbing activities.

3-D.8.9 Agricultural

The NWP may temporarily impact agricultural operations within the project study area. These impacts may include disruption of irrigation services, traffic and access disruptions and detours, dust, and loss of agricultural production. The contractor would be required to coordinate with affected property owners to maintain irrigation deliveries, if impacted during construction, provide access to their properties, and to minimize dust.

3-D.8.10 Soils

Several procedures would be used as necessary to prevent and minimize erosion and siltation during construction and during the period needed to reestablish permanent vegetative cover on disturbed sites. These include the use of a native and approved seed mix on disturbed areas. Vegetation clearing schedules would be arranged to minimize the practical exposure of soils. Final erosion control and site restoration measures would be initiated as soon as an area is no longer needed for construction, stockpiling, or access.

Upon project completion, all yards, offices, and construction buildings, including concrete footings and slabs, and all construction materials and debris would be removed from the site. Construction roads, if needed, would be restored to the original contour. Erosion control measures would be initiated as soon as an area is no longer needed for construction, stockpiling, or access. Upon completion of construction, any land disturbed, but not permanently occupied by new facilities would be graded to provide proper drainage and blend with the natural contours of the land and restored to its pre-construction condition. Where such lands were vegetated, they would be covered with topsoil stripped from construction areas, and revegetated, as appropriate, with plants native to the area and beneficial to wildlife.

3-D.8.11 Vegetation and Invasive Species

The NWP construction activities would disturb the ground surface and result in the removal of established vegetation. This disturbance could allow for the establishment or spread of invasive species and noxious weeds. Construction specifications require the contractor to preserve the natural landscape and prevent any unnecessary destruction, scarring, or defacing of the natural surroundings in the work vicinity. All trees, native shrubbery, and other vegetation would be preserved and protected from construction operations and equipment except where clearing operations are required for permanent structures, approved construction roads, or excavation operations. All maintenance yards, field offices, and staging areas would be arranged to preserve trees and vegetation to the maximum practicable extent. Clearing operations would be limited to those needed for construction. Areas around structures would be backfilled and compacted, and all disturbed areas reclaimed to the native vegetation type.

Disturbed areas, other than the grade and alignment for the proposed future roadway, if constructed, would be seeded with native grasses and erosion control measures would be put in place to prevent the incursion of invasive weed species while still complying with Reclamation and District standards regarding allowable vegetation.

To prevent the spreading of invasive species, the contractor would be required to adhere to the following guidelines as outlined in the specifications:

- Comply with the District’s Integrated Pest Management Program, which requires ongoing monitoring for invasive species and noxious weeds, as well as treatment within the construction impact area
- The contractor will be required to limit the introduction or spread of invasive species from equipment, vehicles, and fill material
- Identify invasive and noxious weeds within the areas planned for earthwork operations;
- Treat areas identified as having invasive and noxious weeds with an approved herbicide within 10 days before starting earthwork operations
- Clean all earth-moving before entering the project site

3-D.8.12 Public Health and Safety

Construction of the NWP would increase traffic during construction to, from, and within the project study area. However, a Traffic Control Plan would be developed to address traffic concerns and minimize the hazards associated with construction related traffic. Further, construction barriers and fencing would be used to clearly demarcate construction zones and prevent access to all but construction personnel.

The contractor will be required to develop a public involvement plan and to notify and update on construction activities that may impact them.

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Appendix 3-E. Correspondence

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Appendix 3-E.1. Utah SHPO Correspondence

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Spencer J. Cox
Governor

Deidre M. Henderson
Lieutenant Governor

Donna Law
Interim Executive Director

Utah SHPO

Christopher Merritt
State Historic Preservation Officer
Utah State Historic Preservation Office

January 23, 2026

Rick Baxter
Area Manager
BOR

RE: Cultural Resource Inventory for the Preliminary Piping Alternatives along the Strawberry Highline Canal, Utah County, Utah

For future correspondence, please reference Case No. 26-0056

Dear Rick Baxter,

The Utah State Historic Preservation Office received your submission and request for our comment on the above-referenced undertaking on January 14, 2026.

We concur with your determinations of eligibility and effect on this undertaking. We look forward to finding appropriate mitigation efforts to address the adverse effect.

This letter serves as our comment on the determinations you have made within the consultation process specified in §36CFR800.4. If you have questions, please contact me at (801) 535-2502 or by email at rmcgrath@utah.gov.

Sincerely,

Ryan P McGrath

Ryan McGrath
Compliance Archaeologist

Appendix 3-E.2. Utah DNR Paleontology Correspondence

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State of Utah

SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

Department of Natural Resources

JOEL FERRY
Executive Director

Utah Geological Survey
L. DARLENE BATATIAN
State Geologist/Division Director

February 18, 2026

Kevin Kilpatrick
HDR Engineering, Inc.
2825 E Cottonwood Parkway, Suite 200
Salt Lake City UT 84121-7077

RE: Paleontological file search and recommendations for the CUWCD Nebo Regional Water Project, Juab and Utah Counties, Utah.
U.C.A. 79-3-508 (Paleontological) Compliance; Request for Confirmation of Literature Search.

Dear Kevin:

I have conducted a paleontological file search for the Nebo Regional Water Project in response to your request of February 17, 2026.

There are no fossil localities recorded in our files in this project area. Quaternary and Recent alluvial, lacustrine, and volcanic deposits that are exposed in these project and rights-of-way have a low potential for yielding significant fossil localities (PFYC 1 - 2). Unless fossils are discovered as a result of construction activities, this project should have no impact on paleontological resources.

If you have any questions, please call me at (801) 537-3311.

Sincerely,

Martha Hayden

Martha Hayden
Paleontological Assistant

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Appendix 3-E.3. DOI Tribal Consultation

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CA-1300
2.1.4.17

Honorable Dennis Alex
Chairman, Northwestern Band
of Shoshoni Nation of Utah
2575 Commerce Way
Ogden, Utah 84401

Subject: Nebo Regional Water Project Environmental Assessment Scoping Notification – Tribal Consultation – Section 202(a)(1) – Central Utah Project Completion Act

Dear Chairman:

The U.S. Department of the Interior – Central Utah Project Completion Act Office (Interior), the Central Utah Water Conservancy District (District), the U.S. Bureau of Reclamation (Reclamation), and the Utah Reclamation Mitigation and Conservation Commission (Mitigation Commission), as Joint Lead Agencies (JLAs), are preparing an Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA), 42 United States Code §§ 4321, *et seq.*, and applicable regulations, for the proposed Nebo Regional Water Project (Proposed Project).

The Proposed Project is located in southern Utah County generally between Spanish Fork Canyon and the city of Genola, Utah, and in eastern Juab County. The Proposed Project includes enclosing the Strawberry High Line Canal with a buried pipeline, establishing a public trail over this pipeline, modifications to the Spanish Fork Santaquin Pipeline, construction of the South Utah Valley Regional Water Treatment Plant, construction of a Diamond Fork Recovery Pump Station, construction of interconnect pipelines, changes to operations and water use, potential changes to the Strawberry Water Users Association's infrastructure, and changes to administrative responsibilities.

More details regarding the Proposed Project, the purpose of and need for the project, and the list of anticipated resources to be analyzed in the Environmental Assessment can be found in the scoping notice and materials on the project website (nebowaterproject.cuwcd.gov).

Interior is seeking your comments and input regarding the Proposed Project during a 30-day comment period ending June 27, 2025. Please provide this information to Mr. W. Russ Findlay, 302 East Lakeview Parkway, Provo, Utah 84606-7317, or by email to wfindlay@usbr.gov. Mr. Findlay may also be reached at (801) 379-1084. For the deaf, hard of hearing or speech impaired, please dial 7-1-1 to access the telecommunication relay system.

Two public scoping open houses will be held, at the following locations:

- June 10, 2025, from 5 to 7 p.m. at Payson City Center, 439 W. Utah Avenue in Payson, Utah
- June 12, 2025, from 5 to 7 p.m. at Juab High School, 802 North 650 East in Nephi, Utah

If you would like to meet in person, please let us know dates, times, and location preferences. Thank you for your participation and interest in this project.

Sincerely,

Paul Christensen
Program Director

Enclosure

cc: Ms. Patty Timbimboo-Madsen
Director, Cultural and Natural Resources
Northwestern Band of Shoshoni Nation of Utah
2575 Commerce Way
Ogden, Utah 84401

Mr. Dawn Williams
Superintendent, Fort Hall Agency
Bureau of Indian Affairs
P.O. Box 220
Fort Hall, Idaho 83203
(w/encl to each)

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rbaxter@usbr.gov
mmills@usbr.gov
gene@cuwcd.gov
pchristensen@usbr.gov
wfindlay@usbr.gov
lapratt@usbr.gov
(w/encl to each)

Name	Organization	Address	City	State	Zip
Honorable Luke Duncan	Chairman Ute Tribe Business Committee	PO Box 190	Fort Duchesne	Utah	84026-0190
Antonio Pingree	Acting Superintendent, Uintah and Ouray	PO Box 130	Fort Duchesne	Utah	84026-0190
Honorable Harold Cuthair	Chairman, Ute Mountain Ute Tribe	PO Box JJ	Towaoc	Colorado	81334
Terry Knight	Ute Mountain Ute Tribe, Cultural Preservation Program	PO Box 468	Towaoc	Colorado	81334
Honorable Pami Borchardt Slayton	Paiute Indian Tribe	440 North Paiute Drive	Cedar City	Utah	84720
Dorena Martineau	Paiute Indian Tribe, Cultural Resources Director	440 North Paiute Drive	Cedar City	Utah	84720
James Williams	Superintendent, Southern Piaute Tribe Agency	PO Box 720	St. George	Utah	84771
Honorable Ona Segunda	Kaibab Band of Paiute Indians of the Kaibab Indian Reservation	HC 65 Box 2, Tribal Affairs Building	Fredonia	Arizona	86022
Charley Bullets	Kaibab Band of Paiute Indians of the Paiute Indian Reservation	HC 65 Box 2, Tribal Affairs Building	Fredonia	Arizona	86022
Honorable Curtis Anderson	Las Vegas Tribe of Paiute Indian of the Las Vegas Indian Colony, Nevada	1 Paiute Drive	Las Vegas	Neveda	89106
Kenny Anderson	Las Vegas Tribe of Paiute Indian of the Las Vegas Indian Colony, Nevada	1 Paiute Drive	Las Vegas	Neveda	89106
Honorable Vickie Simmons	Moapa Band of Paiute Indians of the Moapa River Indian Reservation, Nevada	PO Box 340	Moapa	Neveda	89025
Honorable Candice Bear	Skull Valley Band of Goshute Indians	407 Skull Valley Road	Skull Valley	Utah	84029
Antonio Pingree	Acting Superintendent, Uintah and Ouray	PO Box 130	Fort Duchesne	Utah	84026-0190
Honorable Rupert Steele	Confederate Tribes of the Goshute Reservation	PO Box 6104	Ibapah	Utah	84034
Melissa Oppenhein	Confederate Tribes of the Goshute Reservation	PO Box 6104	Ibapah	Utah	84034
Antonio Pingree	Acting Superintendent, Uintah and Ouray	PO Box 130	Fort Duchesne	Utah	84026-0190
Honarable Darren Parry	Northwestern Band of Shoshoni Nation of Utah	707 North Main Street	Brigham City	Utah	84302
Patty Timbimboo-Madsen	Cultural and Natural Resources of the Northwestern Band of Shoshoni Nation of Utah	707 North Main Street	Brigham City	Utah	84302
Randy Thompson	Fort Hall Agency BIA	PO Box 220	Fort Hall	Idaho	83203
Honorable Nathan Small	Shoshone-Bannock Tribes of the Fort Hall Reservation of Idaho	PO Box 306	Fort Hall	Idaho	83203
Louise Dixie	Cultural Resource Coordinator Shoshone-Bannock Tribes of Fort Hall Reservation of Idaho	PO Box 306	Fort Hall	Idaho	83203
Randy Thompson	Fort Hall Agency BIA	PO Box 220	Fort Hall	Idaho	83203
Honorable Vernon Hill	Shoshone Tribe of the Wind River Reservation of Wyoming	PO Box 538	Fort Washakie	Wyoming	82514-0538
Joshua Mann	Tribal Historic Preservation Officer Eastern Shoshone Tribe of the Wind River Reservation	PO Box 538	Fort Washakie	Wyoming	82514-0538
Mike Addy	Wind River Agency, BIA	PO Box 158	Fort Washakie	Wyoming	82514
Honorable Timoth Nuvangyaoma	Hopi Tribe of Arizona	PO Box 123	Kyotsmovi,	Arizona	86039
Leigh Kuwanwisiwma	Hopi Tribe of Arizona Cultural Preservation Office	PO Box 123	Kyotsmovi,	Arizona	86039
Honorable Lee Spoonhunter	Northern Arapaho Tribe of the Wind River Reservation, Wyoming	PO Box 396	Fort Washakie	Wyoming	82514-0396
Yufina Soldier Wolf	Tribal Historic Preservation Office, Norther Arapaho Tribe of the Wind River Reservatoin	PO Box 67	St Stevens	Wyoming	82524
Jonathan Nez	Navajo Nation, Arizona, New Mexico, and Utah, Navajo Nation Tribal Council	PO Box 7440	Window Rock	Arizona	86515
Timothy Begay	Navajo Nation, Arizona, New Mexico, and Utah, Historic Preservation Office	PO Box 4950	Window Rock	Arizona	86515
Honorable Val Panteah Sr.	Zuni Tribe of the Zuni Reservation, New Mexico, Pueblo of Zuni Tribal Council	PO Box 339	Zuni	New Mexico	87327-0339
Dr. Kurt Dongoske	THPO, Acting Director, Historic Preservation Zuni Tribe of the Zuni Reservation, New Mexico	PO Box 1140	Zuni	New Mexico	87327

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Appendix 3-E.4. USFWS Letter

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NEBO
WATER PROJECT

385-999-2212 / contact@nebowaterproject.cuwcd.gov

May 6, 2026

George Weekley
Field Office Supervisor, Utah Ecological Services Field Office
U.S. Fish and Wildlife Service, Utah Field Office
PO Box 25182
Salt Lake City, Utah 84125

Subject: Request for concurrence with the Joint Lead Agencies' determination that the Nebo Regional Water Project in Utah and Juab Counties may affect, but is not likely to adversely affect, Ute ladies'-tresses and yellow-billed cuckoo

Dear George:

As Joint Lead Agencies (JLAs), the Central Utah Water Conservancy District, the U.S. Bureau of Reclamation, the U.S. Department of the Interior – Central Utah Project Completion Act Office, and the Utah Reclamation Mitigation and Conservation Commission are requesting the U.S. Fish and Wildlife Service's (FWS) concurrence with the JLAs' determination that the Nebo Regional Water Project may affect, but is not likely to adversely affect, Ute ladies'-tresses (*Spiranthes diluvialis*) and yellow-billed cuckoo (*Coccyzus americanus*) in accordance with Section 7(a)(2) of the Endangered Species Act (ESA) of 1973, codified in 50 Code of Federal Regulations (CFR) §402.02 and §402.14.

The Preferred Alternative in the Environmental Assessment for the Nebo Regional Water Project (Project) is considered the proposed action for evaluation in accordance with the ESA. The proposed action would develop an integrated raw (or untreated) water and finished (or treated) water delivery system that is reliable, resilient, and able to serve current and future municipal, industrial, and agricultural water demands in southern Utah County and eastern Juab County. The proposed action would replace aging open-canal infrastructure with enclosed pipelines, improve water conveyance efficiency and reliability, enhance public safety, and expand the ability to treat and deliver potable water. These objectives would be achieved through construction of new pipelines, connections, and a regional water treatment facility, along with associated operational and contractual changes that allow water supplies to be delivered more flexibly and efficiently throughout the service area.

Under the proposed action, flows in the Spanish Fork River between Diamond Fork Creek and the Spanish Fork River Diversion would decrease between May and September. Import water (water that is not natural to the Spanish Fork River or the Bonneville Basin) that is currently released from the Diamond Fork Pipeline into the river could instead be delivered from Strawberry Reservoir through the Spanish Fork Canyon Pipeline (existing) and the proposed

Loafer Pipeline. As a result, water in the Loafer Pipeline would be pressurized and of higher quality than water currently delivered from the Power Canal or Strawberry High Line Canal, because it would not be mixed with lower-quality Spanish Fork River water. The JLAs estimate that average monthly flows in the Spanish Fork River between Diamond Fork Creek and the Spanish Fork River Diversion could decrease by 74 to 250 cubic feet per second (cfs) between May and September as a result of the removal of the import water not natural to the Spanish Fork River. These reductions in flow would correspond to decreased water levels of about 0.23 to 0.78 foot during the same period.

The JLAs evaluated the expected impacts of the proposed action to five species identified by the Information for Planning and Consultation (IPaC) system. These species are Ute ladies'-tresses, yellow-billed cuckoo, Mexican spotted owl (*Strix occidentalis lucida*), monarch butterfly (*Danaus plexippus*), and Suckley cuckoo bumble bee (*Bombus suckleyi*). The JLAs find that potentially suitable habitat for Ute ladies'-tresses, yellow-billed cuckoo, monarch butterfly, and Suckley cuckoo bumble bee is present in the Project action area. Potentially suitable habitat was not identified for Mexican spotted owl.

A total of 177.69 acres of potentially suitable habitat for yellow-billed cuckoo was identified in patches of multilayered riparian vegetation along the Spanish Fork River located between Diamond Fork Creek and the Spanish Fork River Diversion. These areas would not be directly filled or disturbed by the proposed action, but reductions in stream flow could alter the riparian vegetation closest to the river over time. The full extent and timing of the potential effects of reduced hydrology on riparian vegetation are uncertain and cannot be quantified at this time.

The proposed action would include construction activities at the Spanish Fork River Diversion that would not directly disturb potentially suitable habitat for yellow-billed cuckoo but would occur within 0.5 mile of such habitat. The Spanish Fork River Diversion is located about 225 feet from U.S. Highway 6 and about 150 feet from the rail line in Spanish Fork Canyon. Given this close proximity to consistent transportation noise sources, noise from construction activities at the Spanish Fork River Diversion would not be a new noise source in an otherwise quiet area.

A total of 0.40 acre of potentially suitable habitat for Ute ladies'-tresses was also identified on stream terraces along the banks of the Spanish Fork River located between Diamond Fork Creek and the Spanish Fork River Diversion. These areas would not be directly filled or disturbed by the proposed action, but reductions in stream flow and water levels during summer months could alter potentially suitable habitat in and adjacent to the Spanish Fork River over time. With the reduction in average May-to-September monthly water flows and the subsequent decrease in water level, these terraces might experience drier conditions or, over time, could shift farther instream as stream morphology adjusts to the new flows.

Along the Spanish Fork River between Diamond Fork Creek and the Spanish Fork River Diversion, the JLAs will implement the following measures:

- To mitigate the reduced quantity of water in the section of the Spanish Fork River between the confluence with Diamond Fork Creek and the Spanish Fork River Diversion, the JLAs will conduct 3 years of monitoring before and 3 years of monitoring after construction to assess the existing and postconstruction conditions of the riparian vegetation, Ute ladies'-tresses, yellow-billed cuckoo, and fishery habitat in this section of the Spanish Fork River.
- Based on the monitoring data and changes observed with the reduced water volumes, the JLAs, in coordination with Utah Division of Wildlife Resources (UDWR) and Trout Unlimited, will identify and implement mitigation activities to improve water quality and aquatic habitat in and along the Spanish Fork River. Potential mitigation activities could include the following:
    - Conduct a stream restoration study on the Spanish Fork River beginning at the Spanish Fork River Diversion and moving upstream beyond the confluence with Diamond Fork Creek to include portions of Thistle Creek and Soldier Creek. The study would assess conditions and evaluate potential restoration actions.
    - Perform stream-restoration construction such as stream bank improvements, pools, and riffles to improve fish habitat and aeration.
    - Plant and maintain water-friendly plants along the riverbanks to provide shade, reduce solar radiation, and reduce sediment loads from bank erosion.
    - Implement stream-restoration and/or water quality improvement projects on sections of the Spanish Fork River or tributaries above the Diamond Fork Creek confluence to assist with efforts to reduce sediment and nutrient loads in the upper watershed drainages of the Spanish Fork River.

