AGENDA
COUNTY COUNCIL
Wednesday, August 13, 2025

NOTICE is hereby given that the Summit County Council will meet, on Wednesday, August 13, 2025, electronically, via Zoom, and at the anchor location of the Richins Building auditorium, 1885 W. Ute Blvd., Park City, UT 84098
(All times listed are general in nature, and are subject to change by the Board Chair)

To view Council meeting, live, visit the "Summit County, Utah" Facebook page.
OR
To participate in Council meeting: Join Zoom webinar: https://zoom.us/j/772302472
OR
To listen by phone only: Dial 1-301-715-8592, Webinar ID: 772 302 472

10:00 AM - Some Council Members to attend a visit and tour with Steve Waldrip, Senior Advisor for Housing Strategy (2 hours)

1. Presentation:
   Presentation and Tour Information.pdf

12:00 PM - Lunch, and break

2:45 PM Closed Session - Property acquisition (45 min)

3:30 PM - Move to auditorium (10 min)

3:40 PM Work Session

1. 3:40 PM - Pledge of Allegiance (5 min)
2. 3:45 PM - Interview applicants for vacancies on the Summit County Arts & Park Advisory Committee-Cultural (RAP Tax Cultural Committee) (30 min)
   081325 Interview Schedule.docx

4:15 PM Closed Session - Personnel (15 min)

4:30 PM - Move to auditorium (5 min)

4:35 PM Consideration of Approval

1. 4:35 PM - Discussion and possible appointment of members to serve on the Summit County Arts & Park Advisory Committee-Cultural (RAP Tax Cultural Committee) (5 min)
   081325 Appointment to RAP Tax Cultural.docx
2. 4:40 PM - Discussion and possible action regarding the Snyderville Basin Open Space Advisory Committee (BOSAC); Rachael Brard (10 min)
   2025 08 13 BOSAC Discussion Staff Report.pdf
3. 4:50 PM - Council and Manager comments (10 min)
4. 5:00 PM Discussion and possible adoption of the Baseline and Conservation Easement for

the 910 Cattle Ranch; Jess Kirby [Public comment may be taken] (60 min)
2025 08 13 910 Baseline CE Staff Report.pdf
2025 08 13 910 Baseline CE Staff Report_presentation.pdf
910 Ranch BDR Final.pdf
910 Conservation Easement Final.pdf

6:00 PM Public Input

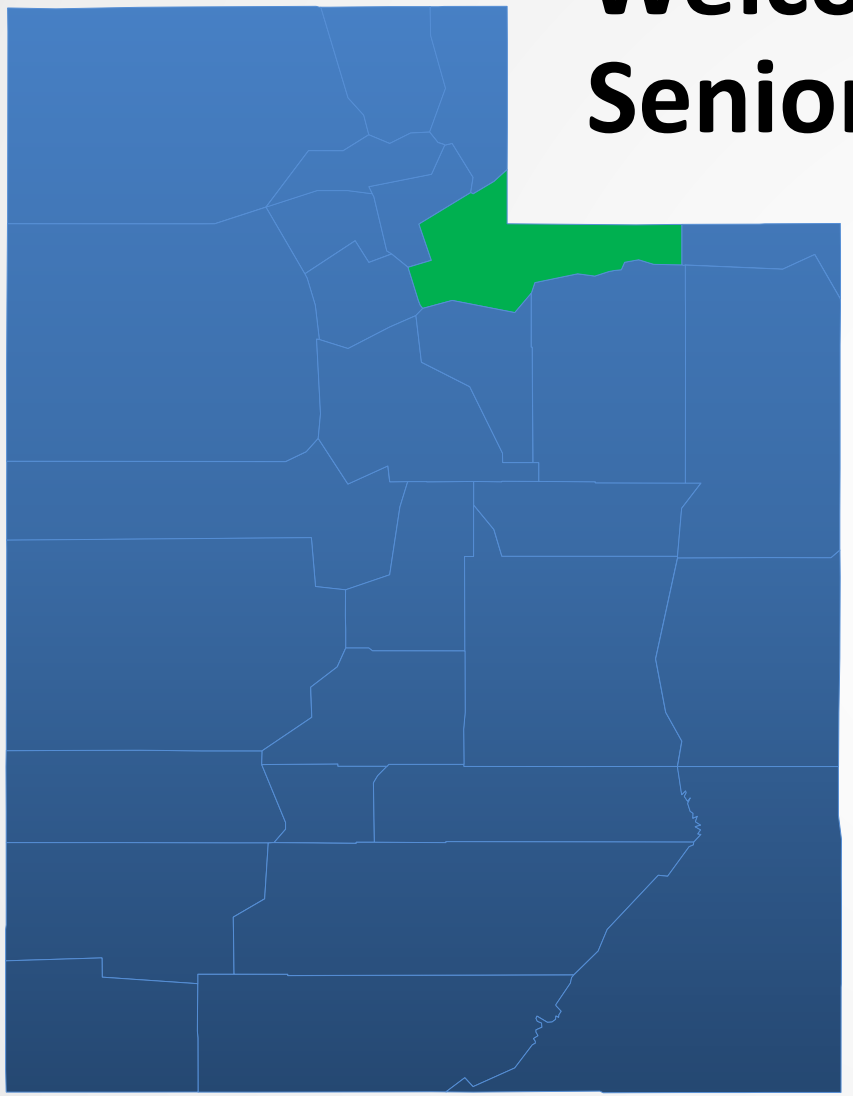
Public comment is for any matter not on the Agenda and not the subject of a pending land use application. If you would like to submit comments to Council, please email publiccomments@summitcountyutah.gov by 12:00 p.m. on Wednesday, August 13, 2025. If you wish to interact with Council, for public input, please appear in person, or use the "Raise Hand" button at the bottom of the chat window in Zoom.

6:00 PM Public Hearing

1. Public hearing and possible approval of Ordinance No. 935-A, an Ordinance Amending Ordinance 935 Creating the Summit County Code, Summit County Open Space Advisory Committee (OSAC); Rachael Brard. Staff is requesting a decision regarding whether to stagger OSAC terms and dissolve the Regional Advisory Groups, and to approve the proposed ordinance; Rachael Brard
   2025 08 13 OSAC Ordinance Staff Report.pdf
   llv 7.16 OSAC 935-A Ordinance Amendment_ 07152025_Draft.docx

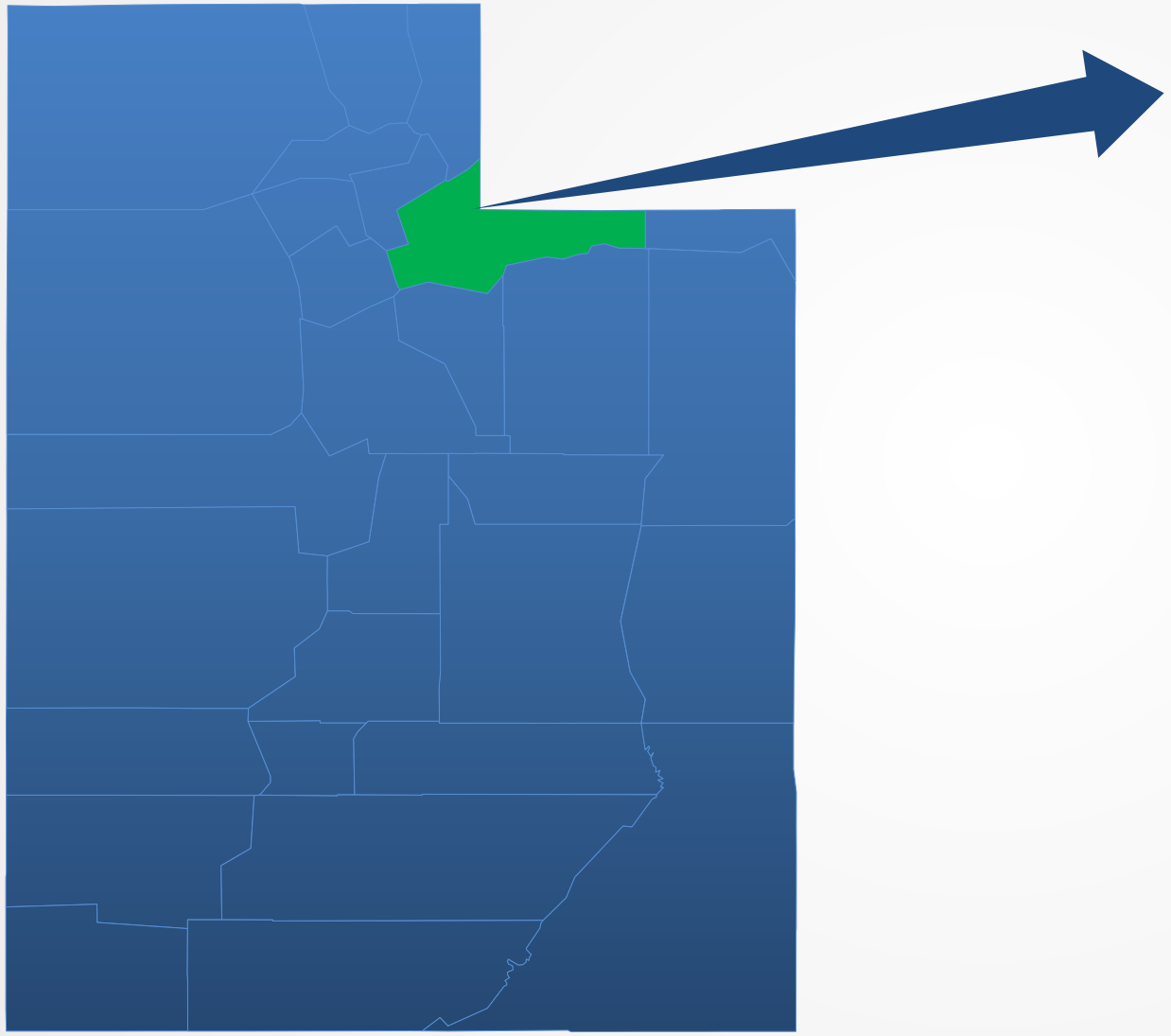
Adjourn

Welcome Mr. Steve Waldrip
Senior Advisor For Housing Strategy



Jeffrey B. Jones, AICP
Jjones@summitcountyutah.gov
Economic Development & Housing Director
Madlyn McDonough, AICP
Economic Development & Housing Manager
mmcdonough@summitcountyutah.gov

Summit County, UT



Demographics

2025 Population = 42,879
2035 Population = 42,538
-333 (-1%)

2025 Employment = 36,649
2035 Employment = 43,942
7,293 (+19.9%)

Ave. Earn. Per Job = $77,187
AMI (family of 4) = $168,600
Median HH Income = $152,408
Per Capita Income = $79,536

Cost of Living Index
USA = 100
Utah = 103.9
Summit County = 136.5

Source: Lightcast Developer, ESRI Business Analyst, HUD, C2ER

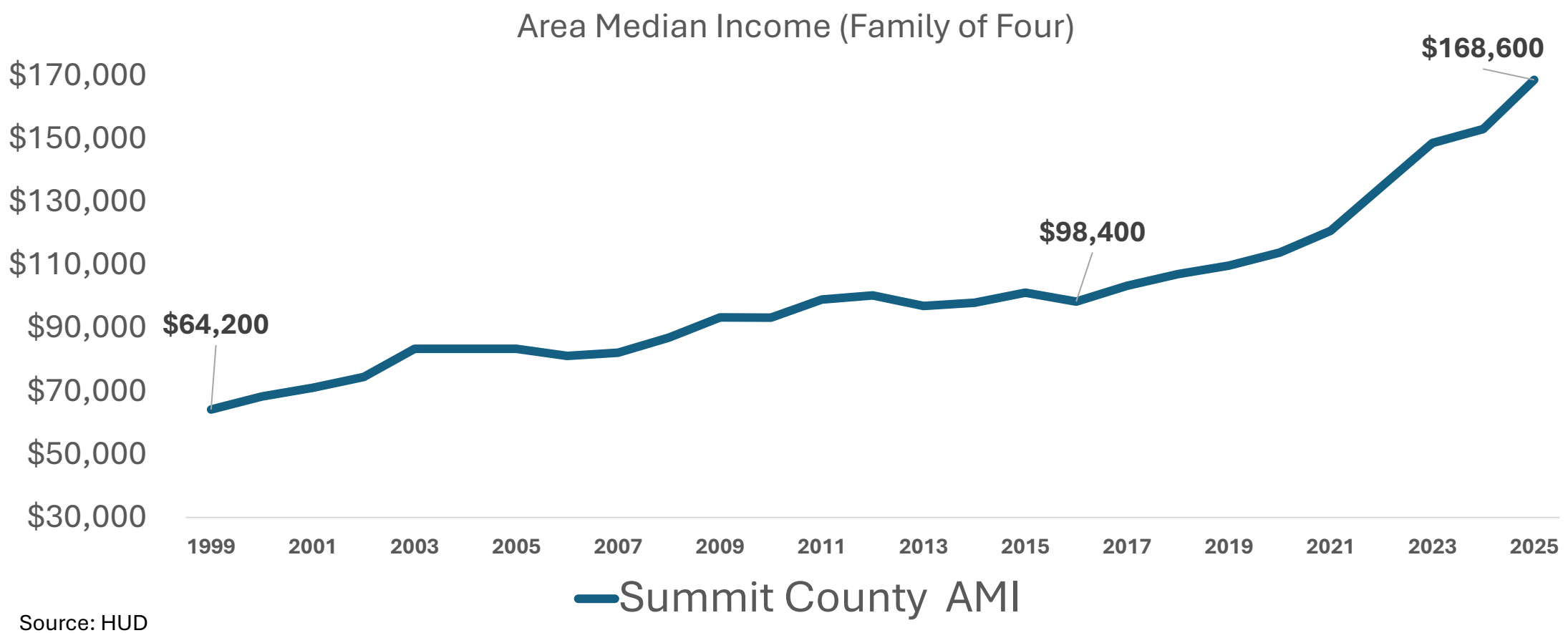
Affordable/Workforce Deed Restricted Housing

Summit County (Non-Incorporated) Affordable Housing Production	
1990s	96 Units
2000s	162 Units
2010s	814 Units
2020s	730 Units
Development	
Dakota Pacific	500 Units
Cline Dahle	172 Units
Total	1,802 Units

Source: Summit County Economic Development and Housing Department/ESRI Business Analyst

Note: 1,802 represents 16.9% of the estimated 10,618 occupied housing units in the County's unincorporated area.

Changes in Area Median Income (AMI)



Source: HUD

Housing Profiles

Geography	Median List Price
Henefer Township	$724,450
Coalville City	$872,000
Oakley City	$1,275,000
Kamas City	$1,299,950
Francis City	$1,189,324
Park City	$2,245,000
Snyderville Basin (84098)	$1,825,000
Summit County	$1,850,000 $1,740,000*
Utah 4/2025	$500,000*
USA 5/2025	$440,892

Source: Rocket Homes
*Utah Association of Realtors Median Sales Price
HUD, Summit County Economic Development & Housing Department

What is Affordable?			
	50% AMI	80% AMI	100% AMI
Studio	$164,000	$295,000	$378,000
1 BR	$197,000	$342,000	$440,000
2 BR	$228,000	$390,000	$502,000
3 BR	$259,000	$440,000	$562,000

Inputs

- 5% downpayment
- FirstHome Interest rate = 6.375%
- Annual Property Tax
- $600 Annual Insurance
- Annual Private Mortgage Insurance
- $300 Month HOA fees

Housing Profile

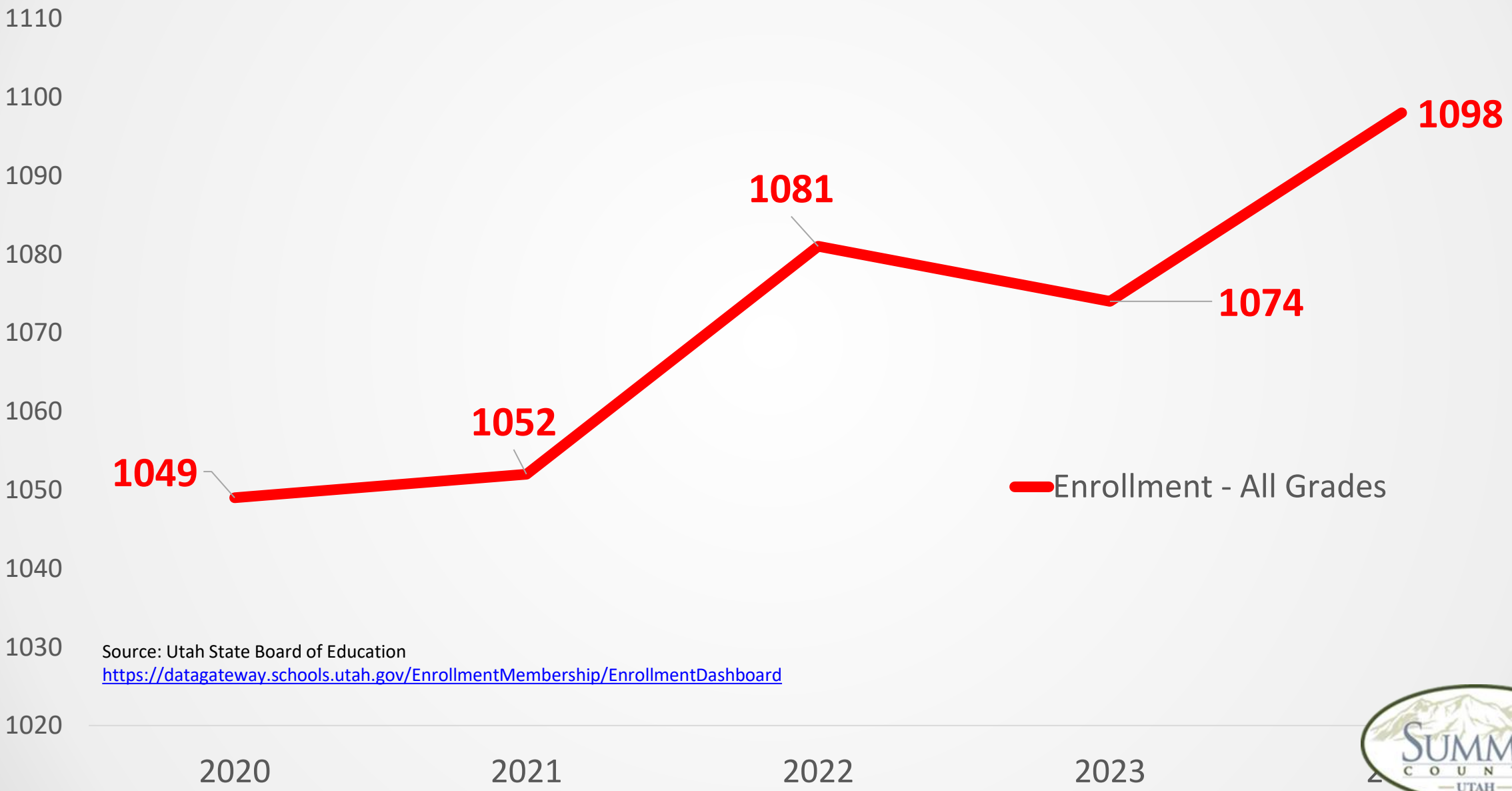
HUD Area Median Income – Maximum Rents

Number of Bedrooms	<=30% AMI Includes basic utilities of water, sewer, power & gas	<=40% AMI Includes basic utilities of water, sewer, power & gas	<=50% AMI Includes basic utilities of water, sewer, power & gas	<=60% AMI Includes basic utilities of water, sewer, power & gas	<=70% AMI Includes basic utilities of water, sewer, power & gas	<=80% AMI Includes basic utilities of water, sewer, power & gas	Median Market Rents 1 Yr Lease
Studio	$885	$1,180.00	$1,475.00	$1,770.00	$2,065.00	$2,360.00	**$1,700.00**
1 Bedroom	$1,012.00	$1,349.00	$1,686.00	$2,024.00	$2,361.00	$2,698.00	**$2,000.00**
2 Bedroom	$1,138.00	$1,517.00	$1,896.00	$2,276.00	$2,655.00	$3,034.00	**$2,475.00**
3 Bedroom	$1,265.00	$1,686.00	$2,108.00	$2,529.00	$2,951.00	$3,372.00	**$6,124.00**
4 Bedroom	$1,350.00	$1,801.00	$2,251.00	$2,701.00	$3,151.00	$3,602.00	**$4,500.00**

Note: Market rents are dropping. And, market rent rates are now more aligned with the 60% AMI threshold for almost all product sizes. Market rents do not include basic utilities.

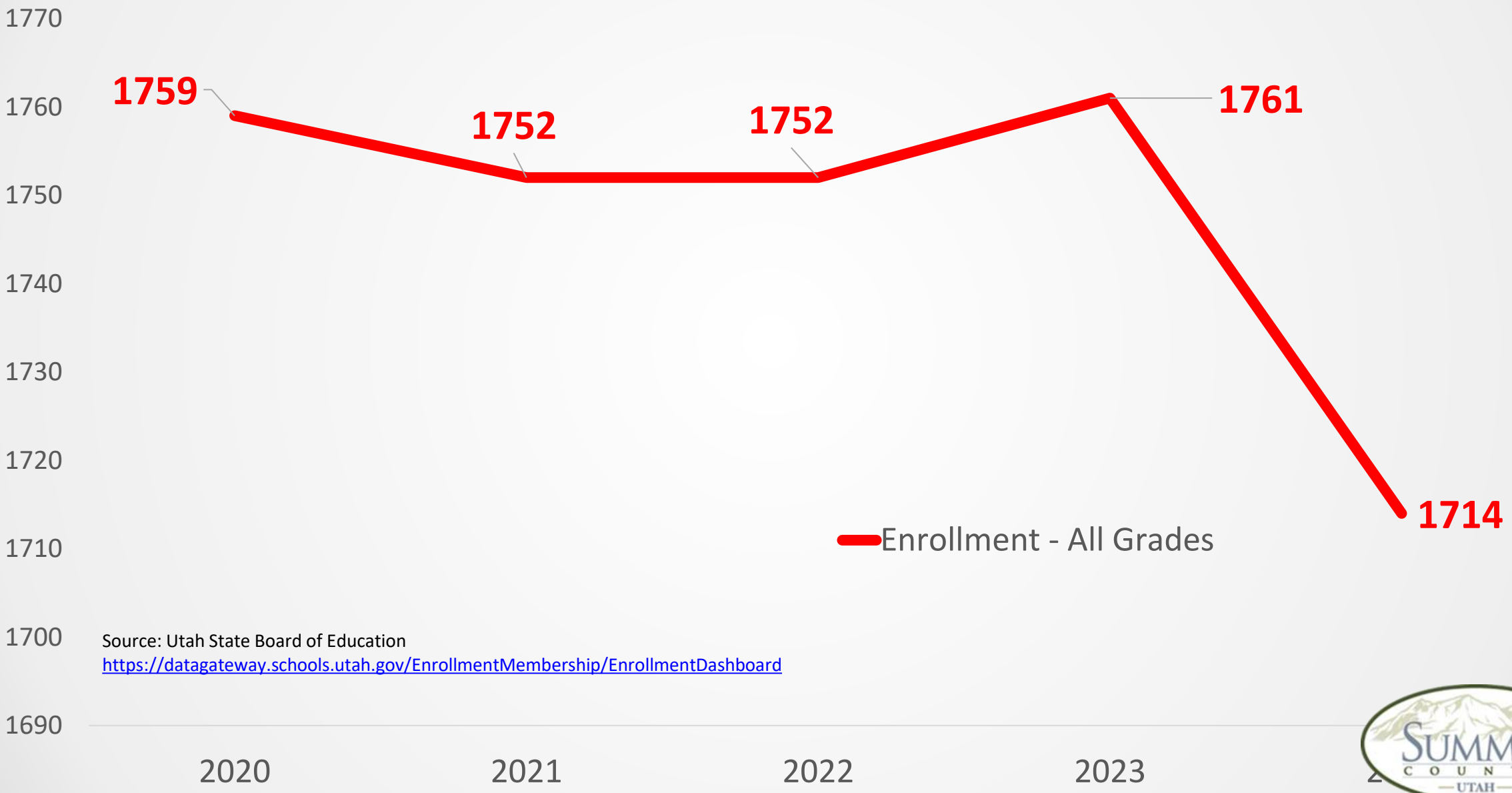
Source: HUD/Summit County Economic Development and Housing Department

North Summit School District, Enrollment



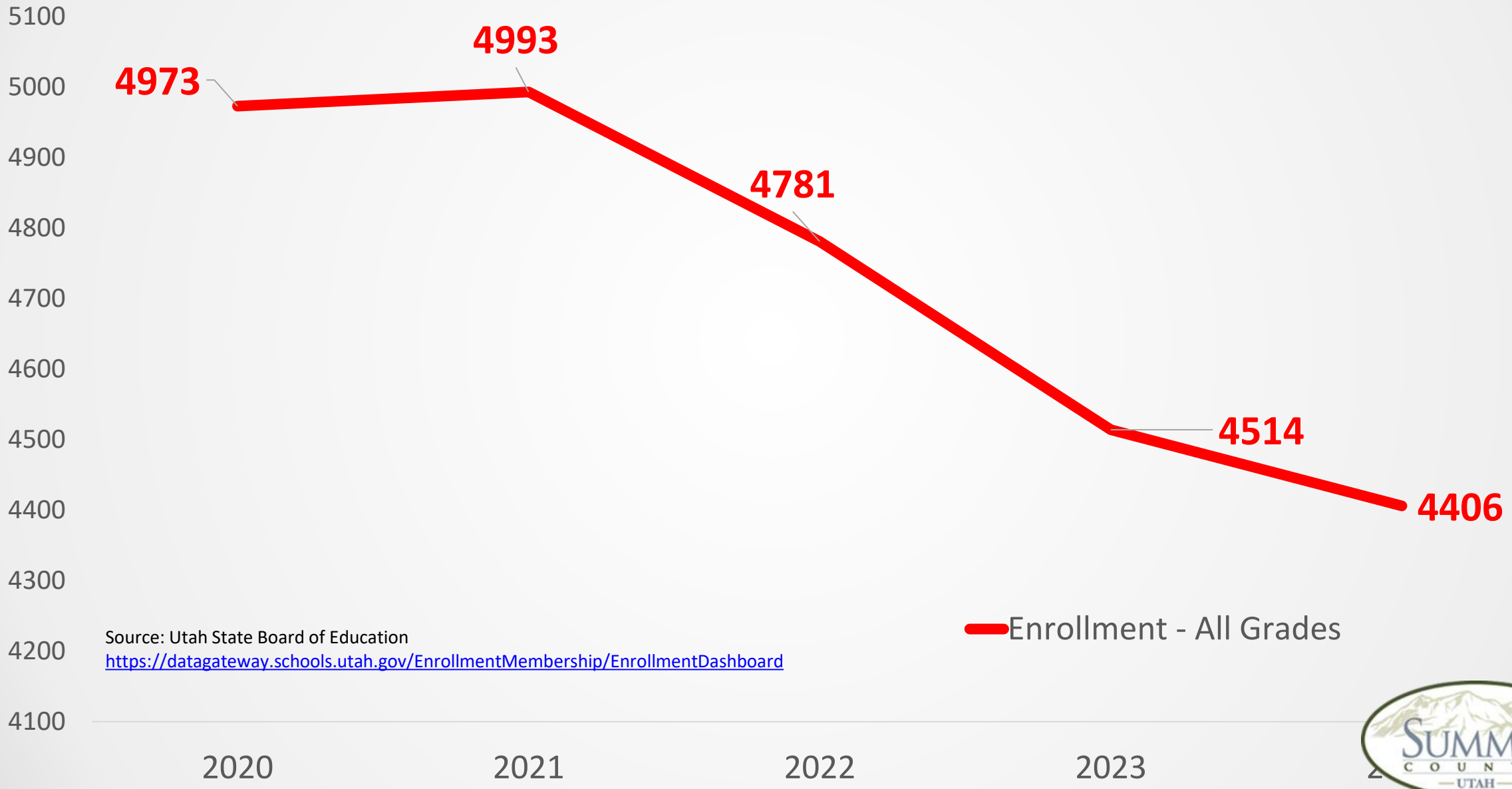
Source: Utah State Board of Education
https://datagateway.schools.utah.gov/EnrollmentMembership/EnrollmentDashboard

South Summit School District, Enrollment



Source: Utah State Board of Education
https://datagateway.schools.utah.gov/EnrollmentMembership/EnrollmentDashboard

Park City School District, Enrollment



Source: Utah State Board of Education
https://datagateway.schools.utah.gov/EnrollmentMembership/EnrollmentDashboard

Other Housing Activities

1. Established the Summit County Housing Authority
2. Summit County Council has adopted a ten (10) year housing goal to facilitate the development of 1,500 affordable/workforce housing units (does not include Dakota Pacific or Cline Dahle).
3. The County waived 50% of the Tipping Fees associated with Soils from the Enginehouse Apartments disposed of at the County Landfills, up to a maximum waiver of $750,000.00.

Steve Waldrip, Senior Advisor for Housing Strategy

Questions:

- What will be the status of the Moderate-Income Housing Plan/Report?
- When will Summit County be able to review the State Housing Plan?

Recommendations/Requests:

- Summit County would like to update its “grandfathered” Inclusionary Zoning Code without “penalty.” The county would not increase the obligation rate beyond current thresholds.
- The Kem Gardner Policy Institute should include data for small private investors in addition to institutional investor owned real estate by County and its impact on price/rents.
- Additional State subsidies should be created to support young families and first-time home buyers. These supports should be indexed to each County’s Area Median Income.
- More research on “supply and demand. Simply building more market rate units in Summit County will not facilitate additional affordable/workforce housing aligned to worker incomes.
- If the Federal Government shifts the Federal Voucher Programs to the State of Utah, Summit County would like to have access to the voucher program which it currently doesn’t have. Additional down payment assistance would also be welcomed.

Housing Tour

- Utah Olympic Park (Non-Profit, State of Utah)
  - 30 (41.6%) deed restricted affordable for workforce; seasonal athlete and year around athlete. 42 Units 58.4% (Market).
- Dakota Pacific (Public Private Partnership, LIHTC, Private)
  - 855 new housing units. 275 affordable housing units. A proposed public-private partnership would also create 225 workforce housing units and a senior living facility.
- New Park Commons (Private)
  - 38 units, Average 80% AMI
- Richer Place (LIHTC)
  - 25 (89%) Affordable; 3 (11%) Market
- Lincoln Station (HUD's Section 221D4)
  - 31 (39%) Affordable; 21 (27%) Attainable; 27 (34%) Market.
- Cline Dahle (Public Private Partnership)
  - As proposed, 172 new units. 100 single-bedroom apartments and 72 for-sale single-family homes. 100% would be reserved for local workers making anywhere from 30% to 150% of the county's median income.
- Silver Creek Village (Mix of Private and LIHTC)
  - 330 (26%) Affordable; 960 (74%) Market
- Slopeside Village (Public Private Partnership, Private)
  - 100% affordable, 169 units (1,107+ Beds)

Interview Schedule
Summit County Recreation Arts and Parks Advisory Committee - Cultural
Wednesday, August 13, 2025

At the anchor location of the Richins Building
1885 W Ute Blvd, Park City, UT 84098
OR
Zoom webinar: https://zoom.us/j/772302472
Phone: 1-301-715-8592, Webinar ID 772 302 472
(2 vacancies; 2 applicants)

3:45 PM	Joe Frazier		Zoom
4:00 PM	Vincent Novack	*Reapplying	Zoom

The vacancies are a result of Stacey Keahon, and Vincent Novack's terms expiring on June 30, 2025. Terms will expire June 30, 2028.

Interview Instructions (Zoom only)

For your interview with Council, please use one of the two following options:

1. By phone only: Dial 1-301-715-8592, Meeting ID: 772 302 472

2. By video chat: Join Zoom meeting: https://zoom.us/j/772302472 When you join the meeting, set up your audio preferences. You will be muted upon entering the meeting.

   When Council finishes the interview prior to yours, the moderator will unmute your microphone so you can interview with Council.

Memorandum:

Date: August 13, 2025
To: Council Members
From: Amy Jones
Re: Summit County Recreation Arts and Parks Advisory Committee-Cultural

Appoint two members to serve on the Summit County Recreation Arts and Parks Advisory Committee-Cultural. Each term will expire on June 30, 2028.

Council interviewed the following applicants on August 13, 2025:

Vincent Novack *Reapplied
Joe Frazier

STAFF REPORT

To:	Summit County Council
From:	Rachael Brard, Lands and Natural Resources Program & Project Administrator Jess Kirby, Lands and Natural Resources Director
Date of Meeting:	August 13, 2025
Type of Item:	Regular Session
Subject:	Discussion and possible action regarding the Snyderville Basin Open Space Advisory Committee (BOSAC).

BACKGROUND

The Snyderville Basin Open Space Advisory Committee (BOSAC) was established in 2003 for the "purpose of advising and providing input to the County Manager and the County Council [previously the County Commission] regarding the creation, preservation, and identification of open space within the Snyderville Basin in order to ensure high conservation values and promote the resort and scenic character of the area." BOSAC duties allow for advising the County Manager as to the identification, preservation, and acquisition of open space, agricultural protection areas, and conservation easements within the boundaries of the Snyderville Basin with respect to the use of the Summit County Open Space General Obligation Bond and any subsequent countywide open space bonds issued hereafter.

In November 2004, voters rallied behind a $10 million General Obligation Bond dedicated to acquiring passive recreational open spaces, including trails and trailheads. This commitment to preserving open spaces was formally enshrined in Summit County **Ordinance No. 520,** which declared the preservation of open space as the "central premise" of the General Plan", and Basin Recreation's 5-Year Trails and Open Space Plan. **BOSAC is currently governed by Chapter 19 of the Summit County Code, under Ordinance No. 749-A**, adopted on December 15, 2010.

DISCUSSION

Since 2022, with the purchase of the SHEILA WILLIAMS property, BOSAC has been deficient of Bond funds. With funds extinguished and no near-term planned intent by Snyderville Basin Special Recreation District to pursue any addition Bond Funds for open space, Staff requests that Council consider suspending any future BOSAC operational functions. The intent is to suspend, rather than dissolve, BOSAC's functions until further funding is secured. BOSAC may be reactivated in the future if warranted by new funding sources or by need of strategic priorities.

RECOMMENDATIONS

Staff recommends suspending BOSAC functions and sunsetting the current committee memberships while reserving the option to reactivate the committee in the future.

REQUESTED COUNCIL ACTION

Staff requests that Council consider taking action to approve suspending BOSAC functions until further notice.

STAFF REPORT

To:	Summit County Council
From:	Jess Kirby, Land and Natural Resources Director
Date of Meeting:	August 13, 2025
Type of Item:	Regular Session - Discussion and possible adoption of the Baseline and Conservation Easement for the 910 Cattle Ranch

BACKGROUND.

Since August 2023, Summit County has been in the process of acquiring the 910 Cattle Ranch (aka the Wasatch Back Forest Conservation Forest Legacy Project), an 8,588-acre property located north of Jeremy Ranch, in what will be the County's largest public land acquisition to date. The $55 million purchase is being funded through a combination of a $40 million federal grant awarded from the U.S. Forest Service's Forest Legacy Program and $15 million allocated from the 2021 Summit County voter-approved open space bond. The County has committed to preserving the land as open space and prohibiting hunting as part of the option agreement with the current landowner. Although the acquisition faced a temporary delay due to a federal freeze on grant disbursements in early 2025, the funds have since been released, and the County anticipates closing the purchase in late August to early September 2025.

In preparation of the property closing, Staff has worked diligently over the past two years with several contracted third-party consultants (Bio-West, Ecology Bridge, Martin and Nicholson Environmental Consultants) and professionals from the funding partners (United States Forest Service and Utah Department of Natural Resources) to complete the required due diligence documents. Two of those documents, the Baseline Documentation Report and the Conservation Easement, are presented to Council today.

> *A **Baseline Documentation Report** is a critical component of a Conservation Easement. Its primary purpose is to provide a detailed snapshot of the property's physical and ecological condition at the time the easement is established. This includes descriptions, maps, photographs, and data on land use, natural resources, structures, and conservation values. The Baseline Documentation Report serves as a reference point to help monitor compliance with the easement terms over time, ensuring that the property is protected according to the agreed-upon conservation goals.*

*A **Conservation Easement** is a voluntary legal agreement that permanently limits defined uses of a property to protect its conservation values. The purpose of a Conservation Easement is to preserve conservation values of the land by restricting development activities that could degrade its ecological or cultural integrity. The easement is held by a qualified organization which ensures the terms are upheld in perpetuity.*

PURPOSE.

As both the Baseline Documentation Report and the Conservation Easement require signatures from the County Manager and the County Council Chair, these documents are being presented to the Council today for the following purposes: (1) to provide an analysis and facilitate discussion, (2) to request consideration for approval, and (3) to establish that, upon approval, both documents will be signed with the Council's consent by the County Manager and the County Council Chair at the future closing of the 910 Cattle Ranch acquisition.

ANALYSIS.

The proposed Baseline Documentation Report is attached as Exhibit A and the proposed Conservation Easement is attached as Exhibit B. A breakdown of each component is outlined below:

Baseline Documentation Report

To summarize the Baseline Documentation Report, the table of contents, taken from the document and pasted below, outlines the depth of ecological and condition assessments conducted on the property. It is important to note that Summit County will continue to collect data and monitor the property on an ongoing and perpetual basis. As such, this baseline assessment is a dynamic document, intentionally designed to be adaptable and periodically updated as new information becomes available. Its flexible structure allows it to evolve in response to changing conditions, ensuring it remains current, relevant, and accurate. As circumstances shift and new data is collected, the report will be revised to incorporate the latest insights, maintaining its long-term utility and integrity.

Conservation Easement

To summarize the Conservation Easement, a section-by-section snapshot has been drafted below to provide a clear overview of its contents and key provisions.

Recitals. This section summarizes and describes the conservation easement and intent, including the collaboration to purchase the land in fee simple between Summit County (the "Grantor"), the United States Department of Agriculture, and Forest Legacy Program, defines the Grantors rights to protect the land, and grants the easement to Utah Department of Natural Resources, Division of Forestry Fire and State Lands (the "Grantee"). It identifies Conservation Values. These values include preservation of public outdoor recreation, protection of natural habitat for wildlife and vegetation, preservation of open space for scenic enjoyment, and preservation of historic structures and character, and assigns to the Grantee the right of preserve and protect the conversation values.

Terms. This section outlines various terms and conditions within the Conservation Easement.

Section I further identifies the Conservation Values, introduces the Conservation Purposes as the perpetual preservation and protection of the Conservation Values and describes the property boundary.

Section II defines the Baseline Documentation Report, which documents existing conditions on the property. The Grantee will use the Baseline Documentation Report to monitor changes on the property and enforce the easement.

Section III describes the encumbered water rights associated with the easement.

Section IV points readers to the defined terms for the purpose of this easement.

Sections V defines the Grantee's rights.

Sections VI-VIII outlines Grantor's Use of the Property and specifics with detail the Reserved Use Rights and Prohibited Uses Rights (i.e. Permitted Uses and Prohibited Uses). This section details various permitted uses of the property in accordance

with upholding the Conservation Values. Notable highlights include the County's right to prohibit hunting (a restriction of the landowner's option to sell the land), to construct and manage a research station, and to allow for the construction and use of limited public recreation amenities such as parking/trailhead, limited trails, picnic areas, and other. The full Conservation Easement is attached as Exhibit B and includes a comprehensive outline of permitted and restricted uses.

Remaining Sections IX-XXV consist of legal notices and remedies.

Exhibits to the Conservation Easement are as follows:

Exhibit A: Legal Description of the Property
Exhibit B: Property Map
Exhibit C: Water Rights
Exhibit D: Baseline Documentation Report, Signed "Acknowledgment of Property Condition"
Exhibit E: Forest Stewardship Plan
Exhibit F: Designated Improvement Areas: Existing Structures, Description of Use & Maps
Exhibit G: Definitions

DISCUSSION.

Staff seeks to engage the Summit County Council in a discussion regarding the 910 Cattle Ranch Baseline Documentation Report and Conservation Easement, focusing on how each document reflects the property's current conditions and outlines future uses and restrictions.

Given the significance of the 910 Ranch and the deep connection Summit County residents have to open space and this property, Staff requests that Council consider accepting public comment during each discussion to ensure transparency and community involvement.

REQUESTED ACTION.

Staff requests that the County Council forward a positive recommendation authorizing the County Manager and County Council Chair to sign the Baseline Documentation Report and the Conservation Easement at the future closing of the 910 Cattle Ranch acquisition. This action will finalize a landmark land protection effort for Summit County, in partnership with the U.S. Forest Service's Forest Legacy Program and the State of Utah.