In the case of the proposed species monarch butterfly and Suckley cuckoo bumble bee, the proposed action would not jeopardize the existence of either species nor adversely affect critical habitat. Therefore, the JLAs declare a no effect to those species.

The JLAs request FWS's review and concurrence with the determination that the proposed action may affect, but is not likely to adversely affect, Ute ladies'-tresses and yellow-billed cuckoo. Please provide your written response within the 60-day period via email to sarah@cuwcd.gov. If you have any questions regarding this matter, please contact Sarah Sutherland at sarah@cuwcd.gov or 801-226-7147. We appreciate your review and assistance in this process and look forward to working with you.

Sincerely,

Gene Shawcroft
General Manager; Central Utah Water Conservancy District

RC
BR

PAUL CHRISTENSEN Digitally signed by PAUL CHRISTENSEN Date: 2026.05.18 09:09:27 -06'00'

Paul Christensen
Program Director; Central Utah Project Completion Act Office, Department of the Interior

MICHAEL MILLS Digitally signed by MICHAEL MILLS Date: 2026.05.18 07:58:02 -06'00'

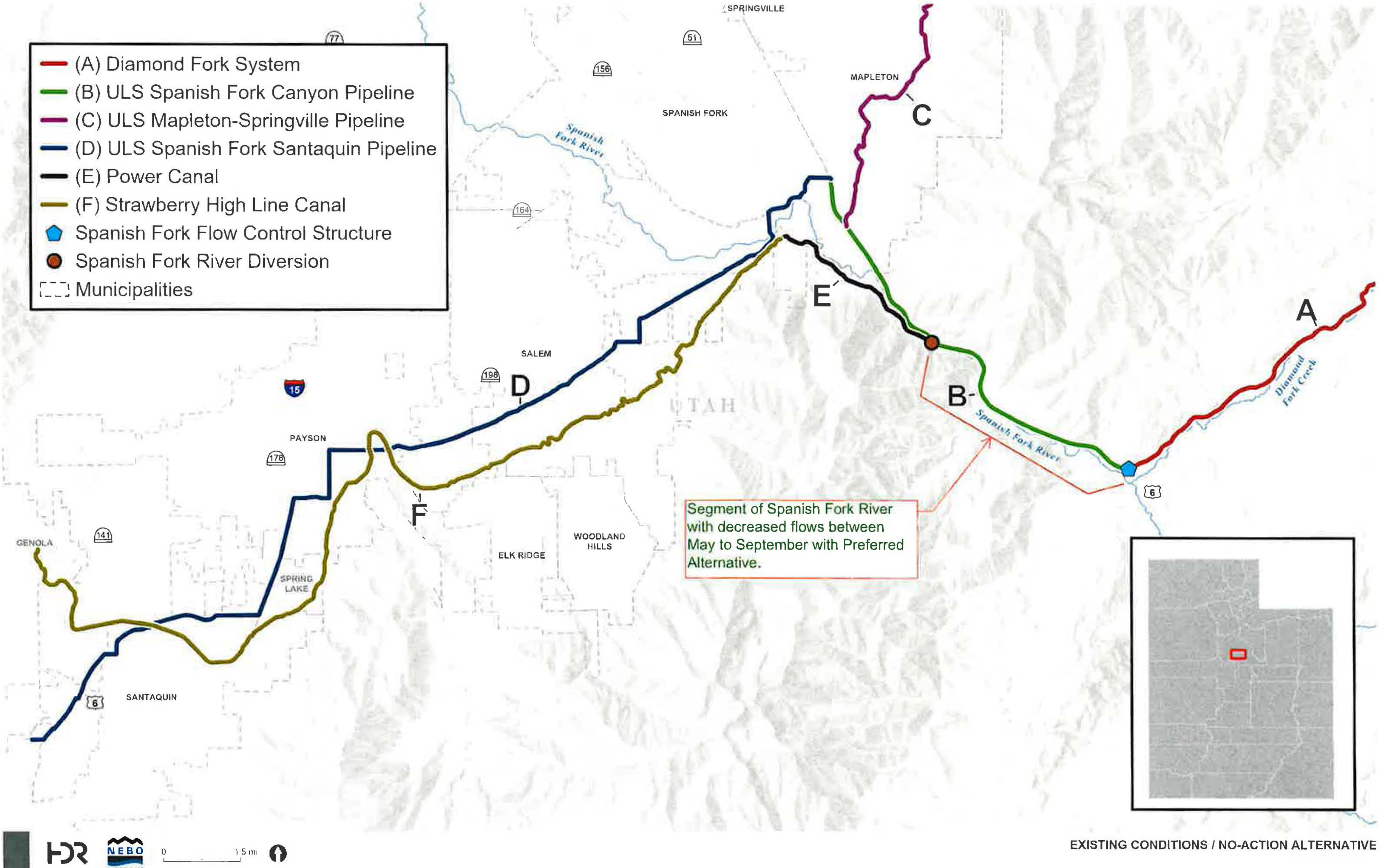
Michael Mills
Executive Director; Utah Reclamation Mitigation and Conservation Commission

Digitally signed by RICK BAXTER Date: 2026.05.18 07:53:16 -06'00'

Rick Baxter
Area Manager; Provo Area Office, U.S. Bureau of Reclamation

cc:

Kevin Kilpatrick (HDR)
Evan Blanford (HDR)



EXISTING CONDITIONS / NO-ACTION ALTERNATIVE

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Appendix 4-A. Scoping Summary Report

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Scoping Summary Report

Nebo Regional Water Project EA

July 2025

U.S. Department of the Interior – CUPCA Office
Bureau of Reclamation
Utah Reclamation Mitigation and Conservation Commission
Central Utah Water Conservancy District

Mission Statements

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, Native Hawaiians, and affiliated island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Contents

Appendices

Abbreviations

Abbreviation	Definition
District	Central Utah Water Conservancy District
EA	environmental assessment
Interior	U.S. Department of the Interior – Central Utah Project Completion Act Office
JLA	Joint Lead Agency
M&I	municipal and industrial
Mitigation Commission	Utah Reclamation Mitigation and Conservation Commission
NEPA	National Environmental Policy Act
Proposed Project	Nebo Regional Water Project
Reclamation	U.S. Bureau of Reclamation
USC	*United States Code*

1.0 Introduction

As Joint Lead Agencies (JLAs), the Central Utah Water Conservancy District (District), the U.S. Bureau of Reclamation (Reclamation), the U.S. Department of the Interior – Central Utah Project Completion Act Office (Interior), and the Utah Reclamation Mitigation and Conservation Commission (Mitigation Commission) are preparing an environmental assessment (EA) in accordance with the National Environmental Policy Act (NEPA), 42 *United States Code* (USC) Section 4321 and subsequent sections, and applicable regulations for the proposed Nebo Regional Water Project (Proposed Project).

The Proposed Project is located in southern Utah County, generally between Spanish Fork Canyon and the city of Genola, Utah, and in eastern Juab County. The JLAs have been coordinating with the Strawberry High Line Canal Company, the Strawberry Water Users Association, the East Juab Water Conservancy District, Utah County, and cities in southern Utah County and eastern Juab County to help identify the proposed actions, needs, and purposes.

1.1 Preliminary Project Purposes

The purposes of the Proposed Action are to improve safety, operational efficiency, and water conservation and to provide a water delivery system that can meet current and anticipated future water demands in southern Utah County and eastern Juab County. These purposes address the needs listed and summarized below.

1.2 Preliminary Project Needs

The needs that are driving the Proposed Action are:

- Safety risks due to the aging infrastructure of the Strawberry High Line Canal
- Strawberry High Line Canal operational inefficiencies
- Water loss in the Strawberry High Line Canal
- Lack of an integrated, redundant water delivery system to meet the anticipated population growth and increasing municipal and industrial (M&I) water demand in southern Utah County and eastern Juab County

1.3 Proposed Project Actions

The Proposed Project includes:

- Enclosing the Strawberry High Line Canal with a buried pipeline and establishing a public trail over the pipeline
- Modifying the Spanish Fork Santaquin Pipeline
- Constructing the South Utah Valley Regional Water Treatment Plant
- Constructing a Diamond Fork Recovery Pump Station
- Constructing interconnect pipelines
- Making changes to operations and water use
- Potentially changing the Strawberry Water Users Association's infrastructure
- Making changes to administrative responsibilities

1.4 Purpose of This Scoping Summary Report

This scoping summary report summarizes public and agency input gathered during the scoping period for the Proposed Project; this scoping period lasted from May 23 to June 27, 2025. Scoping is the first step in the NEPA process. It uses public and agency participation to develop possible solutions and identify issues regarding a proposed project. Scoping also helps determine needs, objectives, resources and constraints, potential alternatives, and any additional requirements for alternatives-screening criteria. This scoping summary report is a tool to ensure that the efforts of the EA are focused on the appropriate issues.

2.0 Summary of Scoping Activities

Section 2.0 summarizes the agency coordination, informational materials, public open houses, and comments received during the scoping period from May 23 to June 27, 2025.

Throughout the EA process, the JLAs will continue to facilitate and encourage involvement from agencies, stakeholders, and the public to help identify issues and develop solutions. The study team will continue to work with the public to ensure that those with interests in the Proposed Project understand how and why certain suggestions are being carried forward and why others are being eliminated. All public and agency comments received to date are being considered for this study and have been included in this report.

2.1 Notifications

The public scoping period began on May 23, 2025, and ended on June 27, 2025. The following methods were used to notify the general public of the public scoping period, open houses, Proposed Project materials available for review, and how to comment. Copies of the notification materials listed below are included in Appendix A, *Scoping Notifications*.

- Web notifications
    - Notifications about the scoping period and comment period were posted on the study website at https://nebowaterproject.cuwcd.gov.
- Postcards
    - Postcards with information about the scoping open houses and scoping period were sent to parcels located adjacent to the study area. A total of 313 postcards were sent.
- Legal notices
    - *Deseret News*: May 23 and May 30, 2025
    - *Daily Herald*: June 4, 2025
- Social
    - District Facebook: May 30, June 3, and June 6, 2025
    - District Instagram: June 6, 2025
    - Genola Facebook: May 28, 2025
    - Nephi Instagram: June 1 and June 12, 2025
    - Salem Facebook: May 27, 2025
    - Santaquin Facebook: June 2 and June 13, 2025

   - Santaquin Instagram: June 2, June 3, June 9, June 25, and June 27, 2025

- **News Coverage**
   - KUTV: "Utah County plans $1.6B water project to meet growing population demand," May 29, 2025
   - *Daily Herald*: "Watering the future: How pioneer settler efforts provided basis for today's water needs in southern Utah County," June 7, 2025

2.2 Public Open Houses

To provide the public with an opportunity to learn more about the Proposed Project's improvements, alternatives, and purpose and needs developed by the JLAs, the study team held two open houses in June 2024. These open houses also provided the public with an opportunity to ask the JLAs questions and provide a public comment.

The first meeting was held on June 10, 2025, in the Banquet Hall of the Payson Municipal Building, located at 439 W. Utah Avenue in Payson, Utah. A total of 28 attendees signed in for the June 10 meeting.

The second meeting was held on June 12, 2025, in the commons area of Juab High School, located at 346 E. 600 N in Nephi, Utah. A total of 22 attendees signed in for the June 12 meeting.

These locations were chosen for convenience of access for stakeholders in southern Utah County and eastern Juab County, where the proposed improvements are located. The open houses included the following elements:

- Attendees were encouraged, but not required, to sign in at the welcome table.
- Attendees were given a brief explanation of the open house format and presentation layout.
- Attendees were given a fact sheet that provided an overview and details of the Proposed Project.
- Information boards were displayed throughout the meeting spaces.
- Large maps displaying Alternatives A and B were laid out in the center of the rooms.
- A screen was set up to display a geographic information system (GIS) map of the study area.
- JLA team members were in attendance to answer questions about the Proposed Project.

- A comment station was provided where attendees could write comments about the Proposed Project.

All of the materials provided at the open houses were made available for review on the Proposed Project website. To review materials presented at the scoping meetings, see Appendix B, *Scoping Meeting Materials*.

2.3 Agency and Tribal Scoping

2.3.1 Agency and Tribal Scoping Notification Letters

Scoping notification letters were sent to agencies and tribal stakeholders inviting them to attend the open houses, review the project scoping materials on the Proposed Project website, and provide comments regarding the Proposed Project.

The following agencies, municipalities, organizations, and federally recognized tribes were sent letters on May 21, 2025:

- **Federal**
    - U.S. Bureau of Land Management
    - U.S. Bureau of Indian Affairs (Eastern Nevada Agency, Wind River Agency, Uintah and Ouray Agency, Southern Paiute Agency, Fort Hall Agency)
    - U.S. Army Corps of Engineers
    - U.S. Department of Agriculture, Forest Service
    - U.S. Department of Agriculture, Natural Resources Conservation Service
    - U.S. Environmental Protection Agency
    - U.S. Fish and Wildlife Service
- **Tribes**
    - Confederated Tribes of the Goshute Reservation
    - Eastern Shoshone Tribe of the Wind River Reservation of Wyoming
    - Hopi Tribe of Arizona
    - Kaibab Band of Paiute Indians
    - Las Vegas Tribe of Paiute Indians
    - Moapa Band of Paiute Indians
    - Navajo Nation
    - Northern Arapaho Tribe of the Wind River Reservation
    - Northwestern Band of Shoshoni Nation

    - Paiute Indian Tribe
    - Shoshone-Bannock Tribes of the Fort Hall Reservation of Idaho
    - Skull Valley Band of Goshute Indians
    - Ute Mountain Ute Tribe
    - Ute Tribe
    - Zuni Tribe of the Zuni Reservation
- **State**
    - Utah Governor's Office of Planning and Budget
    - Utah Public Lands Policy Coordinating Office
    - Utah Department of Agriculture and Food
    - Utah Department of Environmental Quality
    - Utah Department of Transportation
    - Utah Division of Forestry, Fire and State Lands
    - Utah Division of State History
    - Utah Division of Water Quality
    - Utah Division of Water Resources
    - Utah Division of Water Rights
    - Utah Division of Wildlife Resources
    - Utah State Parks and Recreation
- **Regional**
    - Mountainland Association of Governments
    - R6 Regional Council/Six County Association of Governments
- **County**
    - Utah County
    - Utah County Commission
    - Juab County Commission
- **Cities**
    - Elk Ridge City
    - Mapleton City
    - Mona City
    - Nephi City
    - Payson City

  - Salem City
  - Santaquin City
  - Spanish Fork City
  - Springville City
  - Woodland Hills City
- **Towns**
  - Town of Genola
  - Town of Goshen
  - Town of Rocky Ridge
- **Legislative**
  - U.S. Senators
  - U.S. Representatives
  - Utah Senate members for districts in the Proposed Project area
  - Utah House members for districts in the Proposed Project area
- **Water Users, Districts, and Associations**
  - East Juab Water Conservancy District
  - Jordan Valley Water Conservancy District
  - Mapleton Irrigation District
  - Metropolitan Water District of Salt Lake and Sandy
  - Mt. Nebo Water Agency
  - Provo River Commissioner
  - Provo River Water Users Association
  - South Utah Valley Municipal Water Association
  - Spanish Fork River Commissioner
  - Springville Irrigation District
  - Strawberry High Line Canal Company
  - Strawberry Water Users Association
  - Utah Lake Authority
  - Utah Lake Water Users Association
  - Weber Basin Water Conservancy District

To review the scoping notification letter recipients and the scoping notification letter, see Appendix C, *Scoping Notification Letters*.

3.0 Scoping Comments

The scoping period for the Proposed Project began on May 23, 2025, and ended on June 27, 2025. Each comment was reviewed and considered by the JLAs.

The study received 15 comments during the scoping process. Most of these comments were from state and federal agencies. Topics included:

- Support for Proposed Project elements, including:
  - Potential future water to Juab County
  - Shared-use path on the Strawberry High Line Pipeline
- Concerns about potential impacts to:
  - Wildlife, specifically the June sucker (*Chasmistes liorus*), brown trout (*Salmo trutta*), and rainbow trout (*Oncorhynchus mykiss*)
  - Riparian habitat
  - Recreation access
  - Downstream implications for Utah Lake and the Great Salt Lake
  - Aquatic resources
  - Water quality and quantity
  - Air quality
  - Private property
  - Existing and planned transportation infrastructure

To review the scoping comments, see Appendix D, *Scoping Comments*.

4.0 Next Steps: Environmental Analysis

The alternatives proposed during the scoping process will be included in the EA. The JLAs may consider making refinements to these alternatives based on agency and public input.

Public involvement opportunities will be available again at the draft EA stage of the environmental review process.

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Appendix A: Scoping Notifications

Postcard

Legal Notices

Social Media

News Coverage

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NEBO WATER PROJECT

YOU'RE INVITED!

Come learn about the Nebo Regional Water Project.

The Central Utah Water Conservancy District and federal partners are conducting an Environmental Assessment to evaluate improvements to the Strawberry High Line Canal and water delivery in southern Utah County and eastern Juab County.

Your input matters.

Public Scoping Open Houses

Tuesday, June 10 | 5–7 p.m.
Payson City Hall, Banquet Room
439 W Utah Ave, Payson, UT

Thursday, June 12 | 5–7 p.m.
Juab High School Gymnasium
802 N 650 E, Nephi, UT

Maps and displays will be available for review, and project experts will be on hand to answer questions.

NEBO WATER PROJECT

YOU'RE INVITED!

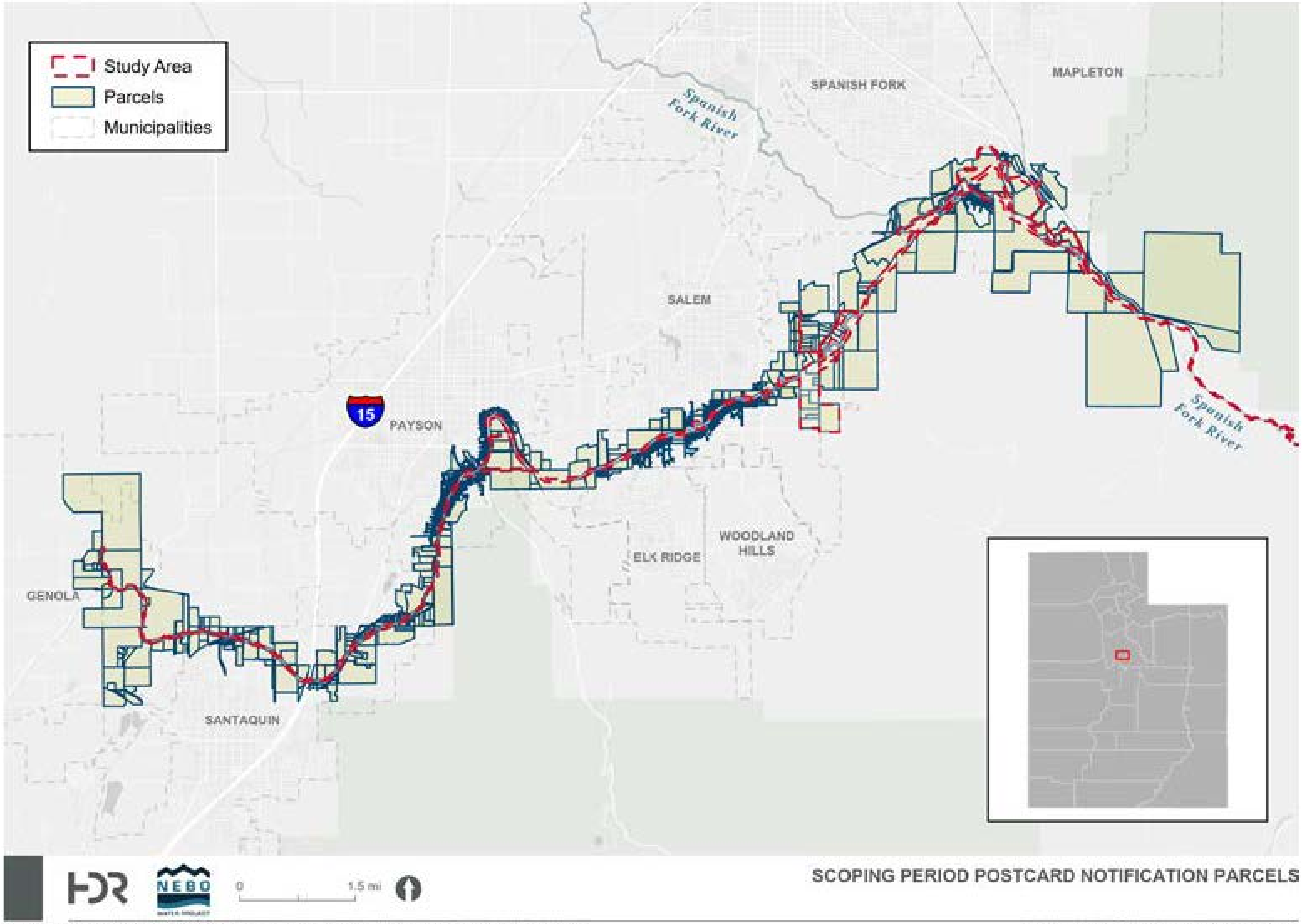
Learn about proposed improvements to the water delivery system serving southern Utah County and eastern Juab County

Public Scoping Open Houses:
Tuesday, June 10 &
Thursday, June 12

Learn more:
385-999-2212
connect@nebowaterproject.cuwcd.gov
nebowaterproject.cuwcd.gov

Nebo Regional Water Project
HDR Engineering
2825 E Cottonwood Pkwy #200
Salt Lake City, UT 84121

Notification postcard front and back



SCOPING PERIOD POSTCARD NOTIFICATION PARCELS

O:\PROJECTS\CUWCD\10418956_NEBOREGIONALWATER_EIS\7.2_WIP\APRX\NEBO_EIS.APRX DATE: 7/10/2025

Deseret News

Publication Name:
Deseret News

Publication URL:

Publication City and State:
Salt Lake City, UT

Publication County:
Salt Lake

Notice Popular Keyword Category:

Notice Keywords:
Nebo

Notice Authentication Number:
202507071543092669504
2742324387

Notice URL:

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Notice Publish Date:
Friday, May 23, 2025

Notice Content

PUBLIC NOTICE LEGAL NOTICE – SCOPING PERIOD, PUBLIC OPEN HOUSES, AND OPPORTUNITY TO PROVIDE COMMENTS The Central Utah Water Conservancy District, the U.S. Bureau of Reclamation, the U.S. Department of the Interior – Central Utah Project Completion Act Office, and the Utah Reclamation Mitigation and Conservation Commission, as Joint Lead Agencies (JLAs), are preparing an Environmental Assessment (EA) in accordance with the National Environmental Policy Act, 42 United States Code §§ 4321, et seq. for the Nebo Regional Water Project (Proposed Project). The Proposed Project is located in southern Utah County between Spanish Fork Canyon and the city of Genola and in eastern Juab County. The Proposed Project involves enclosing the Strawberry High Line Canal, conveying finished water from the proposed South Utah Valley Regional Water Treatment Plant, constructing interconnect pipes to and from the proposed treatment plant, and various administrative changes that would affect the water operations, timing, and use. The purpose of this notice is to offer an opportunity to comment on the Proposed Project. All comments received will be evaluated and considered in the EA. The JLAs will hold two public scoping open houses: on Tuesday, June 10, 2025, at Payson City Center, 439 W. Utah Avenue in Payson and on Thursday, June 12, 2025, at Juab High School, 802 North 650 East in Nephi. Both meetings will be in an open-house format from 5 to 7 p.m. Comments will be accepted until June 27, 2025, and may be submitted by email (connect@nebowaterproject.cuwcd.gov), by postal mail (Nebo Regional Water Project c/o HDR, 2825 E. Cottonwood Parkway, Suite 200, Salt Lake City, UT 84121-7077), or on the project website (nebowaterproject.cuwcd.gov). An electronic map is available on the project website for recording comments. For more information, visit the project website or call the project phone number at 385-999-2212. In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) or language translation services during these meetings should notify the project team 5 days in advance at the contact information provided above. DN0028406

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Deseret News Legal Notice, May 23, 2025

Deseret News

Deseret News

Publication Name:
Deseret News

Publication URL:

Publication City and State:
Salt Lake City, UT

Publication County:
Salt Lake

Notice Popular Keyword Category:

Notice Keywords:
Nebo

Notice Authentication Number:
202507071541598964596
2742324387

Notice URL:

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Notice Publish Date:
Friday, May 30, 2025

Notice Content

PUBLIC NOTICE LEGAL NOTICE – SCOPING PERIOD, PUBLIC OPEN HOUSES, AND OPPORTUNITY TO PROVIDE COMMENTS The Central Utah Water Conservancy District, the U.S. Bureau of Reclamation, the U.S. Department of the Interior – Central Utah Project Completion Act Office, and the Utah Reclamation Mitigation and Conservation Commission, as Joint Lead Agencies (JLAs), are preparing an Environmental Assessment (EA) in accordance with the National Environmental Policy Act, 42 United States Code §§ 4321, et seq. for the Nebo Regional Water Project (Proposed Project). The Proposed Project is located in southern Utah County between Spanish Fork Canyon and the city of Genola and in eastern Juab County. The Proposed Project involves enclosing the Strawberry High Line Canal, conveying finished water from the proposed South Utah Valley Regional Water Treatment Plant, constructing interconnect pipes to and from the proposed treatment plant, and various administrative changes that would affect the water operations, timing, and use. The purpose of this notice is to offer an opportunity to comment on the Proposed Project. All comments received will be evaluated and considered in the EA. The JLAs will hold two public scoping open houses: on Tuesday, June 10, 2025, at Payson City Center, 439 W. Utah Avenue in Payson and on Thursday, June 12, 2025, at Juab High School, 802 North 650 East in Nephi. Both meetings will be in an open-house format from 5 to 7 p.m. Comments will be accepted until June 27, 2025, and may be submitted by email (connect@nebowaterproject.cuwcd.gov), by postal mail (Nebo Regional Water Project c/o HDR, 2825 E. Cottonwood Parkway, Suite 200, Salt Lake City, UT 84121-7077), or on the project website (nebowaterproject.cuwcd.gov). An electronic map is available on the project website for recording comments. For more information, visit the project website or call the project phone number at 385-999-2212. In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) or language translation services during these meetings should notify the project team 5 days in advance at the contact information provided above. DN0028406

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Deseret News Legal Notice, May 30, 2025

Daily Herald

Publication Logo Unavailable

Publication Name:
Daily Herald

Publication URL:

Publication City and State:
Provo, UT

Publication County:
Utah

Notice Popular Keyword Category:

Notice Keywords:
Nebo

Notice Authentication Number:
202507071542460081155
2742324387

Notice URL:

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Notice Publish Date:
Wednesday, June 04, 2025

Notice Content

PUBLIC NOTICE LEGAL NOTICE - SCOPING PERIOD, PUBLIC OPEN HOUSES, AND OPPORTUNITY TO PROVIDE COMMENTS The Central Utah Water Conservancy District, the U.S. Bureau of Reclamation, the U.S. Department of the Interior - Central Utah Project Completion Act Office, and the Utah Reclamation Mitigation and Conservation Commission, as Joint Lead Agencies (JLAs), are preparing an Environmental Assessment (EA) in accordance with the National Environmental Policy Act, 42 United States Code 4321, et seq. for the Nebo Regional Water Project (Proposed Project). The Proposed Project is located in southern Utah County between Spanish Fork Canyon and the city of Genola and in eastern Juab County. The Proposed Project involves enclosing the Strawberry High Line Canal, conveying finished water from the proposed South Utah Valley Regional Water Treatment Plant, constructing interconnect pipes to and from the proposed treatment plant, and various administrative changes that would affect the water operations, timing, and use. The purpose of this notice is to offer an opportunity to comment on the Proposed Project. All comments received will be evaluated and considered in the EA. The JLAs will hold two public scoping open houses: on Tuesday, June 10, 2025, at Payson City Center, 439 W. Utah Avenue in Payson and on Thursday, June 12, 2025, at Juab High School, 802 North 650 East in Nephi. Both meetings will be in an open-house format from 5 to 7 p.m. Comments will be accepted until June 27, 2025, and may be submitted by email (connect@nebowaterproject.cuwcd.go v), by postal mail (Nebo Regional Water Project c/o HDR, 2825 E. Cottonwood Parkway, Suite 200, Salt Lake City, UT 84121-7077) , or on the project website (nebowaterproject.cuwcd.gov). An electronic map is available on the project website for recording comments. For more information, visit the project website or call the project phone number at 385-999-2212. In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) or language translation services during these meetings should notify the project team 5 days in advance at the contact information provided above. Legal Notice 14134 Published in the Daily Herald on May 28, June 4, 2025

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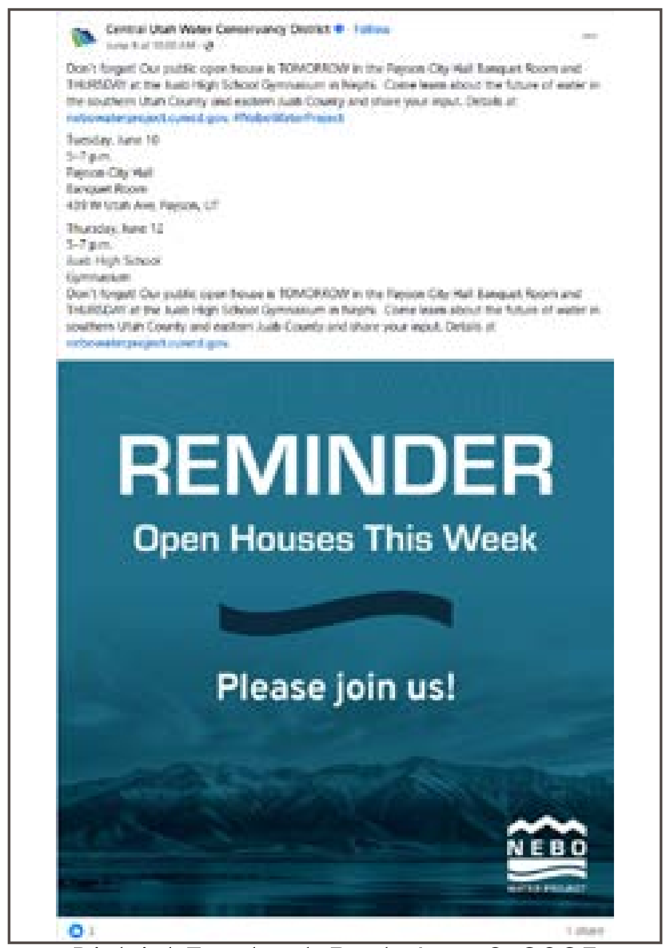
District Facebook Post, May 30, 2025

District Facebook Post, June 3, 2025

District Facebook Post, June 6, 2025



District Facebook Post, June 9, 2025

Genola Facebook Post, May 28, 2025

Nephi Facebook Post, June 12, 2025

Nephi Instagram Post, June 12, 2025

Salem Facebook Post, May 27, 2025

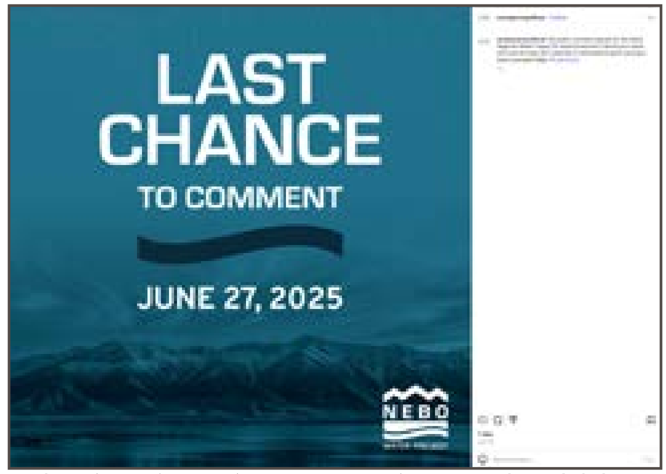
Santaquin Facebook Post, June 2, 2025

Salem Instagram Post, June 2, 2025

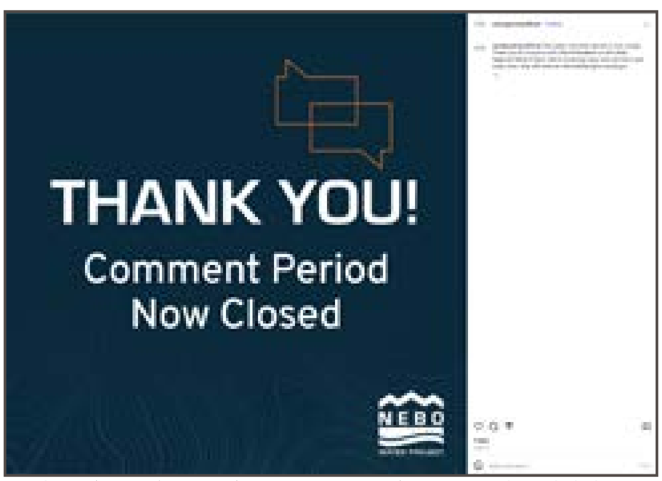
Santaquin Instagram Post, June 3, 2025

Santaquin Instagram Post, June 9, 2025

Santaquin Facebook Post, June 13, 2025



Santaquin Instagram Post, June 25, 2025



Santaquin Instagram Post, June 27, 2025

NEWS WEATHER SPORTS FEATURES GAME CENTER WATCH

Utah County plans $1.6B water project to meet growing population demands

by Natalie Wadas, KUTV
Thu, May 29th 2025 at 6:23 PM
Updated Thu, May 29th 2025 at 7:05 PM

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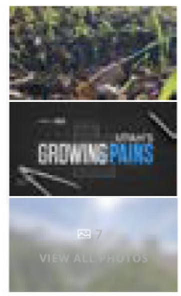

Strawberry Reservoir in Wasatch County, Utah, is seen in this undated photo provided by the Utah Division of Wildlife Resources.

TOPICS: UTAH COUNTY WATER PROJECT $1.6 BILLION POPULATION DEMANDS NEBO REGIONAL WATE

OREM, Utah (KUTV) — Utah County water officials are working on a $1.6 billion project to meet water demands as the county's population continues to grow.

The goal is to get more water to southern Utah County in an effort to keep up with the growing population's needs.

Roger Pearson with CUWCD said the plan has two parts: Enclose the Strawberry Highline Canal and build a new water treatment plant in Salem.

MORE | Utah's Growing Pains:

- Utah homeowners having problems with newly installed water meters
- Gov. Cox orders state agencies to coordinate on Utah's long-range growth challenges
- Three intersections in Joaquin neighborhood of Provo getting revamped over summer

Utahs Growing Pains (KUTV)

Pearson said the canal is a "more than 100-year-old water system," and enclosing it will reduce flood risk and increase the volume of clean water available. The pipeline will continue to be used for agricultural and residential irrigation.

KUTV Article, May 29, 2025

The second part of the plan is to build a drinking water treatment plant in Salem that draws from Strawberry Reservoir. However, the plan isn't far along yet, with Pearson saying they have a "concept-level design."

Officials are still working through the anticipated costs of carrying out the plan, with the rough estimate at about $1.6 billion. Pearson said the money would come from federal funding and local bond measures.

"Together, we're going to build a project that's going to meet the needs of the communities as they continue to grow and meet today's needs for the irrigators," Pearson said.

It may be a while before people start to see movement on this project, as conservancy district officials said they're hoping to have it completed by 2032.

There are two open house events to discuss the project — one at the Payson City Hall Banquet Room on June 10 from 5 to 7 p.m., and the other

KUTV Article (cont'd), May 29, 2025

Watering the future: How pioneer settler efforts provided basis for today's water needs in southern Utah County

By Jacob Nielson - | Jun 7, 2025

1 / 7

The Strawberry High Line Canal is pictured on Wednesday, June 4, 2025.

Jacob Nielson, Daily Herald

The assortment of fruit orchards that are scattered throughout Utah County's southern fields serve both as cultural pillars and cash crops that power the region's economy.

Daily Herald Article, June 7, 2025

The county accounts for half of the state's entire fruit production and is a national leader is cherry production while also churning out large volumes of peaches and apples.

The existence and success of these farms isn't a product of happenstance or convenience but is a credit to the foresight and ingenuity of a group of Latter-day Saint pioneer settlers in the late 19th and early 20th centuries.

Facing a limited supply of water from nearby streams to grow their crops, settlers in towns like Spanish Fork, Payson and Santaquin looked for a new source of water, and came up with the idea to turn Strawberry Valley into a reservoir that stored water from the Uintah Mountains.

To get the water to Utah Valley, workers blasted a 3.8-mile federally funded tunnel through the mountains that crossed the Wasatch Divide from the Colorado River Basin to the Bonneville Basin.

Completed in 1912, the water flowed from the tunnel into streams the led to the Spanish Fork River and into the valley.

In the century since, the reservoir has grown and new tunnels have been built, yet the settler's idea still serves as the basis of how much of Utah Valley and the Wasatch Front receives its water.

Now a new plan is in the works to meet the water demands of a growing population of these once sparsely population southern Utah County towns.

The state-owned Central Utah Water Conservancy District, or CUWCD, is working on the Nebo Regional Water Project, a $1 billion-plus plan to turn the Strawberry High Line Canal into a pipeline and build a new water treatment plant in Salem by 2032.

CUWCD engineers believe these measures will service drinking water supply from Salem to Juab County while continuing to meet the needs of the region's agricultural land for years to come.

And the plan, CUWCD Special Programs Manager Roger Pearson said, is not possible without the assistance of the early settlers.

"(We acknowledge) the foresight of the early pioneers, those who went ahead and paved the way, dug the tunnels, punched through the mountain, so we could utilize the water for the last 100-plus years," Pearson said. "I'm hoping what we're doing is carrying on a legacy, a vision and foresight for what they did, because that's really what makes our project possible. We have no water supply for a water treatment plant if we don't have that water."

Daily Herald Article (cont'd), June 7, 2025

Building a pipeline

Built by the U.S. Reclamation Service and completed in 1917, the federally owned Strawberry High Line Canal begins at the base of Spanish Fork Canyon, winding southwest along the base of the mountain and providing irrigation water from Salem to Santaquin before jetting west to Goshen, CUWCD Project Engineer and Planner Derek Bruton explained.

Only 2,500 acre feet of the canal's allocated 35,000 acre feet of water actually comes from the Spanish Fork River, Pearson said, and by early June this year that water has already ran out. The rest comes from the Strawberry Reservoir, serving as a direct use of the early settler's Strawberry Valley Project.

But the canal is nearing the end of its lifespan.