910 CATTLE RANCH

DISCUSSION AND POSSIBLE ADOPTION OF THE BASELINE AND CONSERVATION EASEMENT

Wasatch Back Forest Conservation - Forest Legacy Project

SUMMIT COUNTY UTAH

Summit County Lands and Natural Resources

BACKGROUND:

- Since August 2023, Summit County has been in the process of acquiring the 910 Cattle Ranch
- County staff is on track and anticipates closing the property purchase in early September 2025
- Staff has completed the required due diligence documents and requests Council's review and possible approval

PURPOSE AND DISCUSSION:

- Baseline and Conservation Easement documents require the signatures from the County Manager and the County Council Chair, these documents are being presented to the Council today for the following purposes:

    1. to provide an overview and facilitate discussion,
    2. to request consideration for approval, and
    3. to establish that, upon approval, both documents will be signed with the Council's consent by the County Manager and the County Council Chair at the future closing of the 910 Cattle Ranch acquisition

**Staff requests that Council consider accepting public comment during each discussion*

BASELINE DOCUMENTATION REPORT:

*A **Baseline Documentation Report** is a critical component of a Conservation Easement. Its primary purpose is to provide a detailed snapshot of the property's physical and ecological condition at the time the easement is established. This includes descriptions, maps, photographs, and data on land use, natural resources, structures, and conservation values. The Baseline Documentation Report serves as a reference point to help monitor compliance with the easement terms over time, ensuring that the property is protected according to the agreed-upon conservation goals.*

BASELINE DOCUMENTATION REPORT:

- Documented current conditions both natural and manmade
- Identified sensitive and unique habitat
- Set the “baseline” for ongoing monitoring
- Living adaptable document that will be updated

CONSERVATION EASEMENT:

*A **Conservation Easement** is a voluntary legal agreement that permanently limits defined uses of a property to protect its conservation values. The purpose of a Conservation Easement is to preserve conservation values of the land by restricting development activities that could degrade its ecological or cultural integrity. The easement is held by a qualified organization which ensures the terms are upheld in perpetuity.*

CONSERVATION EASEMENT:

Voluntary document donated to FFSL

- FFSL is tasked with monitoring the CE in perpetuity

- Identifies Conservation Purpose and Conservation Values
  - Purpose: "*Protecting important forest areas that are threatened by conversion to non-forest uses and for protecting open space land for the conservation of wildlife habitat and for the enjoyment of the public by way of limited recreational use*"
  - Values: "*scenic, open space, forested, aesthetic, scientific, historic, cultural, hydrologic, ecological, agricultural, wildlife, and public non-motorized recreation*"

- Defines Allowed and Restricted Uses
  - Allowed: Forest management, recreation, research/education, restoration, grazing…
  - Restricted: Subdivision, deforestation, feedlot, ski Infrastructure, drones, motorized use…

REQUESTED ACTION:

Staff requests that the County Council forward a positive recommendation authorizing the County Manager and County Council Chair to sign the Baseline Documentation Report and the Conservation Easement at the future closing of the 910 Cattle Ranch acquisition.

This action will finalize a landmark land protection effort for Summit County, in partnership with the U.S. Forest Service's Forest Legacy Program and the State of Utah.

910 CATTLE RANCH

Wasatch Back Forest Conservation - Forest Legacy Project

DISCUSSION AND QUESTIONS

Summit County Lands and Natural Resources

SUMMIT COUNTY UTAH

910 Ranch -Wasatch Back Forest Conservation Forest Legacy Project
2024 Baseline Documentation Report
Summit County, Utah

Prepared for and Edited by:
Summit County
County Lands and Natural Resources
60 N Main Street
PO Box 128
Coalville, Utah 84017

Prepared by:
BIO-WEST, Inc.
1063 West 1400 North
Logan, Utah 84321

February 2025

ACKNOWLEDGEMENT OF PROPERTY CONDITION

The undersigned accept and acknowledge that this Baseline Documentation Report is an accurate representation of the property at the time the conservation easement was transferred to the grantee.

LANDOWNER GRANTOR(S)

Signature: _____ Date: _____
TONJA HANSON, Council Chair
Summit County, Utah

Signature: _____ Date: _____
SHAYNE SCOTT, County Manager
Summit County, Utah

Approve as to form:

Signature: _____ Date: _____
DAVID L. THOMAS, Chief Civil Deputy Attorney
Summit County, Utah

EASEMENT GRANTEE(S)

Signature: _____ Date: _____
JAMIE BARNES, Director/State Forester
Utah Department of Natural Resources, Division of Forestry, Fire & State Lands

PREPARERS CERTIFICATION AND QUALIFICATIONS

This statement certifies that I, Travis Taylor, prepared this 910 Cattle Ranch-Wasatch Back Forest Conservation Project Forest Legacy Baseline Documentation Report, in collaboration with Summit County Lands and Natural Resources Department, through site visits to the Property, field and desktop research, review of publicly accessible data and personal interviews. Photographs in this report were taken on the dates specified by BIO-WEST, Summit County staff, and others listed in the Baseline Documentation Report.

Signature: Travis A. Taylor Date: 02/07/2025
TRAVIS TAYLOR, Ecologist
Bio-West Inc

PROPERTY SUMMARY

Acreage: 8,587.70 acres

Location: Western Summit County, Snyderville Basin
County: Summit County (approximately 6,902 acres, or 80%) and Morgan County (approximately 1,686 acres, or 20%)

Easement Grantor: Summit County
60 N. Main Street
P.O. Box 128
Coalville, Utah 84017
(435) 336-3200

Easement Grantee: Utah Department of Natural Resources,
Division of Forestry, Fire & State Lands
c/o Jamie Barnes, Director/State Forester
1594 W North Temple St #3520
Salt Lake City, UT 84116
(801) 538-5418

Current Owner: Summit County
c/o Lands and Natural Resources
60 N. Main Street
P.O. Box 128
Coalville, Utah 84017
(435) 336-3200

Preceding Owner: David W. Bernolfo Memorial Foundation, Inc.
163 S. Main Street
Salt Lake City, Utah 84111

The County will collect data and monitor the Property ongoing and in perpetuity, as such this baseline assessment is a dynamic document that will be periodically updated as new information becomes available. This document is intentionally designed to be adaptable, allowing for its evolution in response to changing conditions, ensuring that it remains current, relevant, and accurate. As circumstances shift and new data is collected, this document can be revised to incorporate the latest data and insights, thereby maintaining its relevance and utility.

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910 CATTLE RANCH-WASATCH BACK FOREST CONSERVATION PROJECT
FOREST LEGACY BASELINE DOCUMENTATION REPORT

I. PURPOSE

The purpose of this baseline documentation report ("**BDR**") is to report on a comprehensive inventory and ecological survey that compiled the species, habitats, and uses within the 910 Cattle Ranch-Wasatch Back Forest Conservation Project (the "**Ranch**" or the "**Property**") to document the current conditions and evaluate the conservation values that will be protected by Summit County's (the "**County**") future conservation easement. This BDR will serve as a platform for the County's reference in making informed decisions regarding the management, conservation, and restoration of resources on the Ranch. It will serve as documentation of the current conditions to support the Property's conservation easement and as a reference for future monitoring and adaptive management. BIO-WEST, Inc., ("**BIO-WEST**") was contracted to prepare the BDR using a combination of site visits to the Property, field and desktop research, review of publicly accessible data, and personal interviews. BIO-WEST subcontracted Cannon Heritage Consultants, Inc., (**CHC**") to inventory historical, cultural, and archaeological resources on the Ranch. BIO-WEST and CHC conducted field surveys from May through October of 2024.

The BDR is, to the best of its ability, a representation of the current conditions of the Property as of the last date on the Acknowledgement of Property Condition ("**Effective Date**").

II. INTRODUCTION

The 910 Cattle Ranch, with its expansive 8,587.70 acres of relative wilderness, is one of the last remaining contiguous forested mountain ranches of its size within the area of the Wasatch Mountains of western Summit County, Utah. The Ranch's history dates back to 1890 when Thomas E. Jeremy Jr. began acquiring land for a family farm and sheep ranching operation. Located just minutes from the world-renowned, four-season resort town of Park City and only 25 miles from Salt Lake City, the Property links a corridor of 52,000 acres of protected land consisting of Forest Legacy projects, private conservation lands, state parks, and National Forest.

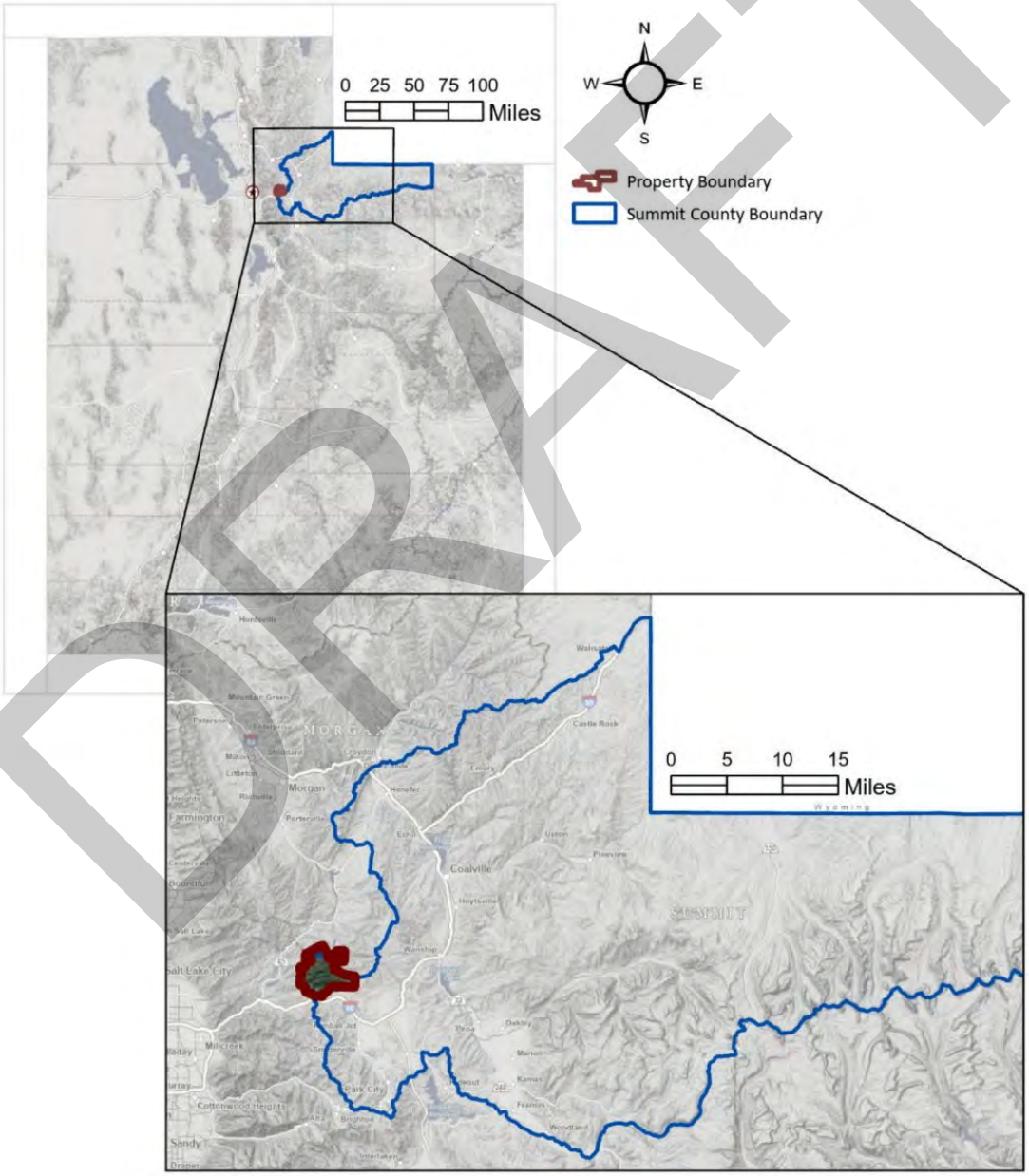
After several years of discussions and negotiations with the landowner, the County secured the property for permanent protection. On August 25, 2023, the County entered into a three (3) year option agreement with landowner, the David W. Bernolfo Memorial Foundation, to purchase the Ranch for *fifty-five million dollars* ($55,000,000) using a *fifteen million dollar* ($15,000,000) non-refundable down payment from the 2021 General Obligation Open Space Bond (the "**Open Space Bond**"). The Open Space Bond funds, which were overwhelmingly approved by Summit County voters, are made available to the County "to purchase passive and active open space, conservation easements, and construct recreational amenities." In addition to the Open Space Bond funds, on June 4, 2024, the County was fortunate to be awarded a *forty-million-dollar* ($40,000,000) grant from the United States Department of Agriculture ("**USDA**") Forest Service Forest Legacy Program ("**FLP**"), to complete the acquisition of the Ranch and protect its forested land in perpetuity. The FLP funds were made possible by more than *eighty-four million dollars* ($84,000,000) from the Land and Water Conservation Fund and *seventy million dollars* ($70,000,000) from a US federal grant.

III. DESCRIPTION OF THE PROPERTY

III.1. Location

The Property is located in north-central Utah, approximately 25 miles east of Salt Lake City and 15 miles northwest of Park City, between the Jeremy Ranch neighborhood of Snyderville Basin and East Canyon State Park. The Property can be publicly accessed via N. East Canyon Road (also commonly known as East Canyon Road or Jeremy Ranch Road), which is a recognized Class B County Road. The N. East Canyon Road is a natural surface dirt road that is seasonally maintained (i.e. closed to general vehicle traffic December 1 – May 1). The Property is situated on both the east and west sides of East Canyon Road, **Figure 1**.

Figure 1. Map - Property location



III.2. Access

From Summit County the property is accessed by exiting Interstate 80 at Jeremy Ranch (Exit 141) and following signs indicating Jeremy Ranch Road. Jeremy Ranch Road becomes N. East Canyon Road just beyond the Jeremy Ranch golf course at the cattle guard where the pavement ends, which is the southernmost property boundary.

III.3. Ownership, Management and Stewardship

The Property is owned by Summit County, Utah. The Property is protected in perpetuity with the Conservation Easement held by State of Utah Department of Natural Resources, Division of Forestry Fire and State Lands ("**FFSL**"). The day-to-day management and stewardship responsibility of the Property is the duty of the County. Monitoring and Conservation Easement enforcement is assigned to FFSL.

III.4. Property Legal Description

The Property covers approximately 8,587.70 acres of mountainous terrain and resides within both Summit County (approximately 6,862.99 acres, or 80%) and Morgan County (approximately 1,724.71, or 20%). The Property boundary is legally described using Summit County Tax Parcel Nos: SS-3-C (10.91), SS-4-D (184.00), SS-5 (400.36), SS-5-A (117.39), SS-7 (197.00), SS-129 (608.98), SS-130 (640.00), SS-131 (645.51), SS-133 (160.00), SS-133-A (480.00), SS-134 (470.39), SS-BDY-1(147.88), SS-BDY-3 (581.33), SS-BDY-4 (35.13), SS-BDY-5 (3.07), SS-BDY-6 (487.33), SS-BDY-9 (251.76), SS-BDY-10 (22.22), SS-BDY-12 (490.28), SS-BDY-13 (468.82), and SS-BDY-14 (460.63); (Summit County total approximately 6,862.99 acres) and Morgan County Tax Parcel Nos: 00-0000-0362 (280.00), 00-0000-0370 (488.93), 00-0000-0388 (284.87), 00-0000-0453 (132.12), 00-0000-0479 (58.67), 00-0000-0487 (114.93), 00-0000-0529 (314.50), and 00-0005-0912 (50.69); (Morgan County total approximately 1,724.71 acres); **Figure 2**.

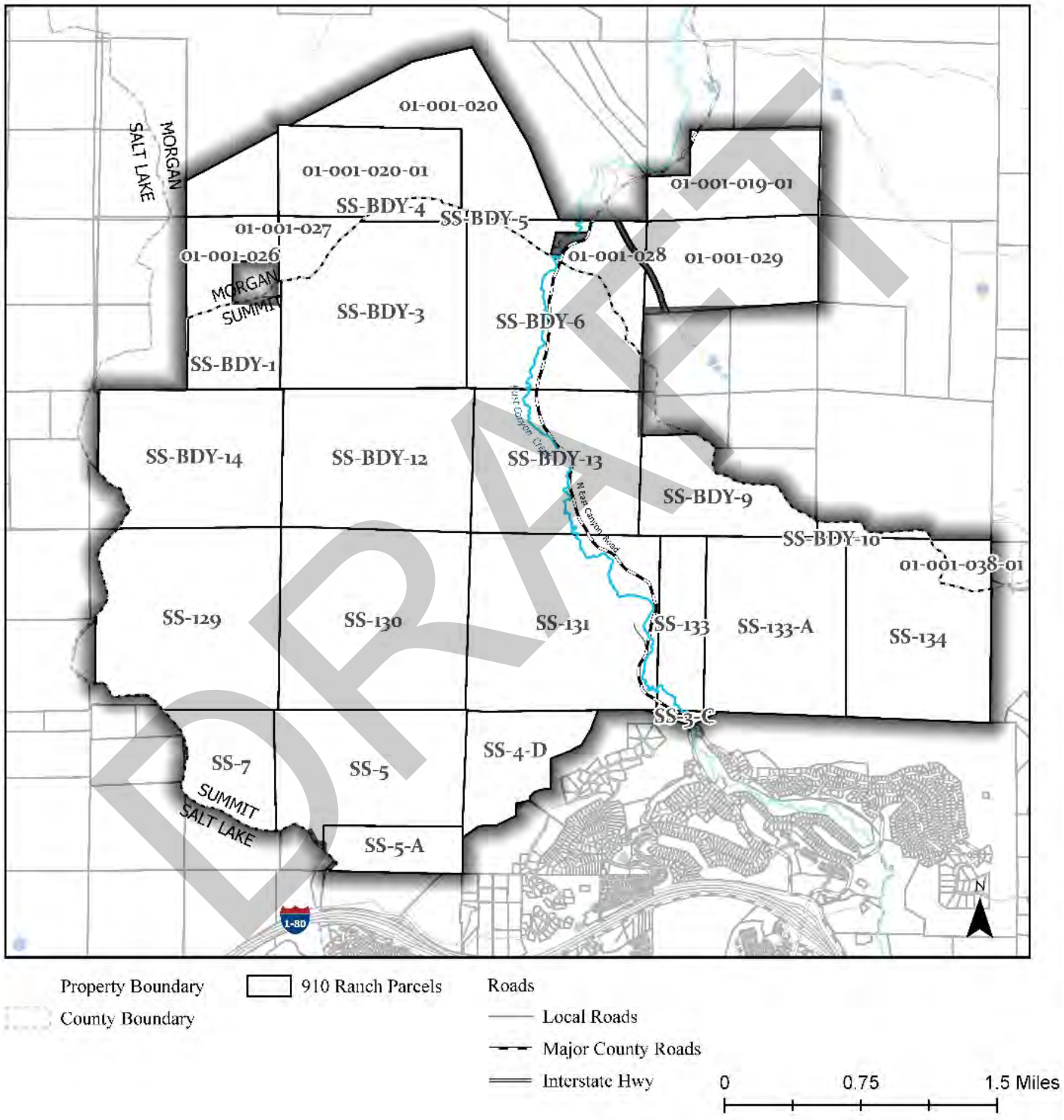
IV. HISTORY AND CURRENT USE

IV.1. Brief History

In 1890, Thomas E. Jeremy Jr. acquired more than 22,000 acres for use as a family farm and sheep ranching operation. The land was owned and operated by the Jeremy family for four generations from 1860-1979. As ranching operations and family use of the land diminished, the massive Jeremy estate was subdivided to create several smaller parcels. In 1977, 12,500 acres were sold and developed into a championship golf course and residential neighborhood of Jeremy Ranch. With a golf course, clubhouse, elementary school, and over 700 single-family homes and 1,000 condominiums bearing the historic homestead appellation, "Jeremy Ranch" is now a household name among area residents and visitors alike. It is thought that the Jeremy family homesteaded on the Ranch and constructed the "Jeremy Ranch Stone Cabin" which still stands on the Property today. This small stone cabin is thought to be the original residence and was used by the Jeremy family each summer while grazing sheep. Folklore tells that the area may have also been occupied by the US Army in 1857, when cavalry militiamen built a low wall of stacked rocks (a

"breastwork") on the ridgetop at Mormon Flat (2-miles north of the Ranch) as a defense against a rumored Mormon rebellion. The Property may have also been associated later with a historical sawmill operation, but this use has not yet been confirmed.

Figure 2. Map - Property legal description



IV.2. Cultural and Archaeological History

The Property has a rich history and is a treasure trove of cultural and archaeological significance, showcasing the presents of this region's early settlers and indigenous peoples. Among the most fascinating finds on the Ranch are the remnants of ancient Native American civilizations that depict stories and daily life from thousands of years ago and, with the Property's close proximity to historical landmarks, from the Mormon pioneers who settled in the area during the 19th century. From the Jeremy Ranch Stone Cabin to the historic trails (Mormon Trail, Great Western Trail, Pony Express Trail and the California Trail), this Ranch tells a piece of a storied history, arduous journeys, and settlement, painting a picture of the cultural evolution in this beautiful mountain range. The blend of ancient artifacts and pioneer history creates a rich tapestry of cultural heritage, making the Property a significant location for both archaeology and Utah history. CHC was subcontracted by BIO-WEST to perform a literature search, create a predictive GIS model of archaeological "hot spots" and to conduct field surveys of the archaeological and cultural resources. CHC identified approximately 1,870 acres of culturally significant areas for survey. During the summer 2024 field season, CHC surveyed 258.6 acres of high-probability (areas ranked 4-5 on the probability model). The remaining 501.2 acres of high probability was completed during the 2025 field season. As of the Effective Date, CHC has recorded ten (10) sites and fourteen (14) isolates (*Archaeological isolates are individual artifacts or small clusters of artifacts that are found alone, without any associated features or other artifacts that would suggest a larger, more complex archaeological site. These isolates can include items like a single stone tool, a piece of pottery, or a fragment of bone*). The full report, maps, and photographs can be found in **Appendix A**.

IV.3. Current Use

Since December 1992, the Property, (a.k.a. The 910 Cattle Ranch, a.k.a. The 910 Wilderness Company) has been owned by a single landowner, David W. Bernolfo and most recently by his namesake Memorial Foundation. Used longer as a mountain retreat than a primary residence, the Property has been managed mainly as a private wilderness and as a wildlife refuge, and cattle ranch. While open public access to the Property has been historically restricted, over the course of Mr. Bernolfo's ownership the Property has been opened at varying times to public recreation opportunities, including among others for groomed cross-country skiing and for a unique opportunity to host a 1990's era NCAA Nordic ski race series. In the early 2000's, the Property was planned for a 116-unit luxury residential development by the owner, a development that was never seen to completion. Over the course of this time, the Ranch has continually been grazed, historically by the homesteading Jeremy Ranch Family who ran sheep and most recently by cattle, horses, and high densities of wildlife.

IV.3.1. History, Grazing and Cattle Ranching

Thomas E. Jeremy Jr. began operating the property as a family farm and sheep ranch in the 1890s. Following the sale of large portions of the original 22,000-acre homestead by the Jeremy family, approximately 8,587.70 acres remained. This remaining land has largely remained undeveloped and continued to be used for ranching—transitioning from sheep to cattle grazing operations.

Today, livestock (e.g., including cattle), horses and an abundance of wildlife (e.g. deer, elk, and moose) graze on the Property. The County is unaware of any historical implementation of a formal grazing management plan on the Property, which has traditionally operated under open range practices. Although several miles of old, unmaintained barbed wire fencing remain—and additional fencing has been removed—the Property largely functions as open range, with minimal fencing and livestock management conducted by a herder using horseback or ATVs. Aside from a four-mile fenced enclosure along the lower portion of Big Bear Hollow, installed by Trout Unlimited and the County in the summer of 2024, cattle have unrestricted access to East Canyon Creek, its tributaries, and all natural springs on the Property

While cattle have access to the entire Property, they were only observed (during field observations) grazing along East Canyon, Big Bear Hollow, and Porcupine Creek, on hillside slopes east of East Canyon Creek Road and in the Lower Wood and Mill Hollows. Yet their presence was observed throughout the Property, mainly through the remnant "cow patty" left behind. Cattle were also often reported, by Property neighbors, to have wandered off the Property and onto neighboring private land. Horses were observed mainly grazing near the area known as "The Ranch Compound" (*defined below*). Grazing ungulates, such as elk, moose, and deer, were observed throughout the entirety of the Property and also have unrestricted access to the Property, i.e. there are no wildlife exclusion fences on the Property. Generally, grazing activities and their related effects were observed in areas with easy access to water and on low angle terrain. Areas with the least livestock grazing activity and effects occurred in Dry Hollow and Deer Hollow which have limited water and offer steeper terrain.

IV.3.2. Recreation and Public Access

Consistent with its history of private ownership, the Property currently does not offer public access or recreational opportunities. However, under future County ownership, it holds significant potential to support limited, low-impact recreational uses. These could include hiking, mountain biking, horseback riding, and winter activities such as Nordic skiing, backcountry skiing, and snowshoeing.

At present, recreational use is confined to the public N. East Canyon Road, which runs north–south through the central portion of the Property. This road is popular with walkers, runners, cyclists, scenic drivers, bird watchers, and wildlife enthusiasts. It is not uncommon to see 20–30 individuals using the road at a given time. The route is also a favorite among dog owners and professional dog-walking services.

While public access is currently limited to this road, several private two-track roads and trails traverse the Property, providing internal access for private use. These existing routes may offer a foundation for a future internal trail network, should the County choose to develop recreational infrastructure. With thoughtful planning, the Property could evolve into a valuable public asset that balances conservation with outdoor recreation.

In addition to the interior trails, there is one established "public" trail. Approximately 1-mile of the "Sheep's Trail", an extension of the Great Western Trail ("**GWT**"), meanders on and off the Property on the south and western most edge (**Figure 3)**. This section of the official GWT is

located on the extreme south and west boundary of the Property along the crest of the Wasatch Mountains following the Summit, Salt Lake, and Mogan County lines from Parleys Summit to Big Mountain Pass. The GWT enters the Property sporadically then dips into neighboring private, Salt Lake Watershed, and USFS owned lands. The trail has been designated by the State as a Utah Centennial Trail (1996) and federally designated as a National Millennium Trail (1999). In total, the full distance of the GWT is 4,455-miles long (Canada to Mexico); of which 1,600-miles reside within Utah. Access to the portions of the GWT on the Property have historically been closed to the public by the private landowner, causing great conflict with the recreational community, resulting in often trespass. If desired, under County ownership, and in partnership with neighboring landowners, this critical trail connection can be restored for the enjoyment of non-motorized recreationalists.

While abundant amounts of wildlife migrate through the Property and utilize it as year-round or seasonal habitat, public hunting is prohibited and will remain prohibited in perpetuity. This prohibition on hunting has been placed on the Ranch as a condition to the Property purchase agreement, a condition that the County will uphold with great resolve. Reported and confirmed poaching incidents have occurred on the Property and will remain a constant challenge for the Ranch and its management in the future.

While public hunting will remain prohibited, other future wildlife-related recreation opportunities can be considered. The Property and its various habitats are home to a variety of large and small mammals, rodents, reptiles, amphibians, and migratory birds. This abundant diversity of wildlife offers exceptional potential for future public recreational wildlife observations and bird watching. The County is encouraged to create a recreational management plan that is mindful of current conditions and that is complementary to the ecological findings herein.

IV.3.1. Existing Roads and Parking Areas

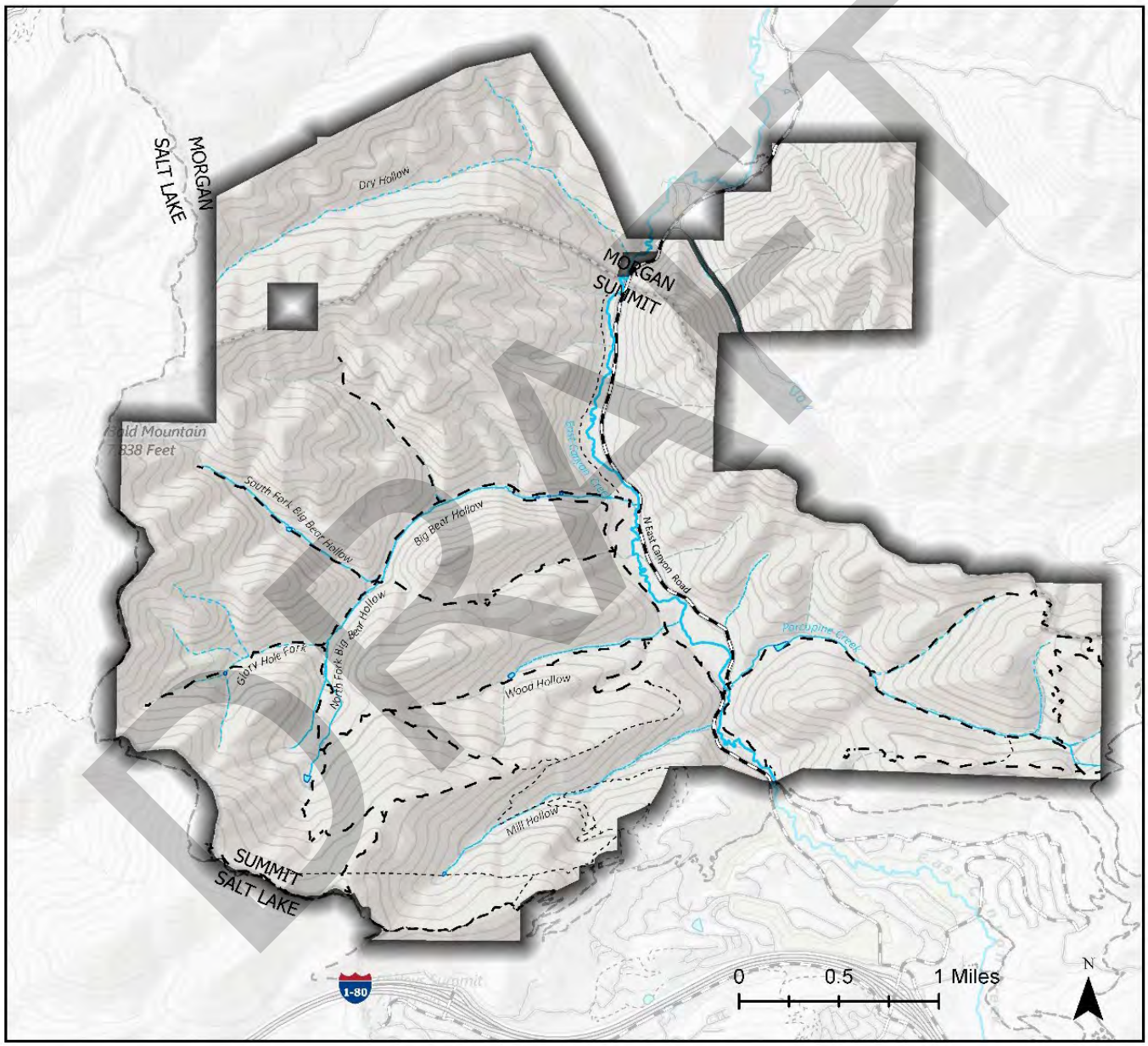
It is known to be approximately a total of 34.5-miles of roads and trails as of the Effective Date, consisting of 22.5-miles of two-track trails, 8.5-miles of single-track trail and 3.5-miles of Major County B Road N. East Canyon Road. In addition, there are several informal parking pullouts along N. East Canyon Road, within the roads designated 120 ft right-of-way, making up nearly 45,000-sqft of permeable dirt pull-out parking areas on the Property and while currently there are no formal designated trailheads at the Effective Date, there is 33,000-sqft of established permeable dirt parking areas, located at the Ranch Compound and southernmost entry of the Property. Currently "as known and visited" roads, two-track trials, and singletrack trails are shown in **Figure 3.** and as shown in the summary below.

IV.3.2. Existing Structures and Ranch Improvements

Structures and improvements are minimal on the Property. There is approximately 252,000 square feet developed area and structures as reported in **Table 1**. Existing structures consisting of a single historic Jeremy Ranch Stone Cabin, a single bridge over East Canyon Creek, a single modest "red roof" cabin, and within the area known as the "Ranch Compound" a single residential home, two (2) "ranch-hand" cabins, three (3) out-buildings/accessory buildings, and one (1) three-bay storage storge barn. Located within the Ranch Compound area are also several horse and cattle corrals, an enclosed water pumphouse, and a disturbed area used as external storage area for fencing

materials. On the extreme southwest portion of the Property there is also the Parley's SNOTEL and within the central western portion resides a natural surface remnant 1979 mineral exploration well pad with a single exposed pipe. There is also an abandoned 1970's era travel trailer located within the northeastern parcel in Morgan County. All known structures and improvements, as of the Effective Date, are further mapped and photo documented in **Appendix B** and as summarized in **Table 1** and described in detail below.

Figure 3. Map - Existing roads and trails



Property Boundary
County Boundary

Roads
Local Roads
Major County Roads
Interstate Hwy

Streams
Ephemeral
Intermittent
Perennial

Interior Road & Trail
Two Track Trail
Single Track Trails
Trails External

Table 1 Existing Structure and Improvements Square Footage

Site #	Site Name	Structure (sqft)/ Impacted Area	Structure Height (ft)	Feet of Fence
1	Mormon Flats Campground	56,500	0	0
2	Big Bear Bridge	800	0	0
3	Historic Jeremy Ranch Stone Cabin	600	15	300
4.a	Residential home site	4,300	19	528
4.b.1	Ranch-hand home site	700	15	0
4.b.2	Ranch-hand home site	700	15	0
4.c.1	Sheds/out buildings	350	12	0
4.c.2	Sheds/out buildings	350	12	0
4.c.3	Sheds/out buildings	400	12	0
4.d	Barn	2,500	19	0
4.e.1	Horse and Cattle Corrals (open fields, fenced in with corral fencing)	0	0	5,280
4.e.2	Covered Corral	500	11	50
4.f	Enclosed water pump house	200	9	370
4.g	Open area fencing material storage area	350	0	0
4.h	2 underground water storage tanks	4,500	0	0
5	"Red Roof" Cabin	1,360	25	0
5.a	"Red Roof" Cabin Shed	80	12	0
6	USFS - SNOTEL	2,500	36	105
7	1979 Well site (natural surface)	175,000	0	0
8	Abandoned 1970's Travel Trailor	300	14	0
	Totals	251,990		6,583

Existing Structures and Ranch Improvements Details are as follows, photographs can be found in Appendix B.

Site 1: Mormon Flats Campground. A small portion of the Utah State Park, Morman Flat Campground, is included in the Property boundary. While not "improved", this grassy area has is adjacent to the dedicated campground managed by Utah State Parks and has had various materials (gravel, wood, fencing) stored upon it. The County is encouraged to enter into an interlocal agreement with the Utah State Parks to remedy maintenance and clarify use.

Site 2: Big Bear Hollow Bridge. Old transportation bridge over East Canyon Creek. The old bridge, circa 1970, which crosses East Canyon Creek at the base of Big Bear Hollow is known to have been installed to aid access to a failed mineral exploration in upper Big

Bear Hollow. The bridge has not been maintained over time, leaving it in its current condition, which is unusable, lacking structural integrity, and in need of immediate repair. The bridge once repaired will be a critical Property access point for maintenance, recreation use and emergency access.

Site 3: Historic Jeremy Ranch Stone Cabin. The stone cabin, which is situated in the central portion of the Property on the west side of East Canyon Creek, shows signs of several iterations of restoration but lack of ongoing repair has left it in need of immediate attention and significant restoration to preserve its historic nature. The cabin has been submitted to the Utah State Historic Preservation Office for potential National or State historic registry designation status. As of the Effective Date the application is still pending. The Cabin should be repaired in order to preserve this historical structure. The future cabins intended use is for education and historical preservation.

Site 4: Ranch Compound Structures. The Rach Compound Structures built by the landowner, David Bernolfo, in the early 1990's, are each unique and one of a kind (described in detail in Appendix B). Constructed of metal pipe welded together by Mr. Bernolfo himself, which he found to be a durable and practical material for the Ranch's needs. He spent the early years living on the ranch full-time, personally installing and overseeing the construction and ensuring that the buildings met his standards. Bernolfo's hands-on approach and dedication to maintaining the ranch's integrity is evident throughout his ownership and is shown in these characteristic structures. In addition to the structures, there is also a large permeable dirt parking area at this site. The Compound structures intended future use can be for a visitor center, County staff offices and storage, events, Ranch manager or employee housing

Site 5: The "Red Roof" Cabin. Built in 1993, by David Atherley and his family, on a private land inholding that has since been incorporated within the Ranch acreage. The cabin sits remotely on a terrace among a stand of aspen west and above of the Ranch Compound. The cabin is in visually good condition with only limited improvements needed to repair the failing roof and chimney masonry. Further investigation is needed to assess its true structural integrity and any failures to the water, septic, and electrical systems. The cabins future intended can be as a residence or occasional events.

Site 6: Parley's Canyon Summit SNOTEL. Away from the central Ranch Compound, the Property is also home to the Parley's Canyon Summit SNOTEL (Snow Telemetry). The SNOTEL site, installed in 1979, is located within the southwestern portion of the Property at an elevation of 7,585 feet on Parley Summit. The site is an automated data collection station that is part of the larger SNOTEL network managed by the USDA, Natural Resources Conservation Service ("**NRCS**"), which monitors snowpack, precipitation, temperature, and other climatic conditions across the western United States. The SNOTEL provides crucial data for water resource management, flood forecasting, and climate research. The information gathered helps in understanding snow water equivalent and predicting water availability for the region. The County intends to maintain the access to the site and allow ongoing research to be collected by NRCS or its authoritative representatives.

Site 7. 1979 Exploration Well Pad. While not necessarily a structure, the Property also houses the remanence of a failed mineral exploration pad and vertical drill casing from 1979, the site is situated at the top of the North Fork of Big Bear Hollow. The future intended use for this area includes a potential location of a research station or similar structure.

8. Abandoned Travel Trailer. Located in the northeastern portion of the Property, an abandoned travel trailer is nestled among a stand of Aspen. The Trailer is known to have been placed there in the early 1970's. It is in great disrepair and has Aspen trees growing through its walls. The trailer will need to be removed as it is an attractive nuisance that could cause future problems.

Other improvements (not mapped). The Property also has miles of barbed wire and pipe fencing in varying conditions**.** While barbed wire fencing that has been historically used on the Property, over time it has either been fully removed, leaving remnant t-posts in its place, or has been left unmanaged, leaving loose fencing and wire remanences. Ongoing mapping is needed to fully capture the breath of the fencing and removal/repair will be needed ongoing to eliminate the impending threat to wildlife, livestock, and dogs.

Additional improvements are located along N. East Canyon Road which includes several farm gates, fencing made from sections of pipe, and several electrical utility boxes. There are also several discarded culvert pipes, two that are know (one culvert is located near the Ranch Compound on the banks of East Canyon Creek and the other in Porcupine Creek approximately 1.5 miles upstream). The culvers should be removed and areas restored it there naturally conditions.

These detailed structures and their locations are illustrated in **Appendix B.**

V. ECOLOGY RESOURCES AND PHYSICAL DESCRIPTION

The Property supports a diverse ecological community, at elevations ranging from 6,200 to 7,800 feet. The Property comprises a significant area of contiguous mountainous terrain within the East Canyon Creek watershed, located in both Summit and Morgan counties.

V.1. Ecoregion

The Property is located within Ecoregion 19-Wasatch and Uinta Mountains, as classified by the Ecoregions of Utah (Woods et al. 2001). Ecoregion 19 is broadly described as a diverse landscape of high glaciated mountains, plateaus, foothills, and valleys, including prominent features like the Uinta Mountains, Wasatch Range, and Wasatch Plateau. This area is characterized by varying elevations and climatic gradients that influence its vegetation and ecology. Surface waters in this ecoregion tend to be non-alkaline, nutrient-poor, and low in dissolved solids due to underlying acidic bedrock and minimal alkaline dust deposition from the Great Basin.

The Property appears to be in a transitional area between ecological subregions 19f-Semiarid Foothills and 19d-Wasatch Montane. Geographically, the Property is situated within the 19f Semiarid Foothills subregion. However, it supports some characteristics of both subregions, 19d Wasatch Montane Zone and 19f Semiarid Foothills. The 19d ecoregion consists of forested mountains and plateaus where Douglas-fir and aspen parklands are common. The ecoregion lacks lower elevation pinyon-juniper woodlands and mountain brush dominant characteristic of ecoregion 19f. The 19f ecoregion is found between 5,000 and 8,000 feet in elevation and contains widely spaced juniper and pinyon in a matrix of sagebrush, grama grass, maple-oak scrub, and Gambel oak. The pinyon-juniper communities are replaced by maple-oak scrub in the northern portions of the ecoregion.

The series of ridges and steep north-facing slopes in the western portion of the Property supports a mix of conifer and subalpine forests, while oak shrublands, sagebrush and grassland communities are prevalent on south and west facing slopes. Douglas-fir and white-fir forests are common at mid elevation, while Englemann spruce and subalpine fir are found at the upper elevations. The eastern portion of the Property contains maple-oak scrub and sagebrush. Aspen parkland can be found within drainages, draws, and above the hollows, sustained by adequate soil moisture. The wide range of plant communities, elevation, and climatic fluctuations provide a unique ecological niche that can be utilized by various wildlife and plant species during the harsh winter months and dry summer heat. Ecoregion classifications are further described in **Appendix C**.

V.2. Flora

V.2.1. Vegetation

The Property contains diverse native plant species across nine (9) distinct vegetation communities, **Figure 4**, which encompass forest, shrubland, riparian, grassland, riparian wetland, and herbaceous wetland habitat types. The forested areas consist primarily of quaking aspen (*Populus tremuloides*), Gambel oak (*Quercus gambelii*), bigtooth maple (*Acer grandidentatum*), and a mix of coniferous species, including white fir (*Abies concolor*), Douglas fir (*Pseudotsuga menziesii*), and subalpine fir (*Abies lasiocarpa*). Open meadows within these forested areas contain native grasses, sagebrush, and a variety of wildflowers and other forbs, including species such as mule's ear (*Wyethia amplexicaulis*), yarrow (*Achillea millefolium*), and meadow-rue (*Thalictrum* sp.). The understory vegetation is dominated by shrubby species such as chokecherry (*Prunus virginiana*), snowberry (*Symphoricarpos albus*), and serviceberry (*Amelanchier utahensis*), which contribute to the area's ecological diversity, offering cover and foraging habitat for numerous wildlife species. A complete list of species observed can be found in **Table 2** and vegetation communities are described in greater detail in the Vegetation Mapping and Classification **Appendix C**.

V.2.2. Nonnative Vegetation

Nonnative species can pose a significant threat to the Property. They have the potential to displace native species that provide essential habitat and forage for wildlife, disrupt resources, and alter the hydrology and soil composition of the area. A full description of the noxious weed distribution on 910 Ranch will require several years of inventory and mapping. Focusing on areas most likely to

have experienced invasion due to disturbance or proximity to vectors of weed seed spread provides a solid base from which to begin managing weeds at the landscape scale.

As of the Effective Date, 19 individual noxious weed species have been identified, 627 acres of infested noxious weed areas have been mapped, and 2,690 acres of the Property was inventoried. The most prevalent species included hounds tongue, Canada thistle, and musk thistle. Due to the potential for each of these species to significantly alter natural resources and wildlife habitat, the most concerning species identified include garlic mustard, Myrtle spurge, Phragmites, spotted knapweed and yellow starthistle

In general, the greatest distribution and density of noxious weeds are associated with buildings, roads/two-track trails, waterways, and open meadows, particularly where cattle have historically use these areas. The western boundary, the northwestern corner and the northeastern corner remain mostly uninvaded by noxious weeds. These areas of the Ranch, due to there step terrain and absences of consistent water, are not currently frequented by cattle. Unlike most noxious weeds identified on the Ranch, garlic mustard was not associated with areas of disturbance or water. Instead, garlic mustard was associated with forested (conifer or maple/oak woodlands) areas, in the path of game trails, and in areas adjacent to the neighboring Jeremy Ranch and Moose Hollow residential communities. All noxious weeds within Big Bear Hollow and along much of Jeremy Ranch Road were treated with herbicide by contractors and County staff in 2024 and will continue to receive treatments ongoing until contained. Additional weed inventory along the southwestern boundary, north boundary and three additional drainages will occur in the summer 2025 field season, and the monitoring and treatment will be ongoing. For a full list of species and to view maps see **Appendix D**.

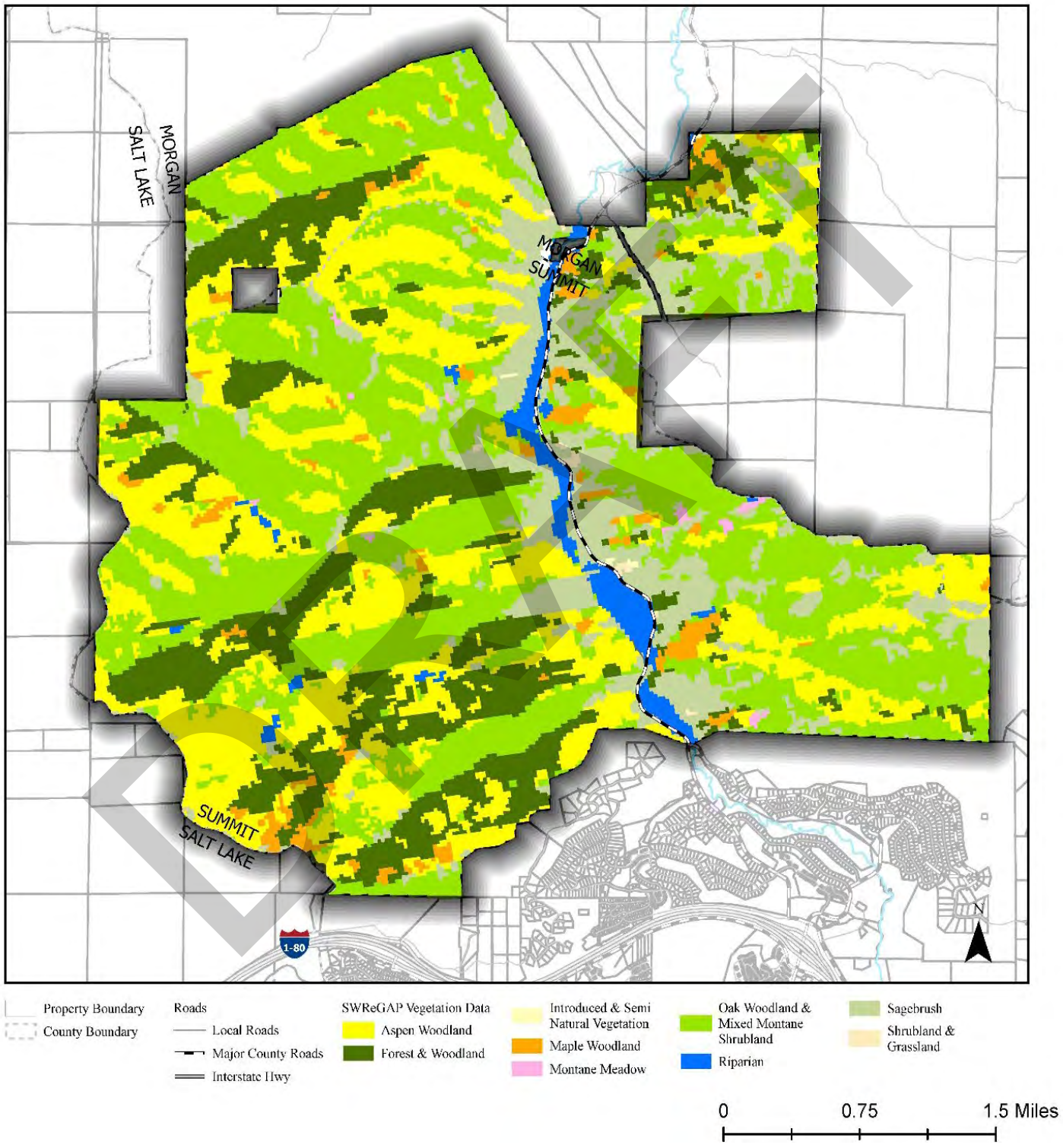
V.2.3. Rangeland

Rangeland on the Property is dominated primarily by dense sagebrush communities which lack other shrubs, grasses, and forb diversity. The sagebrush density is a direct result of grazing, by both livestock and wildlife, and the allowed abundance and concentration of animals in certain areas. In addition, the herbaceous understory of some of the sagebrush communities has been converted from perennial bunchgrass to non-native annual grass to support grazing yields and livestock production. Unlike the Properties riparian zones, the uplands and range areas, while showing signs of browsing and lack of native grasses, revealed descent ecological health. The vegetation in these upland areas remains relatively intact, providing a stable environment for livestock and wildlife. Grazing by both cattle and wildlife is evident but generally semi-healthy, as it was not seen to significantly disrupt the overall upland ecosystem.

The most notable impact observed was the grazing effect on aspen and the diminished resulting aspen recruitment. Grazing pressure by cattle and wildlife has significantly impacted aspen recruitment throughout the Ranch, which can lead to long-term ecological consequences. Grazing pressure has limited the success of young aspen shoots, or suckers, to maturity. Left unchecked, these actions will prevent the natural regeneration of aspen stands, which rely on these young shoots to replace older, dying trees. Over time, this can result in a decline in aspen populations, reducing the biodiversity of the area since aspen forests provide critical habitat for many species. Additionally, the lack of young aspen can lead to soil erosion and decreased water retention in the ecosystem, further degrading the health of the landscape. Implementing controlled grazing

practices is essential to ensure the sustainable recruitment of aspen and the overall health of the ecosystem.

Figure 4. Map – Generalized Vegetation



However, the presence of noxious weeds poses the largest threat to this system. While both cattle and wildlife can spread noxious weeds, these invasive species can outcompete native plants, leading to a decline in biodiversity and altering the natural balance of the ecosystem. Effective management strategies are essential to control these noxious and invasive weeds and to maintain the ecological integrity of the uplands.

Table 2. Plant Species observed within the Property

COMMON NAME	SCIENTIFIC NAME	DURATION	NATIVE OR INTRODUCED	NOXIOUS SPECIES*
Trees				
aspen	*Populus tremuloides*	Perennial	native	no
bigtooth maple	*Acer grandidentatum*	perennial	native	no
black hawthorn	*Crataegus douglasii*	perennial	native	no
blue spruce	*Picea pungens*	perennial	native	no
boxelder	*Acer negundo*	perennial	native	no
Douglas fir	*Pseudotsuga menziesii*	perennial	native	no
eastern cottonwood	*Populus deltoides*	perennial	native	no
Englemann spruce	*Picea engelmannii*	perennial	native	no
Gambel oak	*Quercus gambelii*	perennial	native	no
narrowleaf cottonwood	*Populus angustifolia*	perennial	native	no
Rocky Mountain juniper	*Juniperus scopulorum*	perennial	native	no
Rocky Mountain maple	*Acer glabrum*	perennial	native	no
subalpine fir	*Abies lasiocarpa*	perennial	native	no
water birch	*Betula occidentalis*	perennial	native	no
white fir	*Abies concolor*	perennial	native	no
Shrubs				
antelope bitterbrush	*Purshia tridentata*	perennial	native	no
Bebb's willow	*Salix bebbiana*	perennial	native	no
bearberry	*Arctostaphylos uva-ursi*	perennial	native	no
big sagebrush	*Artemisia tridentata*	perennial	native	no
chokecherry	*Prunus virginiana*	perennial	native	no
common snowberry	*Symphoricarpos albus*	perennial	native	no
common rose	*Rosa woodsii*	perennial	native	no
coyote willow	*Salix exigua*	perennial	native	no
dogwood	*Cornus sericea*	perennial	native	no
golden currant	*Ribes aureum*	perennial	native	no
mallow leaf nine bark	*Physocarpus malvaceus*	perennial	native	no
mountain gooseberry	*Ribes montigenum*	perennial	native	no
Oregon grape	*Mahonia repens*	perennial	native	no
peachleaf willow	*Salix amygdaloides*	perennial	native	no
prickly pear cactus	*Opuntia* sp.	perennial	native	no
red elderberry	*Sambucus racemosa*	perennial	native	no
red willow	*Salix laevigata*	perennial	native	no
rubber rabbitbrush	*Ericameria nauseosa*	perennial	native	no
shrubby cinquefoil	*Potentilla fruticosa*	perennial	native	no
snowbush	*Ceanothus velutinus*	perennial	native	no
Utah serviceberry	*Amelanchier utahensis*	perennial	native	no
wax currant	*Ribes cereum*	perennial	native	no
western serviceberry	*Amelanchier alnifolia*	perennial	native	no
yellow rabbitbrush	*Chrysothamnus viscidiflorus*	perennial	native	no

COMMON NAME	SCIENTIFIC NAME	DURATION	NATIVE OR INTRODUCED	NOXIOUS SPECIES*
yellow willow	*Salix lutea*	perennial	Native	no
	Forbs			
allium	*Allium* sp.	perennial	both	no
alpine bistort	*Polygonum viviparum*	perennial	native	no
American speedwell	*Veronica americana*	perennial	native	no
arrowleaf balsam root	*Balsamorhiza sagittata*	perennial	native	no
aspen fleabane	*Erigeron speciosus*	perennial	native	no
avalanche lily	*Erythronium montanum*	perennial	native	no
ballhead waterleaf	*Hydrophyllum capitatum*	perennial	native	no
big-bract verbena	*Verbena bracteata*	annual/ biennial/ perennial	native	no
black medick	*Medicago lupulina*	annual/perennial	introduced	no
broadleaf cattail	*Typha latifolia*	perennial	native	no
Canada goldenrod	*Solidago canadensis*	perennial	native	no
Canada thistle	*Cirsium arvense*	perennial	introduced	yes
clasping pepperweed	*Lepidium perfoliatum*	annual/biennial	introduced	yes
common cocklebur	*Xanthium strumarium*	annual	native	no
common dandelion	*Taraxacum officinale*	perennial	both	no
common mullein	*Verbascum thapsus*	biennial	introduced	no
common Pacific pea	*Lathyrus vestitus*	perennial	native	no
common wintercress	*Barbarea vulgaris*	biennial	introduced	no
death camas	*Toxicoscordion venenosum*	perennial	native	no
desert biscuitroot	*Lomatium foeniculaceum*	perennial	native	no
false lupin	*Thermopsis montana*	perennial	native	no
false Solomon's seal	*Maianthemum racemosum*	perennial	native	no
Fendler's rue	*Thalictrum fendleri*	perennial	native	no
field mint	*Mentha spicata*	perennial	introduced	no
fringed willowherb	*Epilobium ciliatum*	perennial	native	no
ground plum	*Astragalus crassicarpus*	perennial	native	no
heartleaf arnica	*Arnica cordifolia*	perennial	native	no
hillside woodland star	*Lithophragma heterophyllum*	perennial	native	no
houndstongue	*Cynoglossum officinale*	biennial	introduced	yes
Indian paintbrush	*Castilleja* sp.	annual/ biennial/ perennial	native	no
lambstongue ragwort	*Senecio integerrimus*	biennial/perennial	native	no
largeleaf avens	*Geum macrophyllum*	perennial	native	no
little evening-primrose	*Oenothera perennis*	perennial	native	no
lupine	*Lupinus* sp.	annual/perennial	both	no
nettleleaf giant hyssop	*Agastache urticifolia*	perennial	native	no
Missouri goldenrod	*Solidago missouriensis*	perennial	native	no
monk's hood	*Aconitum columbianum*	perennial	native	no
mountain bluebell	*Mertensia ciliata*	perennial	native	no
mountain tarweed	*Madia glomerata*	annual	native	no
mountain-lover	*Paxistima myrsinites*	perennial	native	no
musk thistle	*Carduus nutans*	biennial/perennial	introduced	yes
mule's ear	*Wyethia amplexicaulis*	Perennial	native	no
Northwestern Indian paintbrush	*Castilleja angustifolia* var. *dubia*	perennial	native	no
oneflower helianthella	*Helianthella uniflora*	perennial	native	no

COMMON NAME	SCIENTIFIC NAME	DURATION	NATIVE OR INTRODUCED	NOXIOUS SPECIES*
parsnipflower buckwheat	*Eriogonum heracleoides*	perennial	native	no
purple clematis	*Clematis occidentalis*	perennial	native	no
purple coneflower	*Rudbeckia occidentalis*	perennial	native	no
Richard's geranium	*Geranium richardsonii*	perennial	native	no
Rocky Mountain penstemon	*Penstemon strictus*	perennial	native	no
rough horsetail	*Equisetum hyemale*	perennial	native	no
sagebrush violet	*Viola vallicola*	perennial	native	no
scarlet gilia	*Ipomopsis aggregata*	biennial/ perennial	native	no
scouring rush	*Equisetum laevigatum*	perennial	native	no
seep monkeyflower	*Mimulus guttatus*	perennial	native	no
showy goldeneye	*Heliomeris multiflora*	perennial	native	no
slender beaksedge	*Carex athrostachya*	perennial	native	no
slender cinquefoil	*Potentilla gracilis*	perennial	native	no
snakeweed	*Gutierrezia sarothrae*	perennial	both	no
starwort	*Stellaria* sp.	annual/perennial	both	no
stinging nettle	*Urtica dioica*	perennial	both	no
strawberry clover	*Trifolium fragiferum*	perennial	introduced	no
tall annual willow herb	*Epilobium brachycarpum*	perennial	native	no
tall evening-primrose	*Oenothera elata*	perennial/biennial	native	no
tansy aster	*Machaeranthera tanacetifolia*	annual/biennial	native	no
teasel	*Dipsacus fullonum*	biennial	introduced	no
valerian	*Valeriana officinalis*	perennial	introduced	no
water ragwort	*Senecio hydrophilus*	perennial/biennial	native	no
water sedge	*Carex aquatilis*	perennial	native	no
watercress	*Nasturtium officinale*	perennial	introduced	no
wax currant	*Ribes cereum*	perennial	native	no
western goldenrod	*Euthamia occidentalis*	perennial	native	no
western spring beauty	*Claytonia lanceolata*	perennial	native	no
white clover	*Trifolium repens*	perennial	introduced	no
white top	*Lepidium draba*	perennial	introduced	yes
wild mint	*Mentha arvensis*	perennial	native	no
wild parsnip	*Pastinaca sativa*	perennial	introduced	no
wild strawberry	*Fragaria vesca*	perennial	native	no
yarrow	*Achillea millefolium*	perennial	both	no
Graminoids				
Baltic rush	*Juncus balticus*	perennial	native	no
beaked spikerush	*Eleocharis rostellata*	perennial	native	no
blue wildrye	*Elymus glaucus*	perennial	native	no
bluebunch wheatgrass	*Pseudoroegneria spicata*	perennial	native	no
bulbous bluegrass	*Poa bulbosa*	perennial	introduced	no
cheatgrass	*Bromus tectorum*	annual	introduced	no
clustered field sedge	*Carex praegracilis*	perennial	native	no
common reed	*Phragmites australis*	perennial	introduced	yes
common spikerush	*Eleocharis palustris*	perennial	native	no
creeping bentgrass	*Agrostis stolonifera*	perennial	native	no
fowl bluegrass	*Poa palustris*	perennial	native	no
fowl mannagrass	*Glyceria striata*	perennial	native	no
Great Basin wildrye	*Leymus cinereus*	perennial	native	no
intermediate wheatgrass	*Thinopyrum intermedium*	perennial	introduced	no

COMMON NAME	SCIENTIFIC NAME	DURATION	NATIVE OR INTRODUCED	NOXIOUS SPECIES*
Kentucky bluegrass	*Poa pratensis*	perennial	both	no
mountain Timothy	*Phleum alpinum*	perennial	native	no
Nebraska sedge	*Carex nebrascensis*	perennial	native	no
needleleaf sedge	*Carex duriuscula*	perennial	native	no
quackgrass	*Elymus repens*	perennial	native	yes
reed canarygrass	*Phalaris arundinacea*	perennial	both	no
Ross' sedge	*Carex rossii*	perennial	native	no
Sandberg bluegrass	*Poa secunda*	perennial	native	no
smooth brome	*Bromus inermis*	perennial	both	no
swordleaf rush	*Juncus ensifolius*	perennial	native	no
Timothy	*Phleum pratense*	perennial	introduced	no
Torrey's rush	*Juncus torreyi*	perennial	native	no
western wheatgrass	*Pascopyrum smithii*	perennial	native	no
water sedge	*carex aquatilis*	perennial	native	no

**Noxious species as listed by the State of Utah and/or Summit County.*

V.3. Fauna

The Property contains suitable habitat for various wildlife species, including Species of Greatest Conservation Need ("**SGCN**") according to the Utah Division of Wildlife Resources ("**UDWR**"), **Appendix E**. Data from the UDWR shows substantial and crucial habitat for several wildlife species. During the BDR inventory ninety-one (91) species of wildlife were observed on the Property. These observations included nineteen (19) species of mammals, one thousand one hundred fifteen (1,115) individual birds from sixty-one (61) species, four (4) reptiles, and seven (7) herpetofauna species. There were also thirty-one (31) taxa of invertebrates recorded. Elk, mule deer, moose, coyote, sandhill crane, wild turkey, and ruffed grouse were most commonly observed both visually and auditorily. **Table 3** provides a list of commonly observed species of wildlife on the Property. A comprehensive wildlife management that includes working closely with UDWR will be completed by the County and keep relevant as adaptive management is required to maintain health and safe populations of Fauna on the Ranch.

V.3.1. Small and Large Mammals

Elk and Moose are the largest ungulate species on the Property and are of great abundance. Elk are commonly observed both individually and in herds. Many bedding areas, likely used by elk, deer or moose, were also observed. A large number of elk have been observed, documented, and are known to take refuge on the Property, with several accounts of collard animals reported by UDWR. Use is concentrated during the spring, summer, and fall months, with lesser use in the winter months correlated with low snow years and exposed south face slopes. With the absence of people and prohibition on hunting, the elk in this area use the Ranch as a sanctuary where they can find food, breeding grounds, and safety (particularly during hunting season) away from human disturbances. As such, the Property provides the essential habitat these mammals need to thrive, including meadows for grazing, forests for cover, and access to water sources. However, if populations are left unchecked, their impact on the habitat can become problematic and their sustainability to disease intensified. Overgrazing by large herds can lead to the degradation of vegetation, soil erosion, and the displacement of other wildlife species that rely on the same resources. The loss of plant diversity and ground cover can also affect the health of the ecosystem,

reducing its resilience to environmental changes. When large numbers of mammals congregate, their susceptibility to disease increases due to closer contact and the easier spread of pathogens among individuals. Population should be closely monitored for signs of diseases such as Chronic Wasting Disease (CWD), brucellosis, and tuberculosis. Effective management of large mammal populations within Property boundaries will be necessary to maintain a balanced and sustainable habitat for all species that call these area home. With limited natural predators and the absences of hunting as a management tool, the County will have the challenge to find a suitable and sustainable way to provide the management necessary to sustain healthy herd populations while maintaining the habitat that they depend on.

In addition to those species already mentioned, badgers, coyote, and turkey are frequently observed, and evidence of black bear and mountain lion have been recorded. Small mammals such as deer mice, shrews, chipmunks, voles, and long-tailed weasels were also observed. One sighting of a yellow-bellied marmot was also collected.

Historic beaver activity and abandoned dams were also noted throughout the Property; however new activity was limited to a single observation along East Canyon Creek. It is understood by the County that beavers have been intentionally removed, or trapped, from the Ranch further adding to the decline in stream ecological function and health. While beaver can be seen as a nuisance and can cause unintentional damage- by flooding roadways, blocking culverts, and downing trees- beavers are a keystone species, meaning their presence and activities play a crucial role in maintaining the structure and health of their ecosystems. By building dams and creating ponds, beavers transform their environment in ways that support a diverse array of plant and animal life. Their dams slow down water flow, which reduces erosion and creates wetlands that act as natural water filters. These wetlands provide essential habitats for numerous species, including fish, amphibians, birds, and invertebrates. The ponds and wetlands also help to recharge groundwater supplies and maintain water levels during dry periods. Active beaver activity promotes greater biodiversity, enhances water quality, and increases resilience to climate change. The County is encouraged to reintroduce beaver, supporting the future vitality and sustainability of the Property's ecosystems.

Appendix F documents many of the species that have been documented and species habitat maps can be referenced in **Appendix G**.

Table 3. Common Wildlife Observations List

COMMON NAME	SCIENTIFIC NAME
Mammals	
American badger	*Taxidea taxus*
American beaver	*Castor canadensis*
black bear	*Ursus americanus*
Bobcat	*Lynx rufus*
Coyote	*Canis latrans*
deer mouse	*Peromyscus maniculatus*
Elk	*Cervus canadensis*
field mouse	*Mus musculus*

COMMON NAME	SCIENTIFIC NAME
Uinta ground squirrel	*Urocitellus armatus*
Chipmunk	*Neotamias sp.*
long-tailed weasel	*Mustela frenata*
Moose	*Alces alces*
mountain lion	*Puma concolor*
mule deer	*Odocoileus hemionus*
North American porcupine	*Erethizon dorsatum*
Shrew	*Sorex sp.*
striped skunk	*Mephitis mephitis*
Vole	*Microtus sp.*
yellow-bellied marmot	*Marmota flaviventris*
Birds and Raptors	
American robin	*Turdus migratorius*
American white pelican	*Pelecanus erythrorhynchos*
bald eagle	*Haliaeetus leucocephalus*
barn swallow	*Hirundo rustica*
broad-tailed hummingbird	*Selasphorus platycercus*
chipping sparrow	*Spizella passerina*
cliff swallow	*Turdus migratorius*
common raven	*Pelecanus erythrorhynchos*
Cooper's hawk	*Haliaeetus leucocephalus*
dusky grouse	*Hirundo rustica*
golden eagle	*Selasphorus platycercus*
great blue heron	*Spizella passerina*
great horned owl	*Bubo virginianus*
hermit thrush	*Corvus corax*
house wren	*Astur cooperii*
Killdeer	*Dendragapus obscurus*
black-billed magpie	*Aquila chrysaetos*
mallard duck	*Ardea herodias*
mountain bluebird	*Centrocercus urophasianus*
mourning dove	*Catharus guttatus*
northern harrier	*Troglodytes aedon*
olive-sided flycatcher	*Charadrius vociferus*
Osprey	*Pica hudsonia*
red-tailed hawk	*Anas platyrhynchos*
ruffed grouse	*Sialia currucoides*
sandhill crane	*Zenaida macroura*
sharp-shinned hawk	*Circus hudsonius*
song sparrow	*Contopus cooperi*
spotted towhee	*Pandion haliaetus*
violet green swallow	*Buteo jamaicensis*
western tanager	*Bonasa umbellus*

COMMON NAME	SCIENTIFIC NAME
wild turkey	*Grus canadensis*
yellow warbler	*Accipiter striatus*
Reptiles/Amphibians	
horned lizard	*Phrynosoma platyrhinos*
northern leopard frog	*Lihobates pipiens*
tiger salamander	*Ambystoma tigrinum*
fence lizard	*Sceloporus undulatus*
garter snake	*Thamnophis sp.*
yellow belly racer	*Coluber constrictor flaviventris*
rubber boa	*Charina bottae*
gopher snake	*Pituophis catenifer*

V.3.2. Reptiles and Amphibians

Reptiles and amphibians (herpetofauna) contribute to the health and stability of ecosystems. As both predators and prey, they are integral in food webs. As predators, they consume prey, which supports and maintains a balanced ecosystem by keeping prey populations from growing too large. Herpetofauna are also a source of food for other animals, including birds of prey and mammals such as raccoons, and weasels. Amphibians, in particular, are useful indicators of wetland ecosystem health because they are sensitive to a variety of threats such as pollution and habitat degradation. Further, because reptiles and amphibians use both aquatic and terrestrial habitats, they transfer energy and nutrients between the two systems.

Environmental variability within the Property supports suitable habitat for many montane herpetofauna species. The Property contains grassland, sagebrush, conifer, and deciduous vegetation communities, which each uniquely support different species. Most importantly, East Canyon Creek, its tributary streams, and the presents of several ponds throughout the Property, provide aquatic resources and habitat needed for herpetofauna life cycles and reproduction. The Property also contains an abundance of supplementary required habitat features including downed trees, mammal burrows, and varying hillslope aspects. However, rocky habitat, including talus slopes and outcrops, are scarce on the Property which may limit diversity by discouraging reptile and amphibian species that rely on such habitat to thermoregulate, den, and hibernate.

During BDR surveys 50 individuals from 7 herpetofauna species (4 snakes, 2 lizards, and 1 salamander) were documented on the Property during BDR field surveys. Snakes were the most abundant. Garter snakes were the most common snake species observed (n=32). Less-common species included yellow belly racer (n=8), rubber boa (n=1), and gopher snake (n=1). Tiger salamander (n=6) was the only salamander species observed. One fence lizard and one horned lizard were also documented, **Figure 5** and **Table 4**.

Table 4. Total number of amphibian and reptile individuals observed

Animal	Array	Incidental	Road	Transect	Total
Fence Lizard	0	0	0	1	1
Garter Snake	21	3	1	7	32
Gopher Snake	0	1	0	0	1
Horned lizard	0	1	0	0	1
Rubber Boa	1	0	0	0	1
Tiger Salamander	0	2	0	4	6
Yellow Belly Racer	4	1	3	0	8
Total	26	8	4	12	50

Although the Property supports habitat suitable for additional herpetofauna species, many species that were anticipated were not observed. Numerous other montane snake species have been detected in Utah habitats similar to and near the Property but were absent from the Ranch. For example, similar montane reptile surveys conducted throughout Utah (e.g., in the Uinta, Canyon, and Stansbury mountains) produced many other snake species including the Sonoran mountain kingsnake (*Lampropeltis pyromelana*), Utah milk snake (*Lampropeltis triangulum*), smooth green snake (*Opheodrys vernalis*), and Great Basin rattlesnake (*Crotalus viridis*), among others (Keleher and Dillingham, 2009). Both the Sonoran mountain kingsnake and Utah milk snake are listed as SGCN by the UDWR Wildlife Action Plan. The low density of rock and rocky outcrops could explain the low diversity of snake species observed because many snakes use such habitat to hide, den, thermoregulate, and hibernate. Trampling by cattle could also degrade snake habitat, preventing some snake species from occupying the area. Further, some snake species hibernate in both winter and summer. Perhaps our survey timing did not occur while some snake species were active in spring or fall.

While recent reports of frogs and toads are known on the Property, no frogs or toads were observed despite the presence of many ponds and wetlands, the timing of survey likely being the cause of this result. Upon further investigation, Boreal toads (*Anaxyrus boreas*), chorus frogs (*Pseudacris spp.*), Columbia spotted frogs (*Rana luteiventris*), and leopard frogs (*Lithobates spp.*), among others, all occur throughout Utah at high elevations and are expected to be present on the Property. Frogs and toads are especially sensitive to low water quality and trampling. Perhaps the cattle density at the time of sampling events, especially around ponds, created low water conditions for these amphibians in the areas sampled. Although no frogs or toads were observed during the herpetofauna surveys, reports of chorus frogs and one visual observation of a leopard frog have been recently documented, **Appendix H**.

Additionally, during field visits only 2 lizards were detected, and 0 skinks. Lizards use rocky outcrops as refuge and for thermoregulation. The limited rocky habitat throughout the Property, combined with potential trampling from cattle and low water quality, could preclude many herpetofauna species from occupying the area. Further studies would be needed to test these hypotheses. Representative photographs taken in the field when available (not all species were photographed) are shown in **Appendix H**.

V.3.3. Freshwater Macroinvertebrates

Freshwater macroinvertebrates are small organisms without backbones that live in freshwater during at least part of their lives (Luell 2020). Freshwater macroinvertebrates play an important role in the food webs of aquatic ecosystems (Cummins and Klug, 1979). Other organisms, such as mammals, fish, birds, amphibians, and reptiles rely on macroinvertebrates as a source of food. Additionally, freshwater macroinvertebrates aid in circulating nutrients in the aquatic food web (National Park Service 2018). Importantly, they are indicators of aquatic ecosystem condition because many are highly sensitive to environmental changes and impaired water quality (Luell 2020). Freshwater macroinvertebrates can provide an overall indication of the health of streams and other waterbodies (USEPA 2024). Thirty-one taxa (e.g., families, orders, subclass) of invertebrates occurred on the Property, **Figure 5** and **Table 5**.

The orders Odonata (dragonflies) and Coleoptera (beetles) occurred at all sites. Baetidae (small minnow mayflies), Lymnaeidae (pond snails), Chironomidae (midges), Gerridae (water striders), and Trombidiformes (water mites) were commonly observed. Small minnow mayflies and pond snails occurred at six sites, water mites occurred at five sites, and midges and water striders occurred at four sites. Elmidae (riffle beetles), Lestidae (spread-winged damselflies), Perlodidae (perlodid stoneflies), Culicidae (mosquitoes), and Tipulidae (crane flies) were less common, only occurring at one site.

Findings at the upstream sites in East Canyon Creek compared to the downstream sites may have differed because of their tolerance to low water quality. A few families that are highly sensitive to low water quality (hellgrammites in remote ponds, and northern caddisflies and perlodid stoneflies in tributaries) were found in the Property. The aquatic invertebrate functional feeding groups collected in the Property were representative of those typically found in small-sized streams, mid-sized streams, and ponds. It would be informative to continue the collection of invertebrates and also water quality samples at these nine sites, and to continue to monitor freshwater invertebrates and aquatic ecosystem health in the Property over time.

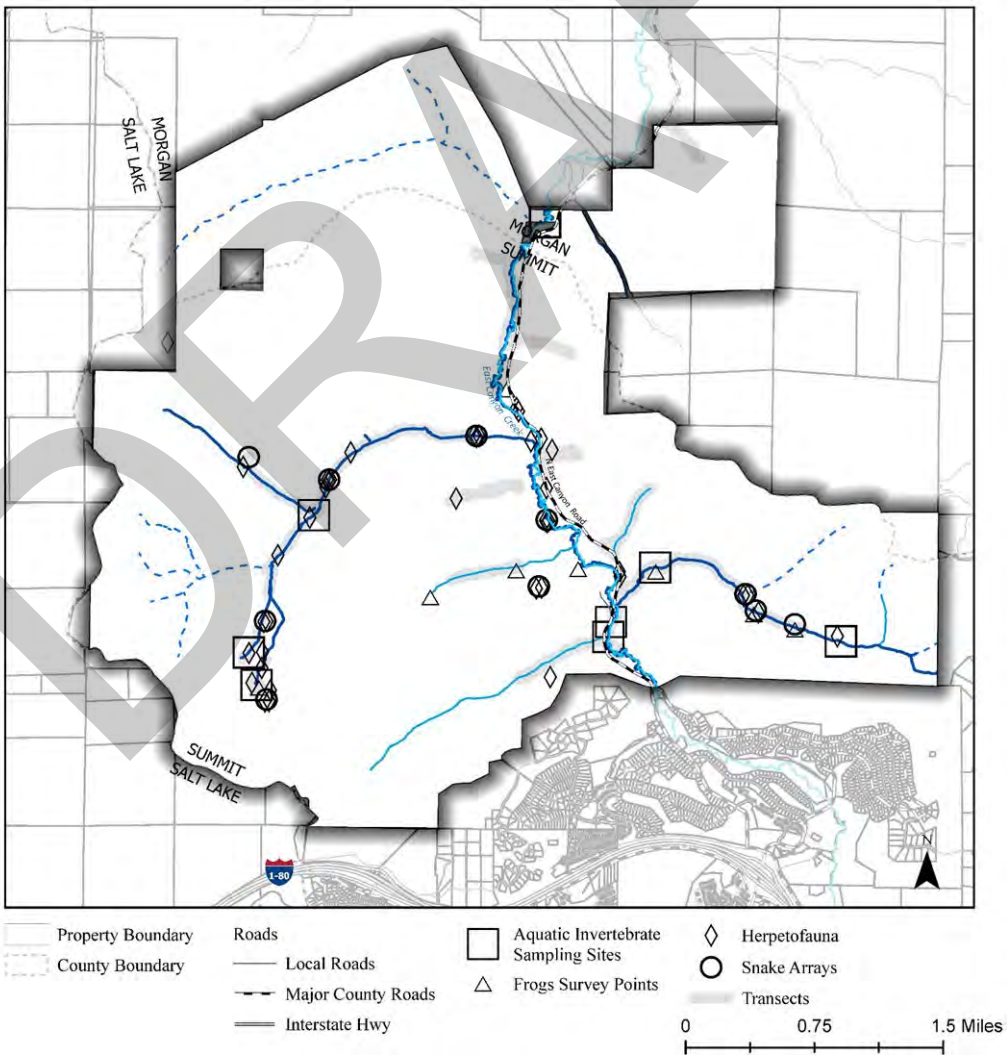
Table 5. Observed Freshwater Macroinvertebrates

NAME OF TAXA	COMMON NAME	FUNCTIONAL FEEDING GROUP
Asellidae	aquatic isopod	collector-gatherer
Baetidae	small minnow mayfly	collector-gatherer
Chironomidae	midge	collector-gatherer
Coenagrionidae	narrow-winged damselfly	predator
Coleoptera	beetle	predator, scraper, shredder, collector-gatherer
Corixidae	water boatman	predator
Corydalidae	dobsonfly	predator
Culicidae	mosquito	collector-gatherer/collector-filterer
Daphniidae	water flea	collector-gatherer
Dytiscidae	predaceous diving beetle	predator
Elmidae	riffle beetle	collector-gatherer/scraper
Ephemeroptera	mayfly	collector-filterer
Gastropoda	snail	scraper
Gerridae	water striders	predator
Gomphidae	club-tailed dragonfly	predator

NAME OF TAXA	COMMON NAME	FUNCTIONAL FEEDING GROUP
Hirudinea	leech	predator
Hyalellidae	scud	omnivore/shredder
Hydropsychidae	net-spinning caddisfly	predator
Lestidae	spread-winged damselfly	predator
Limnephilidae	northern caddisfly	shredder/omnivore
Lymnaeidae	pond snail	scraper
Notonectidae	backswimmer	predator
Odonata	dragonfly	predator
Perlodidae	perlodid stonefly	predator
Physidae	bladder snail	scraper
Planorbidae	ram's horn snail	scraper
Psychomyiidae	net-tube caddisfly	collector-gatherer/scraper
Simuliidae	black fly	collector-filterer
Tipulidae	crane fly	collector-gather/ shredder/predator/omnivore
Trichoptera	caddisfly	collector-filterer
Trombidiformes	water mite	predator

Note: Orders were not identified to a functional feeding group because they contain multiple different groups.

Figure 5. Map - Aquatic Invertebrate and Herpetofauna



V.3.4. Avian-Birds and Raptors

BIO-WEST documented one-thousand one-hundredth fifteen (1,115) individual birds from sixty-one (61) different species during the 2024 point-count surveys. The most-abundant species was the American Robin (n=113, 1.202 birds per point), followed by the Lazuli Bunting (n=94, 1.000 bird per point) and the Yellow Warbler (n=70, 0.745 birds per point). Less-common species included the Mountain Bluebird, Brown Creeper, and Pygmy Nuthatch, each with only one individual observed (0.011 birds per point), **Table 6**. Additional information related to the avian surveys, relative abundance, and species richness methodology can be found in **Section X.2.7**.

Table 6. Avian observations and point count results

SPECIES	COUNT	RELATIVE ABUNDANCE (BIRDS PER POINT)
American Crow	2	0.021
American Goldfinch	24	0.255
American Robin	113	1.202
Bank Swallow	1	0.011
Barn Swallow	2	0.021
Black-billed Magpie	17	0.181
Black-capped Chickadee	42	0.447
Brown-headed Cowbird	10	0.106
Black-headed Grosbeak	12	0.128
Brown Creeper	1	0.011
Broad-tailed Hummingbird	10	0.106
Cedar Waxwing	1	0.011
Chipping Sparrow	53	0.564
Clark's Nutcracker	2	0.021
Cliff Swallow	18	0.191
Common Raven	6	0.064
Dark-eyed Junco	54	0.574
Downy Woodpecker	3	0.032
Dusky Flycatcher	18	0.191
Fox Sparrow	1	0.011
Golden-crowned Kinglet	2	0.021
Great Horned Owl^	3	NA
Gray Catbird	4	0.043
Green-tailed Towhee	40	0.426
Hairy Woodpecker	5	0.053
Hermit Thrush	21	0.223
House Wren	44	0.468
Indigo Bunting	3	0.032
Lark Sparrow	5	0.053
Lazuli Bunting	94	1
Lincoln's Sparrow	3	0.032

SPECIES	COUNT	RELATIVE ABUNDANCE (BIRDS PER POINT)
Mallard	11	0.117
MacGillivary's Warbler	37	0.394
Mountain Bluebird	1	0.011
Mountain Chickadee	21	0.223
Mourning Dove	11	0.117
Northern Flicker	18	0.191
Northern Rough-winged Swallow	2	0.021
Orange-crowned Warbler	12	0.128
Pine Siskin	3	0.032
Pygmy Nuthatch	1	0.011
Red-breasted Nuthatch	19	0.202
Ruby-crowned Kinglet	17	0.181
Ring-necked Pheasant	1	0.011
Red-naped Sapsucker	6	0.064
Red-tailed Hawk	9	0.096
Ruffed Grouse	17	0.181
Song Sparrow	39	0.415
Spotted Sandpiper	4	0.043
Spotted Towhee	45	0.479
Sharp-shinned Hawk	3	0.032
Stellar's Jay	9	0.096
Swainson's Thrush	2	0.021
Unidentified Hawk*	1	0.011
Unidentified Hummingbird*	4	0.043
Unidentified Sparrow*	1	0.011
Unidentified Swallow*	2	0.021
Vesper Sparrow	4	0.043
Virginia's Warbler	3	0.032
Warbling Vireo	51	0.543
Western Tanager	57	0.606
Willow Flycatcher	3	0.032
Wild Turkey	7	0.074
Yellow Warbler	70	0.745
Yellow-rumped Warbler	10	0.106
TOTAL COUNT	**1,115**	**OVERALL RA: 11.830**
SPECIES RICHNESS	**61**	

**Unidentified species not included in richness total.*
^Detected during nocturnal survey, not included in relative abundance calculations.