Constructed with concrete and metal rods, the infrastructure is deteriorating. A drive along the canal shows chips in the concrete, exposed rods hanging out and in one spot a tiny leak.

As the urbanization creeps closer to the canal below, any canal breach would be catastrophic.

"There are risks to life and millions and millions of dollars of property damage, which an irrigation company can't afford, obviously, so then the irrigation company would go bankrupt," Pearson said. "Life is at risk. There's just a lot of challenges with running what used to be a rural canal in an urban area."

To solve the issue, High Line Canal is partnering with Central Utah Water Conservancy District to pipe the canal. CUWCD will transform the canal into a 72-inch, 18 mile-long pipe that will cost an estimated $300 million, Pearson said.

The new pipeline will be connected to an existing 96-inch CUWD pipeline that starts at Diamond Fork Canyon, Bruton added, meaning it will stay piped from the Strawberry Reservoir until it reaches its destination.

This makes the water free of sediments and debris that turn the current canal water dirty and murky, keeps the orchard's drip irrigation systems from plugging up due to sediment buildup, and pressurizes the water all the way to the farms, saving operational costs, Pearson explained.

"Instead of dumping it into the Spanish Fork River and mixing with all the rivers, we're going to bypass it, bring their water all the way down the pipeline and keep it piped all the way to here," he said. "It'll no longer go in this power canal. It'll stay piped clean, pressurized water that can be delivered to their users."

Daily Herald Article (cont'd), June 7, 2025

In exchange for building the pipeline, CUWCD will have rights to the water that is currently lost in the canal through evaporation, which accounts for approximately 15 percent.

It will be distributed to municipalities through the Salem Water Treatment Plant and other irrigation methods, providing efficient, clean water to fulfill both urban and agricultural needs, the engineers said.

“Our goal is to build a project that doesn’t price out the agricultural community,” Pearson said. “They’re our partners. Agriculture is going to continue to be an important part of this project for generations.”

Water treatment plant

While southern Utah County relies on the various offshoots of the Strawberry Valley Project for its agricultural production, every city in the county south of Provo is 100% reliant on springs and well water for its drinking water.

But as the population of the area balloons — Salem City, for instance, said it’s population will grow from its current 10,000 residents to over 60,000 people by 2035 — the demand for this water is soon to exceed the supply.

The way to supplement this issue is to build a surface water treatment plants.

There are already several plants in Salt Lake County and one at the mouth of Provo Canyon. Building a new one in Salem signifies this new era of urbanization.

“It’s taking water that’s coming down the river and treating it in a treatment plant to clean it for drinking water,” Pearson said. “We can take this water to the Salem Water treatment plant, treat it and then just distribute it as a regional facility to multiple cities and in the county.”

The CUWCD purchased a plot of land in Salem at the base of Water Canyon, perched just above the High Line Canal near the Three Bridges luxury development currently under construction.

The land will serve as CUWCD’s future surface water treatment plant, with water from the new pipeline flowing in and being distributed across the area.

“Taking advantage of elevation, it will be built in multiple phases,” Bruton said. “Initially, it would be delivering a fairly small amount of water but eventually delivering upwards of 100 million gallons

Daily Herald Article (cont’d), June 7, 2025

… We wouldn't have to pump to get here. We wouldn't have to pump to get to anywhere in south Utah County."

When completed, the pipeline and the treatment plant combined will have the capacity to service more water than is needed by 2032.

But the idea isn't to build out to 2032, but to plan for the century to come — and improve upon the efforts of the past.

"The fact is that this isn't replacing any of that," Bruton said. "It's building on it, taking that foundation and allowing us to be ready for the next 100 years. We're adjusting and adapting but not replacing."

Two open houses will discuss the project next week. The first one will be held from 5-7 p.m. Tuesday at the Payson City Hall Banquet Room, followed by a 5-7 p.m. meeting Thursday at the Juab High School Gym in Nephi.

Daily Herald Article (cont'd), June 7, 2025

Appendix B: Scoping Meeting Materials

Meeting photos

Information boards

Scroll plot maps

Fact sheet

Meeting sign-in sheets

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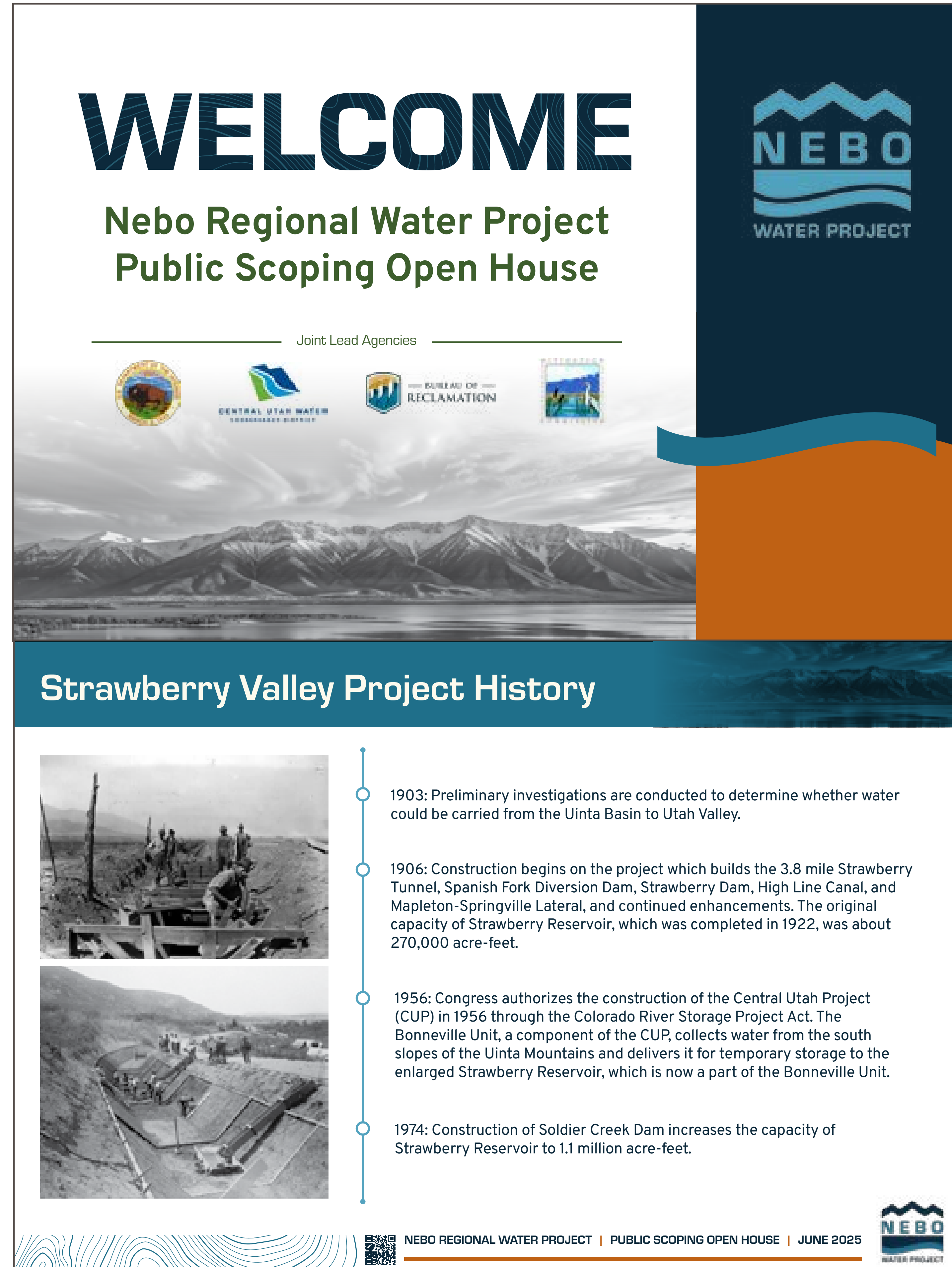
Payson City Meeting, June 10, 2025

Nephi City Meeting, June 10, 2025



Information Boards

Project Purpose

Improve Safety
An enclosed canal would reduce flood risk and other safety risks associated with the aging, open-channel Strawberry High Line Canal.

Improve Operational Efficiency and Water Quality
Enclosing and pressurizing the Strawberry High Line Canal would deliver water directly from Strawberry Reservoir with less sediment and debris making the system more efficient.

Maximize Use of Limited Water Supply
The enclosed canal would conserve water by eliminating seepage and evaporation losses in the Strawberry High Line Canal.

Modernize Water System
These improvements would provide an integrated, efficient, redundant, and flexible water delivery system that meets current and future demands for agricultural use while also facilitating the transition to future demand requirements for indoor and outdoor Municipal and Industrial use in southern Utah County and eastern Juab County.

Project Needs

Operational Inefficiencies
The existing Strawberry High Line Canal frequently has issues with water quality due to sediment loads from the Spanish Fork River that require extra effort and cost to mitigate and remove.

Lack of an Integrated, Redundant Water Delivery System
To meet the needs of current agricultural water demands and anticipated population growth as land uses change in southern Utah County and eastern Juab County, an integrated network between the Strawberry Valley Project and the Utah Lake Drainage Basin Water Delivery System will be needed to add redundancy to the system to ensure the distribution of water without interruptions or service delays.

NEBO REGIONAL WATER PROJECT | PUBLIC SCOPING OPEN HOUSE | JUNE 2025

Project Needs

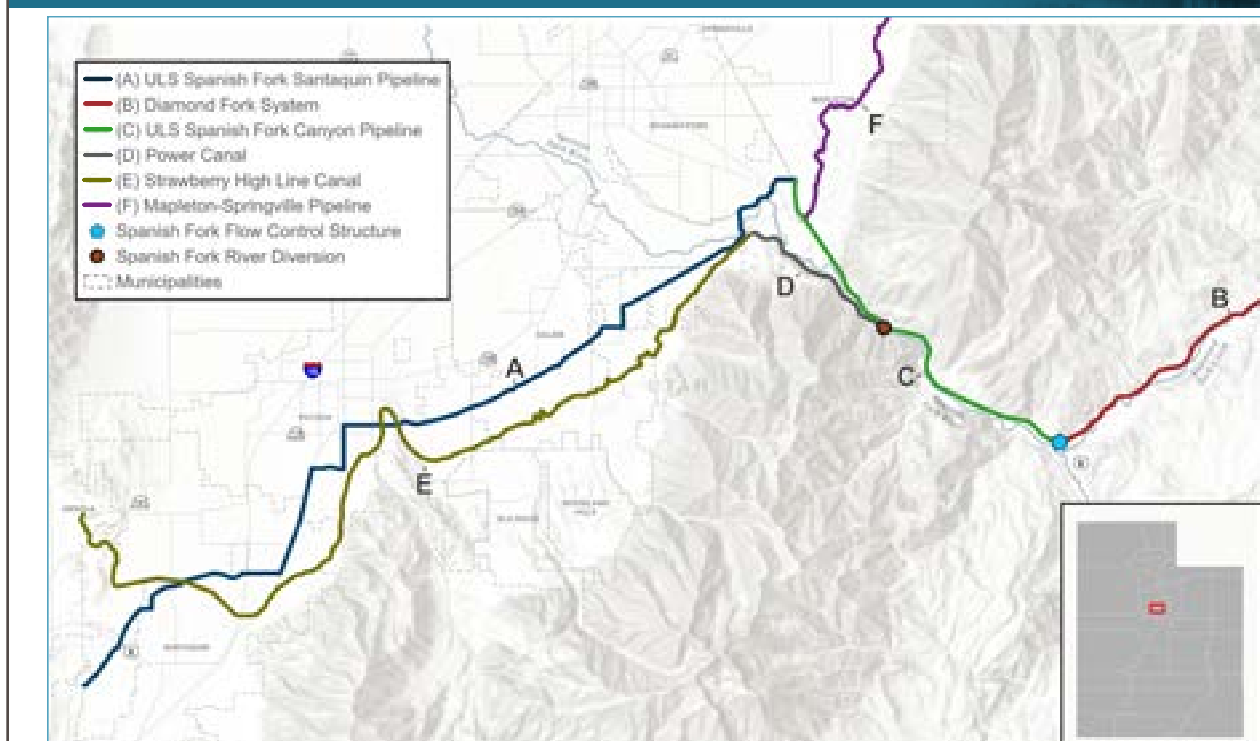
Safety Risks
The century-old Strawberry High Line Canal is vulnerable to failures caused by landslides, debris flows, and earthquakes. Additionally, potential breaches create flood risks to residential areas below the canal.

Water Loss
The Strawberry High Line Canal Company estimates that 16% of water in the canal is lost per year through evaporation and seepage.

NEBO REGIONAL WATER PROJECT | PUBLIC SCOPING OPEN HOUSE | JUNE 2025

Information Boards

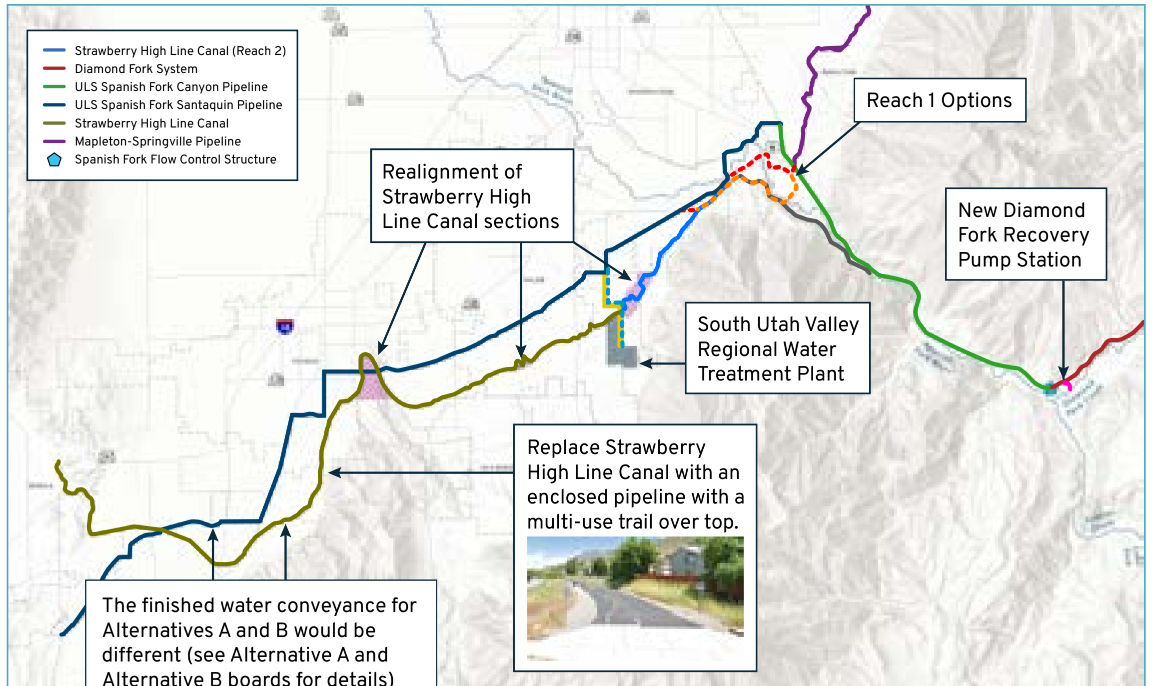
Existing Facilities



NEBO REGIONAL WATER PROJECT | PUBLIC SCOPING OPEN HOUSE | JUNE 2025

Information Boards

Key Improvement Features for Both Alternatives



Alternative B

How finished water would be conveyed after treatment at the South Utah Valley Regional Water Treatment Plant.

Alternative B

From the South Utah Valley Regional WTP to Santaquin, Alternative B would convey finished water in a new District pipeline in the Strawberry High Line Canal right-of-way. Alternative B would also enclose the Strawberry High Line Canal in a pipe along the Strawberry High Line Canal right-of-way.

Alternative A

How finished water would be conveyed after treatment at the South Utah Valley Regional Water Treatment Plant.

Alternative A

With Alternative A, the Utah Lake Drainage Basin Water Delivery System (ULS) Spanish Fork Santaquin Pipeline (and its turnouts) would be reconfigured to convey finished water (water treated for culinary and drinking purposes) from the proposed South Utah Valley Regional Water Treatment Plant (WTP).

Proposed Trail

Construction of a Multi-use Trail

Utah County would fund the construction of and maintain a multi-use trail on the federally owned right-of-way on top of the proposed Strawberry High Line Pipeline once it is installed.

Murdock Trail in Utah County

Scan the QR code for MAG 2023 Regional Transportation Plan Map.

Information Boards

Information Boards

Study Process Timeline

Need for Improvements Identified → **Preliminary Studies** → **Environmental Assessment (EA)** (Current) → **Final Design 2026 – 2028 Completion: 2028** → **Construction: 2028 – 2031 Operational: 2032**

Early 2025	Spring - Summer 2025	Spring - Summer 2025	Fall 2025 - Early 2026	Spring 2026	Summer 2026
Purpose and Need, Alternatives Development	**Scoping**	**Environmental Analysis**	**Prepare Draft EA**	**Publish Draft EA**	**Final EA and Either FONSI or Notice of Intent**
Define the purpose of the project based on the identified needs Develop alternatives for the project	Hold public open houses Provide 30-day public comment period	Conduct studies and evaluate potential impacts of the project to different resources in the study area	Compile information and prepare Draft EA	Publish Draft EA Provide 30-day public comment period	Respond to comments on Draft EA and make updates to EA Publish Final EA Notify the public of the outcome (Finding of No Significant Impact or Notice of Intent to prepare an Environmental Impact Statement)

Submit Comments

Provide your input on:

- Potential impacts to resources that will be evaluated during the NEPA process
- Project alternatives

Comment Form:
Submit a written comment

Comment on our website:
nebowaterproject.cuwcd.gov

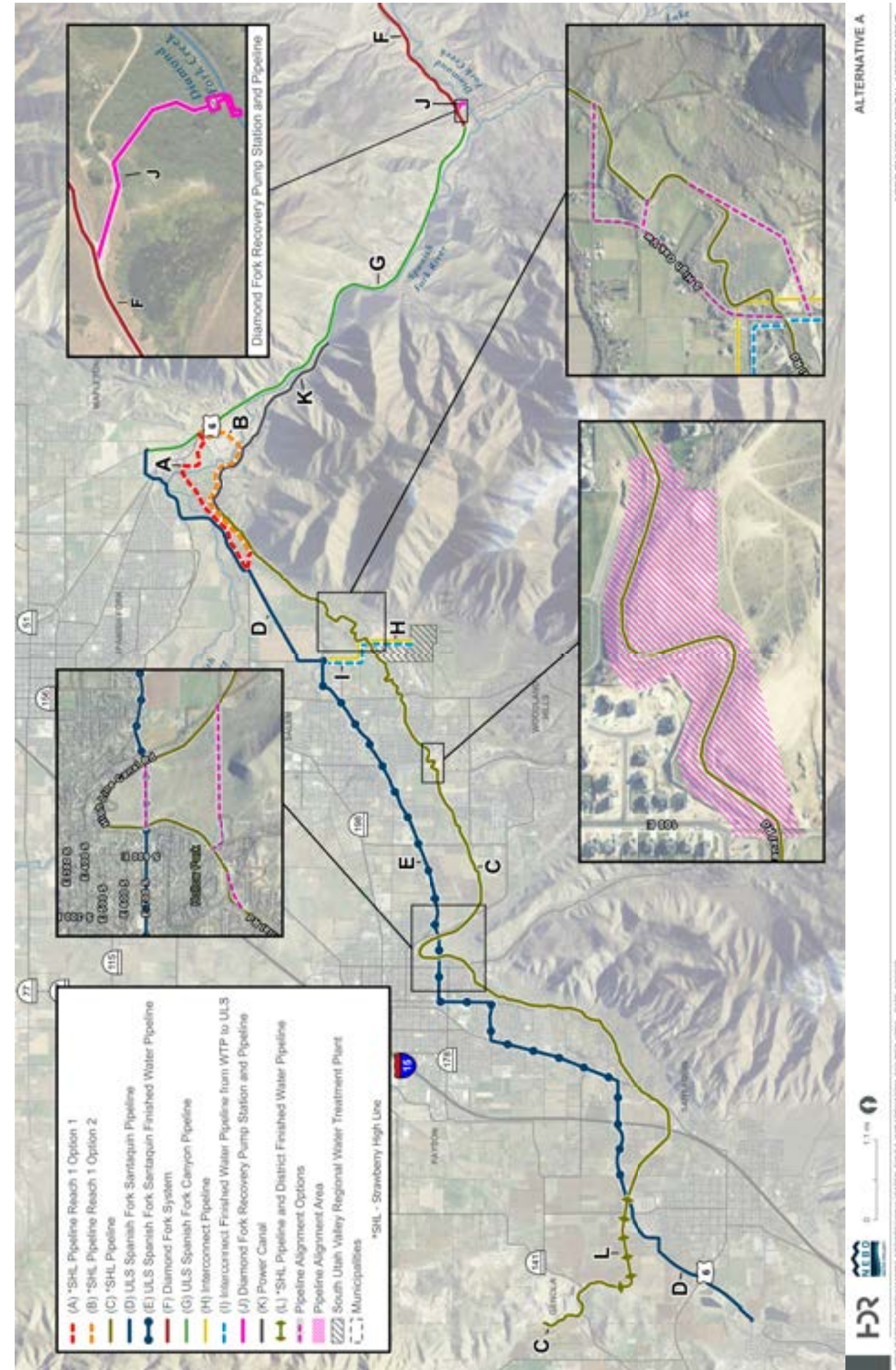
Email: connect@nebowaterproject.cuwcd.gov