V.4. Threatened And Endangered Species

BIO-WEST conducted a literature review of specific federally listed threatened and/or endangered species and state-listed species that have the potential to occur within the Property. This included

a determination of the habitat requirements for the identified federally listed and state-listed species. BIO-WEST compared the habitat types within the Property to those species to assess the potential for the federally listed and state-listed species to occur within the Property.
Utah Division of Wildlife Resources Wildlife Habitat Analysis Tool provided an inventory of confirmed occurrences of federally listed and state-listed species within 0.5 miles and 2 miles of the Property, **Appendix E**, (UDWR 2024a). The UDWR Utah Conservation Data Center also provided occurrence information for federally listed and state-listed species in Summit and Morgan counties (UDWR 2024a, UDWR 2024b). The US Fish and Wildlife Service ("**USFWS**") IPaC resource list provided an inventory of federally listed species (and other resources, such as critical habitat) known or expected to occur within or near the Property (USFWS 2024).

Scientific literature, gray literature, and other reputable online sources were reviewed for specific information regarding proximal occurrences and habitat requirements for federally listed and state-listed species potentially occurring within or near the Property. References to literature used in this report can be found in the Literature Cited section. **Table 7** summarizes the preferred habitat for the listed species in the Property and their potential to occur.

Table 7. Federally listed T&E species

COMMON NAME *(SCIENTIFIC NAME)*	PREFERRED HABITAT*	STATUS	SPECIES OCCURRENCE IN THE PROPERTY
Canada Lynx (*Lynx canadensis*)	Canada lynx occurs in montane coniferous forests. This species exists in areas with deep snow and dense forest cover that support snowshoe hares. In Utah, it occurs Wasatch and Uinta mountains.	Threatened	Potential to occur. Potentially suitable habitat exists on the Property. This species was not observed in the Property.
North American Wolverine (*Gulo luscus*)	Wolverines prefer alpine tundra and mountain forest that are not frequented by humans. In Utah, it occurs in the Wasatch, Uinta, and La Sal Mountains.	Threatened	Potential to occur. Potentially suitable habitat exists in the Property. May occur on mountainous areas of the Property that are less frequented by humans.
Yellow-billed Cuckoo (*Coccyzus americanus*)	This species prefers large and extensive areas (12 acres at a minimum, 100 meters long by 100 meters wide) of riparian or cottonwood-willow habitat (Halterman et al. 2015).	Threatened	Unlikely to occur. Riparian areas of cottonwood-willow habitat exist, but these areas are not large enough for this species to occur.
Monarch Butterfly (*Danaus Plexippus*)	Monarch butterflies rely on patches of milkweed for breeding. During the breeding season, monarch individuals lay their eggs on the milkweed host plant, where larvae emerge and feed before pupating into a chrysalis.	Candidate	Potential to occur. Potentially suitable habitat exists on the Property. Unlikely to occur, due to patches of milkweed were absent within or near the Property.
Ute Ladies'-tresses (*Spiranthes diluvialis*)	Ute ladies'-tresses occurs in wetlands including along streams, on alluvial terraces, in irrigated meadows, in riparian shrublands, and in deciduous forests below 7000 feet in elevation (Fertig et al. 2005).	Threatened	Potential to occur. A few small areas of suitable habitat exists within the Property for this species. BIO-WEST conducted surveys for this species based on the USFWS protocol. This species was not observed within the Property.

V.5. Species of Greatest Conservation Need

The State of Utah maintains a list of Species of Greatest Conservation Need ("**SGCN"**) in Utah. An inquiry report from the Utah Natural Heritage Program determining which species are likely to occur or have been documented near the study area is provided in **Appendix E**. Thirteen (13) species were identified by the UDWR as having the potential to occur within a half-mile radius of the study area, **Table 8**.

Table 8. Species of Greatest Conservation Need

COMMON NAME[a] (*SCIENTIFIC NAME*)	PREFERRED HABITAT[b]	STATUS	SPECIES OCCURRENCE IN THE PROPERTY
American Bittern (*Botaurus lentiginosus*)	This species occurs in extensive marshlands with tall and dense cattails and rushes.	SGCN	Potential to occur. There were a few patches of tall emergent vegetation along East Canyon Creek. This species was not observed within the Property.
Bear Lake Springsnail (*Pyrgulopsis pilsbryana*)	This species occurs in springs flowing from the ground as streams at elevations between 5740 feet and 6,120 feet.	SGCN	Potential to occur. Potentially suitable habitat exists within the Property. However, this species was not observed.
Bonneville Cutthroat Trout (*Oncorhynchus clarkii Utah*)	This species is found in mountain streams and lakes, and grassland streams and prefers streams with structure, cover, shade, and bank stability.	SGCN	Potential to occur. Potentially suitable habitat exists in East Canyon Creek in the Property.
Cross Snaggletooth (*Gastrocopta quadridens*)	This species is found from 7,500 feet to about 11,000 feet. No other habitat information has been reported for this species in Utah and the species is difficult to detect.	SGCN	Unlikely to occur. Only known for two locations within Utah, Fishlake and Lamb's Canyon. Possibly extant.
Flammulated Owl (*Psiloscops flammeolus*)	This species occurs in montane pine forests.	SGCN	Potential to occur. Potentially suitable habitat of montane pine forests exists in the Property. This species was not observed within the Property.
Greater Sage-grouse (*Centrocercus urophasianus*)	This species occurs in sagebrush plains, foothills, and mountain valleys, near springs and or small streams.	SGCN	Potential to occur. Potentially suitable habitat exists in areas dominated by sagebrush. This species was not observed within the Property.
Green River pebblesnail (*Fluminicola coloradoensis*)	This species has been reported in Wyoming in Green River, and lives in large springs and streams.	SGCN	Potential to occur. Potentially suitable habitat may exist in East Canyon Creek. This species was not observed within the Property.
Lewis's Woodpecker (*Melanerpes lewis*)	This species occurs in ponderosa pine forests, in burned-over Douglas-fir, mixed conifer, pinyon-juniper, riparian, and oak woodlands, and in the fringes of pine and juniper stands, and deciduous forests, especially riparian cottonwoods.	SGCN	Potential to occur. Potentially suitable habitat of conifer forests and oak woodlands exists within the Property. This species was not observed within the Property.
Mountain Marshsnail (*Stagnicola montanensis*)	This species occurs in small clear streams, springs, and seasonal waterbodies.	SGCN	Potential to occur. Potentially suitable habitat exists within small, clear, streams such as Porcupine Creek, and the creek in Big Bear Hollow. This

COMMON NAME[a] (*SCIENTIFIC NAME*)	PREFERRED HABITAT[b]	STATUS	SPECIES OCCURRENCE IN THE PROPERTY
			species was not observed within the Property.
Northern Leopard Frog (*Lithobates pipiens*)	This species occurs near permanent water with cattails and other rooted aquatic vegetation. This species can also occur near or in wet meadows, springs, slow streams, marshes, ponds, canals, floodplains, and lakes.	SGCN	Present within streams and ponds throughout the Property. This species was observed within the Property by Summit County.
Western Pearlshell (*Margaritifera falcata*)	This species occurs in small streams.	SGCN	Potential to occur. Potentially suitable habitat exists in small streams in the Property. All populations may have been extirpated in Utah. Although, it is possible that populations remain to be discovered.
Western Bumble Bee (*Bombus occidentalis*)	This species occurs in woodlands, farmlands, urban areas, montane meadows and prairie grasslands.	SGCN	Potential to occur. Potentially suitable habitat exists in forests in the Property. This species was not observed within the Property.
Western Toad (*Anaxyrus boreas*)	This species occurs near permanent waterbodies in a variety of habitats, including riparian, mountain shrub, mixed conifer, and aspen-conifer assemblages. Breeding sites are in small pools, beaver ponds, reservoirs, and backwaters and side-channels of creeks and rivers.	SGCN	Potential to occur. Potentially suitable habitat exists near ponds and small streams in the Property. This species was not observed within the Property.

[a] Species lists were assembled from Utah Natural Heritage Program Report and USFWS Information for Planning and Consultation (UDWR 2024b, USFWS 2024a).
[b] Most habitat descriptions come from Utah Species Field Guide, Nature Serve Explorer, and USFWS, unless otherwise noted (Nature Serve Explorer 2024, UDWR 2024a, USFWS 2024b).

VI. AQUATIC RESOURCES

VI.1. Aquatic Resource Inventory

The Property contains unique aquatic resources such as riparian areas dominated by woody and herbaceous wetland habitat, spring discharge points, seeps, ponds, and perennial, intermittent, and ephemeral creeks. East Canyon Creek, serving as the main hydrologic waterbody, crosses through the center of the Property conveying flows generally from south to north. Several intermittent streams drain into East Canyon Creek, including Porcupine Creek and unnamed streams located in Big Bear Hollow, Mill Hollow, Wood Hollow, and smaller tributaries of those drainage areas. Flows were being conveyed in these intermittent streams during the ecological surveys. Ephemeral drainages flow into Porcupine Creek, the intermittent stream in Big Bear Hollow, and East Canyon Creek. These ephemeral drainages were not conveying flows during the ecological surveys.

The remnants of historic beaver dams were scattered along Porcupine Creek, in the upstream reach of the stream in Big Bear Hollow, and along East Canyon Creek, but only one active dam was observed. Several ponds were observed in the upper portions of Mill and Wood Hollows. A small

pond, located along Porcupine Creek, appears to capture seasonal water staying wet until late summer but dries out during the fall. Several stock ponds have been constructed within the drainage areas to capture surface water for livestock.

Additionally, the springs and drainages situated within and intersecting the forested slopes support unique aquatic resources such as a spring-fed raised fen, riparian vegetation communities, and low stream terraces that support suitable habitat for Ute ladies-tresses (*Spiranthes diluvialis*), a federally listed orchid. **Figure 6** shows the locations of Utah Natural Heritage Program, USFWS National Wetlands Inventory ("**NWI**") mapped wetland areas, US Geological Survey National Hydrography Dataset ("**USGS**") approximate stream locations, and springs, human-made ponds, and other water related points of interest provided by the County.

Field biologists observed that cattle management practices have significantly impacted riparian areas and springs, leading to severe and long-lasting ecological consequences. As a result, the Property shows degradation of vegetation along streambanks, which in turn has caused increased erosion (*upwards of 2 ft annually as recorded in 2023-2024, recorded by UDWR staff)* and sedimentation in waterways. This erosion has altered the natural flow of the Property's streams and reduced water quality, negatively affecting aquatic habitats and the species that depend on them. Additionally, the trampling of soil around springs was observed. Trampling has occurred from both livestock and wildlife. If not properly managed, the continuation of damage to the springs will reduce the ability to absorb water and recharge these critical hydraulic areas.

It was observed that these combined effects have disrupted the delicate balance of the riparian ecosystems, leading to a decline in biodiversity and the overall health of these critical areas. Implementing sustainable grazing practices, from both livestock and wildlife, is essential to mitigate these impacts and restore the health of riparian zones and springs.

VI.2. Watershed

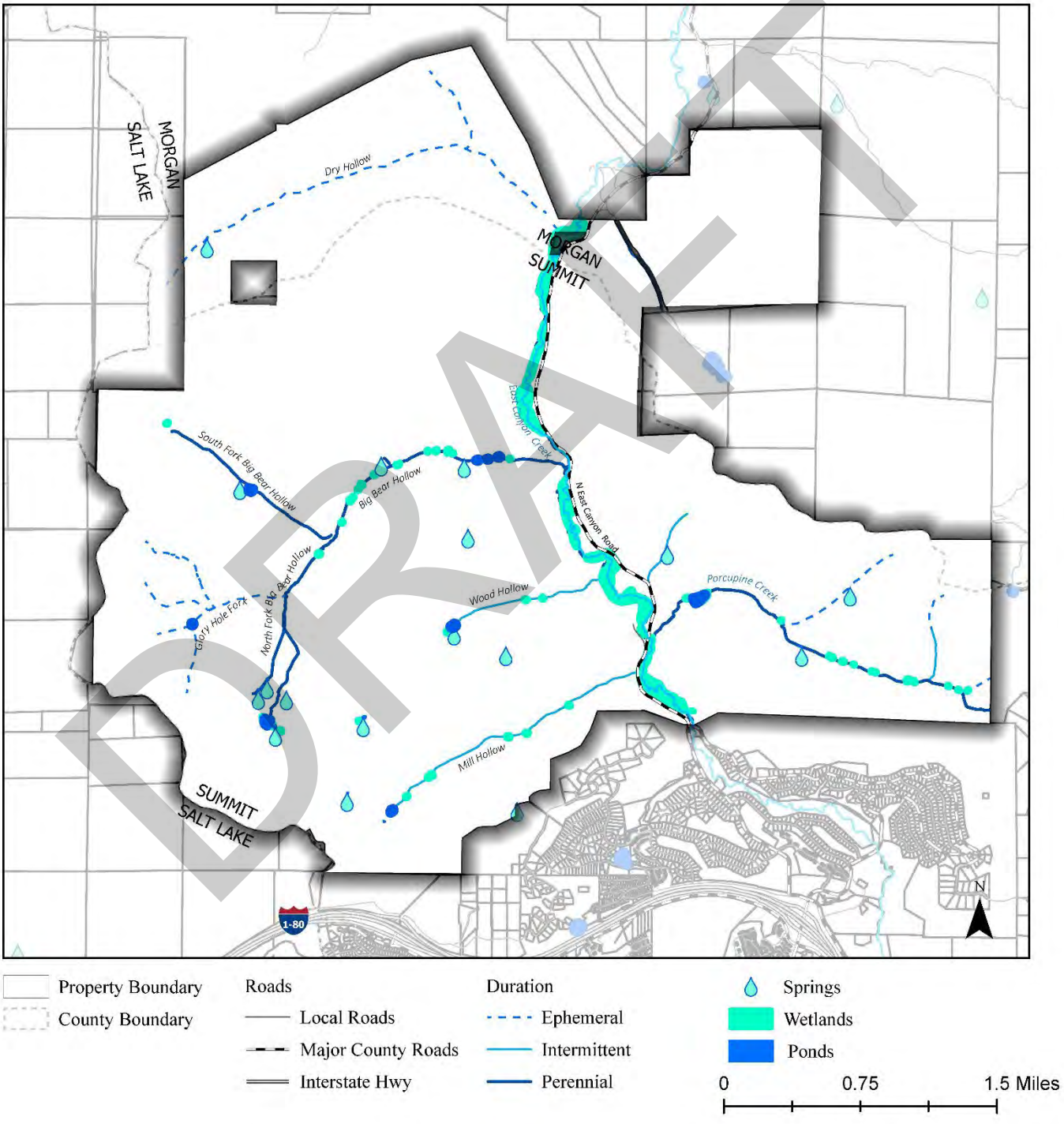
The Property resides within the East Canyon Reservoir-East Canyon Creek (HUC 1602010201) watershed. A Hydrologic Unit Code or "HUC" is a unique number assigned to a watershed to help agencies agree on watershed boundaries and use common terms of reference. The watershed drains an area of 145 square miles, encompassing Park City and several major ski resorts at its headwaters, as well as a portion of Snyderville Basin from the Summit-Morgan County line to the headwaters of East Canyon Creek. The elevation within the watershed ranges from 5,600 feet at the reservoir to over 10,000 feet near Park City. The primary drainage, East Canyon Creek, begins just north of Interstate 80 at the confluence of Kimball Creek from the south and an unnamed creek from the north. From this point, East Canyon Creek flows northeast and northward, ultimately reaching the East Canyon Reservoir.

The State of Utah has designated several beneficial uses for both the reservoir and the creek. These include; domestic drinking water with prior treatment (1C), primary contact recreation (swimming) (2A), secondary contact recreation (2B), cold water game fish and the associated food chain (3A), and agricultural water supply (4). However, the cold-water game fish use (3A) was listed as "partially supported" on Utah's 1998 303(d) list (UDEQ, 2000a).

VI.3. Hydrology

A focal point of the Property's hydrology is a 5-mile segment of East Canyon Creek, which flows south-to-north through the Property before eventually reaching East Canyon Reservoir off-site. East Canyon Creek is historically a "Blue Ribbon" cold-water fishery supporting habitat for the native Bonneville cutthroat trout (*Oncorhynchus clarki utah*) but was listed in the 1990s as

Figure 6. Map - USFWS National Wetland Inventory



impaired water under Section 303(d) of the Clean Water Act because of elevated phosphorus levels and other aquatic resources.

In 2000, the Utah Division of Water Quality ("DWQ") began working with federal, state, and local partners on projects to address excess phosphorus and other water quality impairments in East Canyon Creek. These projects reduced phosphorus and sediment loading into the creek and improved riparian habitat. Improved stream habitat and decreased sediment loading led to the 2020 delisting of East Canyon Creek as impaired for macroinvertebrates. Despite the delisting, the creek is currently not functioning as a restored cold-water fishery and is now routinely monitored for phosphorus levels, temperature, and total dissolved solids. A variety of herbaceous wetland vegetation is present along the banks of the creek, but there is a distinct lack of a shrubby willow and mature cottonwood overstory, features which help maintain stream health and foster ideal habitat for a variety of fish and wildlife. A robust restoration focus is needed to repair this significant ecosystem damage.

In addition to East Canyon Creek several of its ephemeral tributaries provide seasonal, intermittent, and precipitation-generated runoff, which collectively contribute to the greater East Canyon Creek Watershed. The tributaries originate in each of the five main hollows, which serve as the main hydrologic arteries within the Property. These hollows, which lie generally perpendicular to East Canyon Creek are Dry Hollow, Big Bear Hollow, Wood Hollow, Porcupine Creek Hollow, Deer Hollow, and Mill Hollow, **Figure 7**. Porcupine Creek and Deer Hollow Creek drain to the west, and the remaining four hollows drain to the east. These four east-draining hollows (Dry Hollow, Big Bear Hollow, Wood Hollow, and Mill Hollow) serve as the main access points for much of the rugged terrain and upper elevations throughout the Property. A network of natural springs and human-made ponds are found throughout the various hollows, which help sustain both livestock and local wildlife populations. Wetlands are concentrated in the lower reaches of the Property within the floodplain of East Cayon Creek and sporadically found in the upper reaches of perianal tributaries. **Figure 6** shows the locations of USFWS National Wetland Inventory mapped wetland areas, USGS approximate stream locations; and springs, ponds, and other water related points of interest provided by Summit County.

VII. SOILS, GEOLOGY, AND TOPOGRAPHY

VII.1. Soils

Soils throughout the Property are primarily loams, which vary in texture from sandy to cobbly. A majority of the soils identified on-site are derived from sedimentary parent materials. As expected, many of the soils are known to occur on extreme slopes and are commonly associated with the high mountains of northern Utah. **Table 9** includes soil units that comprise the area and **Figure 8** shows the USDA NRCS soil survey data for the Property (USDA NRCS 2024a).

Figure 7. Map - Property overview (aerial base)

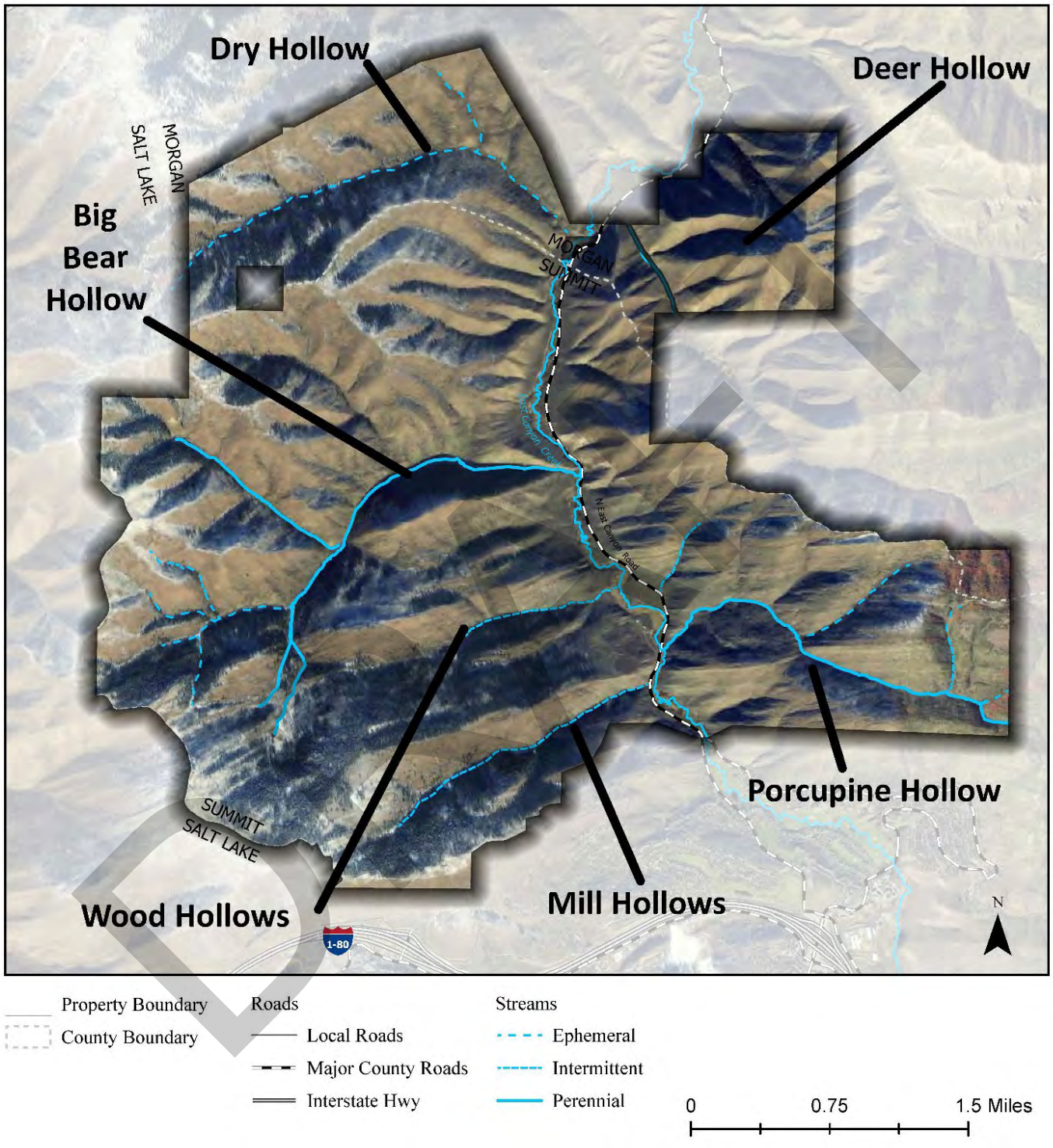


Figure 8. Map - NRCS soils

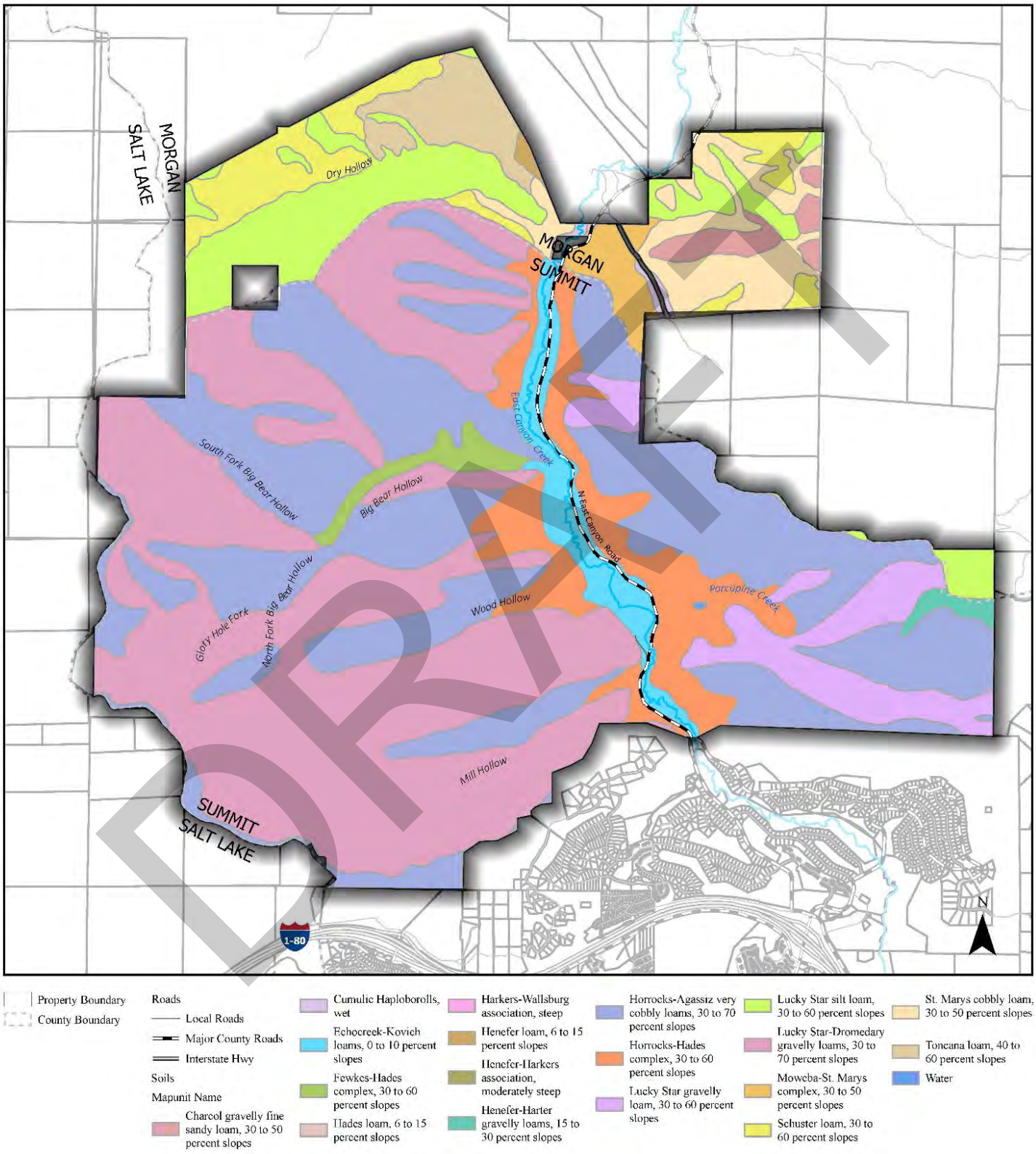


Table 9. Soil Units

Soil Unit Name	Acres	% of Property Area
Lucky Star-Dromedary gravelly loams, 30 to 70 percent slopes	2945.43	34.39%
Horrocks-Agassiz very cobbly loams, 30 to 70 percent slopes	2514.10	29.36%
Horrocks-Hades complex, 30 to 60 percent slopes	618.47	7.22%
Lucky Star silt loam, 30 to 60 percent slopes	596.54	6.97%
Lucky Star gravelly loam, 30 to 60 percent slopes	416.05	4.86%
Schuster loam, 30 to 60 percent slopes	324.99	3.79%
St. Marys cobbly loam, 30 to 50 percent slopes	316.46	3.70%
Echocreek-Kovich loams, 0 to 10 percent slopes	271.32	3.17%
Toncana loam, 40 to 60 percent slopes	202.82	2.37%
Moweba-St. Marys complex, 30 to 50 percent slopes	107.11	1.25%
Charcol gravelly fine sandy loam, 30 to 50 percent slopes	92.28	1.08%
Fewkes-Hades complex, 30 to 60 percent slopes	92.16	1.08%
Henefer-Harter gravelly loams, 15 to 30 percent slopes	35.76	0.42%
Cumulic Haploborolls, wet	15.61	0.18%
Henefer loam, 6 to 15 percent slopes	11.22	0.13%
Water	1.31	0.02%
Hades loam, 6 to 15 percent slopes	1.09	0.01%
Harkers-Wallsburg association, steep	0.96	0.01%
Henefer-Harkers association, moderately steep	0.19	0.00%

VII.2. Geology

According to the Utah Geologic Survey, there are 12 underlying geological units in the Property area. **Table 10** includes geological units that comprise the area.

Table 10. Geological Units

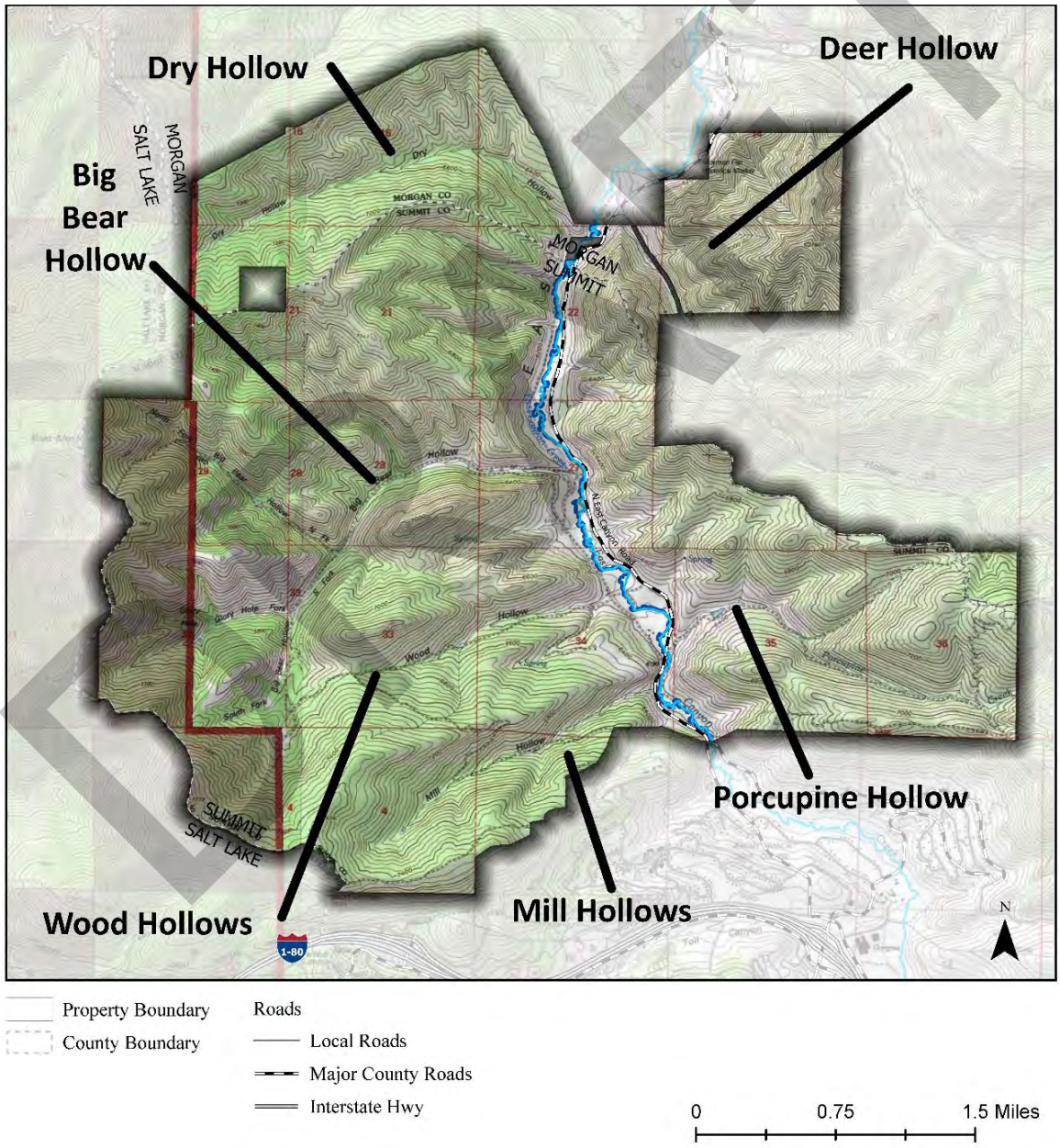
Geological Unit Name (Symbol)	Acres	% of Property Area
Lower member of Frontier Formation (Kfl)	2,646	31.0%
Conglomerate dominant of Wasatch Formation (Twc)	2,539	29.8%
Conglomerate facies of Frontier Formation (Kfcg)	1,696	19.9%
Upper member of Kelvin Formation (Kk)	737	8.6%
Upper member of Frontier Formation (Kfu)	226	2.7%
Alluvium (Qal)	195	2.3%
Lahar, breccia, and tuff of Keetley Volcanics (Tkb)	179	2.1%
Terrace gravels (Qtg)	144	1.7%
Oyster Ridge Sandstone Member of Frontier Formation (Kfo)	86	1.0%
Conglomerate (Toc)	43	0.5%
Preuss Sandstone (Jp)	25	0.3%
Parleys Member of Kelvin Formation (Kkp)	10	0.1%

VII.3. Topography

The topography consists of mountains, ridges, foothills, and valleys. The elevation within the Property ranges from approximately 7,800 feet to 6,100 feet. Nearby Bald Mountain has an elevation of 7,869 feet and is just outside the west boundary of the Property. Other peaks and ridges within the Property include: SuMo Ridge at 7,000 feet, and other unnamed peaks at elevations of 7,779 feet, 7,696 feet, 7,683 feet, and 7,607 feet respectively.

An unconfined floodplain follows East Canyon Creek and drains from south to north. This floodplain is surrounded by a mountainous region with steep ridges and peaks that drain from the

Figure 9. Map - Topological Overview



east and from the west into East Canyon. Several mountain drainages (i.e., hollows) drain into East Canyon. **Figure 9** displays the topological map of the Property.

VIII. CRITICAL LANDS

Critical lands were identified on the Property and should be used to inform management strategies and to guide effective Property administration to meet conservation and resource management goals. **Figure 10** shows critical lands mapped within the Property. The following is a highlight of those critical lands.

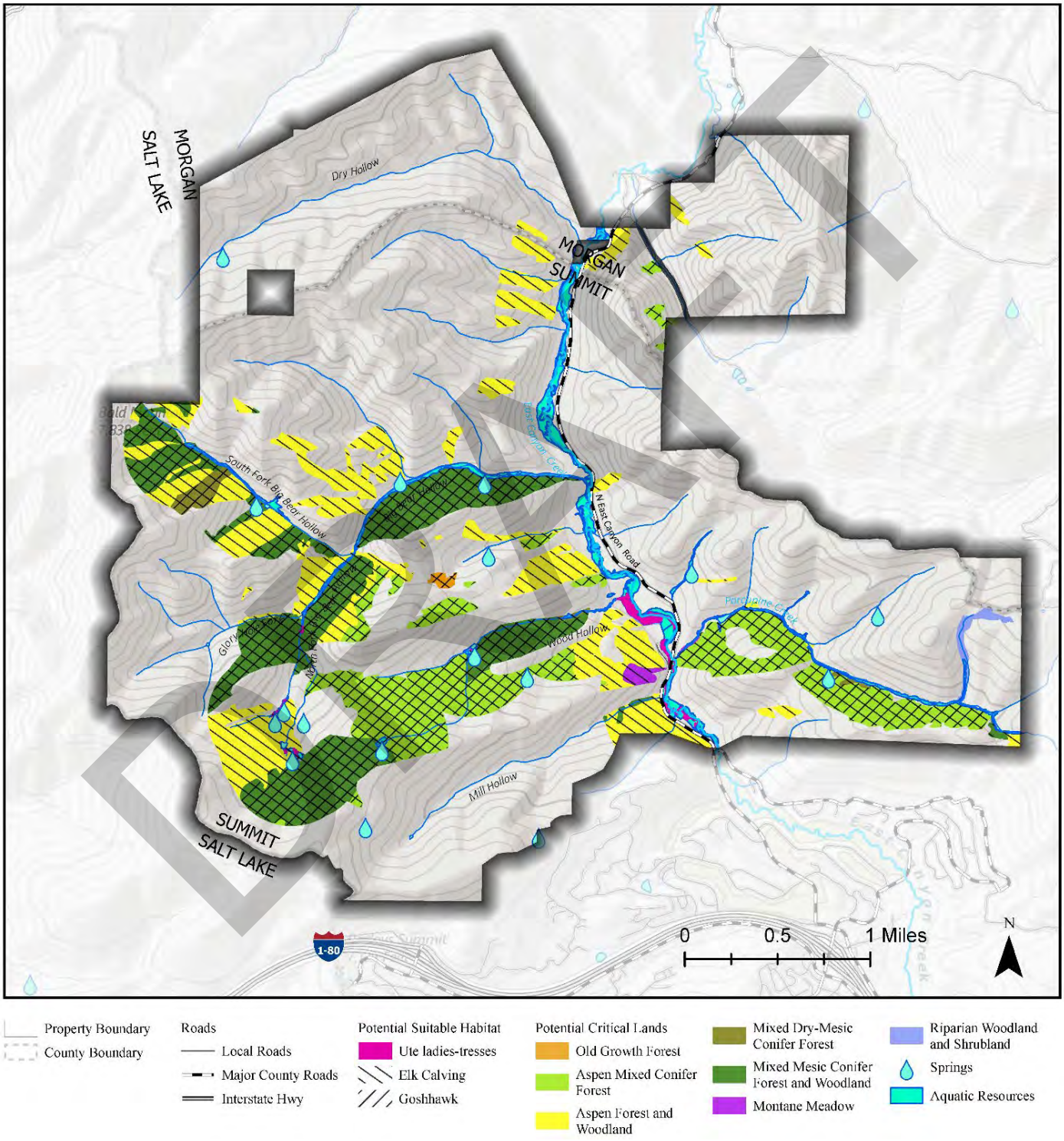
Potential Elk calving areas: Elk calving requires specific habitat conditions to ensure the safety and health of both the calves and their mothers. The critical habitat needs for elk calving include (1) Seclusion and Cover: Elk cows seek out secluded areas with dense vegetation to give birth. This cover provides protection from predators and harsh weather; (2) Proximity to Water: Access to water is crucial for lactating cows and their calves. Calving sites are often located near streams, rivers, or other water sources, areas shown are within aspen and conifer dominated vegetation communities that are within 0.33 mile of a perennial water source (UDWR 2022); (3) Forage Availability: Abundant forage is essential for the nutritional needs of the mother and the growing calf. Calving areas typically have a mix of grasses, forbs, and shrubs; and (4) Gentle Terrain: Elk prefer gentle slopes or flat areas for calving, as these terrains reduce the risk of injury to the calves and make it easier for them to move around.

Potential American Goshawk (Accipiter atricapillus) critical habitat: The American Goshawk, a formidable forest raptor, requires specific habitat conditions to thrive. Habitat requirements for this species include (1) Mature, Unbroken Forests: American Goshawks prefer large tracts of mature, unbroken forests, which provide ample hunting grounds and nesting sites; (2) Coniferous and Mixed Forests: This Raptor is often found in coniferous mountain forests, but they can also inhabit mixed forests with a combination of coniferous and deciduous trees; and (3) Dense Canopy Cover: A dense canopy is essential for Goshawks as it offers protection from predators and harsh weather, and supports their hunting strategy of ambushing prey from cover. In addition, Goshawks typically nest in large trees with sturdy branches that can support their nests. They prefer sites that are secluded and away from human disturbance. Conservation efforts for the American Goshawk should focus on protecting large tracts of mature forest, minimizing human disturbance during the breeding season (late winter to early spring, with nesting activity usually between February and April), and managing forests in a way that maintains their structural complexity and biodiversity.

Wetlands and surface waters, springs and ponds, riparian vegetation, emergent wetland vegetation communities: These vital habitats support a rich biodiversity, providing essential breeding grounds and habitats for numerous species. These areas act as natural filters, improving water quality by trapping pollutants and sediments, and contribute to groundwater recharge. They also play a crucial role in flood control by absorbing and slowing down floodwaters, and help stabilize streams and riverbanks, reducing erosion. Additionally, wetlands are significant carbon sinks, aiding in climate

regulation, and offer recreational and educational opportunities that benefit human communities. Protecting these habitats is essential for maintaining ecological balance and supporting both wildlife and human needs.

Figure 10. Map - Critical lands habitat areas



Ute ladies-tresses suitable habitat: The suitable habitat for Ute ladies'-tresses, a rare orchid, is essential for biodiversity, supporting pollinators, and maintaining ecosystem health. The area surrounding the unique raised fen wetland, water birch dominated wetlands, and potential old growth forest is critical for this species. Additionally, these wetland and riparian areas improve water quality by filtering pollutants, aid in flood control, and contribute to climate regulation through carbon sequestration and temperature moderation. Protecting these habitats is crucial for conservation efforts, scientific research, and ensuring the survival of this threatened species. Preserving these suitable habitats supports both the orchid and the broader ecological systems they inhabit.

IX. CONSERVATION VALUES

The Property offers a valuable combination of scenic, open space, aesthetic, historic, hydrologic, ecological, agricultural, and scientific values and in addition possesses forested, cultural, wildlife, and public non-motorized recreation values. These values are known as "Conservation Values". Conservation Values are the existing and future ecological, natural and aesthetic characteristics and values of Property. They are based on the amount and type of natural resources, biodiversity, open space, historic resources, and recreational resources in a given area. The BDR has documented these assets to inform future management efforts and to identify Conservation Values. Proposed future management practices should include improvements, regeneration, and restoration actions to support landscape scale resilience and watershed health. Adaptive management and ongoing monitoring will be key to overall and long-term success. When considering new uses on the Property, thoughtful planning and implementation should promote resources protection but inherent risks to Conservation Values are still possible. The following section explains some of those risks.

IX.1. Conservation Value Risks

IX.1.1. Forest Health

Conifers have replaced aspen over much of aspen's historic range in the western United States, including northern Utah (Stam et al. 2008). Aspen communities comprise a large portion of the Property and were often observed in codominant stands with Douglas fir, white fir, and maple. Aspen is among the first species to recolonize an area after disturbance such as fire and yet fire suppression can result in coniferous species outcompeting aspen (Stam et al. 2008). Changing climate patterns including decreased snowpack and increased annual temperatures appear to be creating more favorable conditions for maple, which are mixed into some of the aspen communities within the Property. Maple can outcompete aspen over time (FFSL, 2024). Aspen stand age and disease, along with limited regeneration, encroachment of maple on conifers, and browsing by wildlife and cattle affect the health of aspen stands within the Property. Some of the conifer dominated forests contain dense, mature, even-aged, overstory trees that can be vulnerable to insects and disease such as the presence of bark beetles and other insects that may harm Douglas fir and Subalpine fir if they expanded to epidemic proportions (FFSL, 2024). Heavy grazing (by both cattle and wildlife) and fire suppression results in denser understory of shrubs and tree cover, leading to decreased stand vigor and a reduction in species diversity.

Forest health prescriptions such as thinning and prescribed fire in dense understory conifer and mixed forest types can promote increased forest resilience and stand vigor, reduce competition between species, and help protect the stand against insects and disease. (FFSL, 2024).

IX.1.2. Rangeland

Treating overly dense sagebrush stands by chaining or mowing, or administering prescribed burns in suitable areas can promote herbaceous diversity and boost browse productivity (FFSL, 2024).

Grazing in sensitive lands such as the raised fen wetland, riparian zones, and concentration of animals around springs and seeps can degrade these aquatics resources and impact water quality. In addition, grazing animals can be a vector for noxious weeds, which can outcompete and compromise the health of native plant communities. Grazing should be limited or excluded from sensitive areas such as natural springs, wetlands and riparian areas. A short-term rotational grazing schedule with appropriate timing and intensity during the growing season can limit grazing impacts and promote native plant regrowth. A noxious weed control program should be implemented that incorporates a combination of chemical, mechanical, and hand removal along with animal control.

IX.1.3. Aquatic Resources

Aquatic resources within the Property have been affected by grazing, erosion, altered flow regimes, and pollutants. The presents of remnant beaver dams in several tributaries and along East Canyon Creek indicate historic support of beaver activity. Restoring these areas is recommended. Beavers are keystone species supporting aquatic resources. Beaver dams raise the water table and recharge the local aquifer, resulting in a larger wetland and riparian footprint. Significant riparian vegetation has been intentionally removed by previous owners along East Canyon Creek which has resulted in warmer stream temperatures that has impacted the local cold-water fishery. Additionally, as noted in the ***Section IV***, East Canyon Creek is an impaired water body that receives elevated phosphorus and other water quality contaminants. Also, some riparian zones along East Canyon Creek that once supported emergent wetlands appear to have dried and transitioned to upland areas due to creek incision and undercut banks. Stream restoration designed to create or restore side channels and oxbows in these areas could reestablish stream side wetland habitat. In addition, restoring the degraded riparian areas where riparian vegetation has been removed can improve water quality by helping to capture suspended sediments and filter water quality contaminants.

IX.1.4. Introduction of Public Access

Expanding public access beyond East Canyon Road may lead to a higher concentration of users in the area, potentially posing a risk to ecosystem integrity. Designated trailheads and signage should be established to prevent the creation of social trails and unwanted access points that could compromise sensitive areas. Restricting motorized-vehicle use, limiting trail building and avoiding trail development in critical habitat areas can protect these sensitive resources. Land-management activities should prevent watershed degradation and protect essential wildlife corridors.

X. DESKTOP ASSESSMENT

BIO-WEST completed a comprehensive desktop analysis and literature review for the Property that analyzed current conditions based on the best available literature, spatial data, and on the ground survey. During the literature review, BIO-WEST acquired existing, current, and available data. The data and resources included the following: Utah Geospatial Resource Center, recent available aerial imagery, US Fish and Wildlife Service (USFWS) Ecological Services Field Office, USFWS Information for Planning and Consultation website, UDWR, NWI, Southwest Regional GAP Analysis Project and Species Data, USGS National Hydrography Data Center, and US Department of Agricultural soils maps and descriptions. Scientific literature, gray literature, and other reputable online sources were reviewed for specific information regarding available habitat types, proximal occurrences, and habitat requirements of flora and fauna and federally and state-listed species potentially occurring on or near the Property. The results of the literature review and spatial data compilation were analyzed and entered into a Geographic Information Systems ("**GIS**") database to produce the habitat maps of the Property herein.

Working with the County, BIO-WEST engaged stakeholders to gather ecological, cultural, and historical data that had been collected on the Ranch. These groups included Summit County sanctioned citizen scientists (Ambassadors), East Canyon Watershed Committee, Trout Unlimited, US Environmental Protection Agency, Utah Forestry Fire and State Lands, Sageland Collaborative, and private individuals. Information compiled from these groups was reviewed, analyzed, and when appropriate incorporated into the BDR.

The results of the desktop analysis informed the Property's vegetation communities, flora, and fauna present, and revealed possible threatened and endangered species that could utilize the habitat types found on the Property. By way of analysis, potential biodiversity hot-spots were identified within the Property, and were used as a basis to conduct the ecological field surveys and guide survey protocols. The potential biodiversity hot-spots were ground-truthed during the ecological field surveys, and survey site locations were adjusted as site conditions dictated. The Utah Division of Wildlife Resources Wildlife Habitat Analysis Tool was used to provide an inventory of potential species and habitats that overlapped the Property within a two-mile radius and a half-mile radius. Biological hot-spots models including expected sensitive resources, such as springs, seepage areas, wetland habitat types, perennial and intermittent streams, riparian areas, and unique shrubland and forested habitats where examined. For ease of reference and mapping, survey areas were broken into five (5) regional areas that roughly follow the side channel tributary boundaries: Dry Hollow, Big Bear Hollow, Wood and Mill Hollows, Deer Hollow, and Porcupine Hollow, **Appendix C**.

X.1. Field Surveys

The objective of the ecological survey was to compile an inventory of species and their habitat use within the Property and evaluate Conservation Values to be protected by the conservation easement on the Ranch. BIO-WEST scientists visited the Property to evaluate potential biodiversity hot-spots identified during the desktop analysis as possible sampling areas. Specific sampling areas were established around the biodiversity hot-spots and biological data were collected to complete an inventory of flora and fauna. Wildlife observations were also collected

while travelling between the biodiversity hot-spots. If site conditions in the field did not reflect conditions that would support areas of potentially high biodiversity, the sampling locations were adjusted. The team used existing OHV trails and game trails within the Property to collect observations of the current conditions and existing habitat types. A combination of relatively rapid general observation methods (designed to sample large areas based on short-term, time-constrained sampling) and standard sampling methodologies were used to complete an ecological inventory of the Property during spring and fall 2024. An unmanned aerial vehicle (i.e. Drone) was used in compliance with Part 107 of the Federal Aviation Administration rules to conduct site reconnaissance, collect aerial photography, and to assist with classifying habitat types in rugged, hard-to-reach areas of the Property. BIO-WEST collected observations of vegetation communities, large and small mammals, reptiles and amphibians (herpetofauna), migratory birds, wetlands and water resources (aquatic resources), aquatic invertebrates, and existing project-area infrastructure. While CHC conducted cultural resources surveys by completing intensive transects of high probability areas identified by a site sensitivity model. The methods and results sections of CHC surveys are available in **Appendix A**. The following sections describe the methodology and protocol for each discipline.

X.2. Methods

X.2.1. Vegetation Mapping and Classification Methods

Using available aerial imagery collected from the desktop analysis, BIO-WEST created mapping grids of the Property and created field maps at a resolution that allowed field biologists to pinpoint explicit aerial signatures and match them to specific locations on the ground. A separate set of field maps was created showing the landcover types (vegetation communities) overlaid onto aerial imagery. BIO-WEST field biologists ground-truthed the landcover types displayed on the field maps and made adjustments to the vegetation community boundaries wherever changes in species composition would result in change of landcover classification. If a vegetation community was observed that was not included in the landcover data, it was delineated on the aerial imagery map series, recorded, and described in field notes. Vegetation community classification was based on the dominant species visually present. A comprehensive plant list of all species positively identified was generated from the field data, **Table 2**. The plant list includes the native status of the plant species and any observed County or state listed noxious weed(s). If suitable habitat for rare or endangered plant species were observed, the sensitive vegetation community was recorded.

Vegetation community data mapped in the field was digitized using an ArcGIS mapping program. The individually mapped vegetation communities were classified to the association and group levels, as described by Nature Serve Explorer, Ecological Communities and Systems, and the US National Vegetation Classification (USGS 2005, NatureServe 2024, UNVCS 2024). Scientific names and common names follow the US Department of Agriculture, Natural Resources Conservation Service PLANTS Database (USDA 2024). Note: A comprehensive independent noxious weed management plan was completed by Ecology Bridge and is a supplemental to the BDR. Noxious weeds surveyed as of the Effective Date and a preliminary noxious weed report is available in **Appendix D**.

Vegetation community data were sorted into the following three categories: (1) desirable, (2) undesirable, and (3) reference, **Table 11**. The desirable category was typically used for vegetation communities consisting of mostly native vegetation that provides beneficial ecological functions, such as food sources for wildlife and pollinators, soil stabilization, water filtration, and ground cover. Some of these areas are sensitive to disturbance, such as wetland and riparian habitat. The undesirable category was used to describe vegetation communities that have been disturbed in the past and are dominated by nonnative (and in some cases invasive) species with poor ecological functions and low wildlife benefit. The reference category was reserved for vegetation communities that consisted of predominantly native vegetation that has unique and diverse assemblages of plant species and that have significant ecological benefits, which can provide reference for restoration potential.

X.2.2. Vegetation Mapping and Classification Results

The results of the desktop vegetation-mapping analysis revealed that the Ranch is comprised of nineteen (19) dominant landcover classes, **Table 11**. An overview map of the landcover classes (vegetation communities) condensed into general cover types is shown within **Attachment C**. These consist of conifer forest and woodland, aspen forest and woodland, Gambel Oak-mixed shrubland, riparian shrubland, sagebrush steppe and shrubland, grassland and invasive perennial grassland, agricultural, and developed. Some of the landcover classes were not observed in the field during the ecological surveys. These included agricultural, Colorado Plateau pinyon-juniper woodland, invasive perennial grassland, Rocky Mountain lodgepole pine forest, Rocky Mountain subalpine mesic meadow, and Southern Rocky Mountain montane-subalpine grassland. A meadow area dominated by a mix of the invasive grass, smooth brome (*Bromus inermis*), and other native graminoids was observed but was not classified as invasive perennial grassland because it was not entirely dominated by invasive species and had a native plant component. Conditions and vegetation composition observed in the field did not exhibit enough variation to split the sagebrush communities into three different landcover classes. Based on the descriptions of the sagebrush-dominated landcover classes, field ecologists combined the three landcover classes into two: Inter-Mountain Basins Big Sagebrush Shrubland and Inter-Mountain Basins Big Sagebrush Steppe. In addition, the mixed conifer and spruce-fir forest communities were consolidated into two main landcover types based on species composition and conditions observed during the ecological field surveys. These include Northern Rocky Mountain Dry-Mesic Montane Mixed Forest and Rocky Mountain Montane Mesic Mixed Conifer Forest and Woodland.

Table 11. Landcover desktop analysis results

LANDCOVER CLASS	COMPARABLE FIELD MAPPED LANDCOVER CLASS	DOMINANT VEGETATION	OBSERVED WITHIN PROPERTY	CONSERVATION VALUE
Agriculture	None, while horse and cattle pasture occur within the Property, there is no land developed for agriculture.	NA	No	NA
Colorado Plateau Pinyon-Juniper Woodland	None, scattered Juniper trees do occur at the Ranch, but there are areas that would meet this landcover description.	NA	No	NA

LANDCOVER CLASS	COMPARABLE FIELD MAPPED LANDCOVER CLASS	DOMINANT VEGETATION	OBSERVED WITHIN PROPERTY	CONSERVATION VALUE
Developed, Medium—High Intensity	The Disturbed landcover class includes two track roads and ranch buildings.	NA	Yes	NA
Inter-Mountain Basins Big Sagebrush Shrubland	Inter-Mountain Basins Big Sagebrush Shrubland	Big sagebrush, Great Basin Wildrye, Oregon grape, Kentucky Bluegrass, Smooth Brome	Yes	Desirable
Inter-Mountain Basins Big Sagebrush Steppe	Inter-Mountain Basins Big Sagebrush Shrubland	Big sagebrush, rabbitbrush, Antelope bitterbrush, lupin, geranium, showy goldeneye, blue bunch wheatgrass, Sandberg bluegrass	Yes	Desirable
Inter-Mountain Basins Montane Sagebrush Steppe	Inter-Mountain Basins Big Sagebrush Steppe	NA	No	NA
Invasive Perennial Grassland	Smooth Brome—(Western Wheatgrass) Ruderal Grassland	Smooth Brome, Bulbous bluegrass, curly cup gumweed, Hoary cress, Houndstongue	Yes	Undesirable
Rocky Mountain Aspen Forest and Woodland	Rocky Mountain Aspen Forest and Woodland, Bigtooth Maple / Aspen Montane Forest	Aspen, snowberry, golden currant, Great Basin wildrye, False solomon's seal, Lupin, bluebunch wheatgrass, creeping barberry, blue wildrye	Yes	Reference
Rocky Mountain Bigtooth Maple Ravine Woodland	Rocky Mountain Bigtooth Maple Ravine Woodland	Big tooth maple, boxelder, Gambel oak, Aspen, Fendler's rue,	Yes	Desirable
Rocky Mountain Gambel Oak-Mixed Montane Shrubland	Rocky Mountain Gambel Oak-Mixed Montane Shrubland	Gambel oak, Chokecherry, Great basin wildrye, Bluebunch wheatgrass, Bulbous bluegrass, Showy goldeneye	Yes	Desirable
Rocky Mountain Lodgepole Pine Forest	No lodgepole pine forests were located during the ecological surveys, compatible landcover classes could include Rocky Mountain Montane Mesic Mixed Conifer Forest and Woodland, Northern Rocky Mountain Dry-Mesic Montane Mixed Conifer Forest, Subalpine Fir—Engemann Spruce Forest, White Fir / Creeping Barberry Forest	NA	No	N/A
Rocky Mountain Lower Montane Riparian Woodland and Shrubland	Rocky Mountain Lower Montane Riparian Woodland and Shrubland	Narrowleaf cottonwood, Aspen, Salix bebbiana, Salix exigua, Sedge, Baltic rush, Redtop, Reed canarygrass	Yes	Reference
Rocky Mountain Dry-Mesic Mixed Conifer Forest and Woodland	Northern Rocky Mountain Dry-Mesic Montane Mixed Conifer Forest	Douglas fir, Sub-alpine fir, Snowberry, Utah serviceberry, Chokecherry, Mountain lover, Creeping barberry, Western wheatgrass, Field mint, Fendler's rue, Ross' sedge	Yes	Desirable
Rocky Mountain Montane Mesic Mixed Conifer	Rocky Mountain Montane Mesic Mixed Conifer Forest and Woodland	Douglas fir, Bigtooth maple, purple coneflower, goldenrod, red elderberry mountain timothy, blue wildrye, Ross' sedge	Yes	Reference

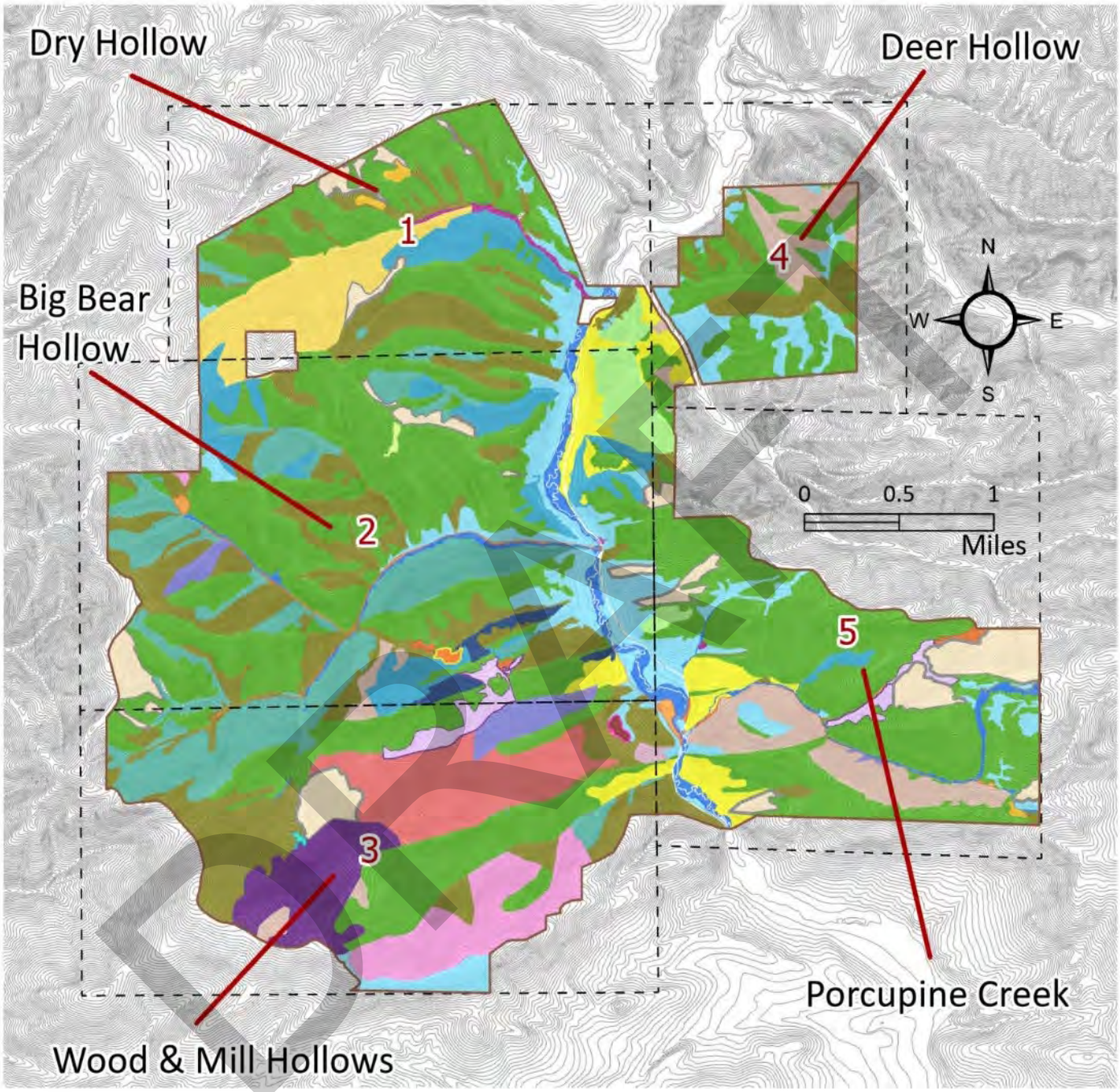
LANDCOVER CLASS	COMPARABLE FIELD MAPPED LANDCOVER CLASS	DOMINANT VEGETATION	OBSERVED WITHIN PROPERTY	CONSERVATION VALUE
Forest and Woodland				
Rocky Mountain Subalpine Dry-Mesic Spruce-Fir Forest and Woodland	Northern Rocky Mountain Dry-Mesic Montane Mixed Conifer Forest	NA	No	NA
Rocky Mountain Subalpine Mesic Meadow	Rocky Mountain Subalpine-Montane Mesic Meadow	Rocky Mountain penstemon, Arrow leaf balsamroot, Mule's ear, mountain brome, bluebunch wheatgrass, Kentucky bluegrass, Lupin	Yes	Desirable
Rocky Mountain Subalpine Mesic Spruce-Fir Forest and Woodland	Subalpine Fir—Engelmann Spruce / (Gooseberry Currant, Prickly Current, White-stem Gooseberry Forest	Subalpine fir, Engelmann Spruce, White-stem Gooseberry, Giant leaf hyssop, purple coneflower, Ross' sedge,	No	NA
Rocky Mountain Subalpine-Montane Riparian Shrubland	Rocky Mountain Lower Montane Riparian Woodland and Shrubland	NA	No	NA
Southern Rocky Mountain Montane-Subalpine Grassland	Rocky Mountain Subalpine-Montane Mesic Meadow, Smooth Brome—(Western Wheatgrass) Ruderal Grassland	NA	No	NA

The following vegetation community classifications are the results of the ecological field survey observations compared to the desktop analysis and show variants from the landcover classes. The community classifications are adapted from landcover and vegetation community descriptions available in the Southwest Regional GAP Analysis Project, NatureServe Explorer, and US National Vegetation Classification Standard data sets (USGS 2005, NatureServe 2024, UNVCS 2024). **Figure 11** provides an overview of the vegetation community mapping results for the Property and illustrates the vegetation community mapping results for each region. **Appendix C** shows representative photos taken of each vegetation community and provides a detailed view of the vegetation classification result and photos of ecological classification zone.

X.2.3. Reptiles and Amphibians Methods

Sampling for herpetofauna species was conducted in a variety of vegetation communities (e.g., sagebrush, grassland, conifer, deciduous), elevations, and on different aspects (e.g., north-facing, west-facing) to maximize capture of species that may use these habitat types differently. Rocky and woody areas were prioritized, when possible, but due to the limited amount of rocky habitat, many study areas lacked rocky features.

Figure 11. Map - Vegetation mapping classification results



BIO-WEST determined the best time to survey for herpetofauna within the Property based on general life-history traits and previous herpetofauna studies in Utah. Most herpetofauna hibernate through the winter, emerge in spring after snowmelt, and return to hibernate in the fall. However, many species, especially snakes, hunt during the early spring months, hibernate during the hottest summer months, emerge again when temperatures cool in late summer, then return to hibernation in fall for winter. Herpetofauna studies in Utah (Kelleher and Dillingham, 2009) found that

montane herpetofauna were active May through October, and that the highest numbers of springtime detections of both total numbers and richness (total number of species) occur between late June and early July. BIO-WEST therefore decided to survey the Property site for all herpetofauna between mid-June and mid-July, with most effort focused on the last week of June and first week of July.

The snow had melted from the Property by mid-June, and the plants were green and growing. Daytime ambient air temperatures ranged from approximately 50 °F to 100 °F (10 °C to 38 °C), which are temperatures suitable for most Utah herpetofauna species.

To maximize detection and capture of herpetofauna species, BIO-WEST personnel conducted the four following sampling procedures: (1) 10 straight-line drift arrays with funnel traps, (3) 18 line transects, 8 road-cruising surveys, and (4) 8 calling-frog surveys. Sampling locations were based on the potential biodiversity hotspots identified during the desktop analysis. Because reptiles and amphibians require access to water, all herpetofauna sampling was performed within 500 meters of a water source (stream, seep, or pond). Additionally, all incidental visual encounters were recorded.

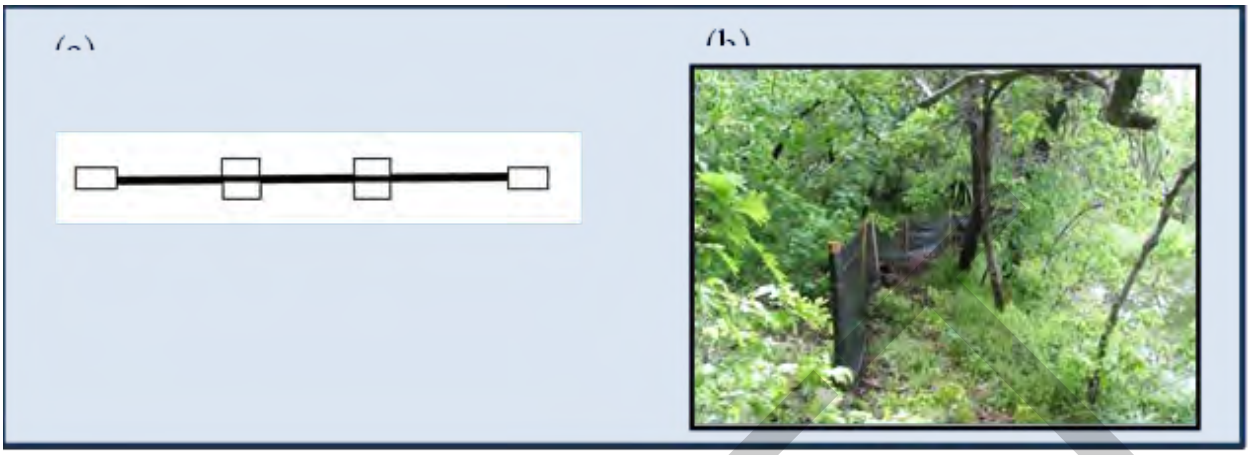
Drift fences were installed randomly within areas of potentially suitable habitat. This sampling method is known to be effective when surveying herpetofauna species (Enge 2001, Heyer et al. 1994). Drift arrays with funnel traps are intended to interrupt herpetofauna traveling along potential paths between water sources and den locations. When fencing is encountered, animals are guided into the traps. Drift arrays consisted of approximately 50 feet of fencing inserted to a minimum depth of 10 centimeters into the soil. Funnel traps were installed at either end, and at least four traps were installed along the length of the drift fence, **Figure 12**, with all traps buried approximately halfway so that the ground surface was even with the funnel hole. Drift fences were installed prior to the ecological site survey and checked every 3 days during the survey. All organisms captured by the funnel traps were identified and recorded, then released (Kelher and Dillingham 2009).

Visual encounter surveys (VES) were performed by walking through areas of suitable habitat (usually along a stream or potential water path) for a specified length of time and recording reptiles encountered. Each VES consisted of a rectangular plot measuring 50 by 100 meters, divided into five 50-meter transects that intersected the plot. All herpetofauna encountered within 2 meters to either side of the transect was identified and recorded (Kelher and Dillingham 2009).

To supplement the VES and drift-fence methodology, BIO-WEST biologists conducted road surveys while traveling. Road surveys were conducted by driving at low speed along a stretch of road while observers watched the road for animals.

Calling-frog surveys were conducted at dusk by means of investigators quietly listening for frog calling for at least 10 minutes per site and recording any detected frog calls.

Figure 12. Methods - Reptiles and Amphibians
Example of drift fence with funnel trap placement (a) and actual straight line drift fence with traps set (b)



Other search techniques for amphibians included looking in wetted areas (e.g., marsh, outflow channels, shallow open water, stream banks) for all life stages of amphibians (eggs, tadpoles, juveniles, adults). These searches were conducted while mapping wetlands and surface waters within the Property. Amphibians observed were identified and recorded.

Incidental observations of any species found outside the parameters of the prescribed survey methods were documented. All amphibians and reptiles encountered were visually inspected, documented, identified, and released.

All survey methods yielded multiple species and organisms. Incidental encounters detected the greatest diversity, with five of the seven species observed, but amounting to only eight individuals. Drift-fence arrays captured the largest total number of individuals (n=26), but this method detected only three of the seven species. Twelve individuals from three species were encountered during line transects, and four individuals from two species were detected during road surveys.

X.2.4. Small and Large Mammals Methods

BIO-WEST biologists traveled through the Property to visit representative areas of potentially highly biodiverse habitat use, as identified during the desktop analysis. Biologists conducted visual observations of animals and their signs (tracks, scat, burrows, trails, etc.) by walking wildlife trails and searching the habitat. Wildlife surveys were implemented in conjunction with all other habitat and organism surveys and VES. Wildlife observations were recorded or collected with a GPS unit with sub-meter accuracy. Observations of wildlife were recorded when seen or heard, and when other signs of wildlife were observed, such as animal tracks, dens, and bedding areas. Wildlife VES observations were made for birds, amphibians, and reptiles. The small mammals were observed in the traps used for herpetofauna surveys.

BIO-WEST also compiled and organized wildlife observations collected by volunteer citizen scientists, County Ambassadors, and local private citizens. The Ambassadors collected wildlife observations by using a GPS unit to record notes and location of wildlife. Ambassadors also participated in a collaborative wildlife camera project, Wildlife Watch, run by Sageland

Collaborative. Any signs of wildlife (e.g., tracks, scat, dens, bedding areas) or wildlife visually or auditorily observed were noted.

X.2.5. Wildlife Watch Program

Within the study area, in collaboration with Sageland Collaborative, the County has created and incorporated the Wasatch Wildlife Watch Project to understand the current condition of wildlife populations and their habitats. Wasatch Wildlife Watch deploys and monitors trail cameras throughout the study area and analyzes the images to help map wildlife movement and habitat, as well as predict species' responses to human influence. The County provided BIO-WEST information from the trail cameras within the study area from data gathered during the 2024 Summer field season. Within the study area, cameras were preferentially placed alongside roads, trails, and water features for ease of access and adherence to specific study design. Further analysis will be performed on the photos collected by this program and ongoing participation will continue to inform the Property Management. Photos collected by the Wildlife Watch program are displayed in **Appendix F**.

X.2.6. Freshwater Macroinvertebrates Methods

BIO-WEST personnel collected freshwater macroinvertebrates (invertebrates) at nine (9) sites representing a variety of habitats within the Property during July 15–17, 2024.). Invertebrates were collected at riffles and pools East Canyon Creek (Sites 1–4); in two remote ponds (Sites 5–6); in an intermittent tributary of East Canyon Creek in Big Bear Hollow (Site 7); in Porcupine Creek, an intermittent tributary of East Canyon Creek (Site 9); and in a pond along Porcupine Creek (Site 8). Sites 6 and 8 contained the highest number of taxa, with 11 taxa at each site, followed by Site 5 (10 taxa), site 1 (9 taxa), sites 3 and 9 (9 taxa at each), sites 2 and 7 (7 taxa at each), and finally site 4 (5 taxa).

BIO-WEST personnel used two methods to collect invertebrates from a variety of habitats. Surber samplers were used to collect invertebrates in lotic environments (i.e., flowing water), and a D-net was used to collect invertebrates from lentic environments (i.e., still or very slow-moving water). Photos were taken to document the site conditions, and GPS coordinates were collected at each site.

Invertebrates were collected with the surber sampler by disturbing the streambed's substrate by hand and allowing the flow of water to flush debris and fauna into the net. Invertebrates were collected with the D-net by sweeping the net along the bottom of the habitat or along the substrate, and by sweeping the net under overhanging vegetation along the banks. Invertebrates from the sampling gear were then placed in a white tub filled with stream or pond water to observe and identify them. Invertebrates were identified to family, if possible. Invertebrates that could not be identified on site were preserved in ethanol and later identified with a stereoscope. Some invertebrates could not be identified past order or subclass. Pollution-tolerance values of the various macroinvertebrate families were then used to evaluate the condition and water quality of the sampled waterbodies (NAMC USU Bug Lab 2020). Invertebrates with tolerance values closer to 0 are more sensitive to impaired water quality, while tolerance values closer to 10 indicate invertebrates that are more tolerant of impaired water quality.

Freshwater invertebrates are assigned to various functional feeding groups according to the ways each acquires its food. Functional feeding groups of freshwater invertebrates are important in processing energy in the food webs of aquatic ecosystems. The invertebrates collected from the Property were assigned to their respective groups using the dataset provided by the US Bureau of Land Management National Aquatic Monitoring Center at Utah State University (BLM/USU NAMC). For instance, the functional feeding group known as "scrapers" use their mouth parts to scrape algae and biofilm from rocks and other substrates. "Collectors" gather fine particulate organic matter (FPOM) from the stream bottom and filter FPOM from the water column. Members of the "predator" group pierce, engulf, or capture other organisms. "Shredders" consume leaf litter and wood (i.e., coarse particulate organic matter) by chewing or tearing it into smaller pieces. Members of the "omnivore" functional feeding group feed on various food sources in multiple ways (Cummins and Klug 1979).

The invertebrates from each taxon collected from the Property were not counted in-house as originally planned, as counting invertebrates is extremely time-consuming. Samples were to be sent to BLM/USU NAMC for calculating the number of individuals from each taxon, and for identifying invertebrates down to genus and/or species. However, this lab recently ended their practice of processing samples for private entities. Therefore, the data include only the invertebrate taxa observed and excludes invertebrate abundance values.

There are limitations associated with the methods used for collecting freshwater invertebrates for this project. First, most of the invertebrates collected were identified in the field, while alive and moving in the collection tub, without the use of a microscope. This made it difficult to ascertain whether the invertebrates observed and identified were representative of those actually present at the sampling sites. In other words, there is a possibility that some invertebrates were present in the freshwater habitats sampled at the Property but escaped observation and identification. Second, it would be informative to sample for invertebrates from the same sites but at different times of the year to capture taxa of invertebrates that may not have been present or active during the survey. Finally, it would be informative to collect water-quality samples at the same nine sites and continue to monitor freshwater invertebrates and aquatic ecosystem health over time.

The taxa observed at each site, a habitat description, photos, and coordinates of each site are provided in **Table 12.** (*Sites 6 and 8 contained the highest number of taxa, with 11 taxa at each site, followed by Site 5 (10 taxa), site 1 (9 taxa), sites 3 and 9 (9 taxa at each), sites 2 and 7 (7 taxa at each), and finally site 4 (5 taxa)*). Sampling sites can be viewed in **Figure 5**.

Table 12. Freshwater Macroinvertebrates habitat description, photos, and sites

SITE	NAME OF TAXA	HABITAT DESCRIPTION	PHOTO OF SITE, GPS COORDINATES, AND PHOTO DIRECTION
1	Planorbidae Simuliidae Tricoptera Baetidae Trombidiformes Chironomidae Lymnaeidae Hirudinea Asellidae	Downstream site in a riffle in East Canyon Creek	 Photo faces east, 40.773464, -111.589094
2	Physidae Hirudinea Planorbidae Corixidae Coenagrionidae Dytiscidae Lymnaeidae	Downstream site in a pool along west bank of East Canyon Creek	 Photo faces north, 40.774703, -111.588783
3	Simuliidae Trombidiformes Chironomidae Baetidae Asellidae Tricoptera Elmidae Psychomyiidae Gomphidae	Upstream site in a riffle in East Canyon Creek	 Photo faces northwest, 40.808414, -111.596492

SITE	NAME OF TAXA	HABITAT DESCRIPTION	PHOTO OF SITE, GPS COORDINATES, AND PHOTO DIRECTION
4	Gomphidae Corixidae Gastropoda Trombidiformes Lymnaeidae	Upstream site in a pool along north bank in East Canyon Creek	 Photo faces northwest, 40.808419, -111.596428
5	Lestidae Coenagrionidae Trombidiformes Hyalellidae Notonectidae Lymnaeidae Daphniidae Physidae Baetidae Corydalidae	Pond near fen wetland	 Photo faces west, 40.769139, -111.628089
6	Gerridae Hyalellidae Corydalidae Notonectidae Gastropoda Tricoptera Baetidae Coleoptera Lymnaeidae Chironomidae Odonata	Beaver pond downstream of fen wetland	 Photo faces northwest, 40.783511, -111.621856
7	Hydropsychidae Baetidae Perlodidae Lymnaeidae Limnephilidae Tipulidae Gerridae	Riffle in a small creek along Bear Hollow	

SITE	NAME OF TAXA	HABITAT DESCRIPTION	PHOTO OF SITE, GPS COORDINATES, AND PHOTO DIRECTION
			Photo faces northeast, 40.779333, -111.583936
8	Notonectidae Baetidae Gerridae Hyalellidae Culicidae Trombidiformes Odonata Coleoptera Chironomidae Corydalidae Daphniidae	Pond along Porcupine Creek	 Photo faces north, 40.779333, -111.583936
9	Gerridae Coleoptera Odonata Asellidae Physidae Ephemeroptera Limnephilidae Dytiscidae	Pool in Porcupine Creek	 Photo faces west, 40.773233, -111.563258

Invertebrate taxa were similar yet distinct from the upstream and downstream sites in East Canyon Creek. Simuliidae (black flies), Trichoptera (caddisflies), Baetidae (small minnow mayflies), Trombidiformes (water mites), Chironomidae (midges), Lymnaeidae (pond snails), Hirudinea (leeches), Asellidae (aquatic isopods), and Corixidae (water boatman) occurred at both the upstream and downstream sites in East Canyon Creek. Planorbidae (ram's horn snail), leeches, Physidae (bladder snails), Coenagrionidae (narrow-winged damselfly), and Dytiscidae (predaceous diving beetle) occurred at the downstream sites in East Canyon Creek, whereas Gomphidae (club-tailed dragonfly), Psychomyiidae (net-tube caddisfly), and Elmidae (riffle beetle) occurred at the upstream sites in East Canyon Creek. The net-tube caddisfly may have occurred at the downstream site in East Canyon Creek, but it is unclear whether it occurred upstream because we were unable to identify Trichoptera (caddisflies) past order at the upstream site.

The presence of some families may have differed between the upstream and downstream sites due to their tolerance to low water quality in East Canyon Creek. For example, club-tailed dragonflies (tolerance value of 4 and riffle beetles (tolerance value of 2–6) are slightly more sensitive to water quality impairments and occurred at the upstream-most site in East Canyon Creek, whereas narrow-winged damselflies (tolerance value of 5–9) and predaceous diving beetles occurred at the downstream sites of East Canyon Creek and are typically more tolerant of pollution and other

water quality impairments (tolerance value of 5–8). Land uses such as the agricultural use of manure and fertilizers and herbicides from residential areas may affect water quality downstream in the creek and, therefore, the invertebrate families present in the creek. Again, it would be more informative to also collect water-quality samples for the purpose of identifying water pollutants and their sources in East Canyon Creek.

While the majority of the invertebrate families collected from the Property were found to be somewhat tolerant to water quality impairments, some families collected were much more sensitive to water impaired water quality. One of these is the hellgrammite Corydalidae, a large invertebrate predator with a tolerance value of 0. Corydalidae was collected from a remote pond in the Property (Site 5) and from Porcupine Pond (Site 8), which is utilized by cattle. Limnephilidae, the largest of the case-making caddisflies, which has a tolerance value ranging between 0 and 4, was collected from Porcupine Creek (Site 9) and the creek in Big Bear Hollow (Site 7). Perlodidae, the perlodid stonefly, with a tolerance value ranging between 0 and 2, was also collected at the creek in Big Bear Hollow. The presence of these invertebrate families in a waterbody can be an indicator of good water quality (e.g., high levels of dissolved oxygen, and/or low concentrations of pollutants) (Macroinvertebrates.org 2024).

Various functional feeding groups were supported in East Canyon Creek, tributaries of East Canyon Creek, and associated ponds within the Property. The functional feeding groups predators, collector-gatherers, collector-filterers, scrapers, shredders, and omnivores were found. The predators were spread-winged damselflies, narrow-winged damselflies, club-tailed dragonflies, water boatman, predaceous diving beetles, water striders, leeches, Hydropsychidae (net-spinning caddisflies), Notonectidae (backswimmers), perlodid stoneflies, and water mites. The collector-gatherers were aquatic isopods, small minnow mayflies, midges, and Daphniidae (water fleas). The collector-filterers were black flies (Simuliidae), and the scrapers were snails (Lymnaeidae, Physidae, and Planorbidae). Because we did not identify past family, the individual species within each family may belong to several different functional feeding groups, **Table 11**.

The functional feeding groups of freshwater invertebrates collected during sampling in the Property were representative of those typically inhabiting small-sized streams, mid-sized streams, and ponds. The small-sized streams in the Property, the tributaries of East Canyon Creek, contained scrapers, collector-gatherers, shredders, predators, and omnivores. These same functional feeding groups—with the exception of shredders—were collected from East Canyon Creek, a mid-sized stream. Shredders typically occur in smaller abundances in mid-sized streams because there is often less leaf litter and wood available for shredders to feed on in such habitat (Vannote 1980). Ponds tend to contain most functional feeding groups (collector-gatherers, predators, scrapers, shredders, and omnivores) because they provide a wider variety of food sources for invertebrates to feed on (Bazzanti et al. 2009). The ponds in the Property contained members from most functional feeding groups (collector-gatherers, scrapers, shredders, predators, and omnivores). Aquatic macroinvertebrate and herpetofauna sampling sites are displayed in **Figure 5**.

X.2.7. Avian Surveys Methods

X.2.7.1. Avian Point-Count Field Methods

The Property was surveyed by qualified BIO-WEST personnel during June 25–July 3, 2024, with unlimited-distance point-counts regardless of distance from the observation point. However, for design purposes, points were located a minimum of 300 meters apart and precautions were taken to avoid double-counting birds at nearby points.
The study used a stratified random sampling with landcover optimization sampling design by establishing a random point outside of the site, then generating a 300x300-meter grid based on a fixed anchor point. Points were then established at the center of each grid cell and overlaid with landcover data. Some points were eliminated from sampling (because they contained virtually no habitat) and some points were slightly shifted in situations when a point fell in the middle of open water or on the edge of terrain inaccessible to survey personnel. Because of the large size of the Property and the rugged terrain throughout the Property, point-count sampling locations were then selected for points that intersected the greatest number of landcover habitats, intersected unique habitats, or habitats in areas reasonably accessible by a combination of ATV and strenuous hiking. This resulted in a total of 94 sampling points throughout the Property. For design purposes, this approach was tailored to record the greatest diversity of species by targeting probable biodiversity hotspots of intersecting habitats while still accounting for specialist species that are known to utilize specific habitats.