Call: 385-999-2212

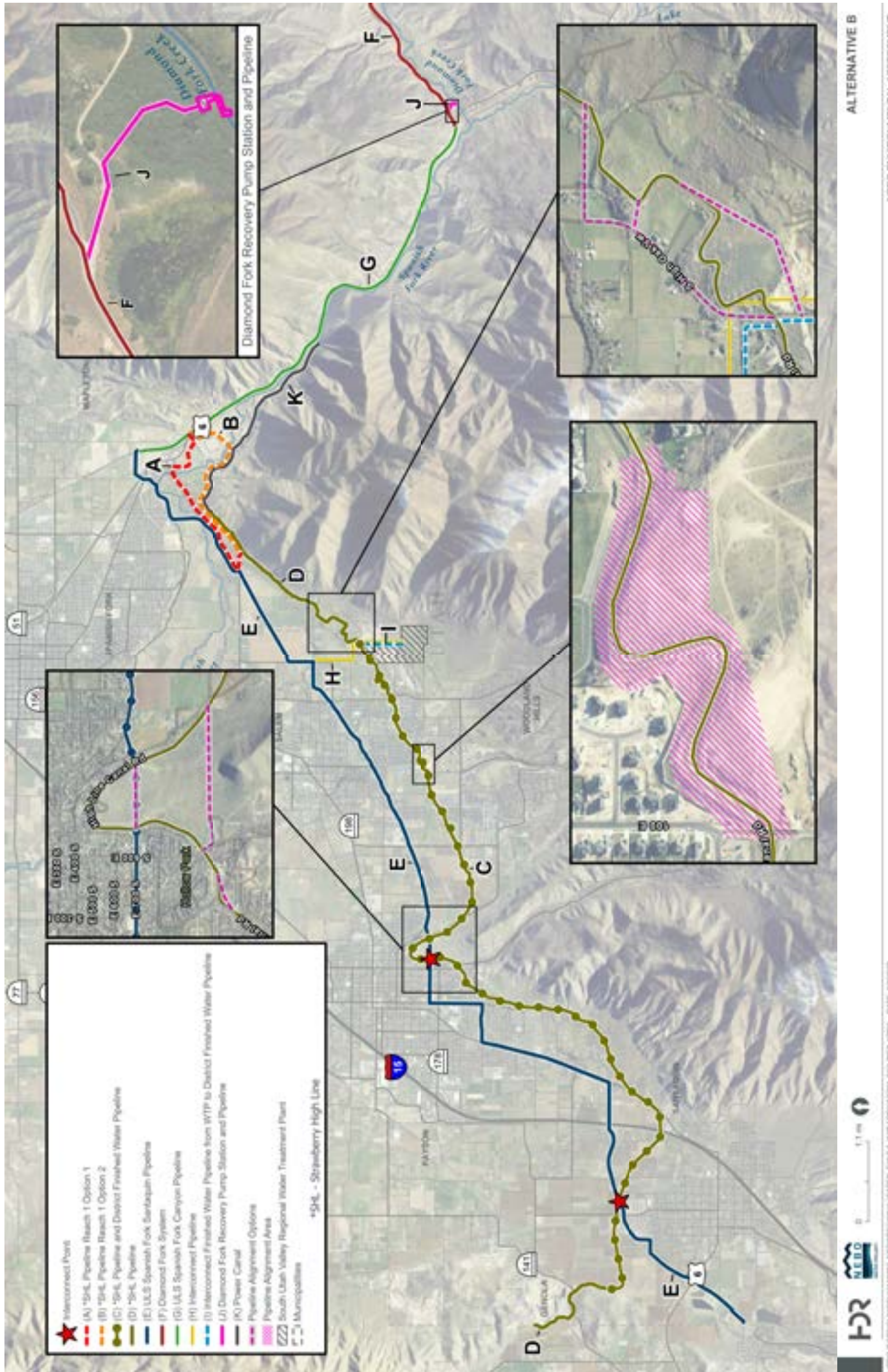
Mail your comments to:
Nebo Water Project
2825 E. Cottonwood Pkwy #200
Salt Lake City, UT 84121

Public comment period: May 23 – June 27, 2025

Information Boards



Scroll Plot: Alternative A



Scroll Plot: Alternative B

Scroll Plot: Supplemental Eastern Juab

Project Timeline

- Need for Improvements Identified
- Preliminary Studies
- Current: Environmental Assessment (EA)
- Final Design 2026 – 2028 Completion: 2028
- Construction: 2028 – 2031 Operational: 2032

EARLY 2025: Purpose and Need, Alternatives Development

Define the purpose of the project based on the identified needs

Develop alternatives for the project

SPRING – SUMMER 2025: Scoping

Hold public open houses

Provide 30-day public comment period

SPRING – SUMMER 2025: Environmental Analysis

Conduct studies and evaluate potential impacts of the project to different resources in the study area

FALL 2025 – EARLY 2026: Prepare Draft EA

Compile information and prepare Draft EA

SPRING 2026: Publish Draft EA

Publish Draft EA

Provide 30-day public comment period

SUMMER 2026: Final EA and Either FONSI or Notice of Intent

Respond to comments on Draft EA and make updates to EA

Publish Final EA

Notify the public of the outcome (Finding of No Significant Impact or Notice of Intent to prepare an Environmental Impact Statement

Submit Comments

Provide your input on:

» Potential impacts to resources that will be evaluated during the NEPA process

» Project alternatives

Comment form: Submit a written comment

Comment on our website: nebowaterproject.cuwcd.gov

Email: connect@nebowaterproject.cuwcd.gov

Call: 385-999-2212

Mail your comments to:
Nebo Water Project
2825 E. Cottonwood Pkwy
#200
Salt Lake City, UT 84121

Public comment period: May 23 – June 27, 2025

Joint Lead Agencies

NEBO WATER PROJECT

Fact Sheet Back Page

Nebo Regional Water Project

Overview

The Central Utah Water Conservancy District, the U.S. Department of the Interior, the U.S. Bureau of Reclamation, and the Utah Reclamation Mitigation and Conservation Commission, as joint lead agencies (JLA), are preparing an environmental assessment (EA) for the proposed Nebo Regional Water Project (NWP). The improvements proposed as part of the NWP would meet current and anticipated future water demands in southern Utah County and eastern Juab County.

Purpose

Improve Safety

Replacing the canal with a pipeline would reduce flood risk and other safety risks associated with the aging, open-channel Strawberry High Line Canal.

Maximize Use of Limited Water Supply

Replacing the canal with a pipeline would conserve water by eliminating seepage and evaporation losses in the Strawberry High Line Canal.

Improve Operational Efficiency and Water Quality

Enclosing and pressurizing the Strawberry High Line Canal would deliver water directly from Strawberry Reservoir with less sediment and debris making the system more efficient.

Modernize Water System

These improvements would provide an integrated, efficient, redundant, and flexible water delivery system that meets current and future demands for agricultural use while also facilitating the transition to future demand requirements for indoor and outdoor Municipal and Industrial use in southern Utah County and eastern Juab County.

Proposed Improvements

The proposed NWP includes:

» Enclosing the Strawberry High Line Canal in a buried pipeline

» Establishing a public trail over this pipeline

» Modifying the Spanish Fork Santaquin Pipeline

» Constructing the South Utah Valley Regional Water Treatment Plant

» Constructing a Diamond Fork Recovery Pump Station

» Constructing interconnect pipelines

» Making changes to operations and water use

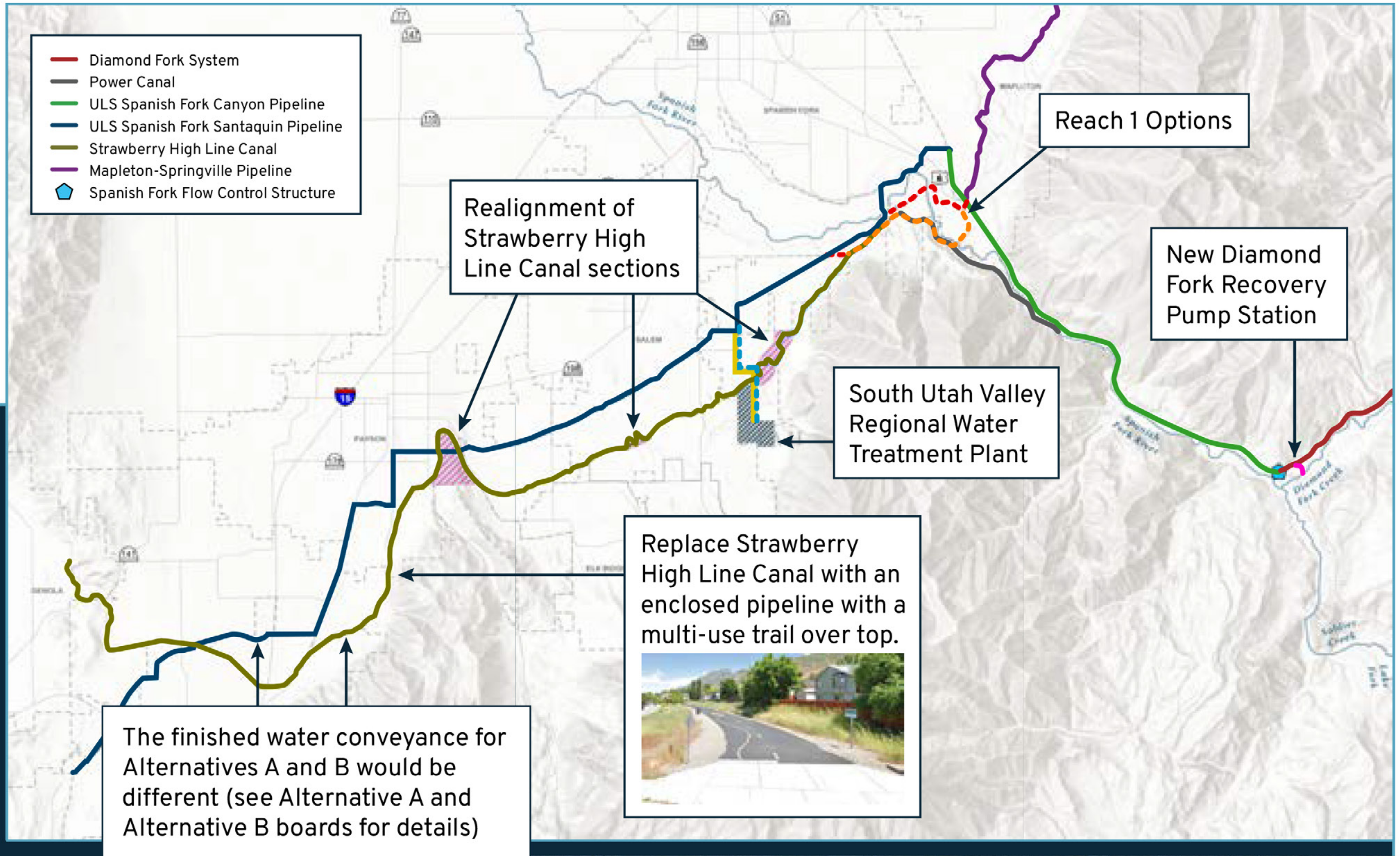
» Potentially making changes to the Strawberry Water Users Association's infrastructure

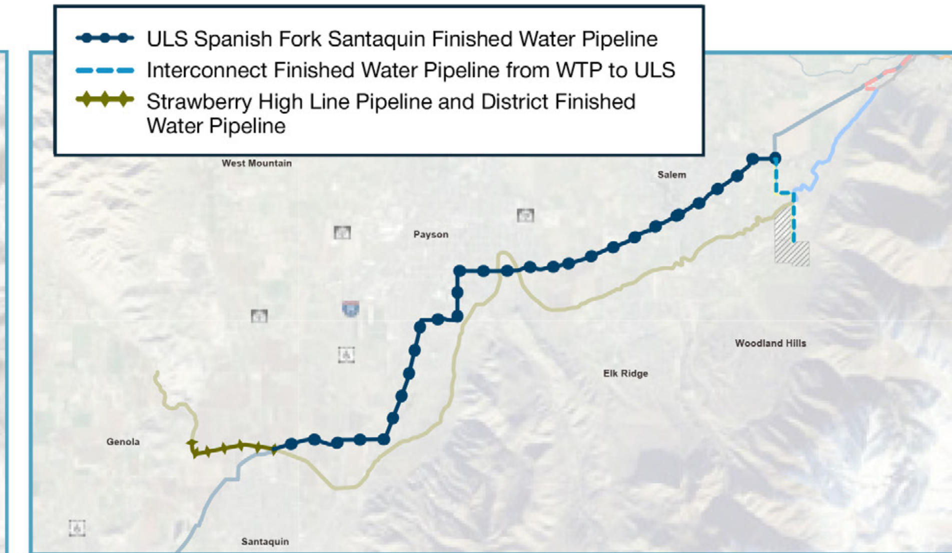
» Making changes to administrative responsibilities

NEBO WATER PROJECT

Fact Sheet Front Page

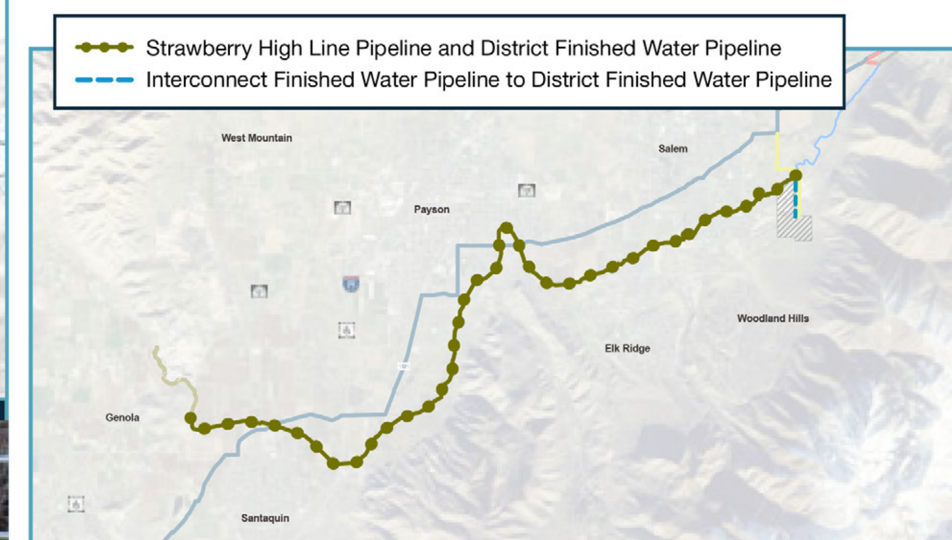
Proposed Improvements





Alternative A

With Alternative A, the Utah Lake Drainage Basin Water Delivery System (ULS) Spanish Fork Santaquin Pipeline (and its turnouts) would be reconfigured to convey finished water (water treated for culinary and drinking purposes) from the proposed South Utah Valley Regional Water Treatment Plant (WTP).



Alternative B

From the South Utah Valley Regional WTP to Santaquin, Alternative B would convey finished water in a new District pipeline in the Strawberry High Line Canal right-of-way. Alternative B would also enclose the Strawberry High Line Canal in a pipe along the Strawberry High Line Canal right-of-way.

NEBO WATER PROJECT

PUBLIC SCOPING OPEN HOUSE

TUESDAY, JUNE 10 | 5 – 7 PM | PAYSON CITY HALL | 439 W. UTAH AVE.

	Name	Organization (if applicable)	Address, City, Zip Code	Phone Number	Email	How did you hear about this meeting?	Add me to your email list
1	Cory Pierce	SF city	[redacted]	[redacted]	[redacted]	Invited	yes
2	John Waters	SF City	[redacted]	[redacted]	[redacted]	invited	yes
3	Dan Thomas		[redacted]	[redacted]	[redacted]	Invite from	yes
4	Lon Lundell	Santaquin	[redacted]	[redacted]	[redacted]	Invite	yes
5	Robert Mills	Payson	[redacted]	[redacted]	[redacted]	Invite	yes
6	Melinda Harris Jim Harris	Spring Lake	[redacted]	[redacted]	[redacted]	mailing	yes
7	Ric Cantrell	CUWCD	[redacted]	[redacted]	[redacted]		yes
8	Bruce Ward	CUWCD	[redacted]	[redacted]	[redacted]	N/A	yes
9							yes no
10							yes no

NEBO WATER PROJECT

PUBLIC SCOPING OPEN HOUSE

TUESDAY, JUNE 10 | 5 - 7 PM | PAYSON CITY HALL | 439 W. UTAH AVE.

	Name	Organization (if applicable)	Address, City, Zip Code	Phone Number	Email	How did you hear about this meeting?	Add me to your email list	
1	Ashley Peay	wwclyde		[redacted]	[redacted]	Industry	yes	no
2	BOYD BARNEY			[redacted]	[redacted]		yes	no
3	MIKE KAY			[redacted]	[redacted]		yes	no
4	Joshua Davis			[redacted]	[redacted]		yes	no
5	Dan Fechner	Jones and Demille		[redacted]	[redacted]		yes	no
6	Duff Shelley			[redacted]	[redacted]	Postcard	yes	no
7	Robert Shelley			[redacted]	[redacted]	Postcard	yes	no
8	Duane Frisby			[redacted]	[redacted]	post card	yes	no
9	Kathy Alvey			[redacted]	[redacted]		yes	no
10	Wade E. Garner	CUWCD Trustee		[redacted]	[redacted]	l.com	yes	no

NEBO WATER PROJECT

PUBLIC SCOPING OPEN HOUSE

TUESDAY, JUNE 10 | 5 – 7 PM | PAYSON CITY HALL | 439 W. UTAH AVE.