This sampling design was created by BIO-WEST in collaboration with Summit County. By selecting point-count locations in a reasonable proximity to existing ATV trails and areas accessible by hiking, we were able to maximize the number of point-count survey locations and avian survey potential as project time and budget allowed.

To account for secretive marsh birds and owls, specialized broadcast methods adapted from a national, standardized playback protocol were employed to increase detection of these species. This approach consists of broadcasting pre-recorded vocalizations at predetermined intervals to elicit potential responses that accordingly indicate the presence of the species of interest. These surveys were habitat-specific and limited to habitats potentially suitable for the target species. Broadcasts for marsh birds were conducted a few hours before sundown, capitalizing on their crepuscular peak activity periods. For owls, calls were broadcasted after sundown when these nocturnal birds are most active. This targeted approach helped maximize the probability of detecting elusive species that are not typically observed during point counts.

Point counts were conducted at ninety-four (94) locations throughout the Property using methods adapted from *Field Methods for Monitoring Landbirds* (Ralph et al. 1993) and the Utah Division of Wildlife Resources riparian point-transect protocol (Howe et al. 1999). Surveys began 15 minutes before sunrise and concluded approximately 3 to 4 hours afterward. Surveyors used a Trimble GPS unit with sub-meter accuracy to precisely navigate to each point and record any birds within 50 meters of the point flushed by the disturbance of the surveyor entering the area. A 1-minute settling period was used upon reaching each sampling point to allow birds to resume calls and normal behavior prior to the disturbance of the surveyor entering the area. All birds seen or heard at the point-count locations were recorded for 5 minutes, separating observations into two time periods for each point: 0–3 minutes and 3–5 minutes. Observations were notated as visual, audible, or both. Every observation was recorded individually; flocks or small groupings were

recorded with the group size as a single observation. Fly-over birds were recorded separately in a similar fashion.

X.2.7.2. Avian Point-Count Resulting Metrics

Species richness refers to the number of species in an area. This is the simplest measurement of species diversity but also the least informative and the least sensitive to change. Species richness provides only a list of species in the area. However, this is an important metric when combined with relative abundance, which yields species diversity.

Relative abundance is the percentage of individuals of a particular bird species relative to the total bird population in a given area. This metric provides valuable insights into bird populations and their composition, but it is less precise than density estimates that can be calculated using distance sampling. There are several important limitations that should be considered when interpreting relative abundance. The sampling design, developed by BIO-WEST in collaboration with Summit County, employed a stratified random sampling approach with landcover optimization. Though this method maximized coverage of the diversity of habitats throughout the Property as much as project scheduling allowed; it was neither fully random nor evenly distributed across all habitat types. Accessibility constraints may have led to over- or under-sampling of certain landcover types, potentially affecting the representativeness of the results. Furthermore, relative abundance does not account for species detectability. Species that are secretive, nocturnal, or otherwise difficult to detect—such as marsh birds and owls—may be underrepresented, which could skew the perceived abundance of certain species in relation to others. Repeated surveys, more sampling locations, and a modification to the sampling design would increase confidence in the results of the avian point-count surveys and provide a better understanding of how the bird community utilizes the Property and its habitats as the seasons change.

Species diversity is the number of different bird species and their relative abundance in the area and, therefore, a measurement of biodiversity. It is the combination of species richness and relative abundance, both of which are described above. Species diversity is expressed as a mathematically derived index, which combines richness and abundance. The Simpson's Diversity Index (which is more sensitive to dominant species) and the Shannon-Wiener Diversity Index (which is more sensitive to rare species) are suitable for establishing an ecological baseline and were calculated for this survey (Magurran and McGill 2011).

Weaknesses. Point counts have notable weaknesses, particularly concerning the detectability of rare or secretive bird species, such as marsh birds and owls. The method relies on visual and audible observations, which may result in underrepresentation of species that are elusive, make infrequent calls, or inhabit dense vegetation. Several marsh birds, known for their reclusive nature and preference for dense emergent wetland habitats, often escape detection during standard point counts. As a consequence, the limitations in avian point counts may lead to underestimation of species richness throughout the Property.

X.2.7.3. Avian Property Species Richness

The Property's species richness was determined by tallying the total number of unique bird species detected during point counts conducted by BIO-WEST during June 25–July 3, 2024. A list of each species observed, and the cumulative number of individuals detected are shown in **Table 13**.

Table 13. Avian point-count diversity values

DIVERSITY METRIC	DIVERSITY VALUE
Species richness	61
Shannon-Wiener Diversity Index	3.470
Simpson's Diversity Index	0.957
Relative abundance	11.830

X.2.7.4. Avian Property Species Diversity

Two species diversity indices typically used in ecological studies were calculated using the 2024 project area point count data: the Shannon-Weiner Diversity Index and Simpson's Diversity Index. Areas with large numbers of detected species and similar numbers of individuals in each species (i.e., evenness) have high diversity and correspondingly high diversity index values. Areas dominated by a single species have low diversity and low index values.

The Shannon-Weiner Diversity Index quantifies the influence of species richness with consideration of the rarity of those species within the community. This index is more sensitive to the presence of rare species than Simpson's Diversity Index. Higher Shannon-Weiner Diversity Index values are indicative of a more diverse (and evenly distributed) community, with typical values falling between 1.5 and 3.5.

The Shannon-Weiner Diversity Index was calculated using the following formula:

$$H = -\sum_{i=1}^{s} pi \ln(pi)$$

Where:
H = Shannon-Weiner Diversity Index,
S = total number of species observed,
pi = proportional abundance of the i^{th} species (the ratio of individuals of one species to the total number of individuals across all species),
ln = natural log.
Simpson's Diversity Index emphasizes the dominance or evenness of common species and provides an outlook on species diversity from a probability standpoint; this index is less sensitive to the presence of rare species. Simpson's Diversity Index values range from 0 to 1, with 1 representing a theoretical maximum level of diversity and 0 representing a community with no diversity. The Simpson's Diversity Index was calculated using the following formula:

$$D = 1 - \sum_{i=1}^{s} pi^2$$

Where:
D = Simpson's Diversity Index,
S = total number of species observed,
pi = proportional abundance of the i^{th} species (the ratio of individuals of one species to the total number of individuals across all species).

The calculated values for both the Shannon-Weiner Diversity Index and Simpson's Diversity Index are included in **Table 12**.

X.2.7.5. Avian Property Relative Abundance

Relative abundance in the context of this bird survey refers to the average number of birds observed per point-count location (i.e., birds per point), during the 2024 Property point-count surveys. Relative abundance provides insight into the density of bird populations within the Property, which is valuable for evaluating species distribution and abundance patterns spatially throughout a site. The following formula was used for each species to calculate species-level relative abundance across the Property:

$$RA = \frac{n}{P}$$

Where:
RA = Relative abundance (birds per point),
n = Total number of individuals detected during the survey,
P = Total number of point-count locations surveyed during the visit.

An overall relative abundance (not broken down by species) was calculated for the Property by summing the relative abundance of all species detected during the point-count surveys. The calculated relative abundance values for each species and overall relative abundance are shown in **Table 6**.

The placement of point-count locations, which prioritized accessibility and landcover diversity, may have influenced relative abundance values by favoring habitats or locations where certain species were more easily detected. Additionally, relative abundance values do not account for species detectability, meaning that elusive species and species that are difficult to detect in certain habitats may be underrepresented in the point-count results.

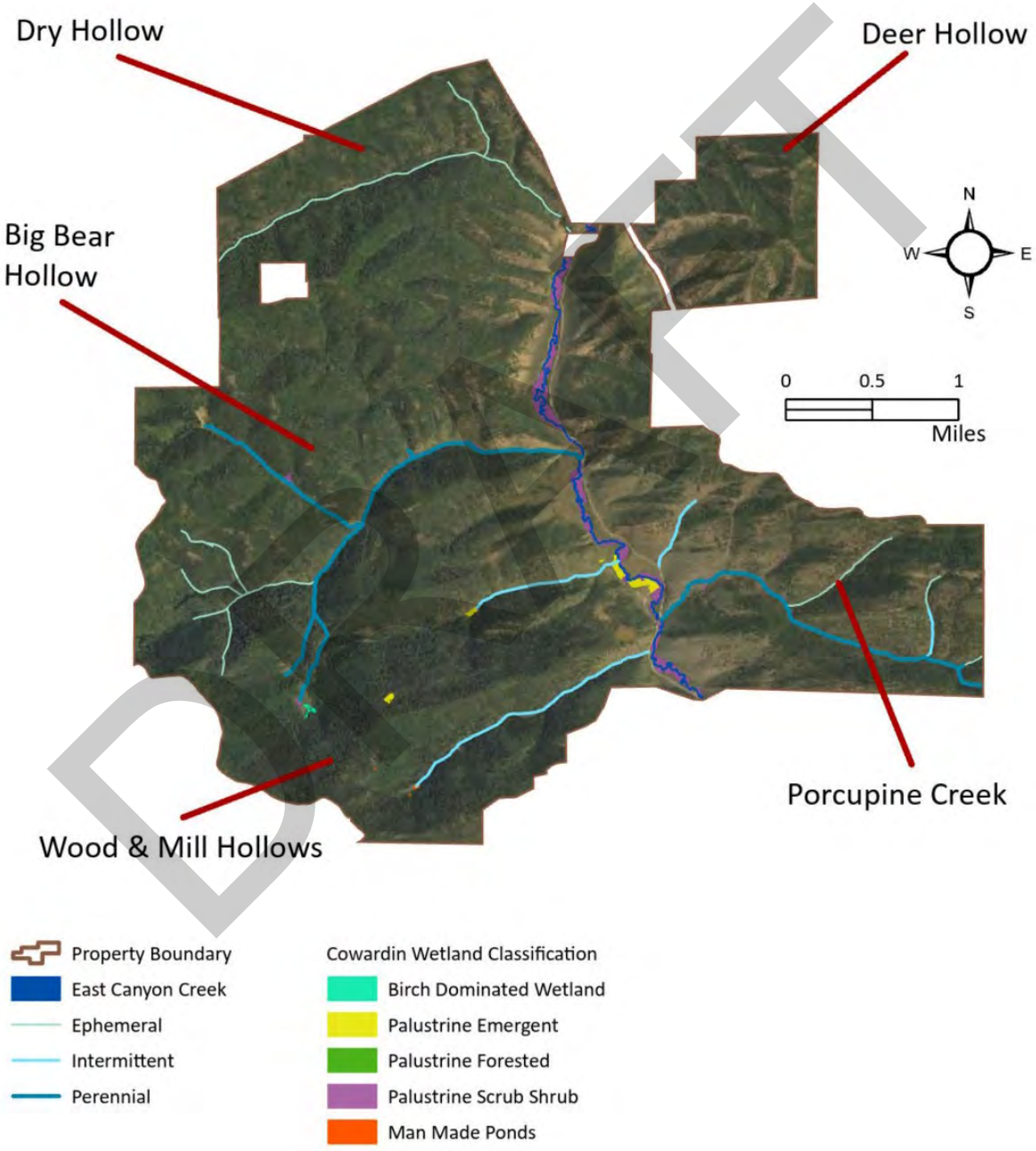
Diversity metrics calculated using the 2024 bird survey data indicate a moderately diverse bird community within the Property, with a species richness of 61, Shannon-Wiener Diversity Index of 3.470, and a Simpson Diversity Index of 0.957. These values suggest a moderate level of species diversity and the bird community being relatively "even" in species abundance, **Table 6**.

X.2.8. Aquatic Resources Inventory Results

Figure 5, introduced in **Section VI**, shows the locations of USGS NWI mapped wetland areas, USGS National Hydrography Dataset approximate stream locations, and springs, human-made ponds, and other water related points of interest provided by Summit County. Those areas were ground-truthed during the ecological survey, and areas that differed from those datasets were

mapped in the field. Additional details are aquatic resources are mapped in **Figure 13** and displayed in **Appendix I** the results of the wetlands and surface waters field inventory. The wetland classifications follow the Cowardin classification system (FGDC 2013).

Figure 13. Map - Aquatic resources overview



XI. UTE LADIES'-TRESSES: SUITABLE HABITAT SPECIAL SURVEY

During the wetland and vegetation mapping, BIO-WEST noted potentially suitable habitat for Ute Ladies'-tresses. BIO-WEST coordinated with the Summit County to conduct surveys for Ute Ladies'-tresses during the bloom period. The following provides a summary of those surveys.

XI.1. Ute Ladies'-tresses: Suitable Habitat Background

The Ute ladies'-tresses is a facultative wetland plant species listed as threatened by the USFWS (USACE 2020, USFWS 1992). The plant is a small orchid with white-to cream-colored flowers known to occur in wetlands and riparian zones in the central Rocky Mountains (Fertig et al. 2005). In June 2023, the USFWS completed a species special-status report for Ute ladies'-tresses that suggest known populations are stable, and a 5-year review that recommends that the species be delisted under the Endangered Species Act (ESA) based on its recovery (USFWS 2023a, USFWS 2023b). The timing of the potential delisting is currently unknown. Section 7 of the ESA, which includes consultation guidelines for listed species, identifies priority survey areas for states containing populations, as well as adjacent states known to have potential habitat (USFWS 1995). Specific habitats to be surveyed include all riparian and wetland communities at elevations below 7,000 feet. Ute ladies'-tresses occur in valley bottoms along medium-to-large streams and rivers of moderate gradient. Habitat is characterized by old stream channels, alluvial terraces, sub-irrigated meadows, and other wetland habitats (USFWS 1992). Ute ladies'-tresses have also been documented within irrigated pastures, riparian shrublands, and deciduous forests. Some wet meadows and irrigated pastures in which Ute ladies'-tresses have been found are isolated from rivers and streams but have some other reliable water source (Fertig et al. 2005).

Ute ladies'-tresses are most often found growing on alluvial deposits ranging from coarse cobbles to fine-textured sands and sandy loams. The orchid has also been documented growing in highly organic peat. Vegetation associated with Ute ladies'-tresses can be variable and usually consists of moderate cover of shrubs and trees such as thinleaf alder (*Alnus incana*), black hawthorn (*Crataegus douglasii*), black cottonwood (*Populus trichocarpa*), and narrowleaf cottonwood Several willow species (*Salix bebbiana*, *S. lasiandra*, *S. lutea*, and *S. geyeriana*) can be situated near (usually less than 5 meters away from) openings dominated by herbaceous species. The herbaceous layer in suitable Ute ladies'-tresses habitat consists of moderate cover of species such as creeping bentgrass, mat muhly (*Muhlenbergia richardsonis*), Nebraska sedge, showy milkweed (*Asclepias speciosa*), swordleaf rush (*Juncus ensifolius*), Baltic rush (*Juncus balticus*), white clover (*Trifolium repens*), field sowthistle (*Sonchus arvensis*), and western aster (*Symphyotrichum ascendens*) (Murphy 2002).

XI.2. Ute Ladies'-tresses: Suitable Habitat Methods

BIO-WEST performed an assessment of the presence of suitable habitat for Ute ladies'-tresses on September 5, 2024. The habitat assessment for Ute ladies'-tresses was conducted following guidance from the USFWS *Interim Survey Requirements for Ute ladies'-tresses Orchid* (Spiranthes diluvialis) (USFWS 1992) and the USFWS *Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants* (USFWS 2011).

A visual inspection of the entire Property was performed by walking the perimeter and throughout. Wetland areas were examined for Ute ladies'-tresses suitable habitat characteristics similar to those described in the USFWS *Interim Survey Requirements for Ute ladies'-tresses Orchid* (Spiranthes diluvialis) (USFWS 1992) and other relevant literature. If any areas exhibited habitat characteristics similar to those described in the literature, BIO-WEST identified the habitat as potentially suitable and marked its boundaries using a handheld GPS unit capable of sub-meter accuracy.

XI.3. Ute Ladies'-tresses: Suitable Habitat Findings

Areas of suitable habitat were situated within the floodplain along both sides of East Canyon Creek. Individuals of Ute ladies'-tresses were not observed. The narrow floodplain shelf along East Canyon Creek receives overbank flows from the stream. This area was determined to be suitable habitat due to possible seasonal flooding along this stream terrace, the occurrence of associated species of Ute ladies'-tresses, and moderate herbaceous cover conditions typically created by grazing animals. An herbaceous layer of graminoids and forbs dominated this area including creeping bentgrass (*Agrostis stolonifera*), common spikerush, Baltic rush (*Juncus balticus*), Nebraska's sedge (*Carex nebrascensis*), water sedge, teasel (*Dipsacus fullonum*), Missouri goldenrod, and willowherb. Soils were alluvial, moist, and loamy, **Figure 14a**.

Other areas of suitable habitat were located near ponded areas in the Wood and Mill Hollow in the southwestern portion of the Property. Individuals of Ute ladies'-tresses were not observed. Suitable habitat was surveyed along a spring-fed pond and an adjacent fen wetland. Soils were loamy and moist surrounding the pond, and peat-like (i.e., highly organic) in the fen wetland, **Figure 14b**. Vegetation surrounding this pond and fen wetland were dominated by associated species including Baltic rush, Nebraska sedge, water sedge, common spikerush, fringed willow herb, and common horsetail (*Equisetum arvense*). Further downstream of the pond, another spring-fed wetland was surveyed for Ute ladies'-tresses. This wetland was sloping and extended down the hill slope toward a depression, which was situated at the base of the toe slope. Soils were moist and loamy. These areas were dominated by associated species including common spikerush, fowl mannagrass (*Glyceria striata*), fringed willow herb, American speedwell, sedges (*Carex* spp.), creeping bentgrass, common horsetail, and seep monkeyflower, **Figure 14c**.

Figure 14a. Photo Ute ladies'-tresses habitat

Figure 14b. Photo - Ute ladies'-tresses habitat
This photo faces north toward suitable habitat along a pond and fen wetland. 40.769248, -111.628022

Figure 14c. Photo - Ute ladies'-tresses habitat
This photo faces east toward suitable habitat within a sloping wetland. 40.778056, -111.62686

XII. DISCUSSION AND RECOMMENDATIONS

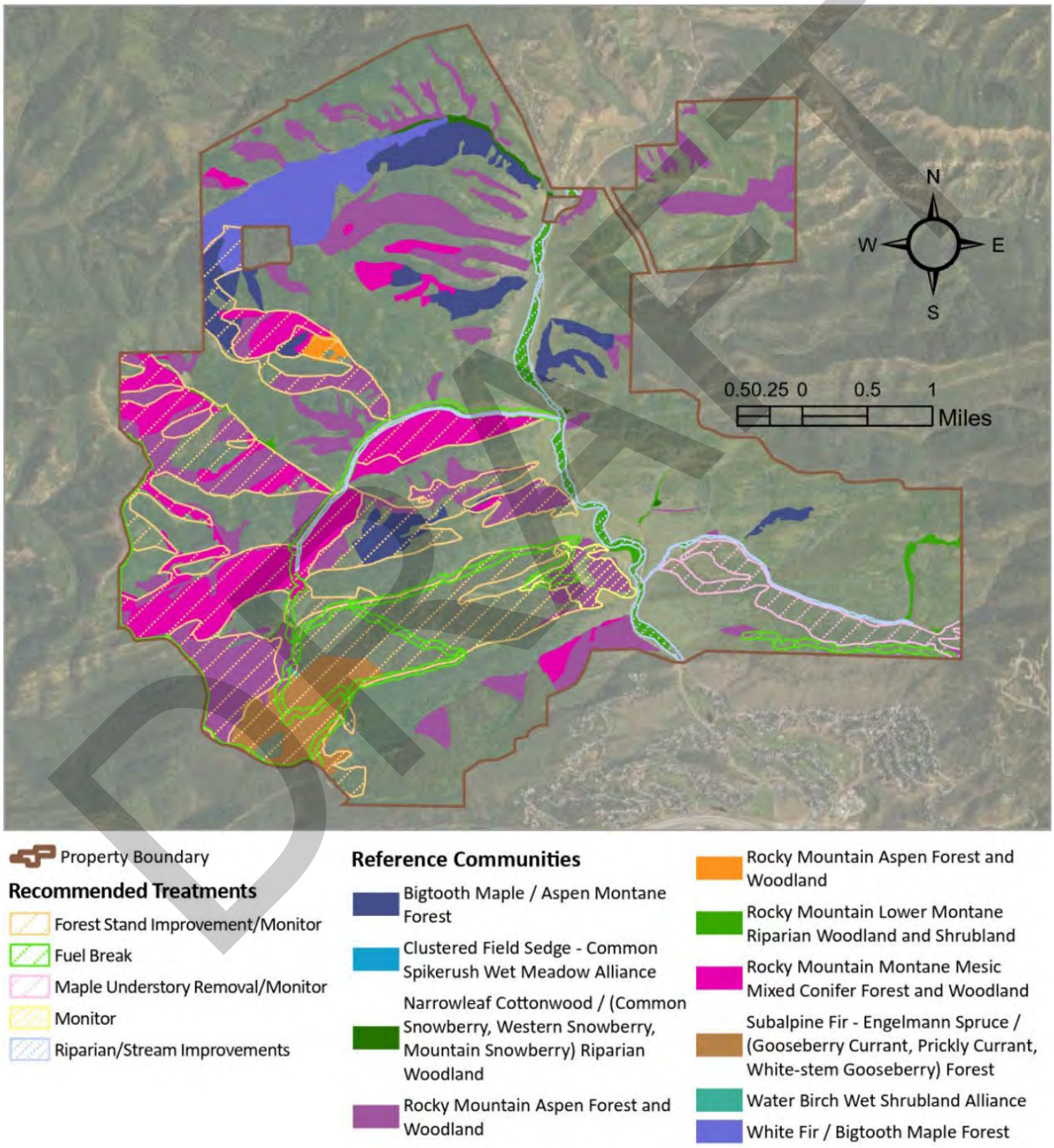
The 910 Ranch Property has a mix of coniferous forested habitat types, extensive aspen stands, montane shrublands and woodlands, riparian areas, wetlands and stream habitat that supports a vast array of natural resources and the wildlife that are reliant. The Property encompasses seasonal and critical wildlife habitat areas, **Appendix E & F**, and provides connectivity between wildlife-migration corridors. Documented areas within the Property contain unique assemblages of plant species that provide habitat for sensitive species and can also serve as reference sites for future land-management activities, **Figure 10 & 15**. Of particular significance are the raised fen and associated palustrine emergent wetland habitat within the upper portions of Mill Hollow and Wood Hollow; the water-birch-dominated riparian shrubland in the upper portions of Mill Hollow and Wood Hollow; the palustrine emergent wetlands in upper Big Bear Hollow with the complex of remnant Beaver Dams; the Ute ladies'-tresses suitable habitat areas along East Canyon Creek; the lower section of East Canyon Creek with its cottonwood-dominated riparian areas (a habitat that is absent from many reaches of the creek); and the wetland complexes and spring-discharge areas along Porcupine Creek. Of additional importance are the aspen and coniferous forest habitat types marked as reference communities in the vegetation-mapping results section, including Rocky Mountain Montane Mesic Mixed Conifer Forest and Woodland, White Fir/Bigtooth Maple Forest, Bigtooth Maple/Aspen Montane Forest, Rocky Mountain Aspen Forest, and Woodland shown in **Figure 15** and in **Appendix C.**

The County currently awards a seasonal cattle grazing lease to a long-standing local agricultural producer. The producer lightly manages the cattle via rotational grazing techniques, accessing the eastern portion of property in early spring then moving animals to the western areas mid-summer. It is recommended that a rangeland management plan is implemented with strategies for maintaining the quantity, quality, and resilience of native forage. If cattle grazing is to continued on the Property it is encouraged to provide a grazing management plant that promotes high-intensity, short-duration grazing rotations in appropriate areas, and exclude grazing in sensitive wetland, stream, and riparian habitat. Fencing enclosure, such as that around the perennial stream in Big Bear Hollow, are also recommended in order to exclude grazing and trampling the sensitive wetland ecosystem, and to help protect future restoration efforts. Sensitive areas that have been grazed heavily in the past can be restored by implementing a revegetation program and re-establishing native vegetation in degraded areas. There is strong evidence that a majority of the springs, seep areas, and tributaries to East Canyon Creek show significant signs of damage by undermanaged livestock and concentrated ungulate trampling. Unrestricted and open range grazing, by cattle and wildlife, has contributed to point-source pollution in the springs and sensitive water resources within the Property. This is indicated by vertically cut banks, erosion, and down-cutting in East Canyon Creek, areas of cattle and wildlife crossings, eroded banks, and trampled vegetation. These conditions have led to areas of bare soil, which are vulnerable to further erosion and conversion to non-native species invasion. Also, there is evidence of large areas of riparian vegetation that were once established along the creek that have been cleared to increase the acreage of pasture for grazing and to give livestock better access to the water resources. Grazing by

livestock and large mammals can spread noxious weeds into these sites that can quickly establish in these degraded areas.

Some wet meadows along East Canyon Creek appear to have dried and are lacking hydrology. These areas have the potential for restoration if hydrology can be reintroduced. Establishing side-channels off East Canyon Creek and constructing braided oxbow channels, along with encouraging

Figure 16. Map - Long-term monitoring site suggestions



the reintroduction of beaver, including the installation of beaver-dam analogues, in these locations can raise the alluvial aquifer and reduce erosion in the main channel. Water-quality conditions in East Canyon Creek are well studied, and elevated dissolved oxygen from excessive nutrients (principally phosphorus, fine sediment, and declining stream flows) have resulted in a decline in native trout populations (UDEQ 2000).

Restoration projects upstream of the Property which re-established native riparian vegetation, the installation of beaver dam analogues, improvements to point-source and nonpoint-source pollution inputs (including the upgrade of the Snyderville Basin Wastewater Reclamation District wastewater treatment plant) and establishing minimum-flow recommendations have resulted in reduced nutrient loads and increased macroinvertebrate abundance (EPA 2021). Still, an analysis of the existing fishery conditions within East Canyon Creek indicates the fishery within the Property is in poor condition and the resulting recommendations included revegetation and planting, fish stocking, increased base flows, beaver augmentation, bank protection, and tributary improvement projects to improve fishery conditions (Bishop et al. 2023). Stream-habitat and water-quality improvement projects within the watershed (including the segments of East Canyon Creek and its tributaries within the Property) would further improve the fishery. In addition, there is a lack of cottonwood galleries along East Canyon Creek within the Property, and the existing cottonwood gallery along the ephemeral creek in the northern portion of the Property appears to lack sustainable hydrology. Planting native cottonwoods along sections of East Canyon Creek, reestablishing native willows in areas that have been cleared, and improving instream flows within the tributaries would improve stream habitat within the Property.

A number of vegetation communities exhibit dense overstory growth with low diversity in the herbaceous understory. Measures that could improve stand conditions include the following: (1) forest-thinning projects aimed at mimicking natural fire occurrence, (2) small scale-controlled burns, (3) revegetation projects targeted at establishing more uneven-aged forest conditions and increasing herbaceous understory diversity and graminoid cover.

The evidence of large elk herds relying on the Property as refuge, complied with undermanaged cattle grazing, has contributed to an overall decline in aspen forest community regeneration within the Property. This concentration has also contributed to significant impacts to sensitive habitat such as spring areas and riparian zones. It is recommended that the County work closely with state wildlife officials to understand herd movements, using collar data and aerial tracking, to gain valuable evidence that can inform the Properties big-game carrying capacity and guide future land-management decisions. The UDWR's Utah Elk Management Plan (UDWR 2022) recommends the following management strategies for areas with high-intensity elk activity:

- Encourage innovative ideas from regional biologists to manage towards population objectives.
- Monitor all elk populations by helicopter survey on a 3-year rotational basis to evaluate herd size, calf production, herd composition, and habitat use, as conditions and budgets allow.
- Evaluate herd size and population trends on an annual basis.
- Implement research studies where needed to close information and data gaps.

- Monitor range condition, utilization, and trends annually as human power and budget allow.

The findings from the 910 Cattle Ranch Ecological Baseline Assessment reveal that the Property boasts a rich array of habitat types, essential for supporting diverse wildlife species. Surrounded by privately owned land next to the heavily developed communities of the Wasatch Front, the Property's unique and relatively undisturbed habitats hold significant conservation value. This area is crucial for maintaining wildlife health and offers long-term opportunities for public education, sustainable recreation, community engagement, and scientific research.

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APPENDIX A. HISTORICAL AND ARCHAEOLOGY REPORT

Progress Report for the 910 Ranch Cultural Resource Inventory, Summit County, Utah

Prepared for
Bio-West
1063 West 1400 North
Logan, Utah 84321-2291

Submitted by
Sari B. Dersam
Kenneth P. Cannon

CHC Technical Report Number UT-24-04
UT SHPO Report number: U24KP0694
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PROGRESS REPORT FOR THE 910 RANCH CULTURAL RESOURCE INVENTORY, SUMMIT COUNTY, UTAH

Submitted by

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Cannon Heritage Consultants Technical Report Number UT-24-004
UT SHPO Report number: U24KP0694
Principal Investigator Permit No. 239

December 2024

ABSTRACT

Summit County recently purchased 910 Ranch and seeks to understand how to manage its natural and cultural resources. To this end, Summit County contracted Bio-West, who subcontracted Cannon Heritage Consultants (CHC) to perform a literature search and a GIS model of archaeological resources. Additionally, Summit County received a grant from UT SHPO to conduct a Section 110 archaeological survey of the 910 Ranch. CHC reports the (2024) preliminary results from two archaeological survey sessions.

Future management practices at the 910 Ranch will include improving forest stands, implementing fuel breaks, removing maple understory, and restoring streams.

This report discusses the results of the fieldwork performed from 23-30 September 2024, led by Sari Dersam, with Kenneth P. Cannon serving as Principal Investigator with archaeological field members Rob Godard and Emma Raguskus. The second session, led by Scott Dersam, lasted from 28 October through 1 November 2024. In the second session, CHC designated 1546.4 acres as surveyed or "slope exclusion." The survey acreage is thus approximately 1,870 acres.

In total, CHC surveyed 258.6 acres of high-probability (areas ranked 4-5 on the probability model. A remaining 501.2 acres of high probability is left to survey. No sites or isolates were located during the second session. CHC recorded ten sites and fourteen isolates during the initial session.

Sites should be treated as eligible for the NRHP until NR status is assessed.

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Chapter 1
Project Introduction

Introduction

Summit County recently purchased 910 Ranch and seeks to understand better its natural and cultural resources for informed land management (Figure 1). Future management practices at the 910 Ranch will include forest stand improvement (2607 acres), fuel breaks (442 acres), maple understory removal (160 acres), monitoring (74 acres), and stream restoration (123 acres). Some of these management practices overlap; thus, 2476 acres will receive some management practice (Figure 2). These activities do not take place on federal land however, Summit County received a grant from UT SHPO to conduct a Section 110 archaeological survey on the 910 Ranch.

Session 1 fieldwork took place from 23-30 September 2024, led by Sari Dersam, with Kenneth P. Cannon serving as Principal Investigator, along with archaeologists Rob Godard and Emma Raguskus. CHC surveyed 327.8 acres and recorded 10 sites and 14 isolates.

CHC conducted the second session of the 910 cultural resources survey from 28 October through 1 November 2024. In the second session, CHC designated 1546.4 acres as surveyed or "slope exclusion." The survey acreage is thus approximately 1,870 acres.

CHC surveyed 258.6 acres of high probability (areas ranked 4-5 on the probability model [Figure 3]). A remaining 501.2 acres of high probability is left to survey (Figure 4). No sites or isolates were located during the second session.

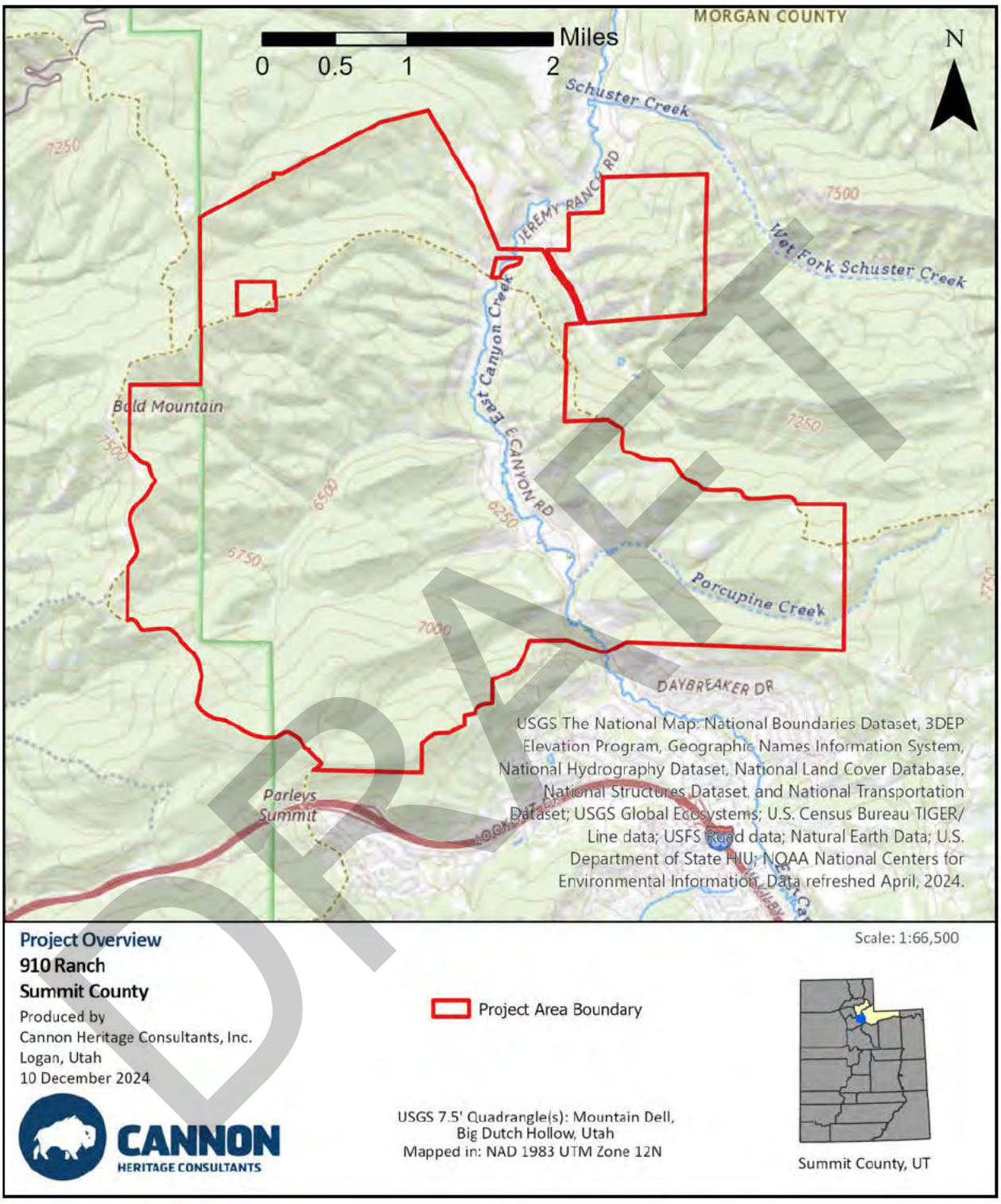

Figure 1. Summit County 910 Ranch Project Area Overview.

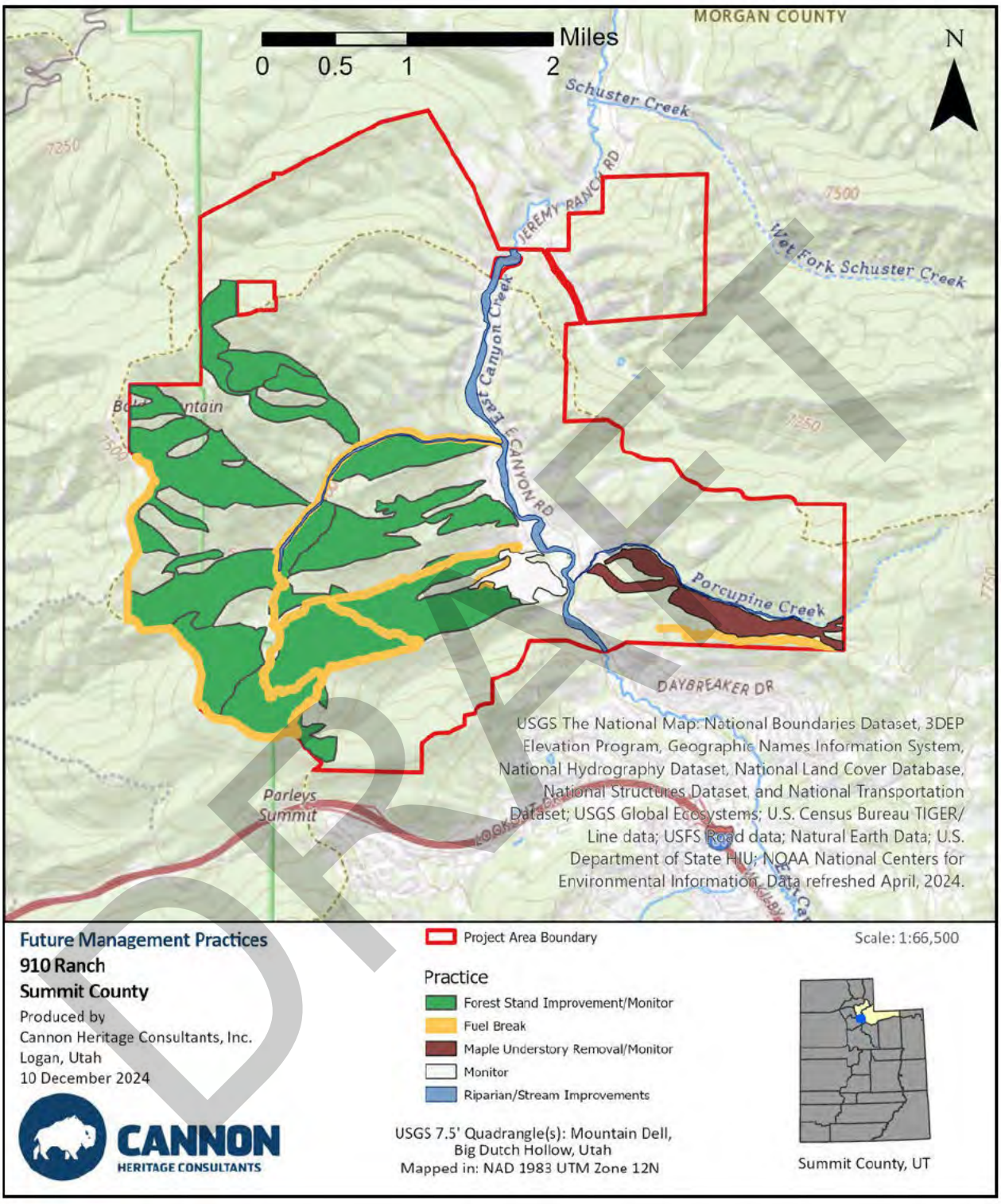

Figure 2. Future Management Practices at the 910 Ranch.

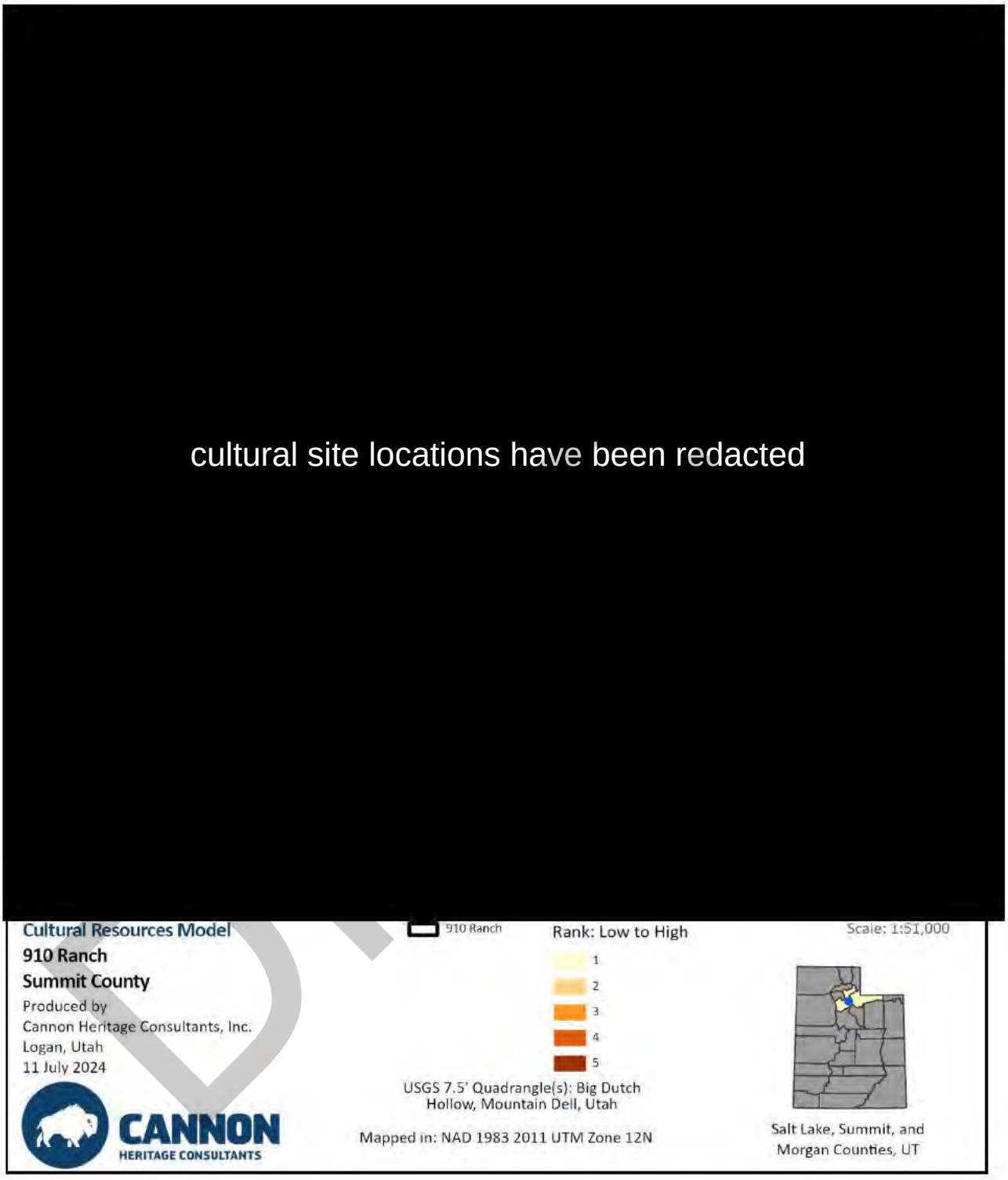

Figure 3. Map of sensitivity model showing the potential for cultural resources from low- to high-ranked locations.

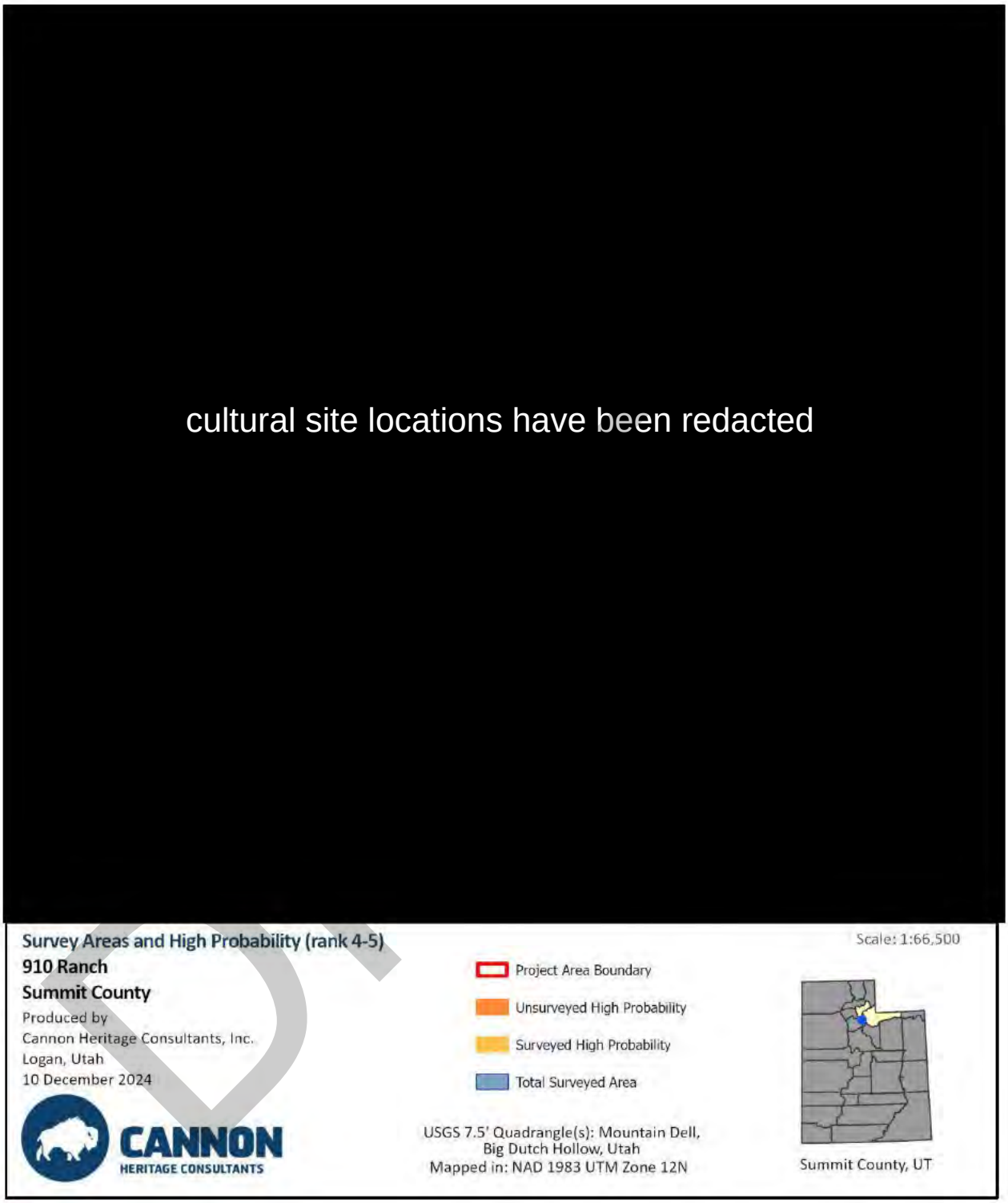

Figure 4. Map of surveyed area in relation to high-ranked (4-5) locations.

Chapter 2
Environmental Setting

The project area consists of ~8840 acres situated in rugged territory among the Wasatch Mountains. It rests to the north of the present-day Jeremy Ranch Golf Club and housing development and south of Little Emigration Canyon (Figure 1). East Canyon Creek bisects the project area, flowing in from the north and out of its southeastern edge. The project area is on the Big Dutch Hollow and Mountain Dell, Utah, USGS 7.5' quadrangles.

The national landcover dataset classifies the present-day landcover as primarily deciduous forest (65%), coniferous forest (21%), and Shrub/Scrub (13%). The remaining 1% is split between developed areas, pasture, woody wetlands, and emergent herbaceous wetlands (NLCD 2021). The minimum elevation within the project area is approximately 6060 ft (1847m), with maximum elevation around 7867 ft (2398m).

Table 1. Legal locations within the project area (Salt Lake Meridian).

Township	Range	Section(s)
T. 1 N	R. 3 E	13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 21, 23, 33, 34, 35, 36
T. 1S	R. 3 E	1, 2, 3, 4, 5, 9

Geology

The project area intersects with several geologic formations; the primary formations include the conglomerate-dominant Wasatch Formation, a lower member of the Frontier Formation (Upper Cretaceous), the conglomerate facies of the Frontier Formation, the Preuss Sandstone Formation, and the Kelvin Formation. Additionally, portions of the southwest and northwestern edges overlap with the Lahar, breccia, and tuff of the Keetley Volcanics. The river bottom near East Canyon Creek is made up of Holocene and Pleistocene Terrace gravels, and multiple drainages are mapped to show primarily alluvium. Multiple rock types are found throughout the project area, such as marine shale, sandstone, conglomeratic sandstone, sedimentary conglomerates, silty shale, siltstone, limestone, claystone, conglomerate with volcanic clasts, and tuff (UGS 2024).

Climate Summary

The Western Regional Climate Center maintains data from weather stations throughout the western United States. The nearest active weather stations to the project location are the Snyderville station (No. 427924) and Mountain Dell station (425892). Additionally, the East Canyon Station (422294) took data up until 1971, but its data are limited. Data from these stations are summarized in Table 4. The local climate is humid, with warm, dry summers and cold, moist winters. Precipitation remains fairly consistent across the seasons, although the winter and spring receive slightly more than the summer and fall seasons.

Table 2. List of comparative weather station data collected near the project area (WRCC 2023).

Weather Station	Years	Jan. Mean Max/Min Daily Temp. (°F)	July Mean Max/Min Daily Temp. (°F)	Precip. (Mean in/yr)	Snowfall (in/yr)
Snyderville, UT (427942)	1991-2024	33.3/8.0	78.9/41.4	21.45	147.2
East Canyon, UT (422294)	1952-1971	-	-	19.27	98.1

Weather Station	Years	Jan. Mean Max/Min Daily Temp. (°F)	July Mean Max/Min Daily Temp. (°F)	Precip. (Mean in/yr)	Snowfall (in/yr)
Mountain Dell Dam, UT (425892)	1920-2024	37.9/14.4	87.8/52.5	23.85	94.3

Plant and Wildlife Community

Modern Euroamerican activities have affected native flora and fauna through grazing, logging, and other activities. The vegetation consists of sagebrush species including big sagebrush (*Artemisia tridentata*), bluebunch wheatgrass (*Pseudoroegneria spicata*), slender wheatgrass (*Eymus trachycaulus*), prairie junegrass (*Koeleria macrantha*), nodding bromegrass (*Bromus anomalus*), buckwheat (*Fagopyrum esculentum*), fescue (*Festuca thruberi*), basin wildrye (*Leymus cinereus*), needlegrass (*Achnatherum sp.*), elderberry (*Sambucus glauca*), service berry (*Amelancheir utahensis*), bitterbrush (*Purshia tridentata*), aspen (*Populus tremuloides*), cottonwood (*Populus sp.*), willows (*Salix sp.*), river birch (*Betula nigra*), white alder (*Alnus rhombifolia*), native hawthorne (*Crataegus douglasii*), Gambel oak (*Quercus gambelii*), Douglas fir (*Pseudotsuga mensiesii*), subalpine fir (*Abies lasiocarpa*), Engelmann spruce (*Picea engelmannii*), juniper (*Juniperus osteosperma*), white fir (*Abies concolor*), snowberry (*Symphoricarpos albus*), chokecherry (*Prunus virginiana*), ninebark (*Physocarpus opulifolius*), mountain bromegrass (*Bromus marginatus*), blue wildrye (*Elymus glaucus*), peavine *(Lathyrus pauciflorus*), horsemint (*Agastache urticifolia*), mulesear dock (*Wyethia amplexicaulis*), oniongrass (*Melica bulbosa)*, balsamroot (*Balsamorhiza sagittata*), yarrow (*Achillea millefolium*), and cinquefoil (*Potentilla angellieae*).

Typical mammal species found in Utah include mule deer (*Odocoileus hemionus*), mountain lion (*Puma concolor*), ground squirrels/chipmunks (*Citellus* spp., and *Eutamias* spp.), lagomorphs (*Lepus* spp., *Sylvilagus* spp., and *Brachylagus* spp.), rats/mice (*Dipodomys* spp., *Peromyscus* spp., and *Perognathus* spp.), voles (*Microtis* spp.), coyote (*Canis latrans*), foxes (*Vulpes* spp.), badger (*Taxidea taxus*), and skunk (*Mephitis mephitis*). Common bird species in the area include common raven (*Corvus corax*), black-billed magpie (*Pica pica*), western meadowlark (*Sturnella neglecta*), sparrows (*Chondestes* spp., and *Spizella* spp.), warbler (*Dendroica* spp., and *Vernova* spp.), hawks (*Buteo* spp.), falcons (*Falco* spp.) and eagles (*Aquila chrysaetos* and *Haliaeetus leucocephalus*).

Chapter 3
Records Search and Background Research

Records Search

CHC completed a records search (Utah Antiquities Project No. U24KP0694) via UT SHPO's Sego and UDAM databases and found no previously recorded resources in the project area. Three surveys intersect with the project area. Additionally, CHC could not locate GLO survey maps for this region.

Table 3. Previous surveys in the project area.

Project No.	Year	Project Title	Principal Investigator	Survey Acres	Sites
U02EP0257	2002	Cultural resource assessment for two Cingular Cellular facilities in Summit County, Utah	Scott Billat	0.06	-
U07ST1132	2007	Programatic [sic] Assessment for East Canyon Creek	D Heersink, E. Root-Garey	907.7	42SM157, 42SM268
U08BE1033	2008	A CRI for the proposed East Canyon Reservoir pipleline project, Morgan and Summit Counties, Utah	Brian Joseph	87.4	-

Paleoindian/Paleoarchaic Period (12,500 to 8000 BP)

For the last 20 years, Great Basin archaeologists have been shifting away from the term Paleoindian in reference to transitional Pleistocene-Holocene foragers to the term Paleoarchaic. While the archaeological community is not in total agreement on the use of the term (e.g., Goebel et al., 2007), ongoing collaborative research employing the term Paleoarchaic and characterizing associated lithic traditions are becoming more commonplace (e.g., Beck and Jones 1997; Elston 1982; Goebel et al., 2011). Early overviews of the Paleoarchaic were hampered by the lack of investigated subsurface archaeological components, with most evidence derived from surface contexts (e.g., Aikens 1978; Hull and Avery 1980; Madsen 1982). The sparse subsurface archaeological database of the Paleoarchaic led to an early belief that population densities and occupations had been relatively limited (e.g., Copeland and Fike 1988). However, recent work on the Dugway Proving Grounds and elsewhere shows that occupation during the Pleistocene-Holocene transition may have been common (Schmitt and Madsen 2005; Rachel Quist, personal communication, 2012) and probably widespread (DeGraffenried et al., 2012).

In the Great Basin, the Western Stemmed Tradition (WST) represents the oldest non-fluted lithic technology and has long been considered a hallmark of the Paleoarchaic. Recently, discussions have focused on the relationship between fluted points (i.e., Clovis and Folsom) and the WST, with some archaeologists suggesting they should be considered contemporaneous (e.g., Jones and Beck 1999) or possibly even earlier than Clovis, although not widely accepted by the archaeological community (Beck and Jones 2010; Erlandson et al., 2011). Several Great Basin sites (e.g., Smith Creek Cave [Bryan 1979], Cooper's Ferry [Davis and Schweger 2004], and Bonneville Estates Rockshelter [Goebel 2007]) have produced WST points in association with Clovis-era radiocarbon dates. Excavations at Paisley Cave recovered human coprolites in association with WST assemblages that radiocarbon date between about 11,070 and 11,340 years BP, providing compelling evidence that WST overlap or even precede Clovis

(Jenkins et al., 2012: 224). However, reanalysis of the coprolites has called into question their human origin (Sistiaga et al., 2014)

Sites around the region (Hogup, Smith Creek, and Deer Creek Caves) prove that milling stones, hand stones, bifacial knives, and gravers were an essential part of the material culture and the WST projectile point. Although earlier debates (cf., Jones and Beck 1999; Simms 1988) have focused on whether these groups were fully mobile big game hunters or semi-sedentary marsh-dwellers, continued research indicates that foragers more likely focused occupations around exploiting well-watered sites. To quote Jones and Beck (1999:89-94), "the evidence … suggest that stemmed point folk were generalized foragers, using aquatic resources like fish, … mollusks and waterfowl, … small terrestrial mammals, … [with] reliance on some seed-producing plants." This diverse range of exploited resources is evidenced further by recent protein residue analysis work on fluted points and other lithic tools collected on Dugway Proving Grounds (DeGraffenried et al., 2012).

Archaic Period (8000 to 2000 BP)

Our understanding of Archaic period occupations is primarily defined by stratified deposits in caves and rockshelters (Aikens and Madsen 1986). Adaptive strategies present similarities to the Paleoarchaic, with some shifts in technology. Typical projectile point styles include Pinto Series bridging the Paleoarchaic into the Early Archaic, large corner- and side-notched projectile points emerge in the early Archaic and continued for much of the Archaic period. Information on projectile point typology and dating can be found in Holmer 1978, 1986, and in Thomas 1981. Expanded use of resources is noted, as well as the development of new hunting techniques (e.g., rabbit drives) technologies (e.g., plant fiber nets), and pinyon pine nut processing (Aikens and Madsen 1986; Madsen and Rhode 1990).

During the Archaic, the region experienced increased episodes of warming and aridity (7.5 ka). Regional dune building occurred during this period as many lakes and marshes on the valley floors dried up. Moisture-adapted species that previously lived along valley floors survived in smaller, more isolated habitats in nearby mountain settings (Grayson 2000, 2006, 2011). Humans were also affected by these changing environmental conditions. In a recent paper by Louderback and colleagues (2010) using radiocarbon ages as a proxy for population trends found evidence of substantial drops in human population densities during this period.

Moister conditions returned between about 4 and 2 ka moister conditions returned with the possible reestablishment of marshes and their abundant resources (Carter and Young 2002). Projectile point types manufactured during this time include Elko Series and Gypsum styles (Thomas 1981). Bettinger (1999) argues for slight technological, subsistence, and settlement intensification increases in these later periods (e.g., Fremont and Late Prehistoric). During the latter part of the Archaic we see expanded range use and increased population densities (Louderback et al., 2010).

Fremont (1500 to 650 BP)

What has become known as the Fremont culture area is geographically centered on the state of Utah, excluding the southcentral and southeast portions of the state adjacent to the San Juan River and the Colorado River below its confluence with the Fremont River? The area also includes portions of the adjacent states of Colorado, Wyoming, Idaho, and Nevada. The term "Fremont" was first used to describe patterns in prehistoric material culture in the area by Morss (1931). One-rod-and-bundle basketry, the "Fremont" hock-style moccasin, distinctive trapezoidal anthropomorphs depicted in rock art and clay figurines, and distinctive gray ware pottery are the artifact classes that constitute this pattern. A trough metate with a distinctive shelf or platform at one end, known as the "Utah Style" metate, also commonly occurs on this attribute list. Relatively early in the history of archaeological research in the area, researchers noted differences in the overarching prehistoric material culture pattern between the

western Great Basin and eastern Colorado Plateau portions of the area. The western Great Basin portion was defined as the "Sevier Fremont" and the eastern Colorado Plateau portion retained the "Fremont" designation (Jennings et al., 1956).

Within the western "Sevier Fremont," a portion of the Fremont area, Marwitt (1970; see also Ambler 1966) defined three regional variants. From north to south, they are Great Salt Lake, Sevier, and Parowan Fremont (Figure 15). Marwitt defined the regional variants based on differences in domestic architecture, ceramics, flaked stone, groundstone, and other artifact and ecofact classes. Site 42SL627 is located south of the Great Salt Lake within the area defined by Marwitt's as the Great Salt Lake Fremont Variant area near the border with the Sevier Fremont Variant.

To a lesser degree, flaked, ground stone, and ceramics are artifact classes that can demonstrate a degree of affiliation with either the Sevier or Great Salt Lake regional variants (Marwitt 1970). Sevier Gray is the dominant plain gray ware type in the Sevier area in contrast to the prevalence of Great Salt Lake Gray to the north in the Great Salt Lake area, although Great Salt Lake Gray also occurs at Sevier area sites (Marwitt 1970). Named projectile points that first appeared during the Archaic period, such as Elko Corner-notched, Rose Spring Corner-notched, and East Gate Expanding Stem, occur within Fremont levels within Hogup Cave in the Great Salt Lake area by Marwitt (1970). Elsewhere in the Great Salt Lake area, Marwitt (1970) notes the presence of Cottonwood Triangular, Desert Side-notched, and Rose Springs Side-notched types. This contrasts with the Sevier area, where Marwitt (1970) notes no diagnostic projectile point types. From the perspective of groundstone, etched slate tablets that are rare elsewhere in the Fremont area are noted as occurring in the Great Salt Lake variant area, while in the Sevier variant zone, "Utah Style" metates, if present, are noted as being particularly well made (Marwitt 1970). However, despite some relatively clear patterning in prehistoric material culture, the geographical boundary between the Great Salt Lake and Sevier Fremont subvariants is not clear.

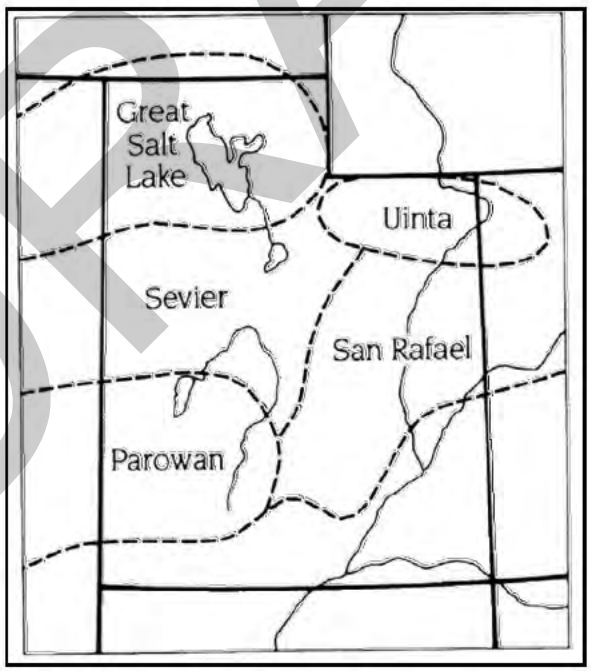

Figure 5. Marwitt's (1970) sub-regional Fremont variants (from Madsen 2002).

Late Prehistoric Period (post-700 BP)

Evidence of Fremont adaptations begins to disappear from the Great Basin and Colorado Plateau somewhere between 700 and 650 BP. The post-Fremont archaeological record reflects a return to migratory hunter-gatherer adaptive strategy. Reasons for the abandonment of Fremont cultural attributes range from population replacement by Numic-speaking Western Shoshone and Southern Paiute (e.g., Marwitt 1986) to an in situ shift away from a horticulturalist economy in response to increasing warmth and aridity of the Medieval Warm period (Simms 2008). Whether the shift is cultural due to the influx of new peoples or a change in scale is still debatable (see discussions in Madsen and Metcalf 2000; Madsen and Rhode 1994).

Increased diet breadth away from horticulture and a decrease in intensification illustrated by a reduction in storage features at residential sites provide signs of this change. The precontact material culture during this period includes the use of Late Archaic dart forms with the introduction of smaller arrow points, such as the Desert Side-Notched and Cottonwood Triangular styles. Minimally fired, undecorated brown ware ceramics were also introduced during this period. There is also an increase in the diversity of seed-gathering and processing implements, which previously represented the hallmark of the Archaic.

Traditional Native American Land-Use

Little firsthand ethnographic or ethnohistoric information is available for the native peoples living in Utah prior to Euroamerican settlement in 1847. Ethnographic perceptions of the lives of prehistoric native groups in the Eastern Great Basin are heavily influenced by Steward's (1938) monograph of the Western Shoshone. His work focuses on aboriginal groups living in Nevada but has been broadly applied to the entire Great Basin. Overall, Steward (1938) depicts Great Basin natives living in an ecologically hostile environment. The scarcity and variability of resources in the Great Basin required and conditioned human groups to be highly mobile and dependent on a broad range of subsistence resources collected on a scheduled seasonal basis. Scarcity and mobility enforced by environmental conditions were reflected in 'simple' social structures and technological adaptations. The environment's carrying capacity placed constraints on the population size of generalized hunter-gatherers and hindered the formation of complex, well-defined political structures. The conception of Great Basin peoples as extremely generalized hunter-gatherers living in small groups with a simple and limited material culture is augmented by a variety of historical accounts, which describe a barren environment and native peoples living in poverty, subsisting on grass seeds and insects.

Janetski (1991) presents an opposing view of Great Basin peoples living near Utah Lake. He identifies the group in the Utah Valley and around Utah Lake as the Timpangot, a division of the Western Ute. As with most names extracted from historical records, this name is one of many alternatives in spelling, pronunciation, and origin (Steward 1938). Most names referring to the Utah Valley group translate roughly into 'water people' or 'fish-eater,' highlighting the importance of wetland resources. The Timpangots relied on a seasonal cycle of changing resource availability and conditions, strongly tied to wetland and lacustrine environs. Fish and waterfowl were of primary importance, although both big and small game were seasonally important diet components. A broad variety of plants were also consumed, including cattail (*Typha latifolia*), bulrush (*Cyperaceae* sp.), sunflower (*Helianthus* sp.), and pinyon (*Pinus edulis*) seeds/nuts.

The Timpangot possessed a diverse material cultural assemblage, including many technologies specialized for fishing. These technologies included: fish arrows, composite fishing spears, weirs, dip-nets, cordage nets, and basketry traps. Food was primarily preserved by drying. Food caches were made in lined pits, or by placing food in containers and then placing containers into unlined pits. Caches were made both near camp locations and at resource extraction locations. Tree and platform storage were also practiced.

Despite some disagreement among the sources consulted by Janetski (1991), the Timpangot likely maintained some property rights, with the exploitation of resources within specific areas restricted to individual persons or families. Camp organizations may reflect these politically organized groups. A camp or village chief typically headed camps. Spanish accounts of meeting the Tampangot suggest a hierarchy of chiefs, perhaps arranged by prestige or social status. Different types of chiefs (i.e., war chief, talking chief, etc.) are alluded to in historic accounts. However, the specific roles and authority of these leaders are unknown.

More locally, Sigurd occurs within the ethnographically documented territory of the Sampits Ute and Pavogogwunsin positioned south of Timpangot territory (Steward 1938). According to ethnographic sources, the Sampits Ute principally lived near Manti along the San Pitch Creek and wintered to the south along the Sevier River, whereas Pavogogwunsin occupied the upper portion of the Sevier River south of the Salina River. These groups subsisted on a variety of resources, including deer, rabbits, ducks, geese, and trapped beaver and mink (Steward 1938). Ethnographic information for both groups is limited; nonetheless, the population of Sampits Ute included at least several hundred persons, but by the 1860s, the population had been reduced to between 40 or 50 family lodges with 4 to 10 persons each (Steward 1938).

Historic Context

Spanish colonial explorers undertook the earliest Euroamerican excursions into the area. Juan Maria Antonia de Rivera led an expedition that entered present-day southeastern Utah near Moab and Monticello in 1765 (Wilde et al. 1994). Friars Dominguez and Escalante passed near the project area in 1776 to survey a route connecting Spanish settlements in the American southwest to southern California. Although the expedition was unsuccessful in establishing this route, it resulted in an increased Euroamerican presence in the region. Spanish colonial expeditions frequently entered the region to trade with native groups throughout the late 18th and early 19th centuries (Wilde et al. 1994).

By the end of the first quarter of the 19th century, regional commerce had developed to the point that the "Old Spanish Trail" was established. This trail generally connected the settlements of New Mexico with those in southern California. However, using the term "trail" may be somewhat misleading in that it was less a singular route than a series of alternative routes. One of those alternative routes is known to have traversed the Clear Creek area.

Between the 1820s and the 1840s, fur trappers and trapping expeditions were frequently in the region. The first U.S. Government-supported exploration was John C. Fremont's 1843 expedition. By 1854, the construction of a north-south trending military road connected the Salt Lake area with Los Angeles (Wilde et al. 1994).

Following the Church of Jesus Christ of Latter-Day Saints settlement around the Great Salt Lake in 1847, Euroamerican influence and settlement in the region rapidly expanded. Euroamerican colonization of the area around Richfield was underway by c. 1864. The Black Hawk War slowed Euroamerican settlement in the area during the 1860s and early 1870s (Wilde et al. 1994). However, the end of the war in 1872 allowed for a resurgence of colonization of the area.

Before the Homestead

Before the European expansion, the land was incorporated into the territories of multiple tribes, including the Goshute, Timpanogos, Eastern Shoshone, and Ute tribes. This land is embedded in the territory delineated in the Fort Bridger Treaty of 1863, in which several Shoshone groups were each granted a portion of the overall territory that stretched through portions of present-day Idaho, Wyoming, Nevada, and Utah (Native Land 2021). The tribes included the Washakie, Goshute, Pocatello, Bannock,

Northwestern, and Western Shoshone peoples (Wyoming Historical Society 2018). The tribes that likely inhabited this land the most frequently before the inception of the Jeremy Ranch were probably the Ute and Goshute, who subsisted primarily on fish, gathered roots, and small game (Wyoming Historical Society 2018).

Homesteading History of the 910 Ranch

The 910 Ranch was first acquired by Thomas E. Jeremy Jr., who owned and operated the property as a family farm, sheep ranch, and cattle ranch beginning in the 1860s. Then, it was called the "Jeremy Ranch." Thomas Jeremy and his wife, Elizbeth Petit Jeremy, raised a large family and roughly 10,000 sheep on this property. The Homestead Act of 1862 stipulated that recipients live on the land for six months of the year. The family wintered their sheep at the west end of Salt Lake City, near the Jordan River (Silver Springs Community 2024).

Thomas Jr., an immigrant from Carmarthenshire, South Wales, was an active businessman and citizen of Salt Lake City. Thomas was elected city councilman, co-founded the Cambrian Society, and founded the Jeremy Fuel & Grain Company, which sold coal, grain, hay, and salt. He was the first to build salt crystallization pools and a refinery. Using the revenue from these business enterprises, Thomas expanded his land holdings as time went on. By 1890, Thomas had purchased several surrounding parcels, and the property consisted of 22,000 acres of land that stretched to what is now Kimball's Junction. The Jeremy family and their descendants operated here until 1979 (Silver Springs Community 2024).

In 1977, 12,500 of the 22,000 acres Jeremy had acquired was sold and became a residential area and a championship golf course. The 910 Ranch consists of ~8840 acres of the original Jeremy Ranch that remained primarily undeveloped, though its use as a cattle and sheep ranch has remained active (Silver Springs Community 2024).

The final report will present a more comprehensive history of the livestock operations. Additional research with the Summit County Historical Society and other livestock records will seek to address such topics as:

- Annual livestock numbers.
- Areas that livestock were grazed including maps, as records allow.
- Grazing and livestock management practices.
    - How has this changed during the history of the ranch operations?

Historic Trails

The California National Historic Trail (NHT)—colloquially termed the Mormon Trail—brushes past the northeastern edge of the ranch, where the trail crosses East Cannon Creek and charges up into Little Emigration Canyon (Figure 4).

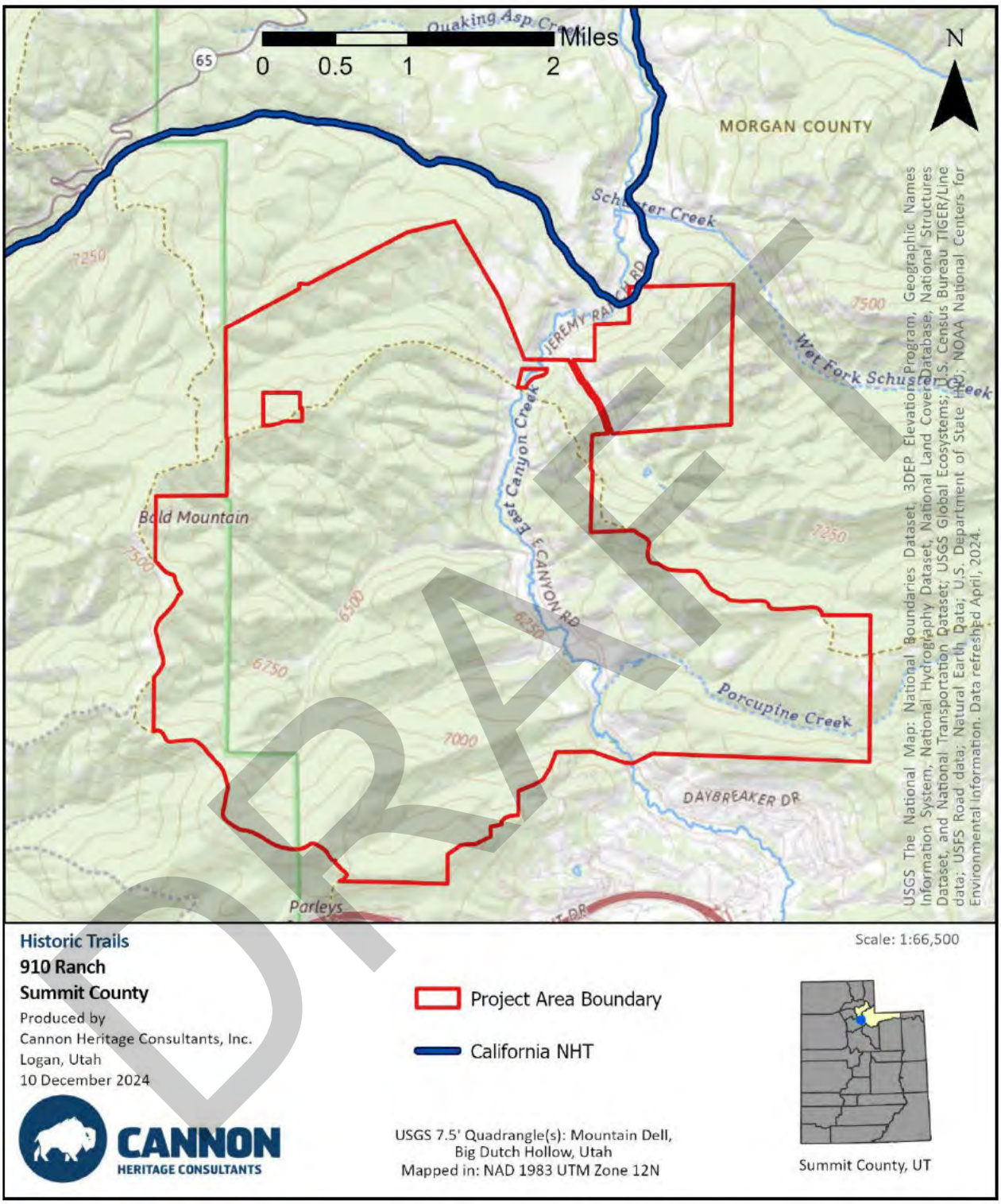

Figure 6. Overview of the California NHT and how it articulates with the project area.

Chapter 4
Methods

CHC conducted an intensive pedestrian survey of 15-m transects. Transects were oriented north-south or east-west depending on the topography. Usually, transects were aligned with landform features such as contours or ridgelines, using a combination of compass directions, the Mesa GNSS unit, and/or visual features to align transects.

CHC recorded spatial data using a Mesa 2 tablet and a Geode sub-meter GNSS receiver and took project photos with a Ricoh WG-80 digital camera (16.0 MPs) with a 5x optical zoom lens (28-140mm). A real-time photo log was maintained throughout the project.

Before fieldwork, Sari Dersam created a site sensitivity model (Figure 3). Sari accomplished this by using ArcGIS Pro (v. 3.3.1) to create the model and Program R v. 4.3.0 (R Core Team 2023) to generate specific datasets (see Table 3). The results of this model guided the selection of survey areas. High-probability areas were a focus, although areas with moderate to low probability were sampled also. The first session focused on the areas close to the river

Table 4. List of raster datasets and variables referenced by this study by 1) name, 2) whether it was used in a model, 3) the data source, and 4) the software and method used to edit the data into its final form.

Dataset Name	Used in a Model	Source	Software/ Method
Elevation (DEM)	no	USGS	-
National Land Cover Dataset	no	NLCD	-
Slope	yes	USGS (DEM)	ArcGIS; 3D Analyst
Surface Roughness	yes	USGS (DEM)	Program R; raster package, terrain function (Hijmans 2023)
Distance to Water	yes	National Hydrography Dataset	ArcGIS; Distance Accumulation

Site Recording

CHC followed Utah SHPO standards in artifact and site recording. All artifacts were point plotted using the GNSS. Diagnostic artifacts at sites were given an FS number. Site boundaries were drawn using ArcGIS Pro (v. 3.3.1), using the UT SHPO site definitions from the Archaeological Compliance Guide, which are as follows: Archaeological or historic properties must include at least 10 artifacts of a single class (e.g., debitage, ceramics, glass, cans) within a 10-meter diameter area; or at least 15 artifacts of at least two classes within a 10-meter area; or one or more archaeological features in temporal association with any number of artifacts; or two or more temporally associated archaeological features without artifacts. CHC recorded all other historic items that do not meet this definition as isolated finds (UTSHPO 2018).

Sites will be evaluated for their inclusion on the NRHP in the context of the more extensive 910 Ranch study report. A formal set of evaluation criteria for precontact Native American and Euroamerican sites will be presented in the final report along with the final NRHP recommendations. For the purposes of this report, sites are left unevaluated, though they should be considered *NRHP-eligible* until determined otherwise. Utah SHPO will concur with the recommendations once the final report is submitted.

Chapter 5
Results

Identified Cultural Resources

An intensive inventory of the project identified 10 sites and 14 isolates. The sites include four historic sites, one prehistoric lithic scatter with a feature of unknown age, four multicomponent sites, and one site of unknown age. Four isolates are prehistoric, and ten are historic. *No artifacts were collected during the field survey.*

Table 5. List of archaeological sites.

Smithsonian	Field No.	mN*	mE*	Precontact/ Historic	Description
42SM964	001	[redacted]	[redacted]	Historic	A stone cabin and associated artifact scatter
42SM965	002	[redacted]	[redacted]	Historic	A potential mining pit and associated artifacts
42SM966	003	[redacted]	[redacted]	Multicomponent	A multicomponent site with a historic artifacts and a lithic debitage scatter with an ultra-thin Paleo biface
42SM967	004	[redacted]	[redacted]	Multicomponent	A multicomponent site; lithic debitage scatter includes a potential precontact feature, a core, and a large quartzite flake with retouch; historic artifact scatter includes cans, glass, and ceramics
42SM968	005	[redacted]	[redacted]	Multicomponent	A multicomponent site; lithic debitage scatter includes a lancelolate projectile point midsection, a marginally retouched flake, and a debitage scatter with a wide diversity of materials; historic artifact scatter included cans and glass
42SM969	006	[redacted]	[redacted]	Multicomponent	A multicomponent site; lithic debitage scatter includes a white CCS projectile point base and several quartzite flakes; historic component included a potential mining pit with assoaciated cans and glass bottles
42SM970	007	[redacted]	[redacted]	Prehistoric / Unknown	A prehistoric lithic scatter that included a midsection and partial base of a white CCS projectile point
42SM971	008	[redacted]	[redacted]	Unknown	A collapsed rock wall of unknown age and origin
42SM972	009	[redacted]	[redacted]	Historic	A cluster of historic dendroglyphs
42SM973	010	[redacted]	[redacted]	Historic	A cluster of historic dendroglyphs

Table 6. List of isolated finds.

IF number	mN*	mE*	Pre./Hist.	Description
IF-01	[redacted]	[redacted]	Prehistoric	A lone quartzite flake
IF-02	[redacted]	[redacted]	Historic	A scatter of historic glass bottles
IF-03	[redacted]	[redacted]	Historic	A historic glass bottle
IF-04	[redacted]	[redacted]	Historic	A historic glass bottle base
IF-05	[redacted]	[redacted]	Prehistoric	Two lone quartzite flakes
IF-06	[redacted]	[redacted]	Historic	Complete Duraglass beer bottle
IF-07	[redacted]	[redacted]	Historic	An shoe sole with square nails
IF-08	[redacted]	[redacted]	Historic	A potentially historic liquor bottle
IF-09	[redacted]	[redacted]	Prehistoric	A large quartzite flake that broke in half (refits)
IF-10	[redacted]	[redacted]	Prehistoric	Three quartzite flakes on the same landform as site 42SM966
IF-11	[redacted]	[redacted]	Historic	A scatter of historic glass bottle fragments
IF-12	[redacted]	[redacted]	Historic	A scatter of historic glass bottle fragments
IF-13	[redacted]	[redacted]	Historic	A scatter of historic glass bottle fragments
IF-14	[redacted]	[redacted]	Historic	A scatter of historic glass bottle fragments

Model Results

CHC surveyed 258.6 acres of high probability (areas ranked 4-5 on the probability model [Figure 3]). A remaining 501.2 acres of high probability is left to survey (Figure 4). Most sites and isolates fall within the high probability area. The only sites that are not in high probability are 42SM971, 42SM972, and 42SM973— the rock wall and dendroglyph sites. The isolates that are not in high probability are IF-04, -06, and -09.

The final report will include a detailed discussion of the model's efficacy.