	Name	Organization (if applicable)	Address, City, Zip Code	Phone Number	Email	How did you hear about this meeting?	Add me to your email list	
1	Shauny Lee		[redacted]	[redacted]	[redacted]	friend	yes	no
2	J. Robert Creer	Water For The West non-profit W.F.T.W	[redacted]	[redacted]	[redacted]	[redacted] m KSL	yes	no
3	Brian Hulet	Payson City	[redacted]	[redacted]	[redacted]		yes	no
4	Eldon Chestnut	~~[illegible]~~ W.W. Clyde	[redacted]	[redacted]	[redacted]	[redacted]	yes	no
5	Tiffine [illegible]	Mona City	[redacted]	[redacted]	[redacted]		yes	no
6	Tara Howard	Mona	[redacted]	[redacted]	[redacted]		yes	no
7	Matt Laurendeau	Jones & DeMille	[redacted]	[redacted]	[redacted]		yes	no
8	Kim Lewis		[redacted]	[redacted]	[redacted]	Salem City Instagram	yes	no
9	Zac Steele	Brown & Caldwell	[redacted]	[redacted]	[redacted]	CUWCD	yes	no
10	Gordon Alvey	[illegible]					yes	no

NEBO
WATER PROJECT

PUBLIC SCOPING OPEN HOUSE

THURSDAY, JUNE 12 | 5 - 7 PM | JUAB HIGH SCHOOL | 802 N. 650 E.

Name	Organization (if applicable)	Address, City, Zip Code	Phone Number	Email	How did you hear about this meeting?	Add me to your email list	
1 Lynn Bailey	East Juab Co Water Conservancy			[redacted]		yes	no
2 Ron Allred	Rocky Ridge City					yes	no
3 Justin Seely	Nephi City	[redacted]				yes	no
4 Brian Trick	U.S. Forest Service					yes	no
5 Michael [illegible], III					Facebook	yes	no
6 Tiffine McAfee	Citizen					yes	no
7 Joanna Covington	Rocky Ridge City				email	yes	no
8 Tyler Keyte	East Juab Water Conservancy					yes	no
9						yes	no
10						yes	no

Nephi meeting Sign In

NEBO
WATER PROJECT

PUBLIC SCOPING OPEN HOUSE

THURSDAY, JUNE 12 | 5 - 7 PM | JUAB HIGH SCHOOL | 802 N. 650 E.

	Name	Organization (if applicable)	Address, City, Zip Code	Phone Number	Email	How did you hear about this meeting?	Add me to your email list	
1	Andy Allred	Rocky Ridge Town	[redacted]	[redacted]	[redacted]	Town notice	yes	no
2	Joshua Davis		[redacted]	[redacted]	[redacted]		yes	no
3	KYLE MARCHANT	NEPHI CITY	[redacted]	[redacted]	[redacted]	CITY	yes	no
4	Jonathan Jones	Mona City	[redacted]	[redacted]	[redacted]	City	yes	no
5	Marty Palmer	Juab county	[redacted]	[redacted]	[redacted]		yes	no
6	Marvin Kenison	Juab County CUWCD	[redacted]	[redacted]	[redacted]		yes	no
7							yes	no
8							yes	no
9							yes	no
10							yes	no

NEBO WATER PROJECT

PUBLIC SCOPING OPEN HOUSE

THURSDAY, JUNE 12 | 5 – 7 PM | JUAB HIGH SCHOOL | 802 N. 650 E.

	Name	Organization (if applicable)	Address, City, Zip Code	Phone Number	Email	How did you hear about this meeting?	Add me to your email list	
1	Seth Atkinson	Nephi City	[redacted]				yes	no
2	Shawn Christiansen	Ames Construction	[redacted]				yes	no
3	Dean Blackhurst	EJWCD	[redacted]				yes	no
4	Barbara Bradford	EJCWCD	[redacted]				yes	no
5	Amy Stanley	mona city council	[redacted]				yes	no
6	Kyle Stanley	mona city	[redacted]				yes	no
7	Myrna (Nephi Times News)	Trauntvein	[redacted]				yes	no
8	Leonard	Trauntvein	[redacted]				yes	no
9							yes	no
10							yes	no

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Appendix C: Scoping Notification Letters

Agency Mailing List

Tribal Mailing List

Example of Scoping Notification Letters

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Contact Type	Name	Organization	Address	City	State	Zip
Federal	Agency Representative	U.S. Bureau of Land Management, Utah State Office	440 West 200 South, Ste. 500	Salt Lake City	UT	84101
Federal	Jason Gipson, Chief	U.S. Army Corps of Engineers, Bountiful Regulatory Office	533 West 2600 South, Ste 150	Bountiful	UT	84101-7744
Federal	George Weekley, State Supervisor	U.S. Fish and Wildlife Service, Utah Ecological Services Field Office	2369 West Orton Circle, Ste 50	West Valley City	UT	84119-7603
Federal	Agency Representative	U.S. Forest Service, Spanish Fork Ranger District	44 West 400 North	Spanish Fork	UT	84660
Federal	Jenny Cox	Natural Resources Conservation Service - Provo Field Office	302 E. Lakeview Parkway	Provo	UT	84606-6154
Federal	Melissa McCoy, NEPA Branch Manager	US Environmental Protection Agency - Region 8	1595 Wynkoop Street	Denver	CO	80202-1129
Cities and Counties	Mayor Matt Packard	Springville City	110 South Main Street	Springville	UT	84663
Cities and Counties	Mayor Dallas Hakes	Mapleton City	125 W Community Center Way	Mapleton	UT	84664
Cities and Counties	Mayor Mike Mendenhall	Spanish Fork City	40 S Main St	Spanish Fork	UT	84660
Cities and Counties	Mayor Kurt Christensen	Salem City	30 W 100 S	Salem	UT	84653
Cities and Counties	Mayor Robert Hadddock	Elk Ridge City	80 E Park Drive	Elk Ridge	UT	84651
Cities and Counties	Mayor Brent Winder	Woodland Hills City	690 S Woodland Hills Dr.	Woodland Hills	UT	84653
Cities and Counties	Mayor Bill Wright	Payson City	439 W Utah Avenue	Payson	UT	84651
Cities and Counties	Mayor Dan Olson	Santaquin City	110 S Center Street	Santaquin	UT	84655
Cities and Counties	Richard Nielsen	Utah County Public Works Director	2855 South State Street	Provo	UT	84606
Cities and Counties	Mayor Steven Staheli	Goshen	10 West Main PO Box 197	Goshen	UT	84633
Cities and Counties	Mayor Neil Brown	Genola Town	74 W 800 S	Genola	UT	84655
Cities and Counties	Mayor Ronald Allred	Rocky Ridge	195 E. Mountain Ridge Road	Rocky Ridge	UT	84645
Cities and Counties	Mayor Randy Christensen	Mona	20 West Center Street	Mona	UT	84645
Cities and Counties	Mayor Justin Seely	Nephi	21 E 100 N	Nephi	UT	84648
Cities and Counties	Brandon Gordon, Chair	Utah County Commission Chair	100 E Center Street Suite 2300	Provo	UT	84606
Cities and Counties	Amelia Powers Gardner	Utah County Commissioner	100 E Center Street Suite 2300	Provo	UT	84606
Cities and Counties	Skyler Beltran	Utah County Commissioner	100 E Center Street Suite 2300	Provo	UT	84606
Cities and Counties	Marty Palmer, Chair	Juab County Commission	160 N Main Street	Nephi	UT	84648
Cities and Counties	Clinton Painter	Juab County Commissioner	160 N Main Street	Nephi	UT	84648
Cities and Counties	Marvin Kenison	Juab County Commissioner	160 N Main Street	Nephi	UT	84648
Elected officials	Congressman Blake Moore	U.S. House of Representatives - Congressman Blake Moore (District 1)	324 25th Street	Ogden	UT	84401
Elected officials	Congressman Celeste Maloy	U.S. House of Representatives - Congressman Celeste Maloy (District 2)	585 West 500 South #230	Bountiful	UT	84010
Elected officials	Congressman Mike Kennedy	U.S. House of Representatives - Congressman Mike Kennedy (District 3)	3549 N University Parkway Suite 275	Provo	UT	84604
Elected officials	Congressman Burgess Owens	U.S. House of Representatives - Congressman Burgess Owens (District 4)	9067 South 1300 West Suite 101	West Jordan	UT	84088
Elected officials	Senator Mike Lee	Senator Mike S. Lee	125 South State Street Suite #4225	Salt Lake City	UT	84138
Elected officials	Senator John Curtis	Senator John Curtis	125 South State Street Suite #8402	Salt Lake City	UT	84138
Elected officials	Rep. Stephanie Gricius	Utah House District 50	350 N State Street, Ste 350	Salt Lake City	UT	84114
Elected officials	Rep. Norman Thurston	Utah House District 62	965 E Center Street	Provo	UT	84606
Elected officials	Rep. Stephen Whyte	Utah House District 63	913 S Iris Lane	Mapleton	UT	84664
Elected officials	Rep. Jefferson Burton	Utah House District 64	350 N State Street, Ste 350	Salt Lake City	UT	84114
Elected officials	Rep. Douglas Welton	Utah House District 65	350 N State Street, Ste 350	Salt Lake City	UT	84114
Elected officials	Rep. Troy Shelley	Utah House District 66	PO Box 393	Ephraim	UT	84627
Elected officials	Senator Michael McKell	Utah Senate District 25	642 Kirby Lane, Ste 105	Spanish Fork	UT	84660
Elected officials	Senator David Hinkins	Utah Senate District 26	PO Box 383	Ferron	UT	84523
Elected officials	Senator Derrin Owens	Utah Senate District 27	PO Box 127	Fountain Green	UT	84632
State agencies	Candice Hasenyager, Director	Utah Division of Water Resources	1549 W North Temple Suite 310	Salt Lake City	UT	84114-6201
State agencies	Jamie Barnes, Director	Utah Division of Forestry, Fire & State Lands	PO Box 145703	Salt Lake City	UT	84114-5703
State agencies	Teresa Wilhelmsen, State Engineer	Utah Division of Water Rights	1594 West North Temple, Suite 220	Salt Lake City	UT	84114-6300
State agencies	Scott Strong, Director	Utah State Parks & Recreation	1594 West North Temple, Suite 116	Salt Lake City	UT	84116
State agencies	Riley Peck, Director	Utah Division of Wildlife Resources	1594 W. North Temple Suite 2110	Salt Lake City	UT	84116
State agencies	Sarah Seegert	Utah Division of Wildlife Resources	1594 W. North Temple Suite 2110	Salt Lake City	UT	84116
State agencies	Eric Anderson	Utah Division of Wildlife Resources	1594 W. North Temple Suite 2110	Salt Lake City	UT	84116
State agencies	Chris Crockett	Utah Division of Wildlife Resources	1115 N Main Street	Springville	UT	84663
State agencies	Mike Slater	Utah Division of Wildlife Resources	1115 N Main Street	Springville	UT	84663
State agencies	Redge Johnson, Director	Public Lands Policy Coordinating Office	1594 W North Temple, Suite 320	Salt Lake City	UT	84116
State agencies	Joel Ferry, Executive Director	Utah Department of Natural Resources	1596 W. North Temple	Salt Lake City	UT	84114-5610
State agencies	Sophia DiCaro, Executive Director	Governor's Office of Planning & Budget	350 N State Street #150	Salt Lake City	UT	84114-2210
State agencies	John Mackey, Director	Utah Division of Water Quality	PO Box 144870	Salt Lake City	UT	84114-4870
State agencies	Nathan Lunstad, Director	Utah Division of Drinking Water	PO Box 144830	Salt Lake City	UT	84114-4830
State agencies	Chris Merritt, SHPO	Utah Division of State History	300 South Rio Grande Street	Salt Lake City	UT	84101
State agencies	Rob Clayton, Director	Utah Department of Transportation, Region 3	658 N 1500 W	Orem	UT	84057
State agencies	Kelly Pehrson, Commissioner	Utah Department of Agriculture and Food	P.O. Box #146500	Salt Lake City	UT	84114-6500
State agencies	Tim Davis, Executive Director	Utah Department of Environmental Quality	P.O. Box #144810	Salt Lake City	UT	84114-4810
Local agencies	LaNiece Davenport, Planning Director	Mountainland Association of Governments	586 E 800 N	Orem	UT	84097
Local agencies	Calvin Clark, Transportation Project Manager	Mountainland Association of Governments	586 E 800 N	Orem	UT	84097
Local agencies	Travis Kyhl, Executive Director	R6 Regional Council/Six County Association of Governments	82 E 600 N	Richfield	UT	84701
Local agencies	Luke Peterson, Executive Director	Utah Lake Authority	51 South University Ave, Suite 109	Provo	UT	84601
Water Districts	Scott Paxman, General Manager	Weber Basin Water Conservancy District	2837 East Highway 193	Layton	UT	84040
Water Districts	Alan Packard	Jordan Valley Water Conservancy District	8215 South 1300 West	West Jordan	UT	84088
Water Districts	Shazelle Terry	Jordan Valley Water Conservancy District	8215 South 1300 West	West Jordan	UT	84088
Water Districts	Kevin Rubow	Jordan Valley Water Conservancy District	8215 South 1300 West	West Jordan	UT	84088
Water Districts	Wade Tuft	Jordan Valley Water Conservancy District	8215 South 1300 West	West Jordan	UT	84088
Water Districts	Annalee Munsey	Metropolitan Water District of Salt Lake & Sandy	3430 East Danish Road	Cottonwood Heights	UT	84093
Water Districts	Jeff Budge	Provo River Water Users Association	285 West 1100 North	Pleasant Grove	UT	84062
Water Districts	Richard Nielsen	Mt. Nebo Water Agency	30 W 100 S	Salem	UT	84653
Water Districts	Marty Larson	Strawberry High Line Canal Company	1608 American Way	Payson	UT	84651
Water Districts	Sterling Brown	Strawberry Water Users Association	745 N 500 E	Payson	UT	84651
Water Districts	Lani Bonnett	South Utah Valley Municipal Water Association	1405 W 1600 N	Mapleton	UT	84664
Water Districts	Duran Kay	East Juab Water Conservancy District	P.O. Box 199	Nephi	UT	84648
Water Districts	Mike Miner	Mapleton Irrigation District	125 W Community Center Way	Mapleton	UT	84664
Water Districts	Albert Harmer	Springville Irrigation District	PO Box 745	Springville	UT	84663
Water Districts	Wade Tuft	Utah Lake Water Users Association	P O Box 571440	Midvale	UT	84157
Water Districts	John Larsen	Utah Lake/Jordan River	2399 East 10265 South	Sandy	UT	84092
Water Districts	Ed Vidmar	Spanish Fork River Commissioner	1218 S 480 W	Salem	UT	84653
Water Districts	Scott Bergendorf	Provo River Commissioner	717 North Main Street, Ste 201	Springville	UT	84663
NGOs/Stakeholders	Jordan Nielson	Trout Unlimited	1104 S River Ridge Ln	Spanish Fork	UT	84660
NGOs/Stakeholders	Marcelle Shoop	Audubon	PO Box 520867	Salt Lake City	UT	84152-0867
NGOs/Stakeholders	Adam Wickline	Audubon	PO Box 520867	Salt Lake City	UT	84152-0867
NGOs/Stakeholders	Max Malmquist	Audubon	PO Box 520867	Salt Lake City	UT	84152-0867
NGOs/Stakeholders	Ann Neville	The Nature Conservancy	559 E South Temple	Salt Lake City	UT	84102
NGOs/Stakeholders	Jay Buckley	Utah Valley Historical Society	550 N University Avenue, Provo Library Ste 201	Provo	UT	84601
NGOs/Stakeholders	David Robbins	Utah County Farm Bureau	9865 S. State Street	Sandy	UT	84070
NGOs/Stakeholders	Gary Herbert, Executive Chair	Utah Valley Chamber of Commerce	2696 N University Avenue Ste 220	Provo	UT	84604
NGOs/Stakeholders	Kathleen Leavitt, President/CEO	Spanish Fork Salem Chamber of Commerce	67 E 100 N	Spanish Fork	UT	84660
NGOs/Stakeholders	Jim Rowland, President/CEO	Payson Santaquin Chamber of Commerce	87 N Main St.	Payson	UT	84651
NGOs/Stakeholders	Melanie Bott, President/CEO	Springville-Mapleton Chamber of Commerce	110 S Main St.	Springville	UT	84663-5741
NGOs/Stakeholders	Agency Representative	Greater Nephi Chamber of Commerce	PO Box 219	Nephi	UT	84648
NGOs/Stakeholders	Tribly Cox, Co-Executive Director	Bike Utah	960 S Main Street	Salt Lake City	UT	84101
NGOs/Stakeholders	Wendy Fisher, Executive Director	Utah Open Lands	1488 Main Street	Salt Lake City	UT	84115
CUWCD Trustees	G. Wayne Andersen	CUWCD Trustee	957 South 1700 West	Spanish Fork	UT	84660
CUWCD Trustees	Shelley Brennan	CUWCD Trustee	PO Box 916	Duchesne	UT	84021
CUWCD Trustees	Jon Bronson	CUWCD Trustee	10085 Silver Streak Dr	South Jordan	UT	84095
CUWCD Trustees	Kirk L. Christensen	CUWCD Trustee	24493 W 4000 N	Talmage	UT	84073
CUWCD Trustees	Steve Farrell	CUWCD Trustee	325 West 500 South	Midway	UT	84049
CUWCD Trustees	Wade E. Garner	CUWCD Trustee	PO Box 85	Elberta	UT	84626
CUWCD Trustees	Steve Hanberg	CUWCD Trustee	HC 69 Box 129	Randlett	UT	84063
CUWCD Trustees	Max Haslem	CUWCD Trustee	3150 N Vernal Ave	Vernal	UT	84078
CUWCD Trustees	Marvin Kenison	CUWCD Trustee	1239 W Powell Lane PO Box 203	Levan	UT	84639
CUWCD Trustees	Kathy Loveless	CUWCD Trustee	198 E Ensign Vista Dr	Salt Lake City	UT	84103
CUWCD Trustees	Al Mansell	CUWCD Trustee	2547 Granite Pass Court	Sandy	UT	84092
CUWCD Trustees	Greg McPhie	CUWCD Trustee	690 South 4800 East	Heber City	UT	84032
CUWCD Trustees	Eldon Neves	CUWCD Trustee	PO Box 727	Spanish Fork	UT	84660
CUWCD Trustees	Jim Riding	CUWCD Trustee	3273 Freedom Lane	West Jordan	UT	84084
CUWCD Trustees	Jennifer Scott	CUWCD Trustee	1486 Fox Pointe Dr	West Jordan	UT	84088
CUWCD Trustees	Randy Vincent	CUWCD Trustee	PO Box 203	Jensen	UT	84035
CUWCD Trustees	Brad Wells	CUWCD Trustee	1086 N 2250 W	Roosevelt	UT	84066

Name	Organization	Address	City	State	Zip
Honorable Luke Duncan	Chairman Ute Tribe Business Committee	PO Box 190	Fort Duchesne	Utah	84026-0190
Antonio Pingree	Acting Superintendent, Uintah and Ouray	PO Box 130	Fort Duchesne	Utah	84026-0190
Honorable Harold Cuthair	Chairman, Ute Mountain Ute Tribe	PO Box JJ	Towaoc	Colorado	81334
Terry Knight	Ute Mountain Ute Tribe, Cultural Preservation Program	PO Box 468	Towaoc	Colorado	81334
Honorable Pami Borchardt Slayton	Paiute Indian Tribe	440 North Paiute Drive	Cedar City	Utah	84720
Dorena Martineau	Paiute Indian Tribe, Cultural Resources Director	440 North Paiute Drive	Cedar City	Utah	84720
James Williams	Superintendent, Southern Piaute Tribe Agency	PO Box 720	St. George	Utah	84771
Honorable Ona Segunda	Kaibab Band of Paiute Indians of the Kaibab Indian Reservation	HC 65 Box 2, Tribal Affairs Building	Fredonia	Arizona	86022
Charley Bullets	Kaibab Band of Paiute Indians of the Paiute Indian Reservation	HC 65 Box 2, Tribal Affairs Building	Fredonia	Arizona	86022
Honorable Curtis Anderson	Las Vegas Tribe of Paiute Indian of the Las Vegas Indian Colony, Nevada	1 Paiute Drive	Las Vegas	Neveda	89106
Kenny Anderson	Las Vegas Tribe of Paiute Indian of the Las Vegas Indian Colony, Nevada	1 Paiute Drive	Las Vegas	Neveda	89106
Honorable Vickie Simmons	Moapa Band of Paiute Indians of the Moapa River Indian Reservation, Nevada	PO Box 340	Moapa	Neveda	89025
Honorable Candice Bear	Skull Valley Band of Goshute Indians	407 Skull Valley Road	Skull Valley	Utah	84029
Antonio Pingree	Acting Superintendent, Uintah and Ouray	PO Box 130	Fort Duchesne	Utah	84026-0190
Honorable Rupert Steele	Confederate Tribes of the Goshute Reservation	PO Box 6104	Ibapah	Utah	84034
Melissa Oppenhein	Confederate Tribes of the Goshute Reservation	PO Box 6104	Ibapah	Utah	84034
Antonio Pingree	Acting Superintendent, Uintah and Ouray	PO Box 130	Fort Duchesne	Utah	84026-0190
Honarable Darren Parry	Northwestern Band of Shoshoni Nation of Utah	707 North Main Street	Brigham City	Utah	84302
Patty Timbimboo-Madsen	Cultural and Natural Resources of the Northwestern Band of Shoshoni Nation of Utah	707 North Main Street	Brigham City	Utah	84302
Randy Thompson	Fort Hall Agency BIA	PO Box 220	Fort Hall	Idaho	83203
Honorable Nathan Small	Shoshone-Bannock Tribes of the Fort Hall Reservation of Idaho	PO Box 306	Fort Hall	Idaho	83203
Louise Dixie	Cultural Resource Coordinator Shoshone-Bannock Tribes of Fort Hall Reservation of Idaho	PO Box 306	Fort Hall	Idaho	83203
Randy Thompson	Fort Hall Agency BIA	PO Box 220	Fort Hall	Idaho	83203
Honorable Vernon Hill	Shoshone Tribe of the Wind River Reservation of Wyoming	PO Box 538	Fort Washakie	Wyoming	82514-0538
Joshua Mann	Tribal Historic Preservation Officer Eastern Shoshone Tribe of the Wind River Reservation	PO Box 538	Fort Washakie	Wyoming	82514-0538
Mike Addy	Wind River Agency, BIA	PO Box 158	Fort Washakie	Wyoming	82514
Honorable Timoth Nuvangyaoma	Hopi Tribe of Arizona	PO Box 123	Kyotsmovi,	Arizona	86039
Leigh Kuwanwisiwma	Hopi Tribe of Arizona Cultural Preservation Office	PO Box 123	Kyotsmovi,	Arizona	86039
Honorable Lee Spoonhunter	Northern Arapaho Tribe of the Wind River Reservation, Wyoming	PO Box 396	Fort Washakie	Wyoming	82514-0396
Yufina Soldier Wolf	Tribal Historic Preservation Office, Norther Arapaho Tribe of the Wind River Reservatoin	PO Box 67	St Stevens	Wyoming	82524
Jonathan Nez	Navajo Nation, Arizona, New Mexico, and Utah, Navajo Nation Tribal Council	PO Box 7440	Window Rock	Arizona	86515
Timothy Begay	Navajo Nation, Arizona, New Mexico, and Utah, Historic Preservation Office	PO Box 4950	Window Rock	Arizona	86515
Honorable Val Panteah Sr.	Zuni Tribe of the Zuni Reservation, New Mexico, Pueblo of Zuni Tribal Council	PO Box 339	Zuni	New Mexico	87327-0339
Dr. Kurt Dongoske	THPO, Acting Director, Historic Preservation Zuni Tribe of the Zuni Reservation, New Mexico	PO Box 1140	Zuni	New Mexico	87327

May 21, 2025

Agency Representative
U.S. Bureau of Land Management, Utah State Office
440 West 200 South, Ste. 500
Salt Lake City, UT 84101

Subject: Nebo Regional Water Project Environmental Assessment Scoping Notification

Dear Agency Representative:

The Central Utah Water Conservancy District (District), the U.S. Bureau of Reclamation (Reclamation), the U.S. Department of the Interior – Central Utah Project Completion Act Office (Interior), and the Utah Reclamation Mitigation and Conservation Commission (Mitigation Commission), as Joint Lead Agencies (JLAs), are preparing an Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA), 42 United States Code §§ 4321, *et seq.*, and applicable regulations, for the proposed Nebo Regional Water Project (Proposed Project).

The Proposed Project is located in southern Utah County generally between Spanish Fork Canyon and the city of Genola, Utah, and in eastern Juab County. The Proposed Project includes enclosing the Strawberry High Line Canal with a buried pipeline, establishing a public trail over this pipeline, modifications to the Spanish Fork Santaquin Pipeline, construction of the South Utah Valley Regional Water Treatment Plant, construction of a Diamond Fork Recovery Pump Station, construction of interconnect pipelines, changes to operations and water use, potential changes to the Strawberry Water Users Association's infrastructure, and changes to administrative responsibilities.

More details regarding the Proposed Project, the purpose of and need for the project, and the list of anticipated resources to be analyzed in the Environmental Assessment can be found in the scoping notice and materials on the project website (nebowaterproject.cuwcd.gov).

The JLAs are seeking comments and input from the public and agencies regarding the Proposed Project during the 30-day comment period between May 23 and June 27, 2025. Comments may be submitted by email (connect@nebowaterproject.cuwcd.gov), on the project website (nebowaterproject.cuwcd.gov), or by postal mail to Nebo Regional Water Project c/o HDR, 2825 E. Cottonwood Parkway, Suite 200, Salt Lake City, UT 84121-7077. A geographic information systems (GIS) map is also available on the project website for recording comments.

Two public scoping open houses will be held, at the following locations:

- June 10, 2025, from 5 to 7 p.m. at Payson City Center, 439 W. Utah Avenue in Payson
- June 12, 2025, from 5 to 7 p.m. at Juab High School, 802 North 650 East in Nephi

If you or your agency would like to meet with the project team, please let us know dates, times, and preference regarding in-person or virtual meetings, and we will work to get this set up.

Thank you for your participation and interest in this project.

Sincerely,

Sarah Sutherland

Sarah Sutherland
Central Utah Water Conservancy District
Environmental Programs Manager

cc: Rick Baxter, Reclamation
Paul Christensen, Interior
Michael Mills, Mitigation Commission

United States Department of the Interior

OFFICE OF THE SECRETARY
Central Utah Project Completion Act Office
302 East Lakeview Parkway
Provo, Utah 84606

CA-1300
2.1.4.17

Honorable Chairman
Skull Valley Band of Goshute Indians
407 Skull Valley Road
Skull Valley, Utah 84029

Subject: Nebo Regional Water Project Environmental Assessment Scoping Notification – Tribal Consultation – Section 202(a)(1) – Central Utah Project Completion Act

Dear Chairman:

The U.S. Department of the Interior – Central Utah Project Completion Act Office (Interior), the Central Utah Water Conservancy District (District), the U.S. Bureau of Reclamation (Reclamation), and the Utah Reclamation Mitigation and Conservation Commission (Mitigation Commission), as Joint Lead Agencies (JLAs), are preparing an Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA), 42 United States Code §§ 4321, *et seq.*, and applicable regulations, for the proposed Nebo Regional Water Project (Proposed Project).

The Proposed Project is located in southern Utah County generally between Spanish Fork Canyon and the city of Genola, Utah, and in eastern Juab County. The Proposed Project includes enclosing the Strawberry High Line Canal with a buried pipeline, establishing a public trail over this pipeline, modifications to the Spanish Fork Santaquin Pipeline, construction of the South Utah Valley Regional Water Treatment Plant, construction of a Diamond Fork Recovery Pump Station, construction of interconnect pipelines, changes to operations and water use, potential changes to the Strawberry Water Users Association's infrastructure, and changes to administrative responsibilities.

More details regarding the Proposed Project, the purpose of and need for the project, and the list of anticipated resources to be analyzed in the Environmental Assessment can be found in the scoping notice and materials on the project website (nebowaterproject.cuwcd.gov).

Interior is seeking your comments and input regarding the Proposed Project during a 30-day comment period ending June 27, 2025. Please provide this information to Mr. W. Russ Findlay, 302 East Lakeview Parkway, Provo, Utah 84606-7317, or by email to wfindlay@usbr.gov. Mr. Findlay may also be reached at (801) 379-1084. For the deaf, hard of hearing or speech impaired, please dial 7-1-1 to access the telecommunication relay system.

Two public scoping open houses will be held, at the following locations:

- June 10, 2025, from 5 to 7 p.m. at Payson City Center, 439 W. Utah Avenue in Payson, Utah
- June 12, 2025, from 5 to 7 p.m. at Juab High School, 802 North 650 East in Nephi, Utah

If you would like to meet in person, please let us know dates, times, and location preferences. Thank you for your participation and interest in this project.

Sincerely,

Paul Christensen
Program Director

Enclosure

cc: Mr. Antonio Pingree
Superintendent, Uintah and Ouray
Agency Bureau of Indian Affairs
P.O. Box 130
Fort Duchesne, Utah 84026
(w/encl)

ec: isis_farmer@ios.doi.gov
rbaxter@usbr.gov
mmills@usbr.gov
gene@cuwcd.gov
pchristensen@usbr.gov
wfindlay@usbr.gov
lapratt@usbr.gov
(w/encl to each)

Appendix D: Scoping Comments

Scoping Comments

DNR Scoping Comment Attachment

EPA Scoping Comment Attachment

Written Comments

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NEBO
WATER PROJECT

Nebo Regional Water Project Scoping Public Comments

#	Name	Date	Method	Comment
1	Adam Cowie	5/30/2025	Email	I tried to send a comment through the web link but it said the 'Subject Line' needed to be filled in, but gave no field for a Subject Line. Please include this message in your public comments on the piping of the Highline Canal. I believe there's strong public interest to see the canal corridor turn into a publicly accessible trail. Something similar to the Murdock Canal trail system would be of significant interest and value to the communities that the canal traverses through. Please consider this as part of the piping project. Please also protect public access to the "P" mountain during and after construction. Thank you
2	Dan Thomas	6/4/2025	Comment Map	Reach 1 option 1 destroys my home, why is this necessary? (This comment was resolved at Payson open house (Brady Cervetti - 06/12/2025)
3	Jeff Lewis	6/10/2025	Comment Map	The Transportation Commission has approved funding to add an additional lane on I-15 in each direction, likely in the median. Freeway project and water project will need to coordinate with each other. Exact timeline of I-15 project unknown.
4	Jeff Lewis	6/10/2025	Comment Map	Impacts to I-15 of the improved pipeline and trail crossing will need to be coordinated and permitted through UDOT Region 3.

5	Jeff Lewis	6/10/2025	Comment Map	Impacts to State Route 198 of the improved canal and trail crossing will need to be coordinated and permitted through UDOT Region 3.
6	Jeff Lewis	6/10/2025	Comment Map	UDOT is working with Union Pacific in a long-term planning/environmental effort to eliminate this rail line that parallels US-6 through Spanish Fork.
7	Jeff Lewis	6/10/2025	Comment Map	UDOT is working with Spanish Fork and Mapleton to connect the Mapleton Lateral Canal trail across US-6 and the railroad to connect to the existing trail system. Project is moving forward.
8	Jeff Lewis	6/10/2025	Comment Map	The Utah Legislature allocated funding to Spanish Fork City to construct a new bridge over the railroad to access a new residential development. Timeline of project unknown, but it could happen around the same time as the Nebo Water project.
9	Ashley Peay	6/10/2025	Written Comment	As a person in the industry as well as a local citizen, tonight's event was well thought out and easy for the public to understand. I liked the boards and large showing of CUWCD staff. Naturally, I am pro project as a science major. I understand the importance of the project. I know it comes with a large price tag but am happy to see the project finally proceed forward. Great job so far.
10	Kim Lewis	6/12/2025	Written Comment	Our property on Utah County maps show we own high line canal property. We are wondering how property ownership will be addressed, easement questions, etc? If someone is hurt on a portion of the canal that shows up under our name, who is held liable for that?

				We have animals grazing in the fields bordering the canal. If existing fences are removed during construction, will we be reimbursed for costs to reinstall?
11	Seth Atkinson	6/12/2025	Written Comment	Nephi is experiencing significant growth and this project can help with providing critical water supply for that growth. I want to point out that part of this growth is Agri-Park project from the R6 Regional Council that will most likely have several water-intensive uses. Juab County is also involved with this project. Nephi City is involved by providing utilities, including water.
12	Kyle Stanley	6/25/2025	Web Comment	I suggest bringing in the water to Juab as raw water and trading that water with the farmers and irrigation company in Mona for well water shares. The well water could be used as the culinary water source for Mona and Nephi city's. It would save a lot in building the project to not have to build a system to treat water to bring it to Juab, while there is water already available in town why not just find a way to work with both. The raw water that the farmers get in trade would be used to irrigate farm land keeping the agriculture industry alive in Juab County. Mona City needs water to support the continued growth in the community and this could be a good start to a water option.
13	Redge B. Johnson Public Lands Policy Coordinating Office Director DNR	6/25/2025	Email	**Division of Wildlife Resources** The proposed Diamond Fork recovery pump station may alter existing Spanish Fork River flows, potentially affecting several fish species, including June sucker. The June sucker is listed as threatened under the federal Endangered Species Act and found only in Utah Lake and its lower tributaries. The June Sucker Recovery Implementation Program (JSRIP) was created in 2002 as a multi-agency effort to recover the species. The DWR and our

				partners with the JSRIP have invested significant resources in this effort for over 20 years. Water in this system provides ecological benefits to the Spanish Fork River, Utah Lake, Jordan River, and ultimately the Great Salt Lake. Severe drought conditions in recent years and record-low Great Salt Lake levels make conserving in-stream flows vital to maintaining ecosystem health. DWR recommends that any potential impacts from altered downstream flows be addressed in consultation with the U.S. Fish and Wildlife Service during the development of the Environmental Assessment. DWR appreciates the opportunity to review and coordinate this project. If you have questions, please contact Josee Seamons, the DWR's Impact Analysis Biologist at DWR's Central Region office, at jseamons@utah.gov or 385-421-1277. **Division of Water Rights** DWRi asks that the project participants continue to coordinate with the Regional Engineer for the Utah Lake /Jordan River Region to address any necessary actions related to water rights associated with the project, including any changes that may be proposed to periods and types of uses or places of use. Also, if changes are made to the alignment of the Strawberry Highline Canal, please work with the DWRi's technical services section so it can update the statewide canal inventory map.

				Both the Utah Lake/Jordan River region office and technical services may be reached at (801) 538-7240. The State appreciates the opportunity to provide scoping comments. Please contact me if you have any further questions.
14	Melissa McCoy Nepa Branch Manager EPA	6/26/2025	Email	To whom this may concern: The U.S. Environmental Protection Agency reviewed the May 2025 scoping notice for the Central Utah Water Conservancy District, U.S. Bureau of Reclamation, U.S. Department of Interior – Central Utah Project Completion Act Office, and Utah Reclamation Mitigation and Conservation Commission's (collectively referred to as the Joint Lead Agencies, or JLA) proposed Nebo Regional Water Project (Project). In accordance with our responsibilities under Section 102(2)(c) of the National Environmental Policy Act (NEPA), the EPA is providing scoping comments for your consideration. The EPA's detailed comments are enclosed. Our comments focus on the following topics that we recommend the JLA consider in its NEPA document for the proposed Project: (1) aquatic resources; (2) water quality and quantity; and (3) air quality. The EPA appreciates the opportunity to provide comments at this stage of the NEPA process. If further explanation of our comments is desired, please contact me at (303) 312-6155 or mccoy.melissa@epa.gov, or Matt Hubner, lead reviewer, at (303) 312-6500 or hubner.matt@epa.gov. Sincerely, Melissa W. McCoy, Ph.D., J.D. NEPA Branch Manager **Detailed Scoping Comments for the Nebo Regional Water Project**

				Water Quality and Aquatic Resources *Clean Water Act (CWA) Section 404* The Proposed Action includes major ground-disturbing activities (such as enclosing the Strawberry High Line Canal, constructing new raw and finished pipelines, and building the Diamond Fork Recovery Pump Station) that may result in a discharge of dredged or fill material into waters of the United States (WOTUS). The discharge of dredged or fill material into WOTUS is regulated under the CWA Section 404. We recommend that the NEPA document for this Project include details on the jurisdictional status, and the type, quantity, and quality of aquatic resources that could be impacted by the Project. We also recommend consulting with the Corps during the NEPA process to determine the applicability of CWA Section 404 permit requirements in the project area and to ensure appropriate avoidance and minimization of adverse impacts to wetlands and streams. Aligning the NEPA process and CWA Section 404 permitting allows the JLA to accurately assess environmental impacts, avoid future permittingrelated delays, and improve the project schedule's predictability. Further, if an individual CWA Section 404 permit is necessary, the EPA recommends that the NEPA document include information that would support a permitting decision, including sufficient information to evaluate compliance with the CWA Section 404(b)(1) Guidelines (Guidelines, 40 C.F.R. Part 230). The Guidelines require, among other things, that a CWA Section 404 permit only be issued if the proposed project is the least

				environmentally damaging practicable alternative (LEDPA). Therefore, if an individual CWA Section 404 permit will be sought, the alternatives analysis must be focused on determining if the project purpose can be met with less damage to the aquatic ecosystem, including if it can be met without discharging into waters of the U.S. *Water Quality and Quantity* The Proposed Action includes shifting delivery of 1991 Contract Water from conveyance through the Spanish Fork River and Power Canal to a new enclosed pipeline system (Strawberry High Line Pipeline). This change may reduce instream flows in the Spanish Fork River markedly during the irrigation season. Reduced flows may degrade aquatic and riparian habitat, alter sediment transport dynamics, increase stream temperature and nutrient concentrations and impact recreation and visual resources. We recommend the NEPA document include a detailed hydrologic and water quality impact analysis for river reaches currently benefitting from 1991 Contract Water deliveries. The analysis should assess seasonal flow reductions, changes in water temperature and sediment loads, and implications for aquatic habitat, particularly downstream of the Spanish Fork River Diversion. The analysis should also evaluate mitigation options, such as maintaining minimum bypass flows or adjusting other upstream releases to support flows necessary for the maintenance of aquatic habitat and life cycles. Providing such an analysis will allow JLAs to identify current baseline conditions and protect or mitigate key environmental functions currently supported by instream water conveyance.

				Similarly, the Project proposes to install a pump station and pipeline to recapture Bonneville Unit water released to Diamond Fork and Sixth Water Creeks, which are currently used to meet instream flow requirements under the Central Utah Project Completion Act (CUPCA). It is unclear from the details in the scoping document how the recapture of water will avoid impairments to aquatic and riparian ecosystems that have come to rely on enhanced flow regimes. This is especially important considering these watersheds are recovering from wildfire (e.g., 2018 Pole Creek and Bald Mountain Fires) and subsequent sedimentation impacts. We recommend the NEPA document evaluate how the recapture of flows may affect streamflow variability, aquatic habitat, temperature, and channel stability in Diamond Fork and Sixth Water Creeks. The analysis should include baseline flow and water quality data, as well as modeled projections of post-project conditions. If recapture is expected to reduce ecological benefits of past CUPC instream flow commitments, the NEPA document should identify potential flow protection thresholds, seasonal release schedules or other mitigation strategies to offset the impacts. Including these analyses will help ensure that the Project is preserving and maintaining the ecological restoration progress made in these creeks. Further, project components, such as the Diamond Fork Recovery Pump Station and potential pipeline crossings, are proposed near sensitive aquatic zones like the Diamond Fork-Spanish Fork confluence and nearby riparian corridors. Construction and excavation in these areas could cause sedimentation, habitat disruption or changes in streamflow that affect downstream

				ecological conditions. We recommend that the NEPA document include site-specific analysis in hydrologically sensitive areas. These analyses should identify construction-related risks (e.g., sedimentation, habitat fragmentation, channel disturbance) and propose best management practices (BMPs), such as seasonal construction windows, erosion control, and streambank stabilization. The NEPA document should also assess the feasibility of siting or routing adjustments to reduce direct impacts. Addressing potential high-risk areas during planning also allows the Project to avoid or reduce post-hoc mitigation. The Project proposes to adjust both the timing (e.g., allowing year-round M&I use rather than just during irrigation season) and the delivery method of 1991 Contract Water and Bonneville Unit water. The changes may affect return flow volumes and timing of these flows to surface and groundwater systems, aquifer recharge patterns, surface water availability for downstream users, and cumulative loading and concentrations of pollutants to waterbodies with total maximum daily loads (TMDLs) or impaired status (e.g., the Spanish Fork River is listed as impaired for E. coli and downstream Lower Spanish Fork River and Utah Lake have TMDLs aimed at reducing microbial and nutrient loading). We recommend that the NEPA document include a regional water quantity and quality analysis that considers how altered delivery schedules and methods will impact return flows, groundwater recharge, and surface water conditions. This should include comparisons under the No Action Alternative and account for future land use conversion from agricultural to residential. The NEPA document should also evaluate the reasonably foreseeable effects of the Project on waterbodies in the region with 303(d) listings or TMDLs and identify monitoring or mitigation measures

				as needed to avoid further impacting them. Providing these details and evaluations in the NEPA document will help ensure the Proposed Action supports long-term water security, resource conservation, and compliance with state and federal water quality goals. **Air Quality** The Proposed Action involves large-scale construction activities across multiple sites, including canal enclosure, new pipeline alignments, the South Utah Valley Regional Water Treatment Plant and the Diamond Fork Recovery Pump Station. These activities will generate fugitive dust (PM10 and PM2.5), diesel exhaust, and volatile organic compounds (VOCs) from equipment and vehicle emissions over several years. Given the large scale of the Project, there is the potential for exceedances of National Ambient Air Quality Standards (NAAQS), particularly during dry or windy periods, affecting nearby residents and sensitive populations. Further, much of the project area is in Nonattainment Areas for PM2.5, PM10 and Ozone (8-Hour). We recommend the NEPA document include a quantitative analysis of expected construction-related emissions (i.e., an emissions inventory), including criteria pollutants (such as particulate matter, ozone precursors, carbon monoxide, and nitrogen oxides [NOx]) and greenhouse gasses. The NEPA document should describe the methods used to analyze the impacts of these emissions (e.g. EPA's MOVES1) and include comparisons to the NAAQS and state implementation plans. Additionally, a fugitive dust and emissions control plan should be developed that includes BMPs, idling restrictions, use of Tier 4 or electric

				equipment where feasible, and phasing of activities to minimize overlapping high-emission activities. Quantifying emissions and including enforceable dust control measures will help ensure compliance with the Clean Air Act and local health regulations. The proposed project alignment and facilities pass near or through communities such as Salem, Payson, Santaquin, and Genola, all of which are experiencing high population growth. These areas include schools, residences, and public recreation areas that may be exposed to additive air pollution impacts, including elevated PM2.5, NOx, and ozone precursors. Extended construction and hauling near populated areas could increase risks for children, seniors, and those with respiratory conditions. We recommend that the NEPA document should identify and map sensitive receptors near major Project construction zones, haul routes, or staging areas and assess potential short-term and medium-term exposure (e.g., weeks to months) risks, including cases where construction activities may persist near receptors for extended durations. We recommend the Project include construction buffers or adjusted work hours near schools and healthcare facilities, community notification systems (e.g., flyers, text alerts, signage, etc.) for air quality sensitive populations, and consideration of high-emission activities when local meteorology favors dispersion. Identifying and mitigating the Project's risks to sensitive populations will be beneficial to the overall health of communities in the vicinity of the Project.
15	Jordan Nielson	6/27/2025	Web Comment	To whom it may concern, For decades, Trout Unlimited has been a leading Utah conservation organization developing collaborative projects

				intended to conserve, protect and restore important coldwater fisheries. Through time, we have completed hundreds of cooperative projects with private landowners, water users and government agencies ranging from irrigation diversion reconstruction, irrigation efficiency, culvert reconstruction, habitat restoration and water leases within many river basins in Utah, including the Spanish Fork River watershed. Through engagement in these projects, we have come to understand community water security needs. We are sympathetic to the challenges that a rapidly growing populace such as Utah County faces. However, water use in many locations is bumping up against the natural limitations of Utah's watersheds. We understand the expectation that water development for municipal and agricultural use should continue supporting economic development, but we also believe that development must occur responsibly, and with the importance of continued in-stream flows in mind. Expanding water supply sources must be adequately balanced with other issues important to public welfare and overall system values provided by healthy watersheds. Representing over 1500 anglers in the state of Utah, Trout Unlimited offers the following comments on the Nebo Water Project as it is currently put forward, as it would be detrimental to the Utah Lake watershed and public welfare and would instigate a wide range of conflicts including: • Degradation of June Sucker breeding habitat

NEBO WATER PROJECT

				As it flows to Utah Lake, Spanish Fork River is one of the few tributaries the endemic June Sucker are known to spawn in. The state, federal programs, and non-profit agencies have worked diligently for many years to recover the June Sucker to the point it could be removed from the Endangered Species List. While not there yet, the downlisting of the June Sucker from Endangered to Threatened in 2021 shows we are moving in the right direction. Much of this success can be attributed to improved spawning habitat in the tributaries of Utah Lake. To prevent going backwards in this long road to recovery, we must ensure adequate flows remain in these few known spawning tributaries. • Negative effects to the riparian habitat Many large-scale restoration projects have been completed along the Spanish Fork River over the last several decades, for both stream health and the residents of Spanish Fork City. They include plantings, bank stabilization, protection, landscaping, and fire mitigation. As such, the riparian zone has developed into a corridor for wildlife movement because of patches of high-quality habitat. The mature cottonwoods shade the river and provide shelter to preserve water quality and provide habitat for many species of fish and wildlife. Lowering the volume of water that flows through the river consistently will lead to a lower water table, more easily eroded stream banks and stress on riparian plants, which would in turn make them more susceptible to disease and fire. • Disproportionate negative impacts on Spanish Fork River's fisheries

				Spanish Fork River boasts productive angling opportunities for recreational fisherman, including populations of brown trout and rainbow trout. Excitingly, despite the unusual urban setting, cutthroat trout also inhabit these waters. The need for cool, clean water to support these trout is critical. Deeper, flowing water maintains the cooler temperatures and oxygenated waters the fish need to thrive. Reducing flow, especially during the summer months, may prove lethal to the river's trout fishery, as we have seen in other Utah waters when water use goes unmitigated. • Limiting recreational opportunities for the residents of Spanish Fork The paved Spanish Fork River trail runs from I-15 to the mouth of Spanish Fork Canyon and is heavily used by walkers, runners, bikers, and recreation users. In 2020, Spanish Fork City developed a non-motorized boat ramp to access the lower Spanish Fork River to increase recreational opportunities in-stream. The river has become a favorite for local kayakers and tubers. Spanish Fork City's Urban Fishing Program runs weekly through summer, offering children a way to safely connect with the river and the outdoors. Disrupting the rivers flow and fishery will greatly diminish recreational opportunities currently available and loved by Spanish Fork residents. • Downstream Implications for Utah Lake and the Great Salt Lake The Spanish Fork River represents a large flow contribution to Utah Lake and in turn the Great Salt Lake. Recovery of CUPCA

				mandated flows in Diamond Fork that would have otherwise run through the Spanish Fork River represent a problematic reduction in potential for GSL recovery resulting in increased salinity, negatively impacting the brine shrimp industry (estimated to add up to $60 million annually to Utah's economy) and reduced water levels, contributing to public health concerns for aridification and toxic dust. Trout Unlimited welcomes open dialogue to explore potential solutions to keep some water flowing in the river channel including water leases, water banking, mitigation efforts, alternative supplemental water development options or a compensated demand reduction program to reduce the reliance on trans-basin water sources and ensure a sustainable agricultural economy while protecting valuable ecological resources. While the Nebo Water Project represents many positive community benefits, we encourage CUWCD and partners to fairly weigh the broad negative impacts of this proposal as it is currently presented. With Kind Regards, Jordan Nielson Utah State Director and Great Basin Director Trout Unlimited

State of Utah

SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

Department of Natural Resources

JOEL FERRY
Executive Director

Public Lands Policy Coordinating Office

REDGE B. JOHNSON
Director

June 25, 2025

Submitted electronically: connect@nebowaterproject.cuwcd.gov

Sarah Sutherland
Environmental Programs Manager
Central Utah Water Conservancy District
2825 E. Cottonwood Parkway, Suite 200
Salt Lake City, Utah 84121

Subject: **Nebo Regional Water Project EA Scoping Comments**
RDCC Project No. 86715

Dear Ms. Sutherland:

The State of Utah (State), through the Public Lands Policy Coordinating Office (PLPCO), has reviewed the Nebo Regional Water Project scoping notification document and materials. The State supports the project, which involves enclosing the Strawberry High Line Canal with a buried pipeline, establishing a public trail over the Utah Valley Regional Water Treatment Plant, constructing the Diamond Fork Recovery Pump Station and related pipelines, modifying operations and water usage, and potentially altering the Strawberry Water User Association's infrastructure along with associated administrative responsibilities.

In collaboration with the Utah Division of Wildlife Resources (DWR) and the Division of Water Rights (DWRi), the State submits the following scoping comments for your consideration.

Division of Wildlife Resources

The proposed Diamond Fork recovery pump station may alter existing Spanish Fork River flows, potentially affecting several fish species, including June sucker. The June sucker is listed as threatened under the federal Endangered Species Act and found only in Utah Lake and its lower tributaries. The June Sucker Recovery Implementation Program (JSRIP) was created in 2002 as a multi-agency effort to recover the species. The DWR and our partners with the JSRIP have invested significant resources in this effort for over 20 years.

Water in this system provides ecological benefits to the Spanish Fork River, Utah Lake, Jordan River, and ultimately the Great Salt Lake. Severe drought conditions in recent years and record-low Great Salt Lake levels make conserving in-stream flows vital to maintaining ecosystem health.

DWR recommends that any potential impacts from altered downstream flows be addressed in consultation with the U.S. Fish and Wildlife Service during the development of the Environmental Assessment.

DWR appreciates the opportunity to review and coordinate this project. If you have questions, please contact Josee Seamons, the DWR's Impact Analysis Biologist at DWR's Central Region office, at jseamons@utah.gov or 385-421-1277.

Division of Water Rights

DWRi asks that the project participants continue to coordinate with the Regional Engineer for the Utah Lake /Jordan River Region to address any necessary actions related to water rights associated with the project, including any changes that may be proposed to periods and types of uses or places of use.

Also, if changes are made to the alignment of the Strawberry Highline Canal, please work with the DWRi's technical services section so it can update the statewide canal inventory map.

Both the Utah Lake/Jordan River region office and technical services may be reached at (801) 538-7240.

The State appreciates the opportunity to provide scoping comments. Please contact me if you have any further questions.

Sincerely,

Redge B. Johnson
Director

REGION 8
DENVER, CO 80202

June 26, 2025

Ref: 8EJC-NE

Nebo Regional Water Project
c/o HDR
2825 E. Cottonwood Parkway, Suite 200
Salt Lake City, Utah 84121-7077

To whom this may concern:

The U.S. Environmental Protection Agency reviewed the May 2025 scoping notice for the Central Utah Water Conservancy District, U.S. Bureau of Reclamation, U.S. Department of Interior – Central Utah Project Completion Act Office, and Utah Reclamation Mitigation and Conservation Commission's (collectively referred to as the Joint Lead Agencies, or JLA) proposed Nebo Regional Water Project (Project). In accordance with our responsibilities under Section 102(2)(c) of the National Environmental Policy Act (NEPA), the EPA is providing scoping comments for your consideration.

The EPA's detailed comments are enclosed. Our comments focus on the following topics that we recommend the JLA consider in its NEPA document for the proposed Project: (1) aquatic resources; (2) water quality and quantity; and (3) air quality.

The EPA appreciates the opportunity to provide comments at this stage of the NEPA process. If further explanation of our comments is desired, please contact me at (303) 312-6155 or mccoy.melissa@epa.gov, or Matt Hubner, lead reviewer, at (303) 312-6500 or hubner.matt@epa.gov.

Sincerely,

Melissa W. McCoy, Ph.D., J.D.
NEPA Branch Manager

ENCLOSURE
1. Detailed Scoping Comments for the Nebo Regional Water Project

Detailed Scoping Comments for the Nebo Regional Water Project

Water Quality and Aquatic Resources

Clean Water Act (CWA) Section 404
The Proposed Action includes major ground-disturbing activities (such as enclosing the Strawberry High Line Canal, constructing new raw and finished pipelines, and building the Diamond Fork Recovery Pump Station) that may result in a discharge of dredged or fill material into waters of the United States (WOTUS). The discharge of dredged or fill material into WOTUS is regulated under the CWA Section 404. We recommend that the NEPA document for this Project include details on the jurisdictional status, and the type, quantity, and quality of aquatic resources that could be impacted by the Project. We also recommend consulting with the Corps during the NEPA process to determine the applicability of CWA Section 404 permit requirements in the project area and to ensure appropriate avoidance and minimization of adverse impacts to wetlands and streams. Aligning the NEPA process and CWA Section 404 permitting allows the JLA to accurately assess environmental impacts, avoid future permitting-related delays, and improve the project schedule's predictability.

Further, if an individual CWA Section 404 permit is necessary, the EPA recommends that the NEPA document include information that would support a permitting decision, including sufficient information to evaluate compliance with the CWA Section 404(b)(1) Guidelines (Guidelines, 40 C.F.R. Part 230). The Guidelines require, among other things, that a CWA Section 404 permit only be issued if the proposed project is the least environmentally damaging practicable alternative (LEDPA). Therefore, if an individual CWA Section 404 permit will be sought, the alternatives analysis must be focused on determining if the project purpose can be met with less damage to the aquatic ecosystem, including if it can be met without discharging into waters of the U.S.

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The Proposed Action involves large-scale construction activities across multiple sites, including canal enclosure, new pipeline alignments, the South Utah Valley Regional Water Treatment Plant and the Diamond Fork Recovery Pump Station. These activities will generate fugitive dust (PM_{10} and $PM_{2.5}$), diesel exhaust, and volatile organic compounds (VOCs) from equipment and vehicle emissions over several years. Given the large scale of the Project, there is the potential for exceedances of National

Ambient Air Quality Standards (NAAQS), particularly during dry or windy periods, affecting nearby residents and sensitive populations. Further, much of the project area is in Nonattainment Areas for $PM_{2.5}$, PM_{10} and Ozone (8-Hour). We recommend the NEPA document include a quantitative analysis of expected construction-related emissions (i.e., an emissions inventory), including criteria pollutants (such as particulate matter, ozone precursors, carbon monoxide, and nitrogen oxides [NOx]) and greenhouse gasses. The NEPA document should describe the methods used to analyze the impacts of these emissions (e.g. EPA's MOVES[1]) and include comparisons to the NAAQS and state implementation plans. Additionally, a fugitive dust and emissions control plan should be developed that includes BMPs, idling restrictions, use of Tier 4 or electric equipment where feasible, and phasing of activities to minimize overlapping high-emission activities. Quantifying emissions and including enforceable dust control measures will help ensure compliance with the Clean Air Act and local health regulations.

The proposed project alignment and facilities pass near or through communities such as Salem, Payson, Santaquin, and Genola, all of which are experiencing high population growth. These areas include schools, residences, and public recreation areas that may be exposed to additive air pollution impacts, including elevated $PM_{2.5}$, NOx, and ozone precursors. Extended construction and hauling near populated areas could increase risks for children, seniors, and those with respiratory conditions. We recommend that the NEPA document should identify and map sensitive receptors near major Project construction zones, haul routes, or staging areas and assess potential short-term and medium-term exposure (e.g., weeks to months) risks, including cases where construction activities may persist near receptors for extended durations. We recommend the Project include construction buffers or adjusted work hours near schools and healthcare facilities, community notification systems (e.g., flyers, text alerts, signage, etc.) for air quality sensitive populations, and consideration of high-emission activities when local meteorology favors dispersion. Identifying and mitigating the Project's risks to sensitive populations will be beneficial to the overall health of communities in the vicinity of the Project.

[1] https://www.epa.gov/moves

NEBO WATER PROJECT

WE VALUE YOUR FEEDBACK

Public comments are an important part of this project and will be reviewed by the study team. Please comment in the space provided below. Print clearly.

As a person in The industry as well as a local Citizen, tonights event was well thought out and Easy for the public to understand. I liked The boards & large Showing of The CUWCD staff. Naturally I am pro The project as a science major I understand The importance of The project. I know it comes with a large pricetag but am happy to see The project finally proceed Forward

-Great Job so far

Ashly

Contact Information (optional)

Name Ashley Peay

Address

Phone

Email [redacted]

Thank You For Your Participation

For more information on this project:

www.nebowaterproject.cuwcd connect@nebowaterprojectcuwcd.gov 385.999.2212

NEBO
WATER PROJECT

WE VALUE YOUR FEEDBACK

Public comments are an important part of this project and will be reviewed by the study team. Please comment in the space provided below. Print clearly.

Our property on Utah County maps shows we own high line canal property. We are wondering how property ownership will be addressed, easement questions, etc.?

If someone is hurt on a portion of the canal that shows up under our name, who is held liable for that?

We have animals grazing in fields bordering the canal. If existing fences are removed during construction, will we be reimbursed for costs to reinstall?

Contact Information (optional)

Name Kim Lewis [redacted]

Address [redacted]

Phone [redacted]

Email [redacted]

Thank You For Your Participation

For more information on this project:

www.nebowaterproject.cuwcd connect@nebowaterprojectcuwcd.gov 385.999.2212

NEBO
WATER PROJECT

WE VALUE YOUR FEEDBACK

Public comments are an important part of this project and will be reviewed by the study team. Please comment in the space provided below. Print clearly.

Nephi is experiencing significant growth and this project can help with providing critical water supply for that growth. I wanted to point out that part of this growth is an Agri-Park project from the R6 Regional Council that will most likely have several water-intensive uses. Juab County is also involved with this project. Nephi City is involved by providing utilities, including water.

Contact Information (optional)

Name Seth Atkinson

Address [redacted]

Phone

Email

Thank You For Your Participation

For more information on this project:

www.nebowaterproject.cuwcd connect@nebowaterprojectcuwcd.gov 385.999.2212

Appendix 5. References

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Appendix 5. References

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Appendix 6. List of Preparers

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Appendix 6. List of Preparers

The following preparers played a significant role in the preparation of this EA. Because of the nature of this project, the list includes lead agencies, cooperating agencies, outside consultants, and firms that were involved in and consulted regarding the Nebo Regional Water Project.

Name	Organization	Title
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