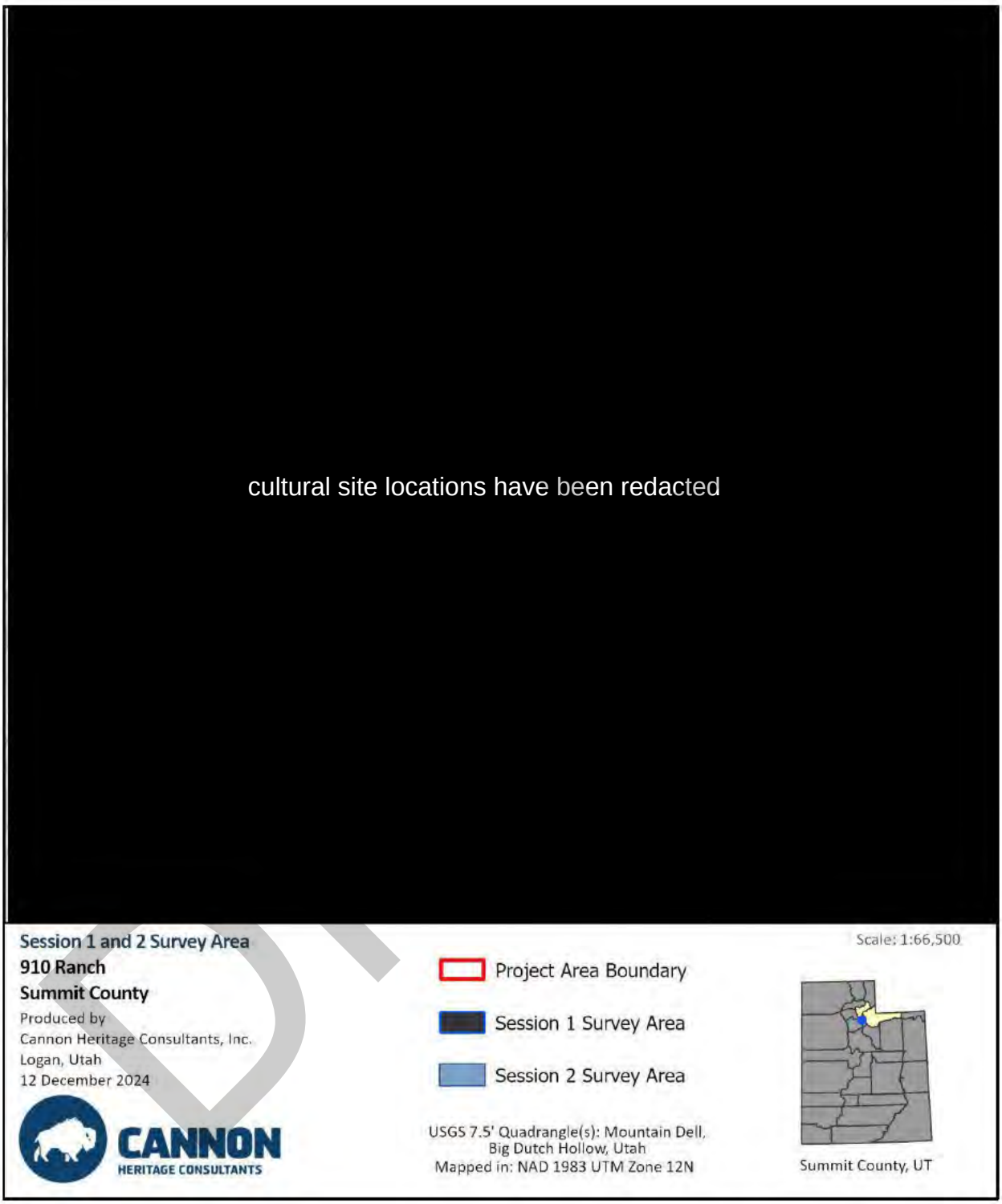

Figure 7. Map of surveyed areas within the project area after Sessions 1 and 2.

Archaeological Sites

42SM964

CHC recorded 42SM964 on 23 September. The site contains a historic rock cabin (*Figure 8* and *Figure 9*) and associated artifact scatter. The cabin is thought to be associated with early homesteading in the late 19th and early 20th century. The interior and exterior have extensive graffiti and bullet holes. The original northwest wall has collapsed and has since been reframed with wood. Surface artifacts suggested occupation from the 1920s -1940s. The site has an excellent view of much of the East Canyon Creek valley in the southern portion of the ranch property that has not been modified.

A viewshed analysis from the cabin is presented below and provides a model for assessing historic viewsheds on the ranch that Summit County may want to preserve (Figure 15). The viewshed represents what an average person (1.75 m tall) would see when standing at the cabin and was calculated using ArcGIS Pro's (version 3.4.0) "Ready to Use" Viewshed tool. The viewshed analysis can be supplemented with photos from various vantage points.

Additional subsurface/GPR investigations may provide more detailed information regarding the use of the cabin.

Ron Sladek, architectural historian, will provide a detailed report on the architectural style of the cabin, which will be presented in the final report.

Figure 8. 42SM964 historic cabin overview, NE and SE walls, facing SW (Emma Raguskus, 23 September 2024).

Figure 9. 42SM964 historic cabin overview, NW and SW walls, facing NE (Emma Raguskus, 23 September 2024).

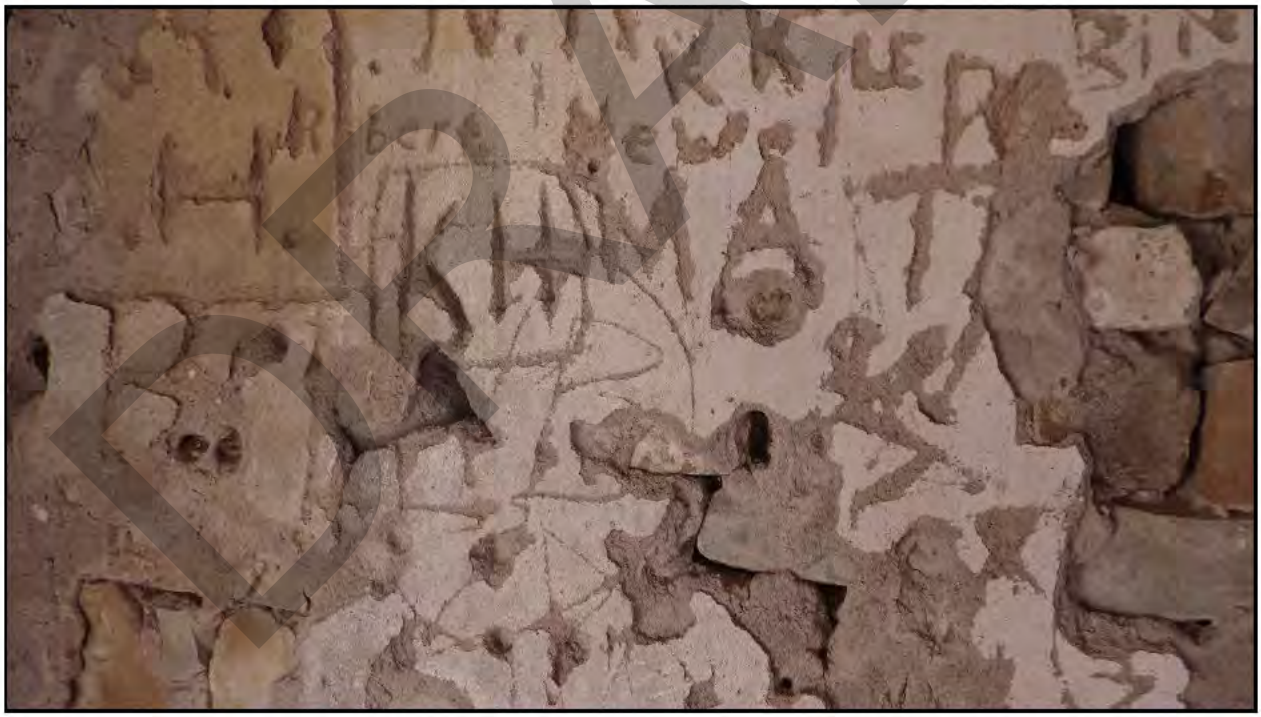

Figure 10. Graffiti on cabin interior (Emma Raguskus, 23 September 2024).

Figure 11. FS-01 milk glass lid liner (Emma Raguskus, 23 September 2024).

Figure 12. FS-02 cast iron lid (Emma Raguskus, 23 September 2024).

Figure 13. FS-04 aqua glass fragment (Emma Raguskus, 23 September 2024).

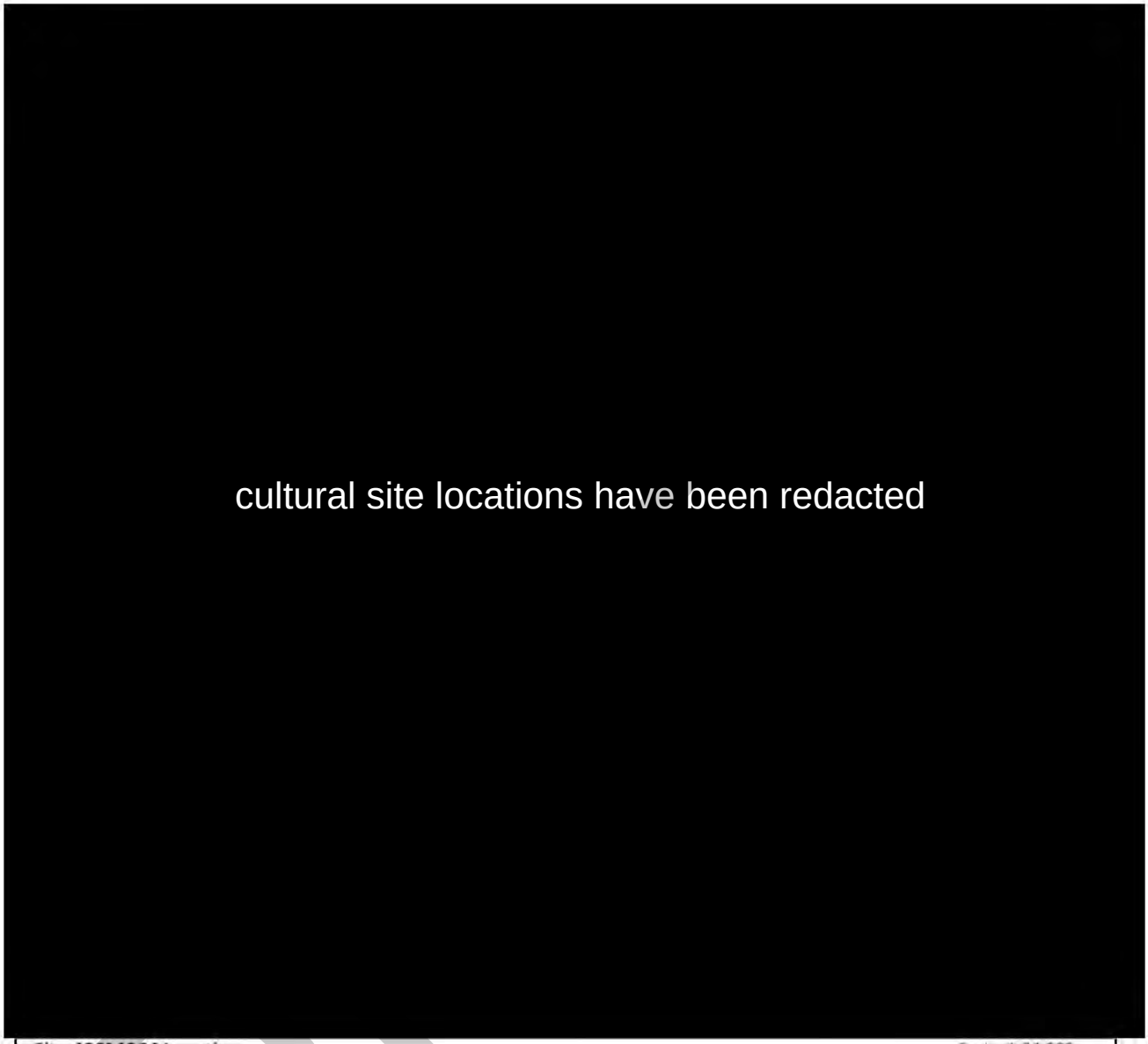

Figure 14. 42SM964 site location (S.B. Dersam).

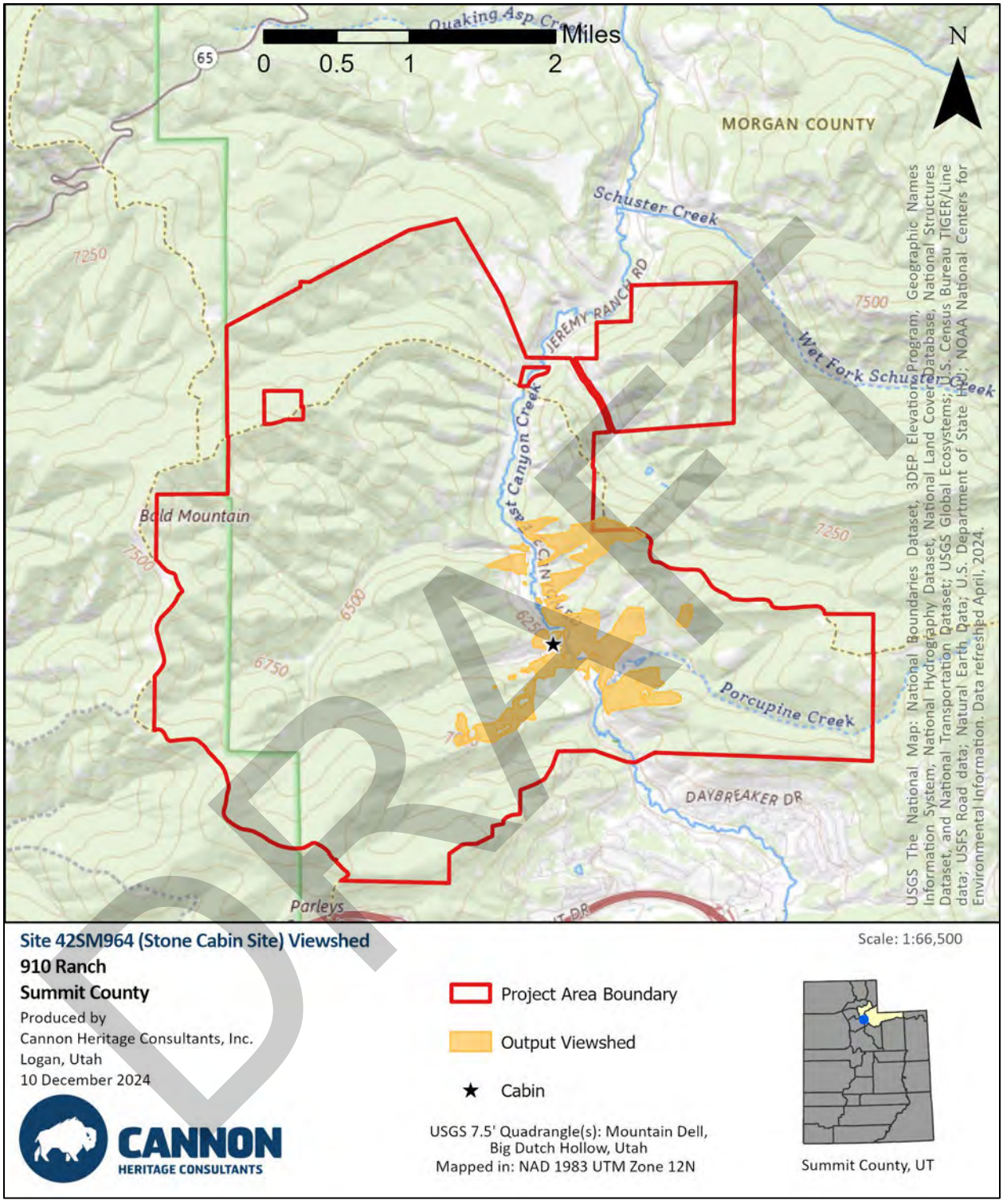

Figure 15. 42SM964 viewshed (S.B. Dersam).

42SM965

CHC recorded 42SM965 on 23 September. The site contains a historic pit feature and associated historic artifact scatter. The artifacts associated with the pit feature suggest an age range of 1920s to 1960s. Non-diagnostic artifacts included aqua glass, amethyst glass, amber/brown glass, green glass, and cobalt glass. The pit feature may be related to mining.

Figure 16. Feature-01, dug-out feature, facing west (Emma Raguskus, 23 September 2024).

Figure 17. FS-01 amethyst glass bottle neck with brandy/wine finish (Emma Raguskus, 23 September 2024).

Figure 18. FS-03 bottle neck and partial shoulders (Emma Raguskus, 23 September 2024).

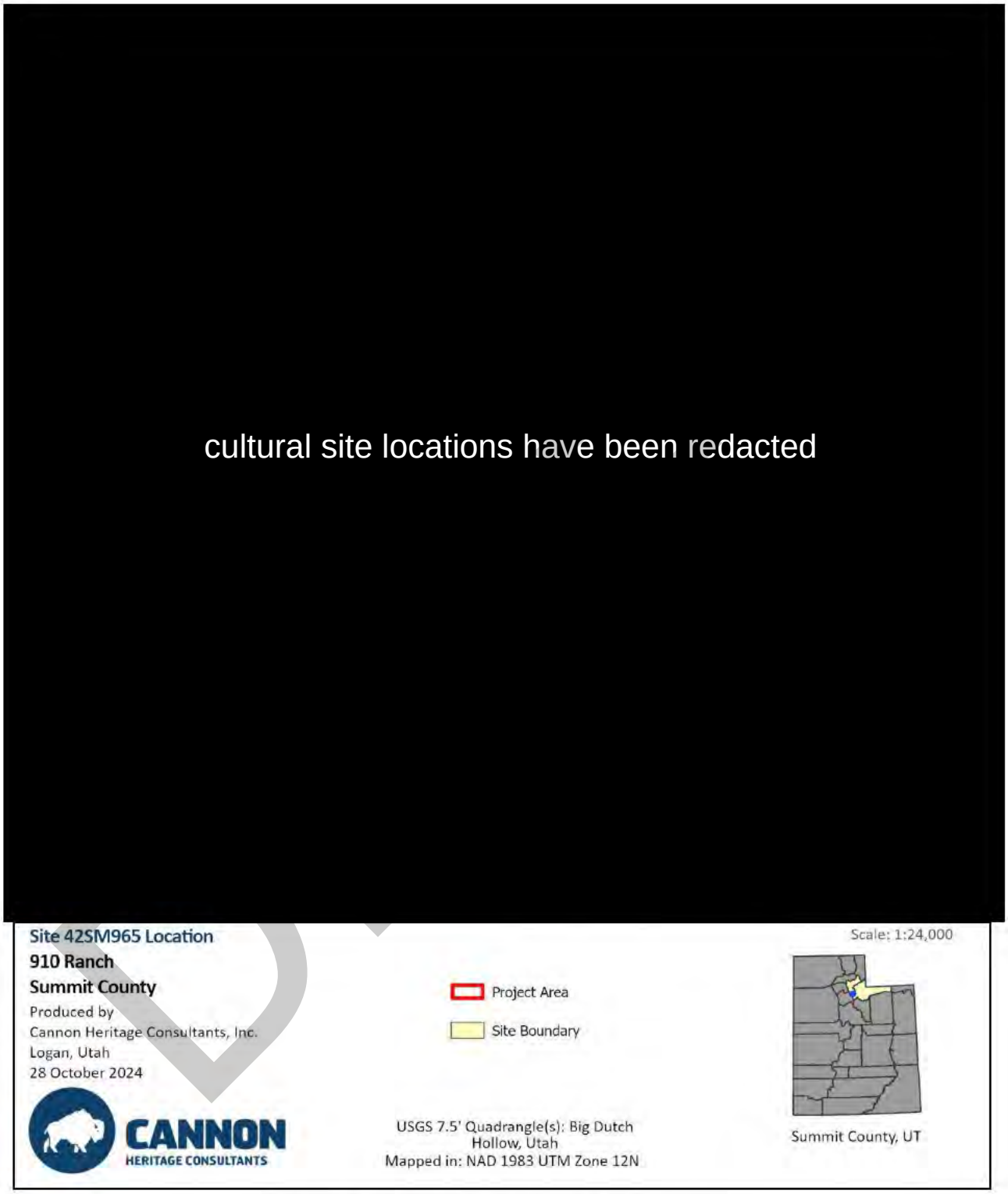

Figure 19. 42SM965 site location (S.B. Dersam).

42SM966

CHC recorded 42SM966 on 27 September. The site contains a historic artifact scatter and prehistoric lithic scatter. Historic artifacts date to 1929-1962. Prehistoric artifacts date to the Paleo period (12,500 to 8000 years BP).

The site includes a Paleo ultra-thin biface fragment made of tan CCS, white-mottled CCS biface, and CCS flakes.

Historic artifacts include glass bottle fragments, including a clear glass bottle base.

Figure 20. Site overview facing north (Emma Raguskus, 27 September 2024).

Figure 21.FS-01, a Paleo ultra-thin biface fragment (Emma Raguskus, 27 September 2024).

Figure 22. FS-01 Paleo ultra-thin biface profile (Emma Raguskus, 27 September 2024).

Figure 23. FS-02 biface fragment (Emma Raguskus, 27 September 2024).

Figure 24. FS-03 glass bottle base (Emma Raguskus, 27 September 2024).

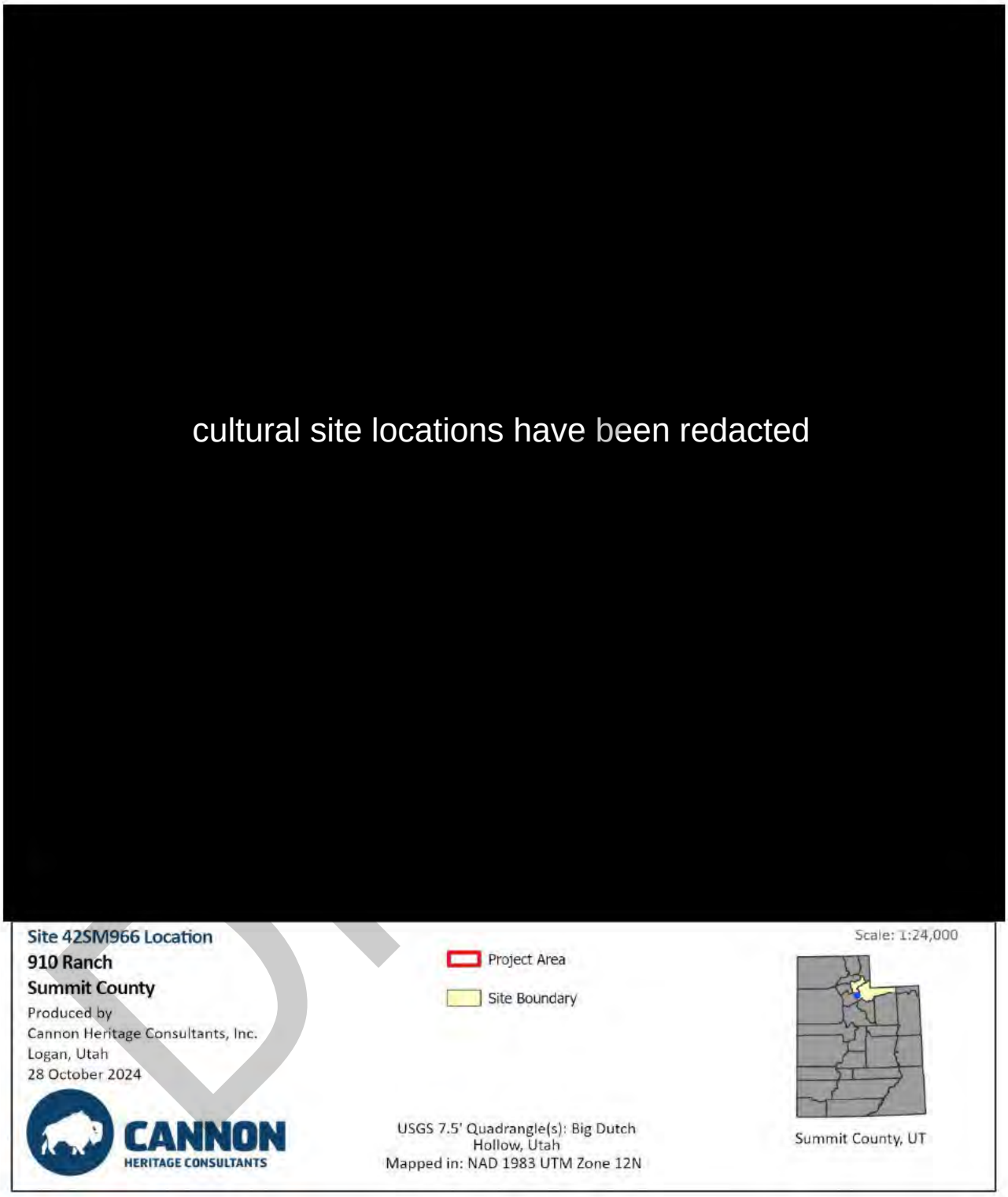

Figure 25. 42SM966 site location (S.B. Dersam).

42SM967

CHC recorded 42SM967 on 28 September. The site contains a historic artifact scatter and prehistoric lithic scatter. Due to the rarity of prehistoric sites recorded in the region and the potential for deposition, the site is recommended eligible under Criterion D.

The site consists of sanitary cans, pull tab cans, glass bottle fragments that are brown, aqua, and clear, and fragments of decorated porcelain glass. The site contains a rock feature of unknown age, although due to the depth at which rocks are buried (8-10cm), the feature is considered prehistoric. Prehistoric artifacts include a large tan quartzite flake with retouch at the distal end and a grey quartzite expended core fragment. The debitage materials included yellow chert, red quartzite, grey chert with dendritic banding, and a tan chert.

Figure 26. 42SM967 overview facing west (Emma Raguskus, 28 September 2024).

Figure 27. 42SM967 Feature-01. Potential stone feature (Emma Raguskus, 28 September 2024).

Figure 28. 42SM967 FS-01 flake tool (Emma Raguskus, 28 September 2024).

Figure 29. 42SM967 FS-02 expended core (Emma Raguskus, 28 September 2024).

Figure 30. 42SM967 FS-03 (Emma Raguskus, 28 September 2024).

Figure 31. 42SM967 site location (S.B. Dersam).

42SM968

CHC recorded 42SM968 on 28 September. The site contains a historic artifact scatter and prehistoric lithic scatter. The historic artifacts were non-diagnostic. Prehistoric artifacts are potentially late-Paleo (12,000

– 8000 BP) to Early Archaic (8000 to 6000 BP). Due to the rarity of prehistoric sites in the region and the potential for deposition, the site is recommended eligible under Criterion D.

Prehistoric artifacts include a marginally-retouched white-mottled CCS flake and a quartzite lanceolate projectile point with parallel oblique flaking. The site has diverse material types, from tan and red quartzites to red and yellow CCS with small phenocrysts, pink-mottled CCS, and white-mottled CCS.

Historic artifacts include fragments of aqua, clear, brown, milk, and green glass and sanitary cans. Prehistoric artifacts include a chalcedony flake tool and a projectile point fragment

Figure 32. 42SM968 overview facing east (Emma Raguskus, 28 September 2024).

Figure 33. 42SM968 FS-01 marginally retouched flake tool (Rob Godard, 28 September 2024).

Figure 34. 42SM968 FS-02 grey quartzite lanceolate point midsection with parallel oblique flaking (Rob Godard, 28 September 2024).

Figure 35. 42SM968 material sample (Rob Godard, 28 September 2024).

Figure 36. 42SM968 FS-03 brown glass bottle base fragment (Rob Godard, 28 September 2024).

Figure 37. 42SM968 FS-04 base fragment from Anchor Hocking Glass Corp (ca. 1938-1980) made of milk glass (Rob Godard, 28 September 2024).

Figure 38. 42SM968 FS-05 brown glass fragment with "GG" embossed (Rob Godard, 28 September 2024).

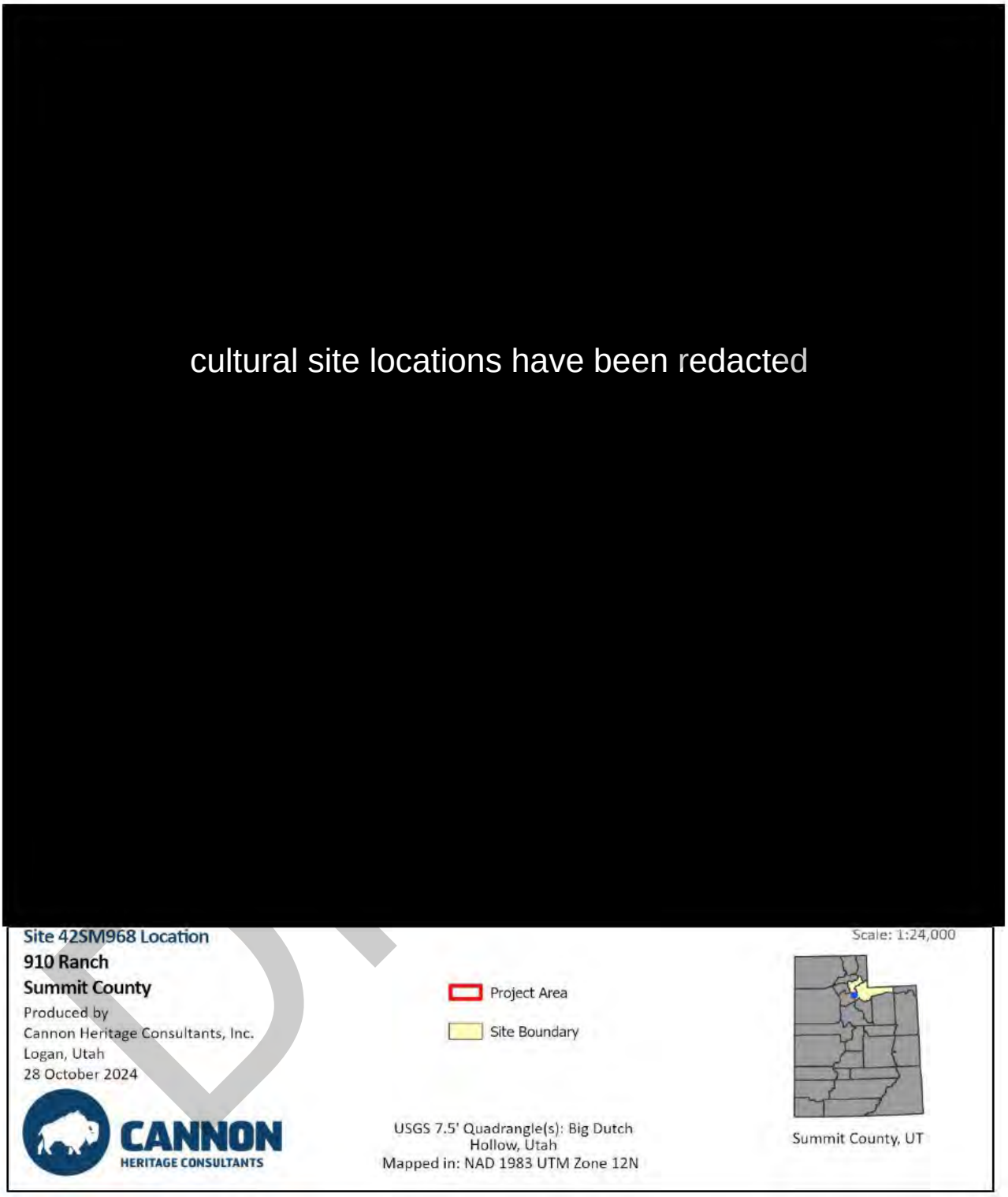

Figure 39. 42SM968 site location (S.B. Dersam).

42SM969

CHC recorded 42SM969 on 29 September. The site contains historic features, a historic artifact scatter, and prehistoric lithic scatter. The historic scatter is estimated from the 1930s to 1960s based on the

manufacture dates of the artifacts. Due to the rarity of prehistoric sites in the region and the potential for deposition, the site is recommended eligible under Criterion D.

The site has 3 features that are assumed historic in age. Feature-01 is a rock feature that may be a refuse pile from the pits, or may be a collapsed fire pit. Alternately, it could also be a prehistoric feature of unknown function. Feature-02 and -03 are dug out pits on the edge of the river terrace, which are assumed to be historic mining pits.

Historic artifacts included fragments of aqua, clear, brown, aqua, and green glass, a variety of cans such as sanitary, pull-tab, sardine, condensed milk, and paint, and fragments of floral painted ceramics. Prehistoric artifacts included a chalcedony flake tool, and a projectile point fragment

Figure 40. 42SM969 overview facing west (Rob Godard, 29 September 2024).

Figure 41. 42SM969 Feature-01, facing west. A rock feature of unknown age that may be a collapsed hearth or refuse pile from mining activity. The feature may also be older than the historic features. (Rob Godard, 29 September 2024).

Figure 42. 42SM969 Feature-02, facing northeast. A dug-out pit feature at the edge of the river terrace that measures 15 x 20 ft. (Rob Godard, 29 September 2024).

Figure 43. 42SM969 Feature-03, facing east. A dug-out pit feature at the edge of the river terrace that measures 10 x 10 ft.(Rob Godard, 29 September 2024).

Figure 44. 42SM969 FS-01. A Duraglass bottle base (ca. 1940-1964) made of brown glass (Rob Godard, 29 September 2024).

Figure 45. 42SM969 FS-02. Owens Illinois base fragment of oval bottle (ca. 1929-1960) made of clear glass (Rob Godard, 29 September 2024).

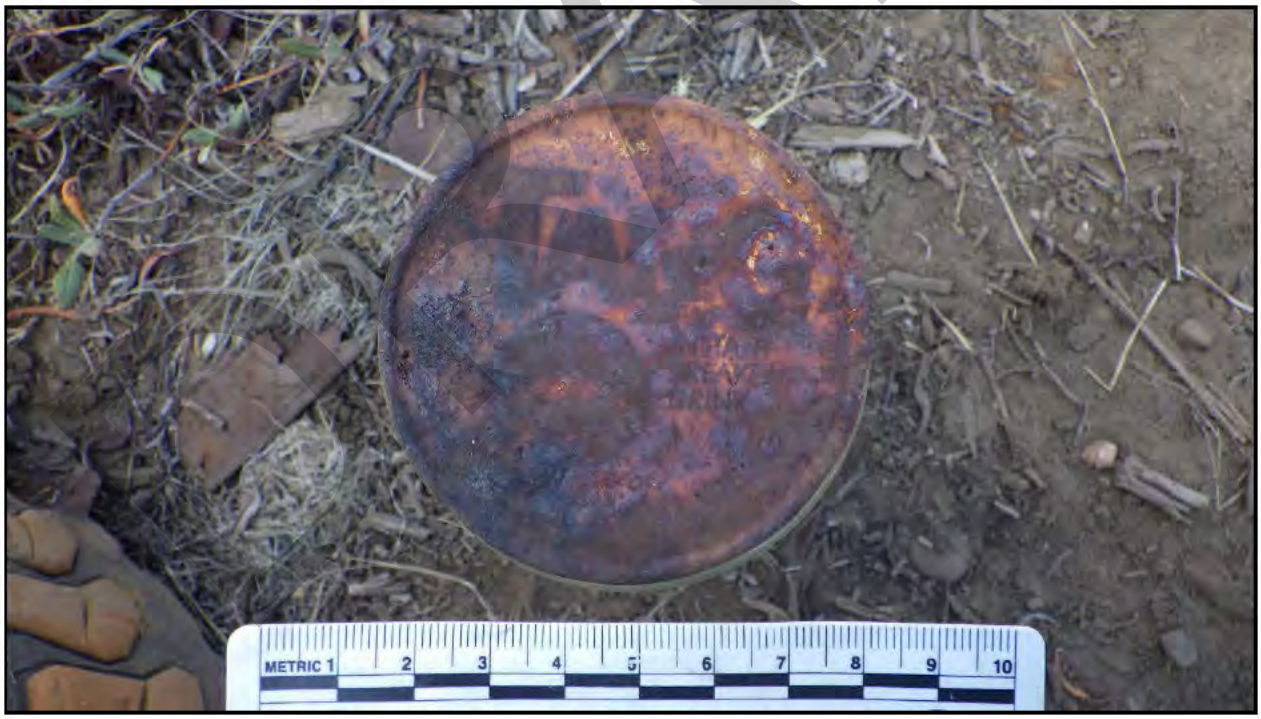

Figure 46. 42SM969 FS-07. Mason jar with lid that reads "TANG" (ca. 1933-1980). The jar is made of clear glass (Rob Godard, 29 September 2024).

Figure 47. 42SM969 FS-10. Pacific Coast Glass jar (ca. 1924-1930) made of clear glass (Rob Godard, 29 September 2024).

Figure 48. 42SM969 white CCS Archaic projectile point base, possibly Pinto or Humbolt Series. Measures 1.3 x 1.7 x 0.5 cm (Rob Godard, 29 September 2024).

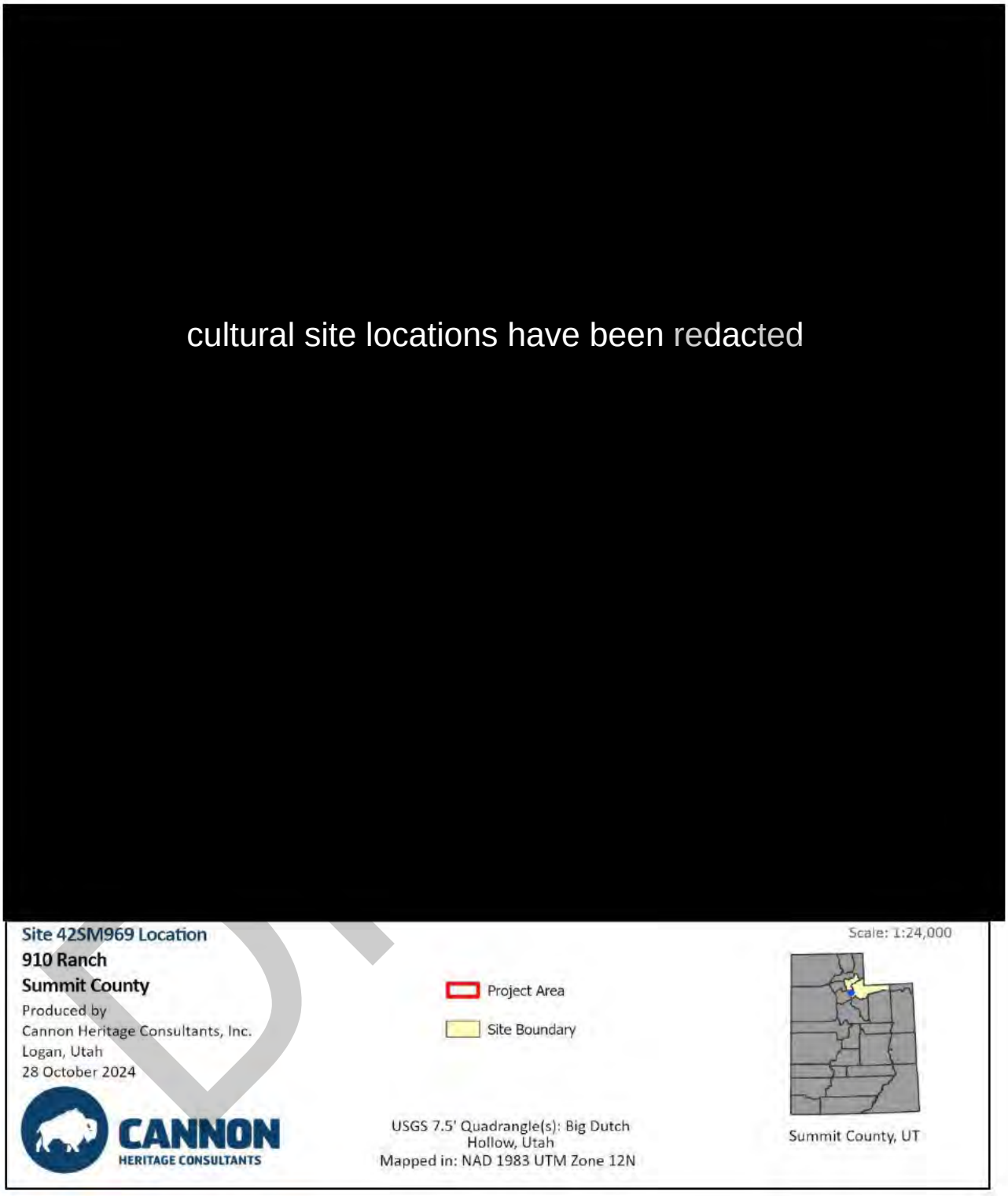

Figure 49. 42SM969 site location (S.B. Dersam).

42SM970

CHC recorded 42SM970 on 29 September. The site contains a prehistoric lithic scatter and a feature of unknown age. Due to the rarity of prehistoric sites in the region and the potential for deposition, the site is recommended eligible under Criterion D.

Materials at the site include tan quartzite and chalcedony. CHC recovered a CCS biface fragment that may be a projectile point midsection and partial base.

Additionally, the site includes a mound feature near the lithic scatter that looks like a potential modern to historic burial. Two large rocks are positioned on the west side of the mound and sagebrush is growing out the of the top/north side of the mound. Additional GPR investigations may provide some insight into the nature of this feature.

Figure 50. Overview of site 42SM970, facing south (Rob Godard, 29 September 2024).

Figure 51. 42SM970 FS-01. A medial section of a biface, possibly the "ears" of a base and midsection (Rob Godard, 29 September 2024).

Figure 52. 42SM970 flake sample (Rob Godard, 29 September 2024).

Figure 53. 42SM970 Feature 1. A (possibly modern?) feature that could be a burial (Rob Godard, 29 September 2024).

42SM971

CHC recorded 42SM971 on 29 September. The site contains a stacked rock feature of unknown age. The stacked rock feature is positioned on a very steep slope. Natural bedrock provides a backdrop to the feature, which juts out of the ridgeline in large fins. The estimated size of the feature before it collapsed is ~180 cm wide, 90 cm deep, and 1 m tall. Current dimensions are 380cm wide, 245cm wide, and 42 cm tall. The only artifact found associated with this feature is a ferrule of unknown age.

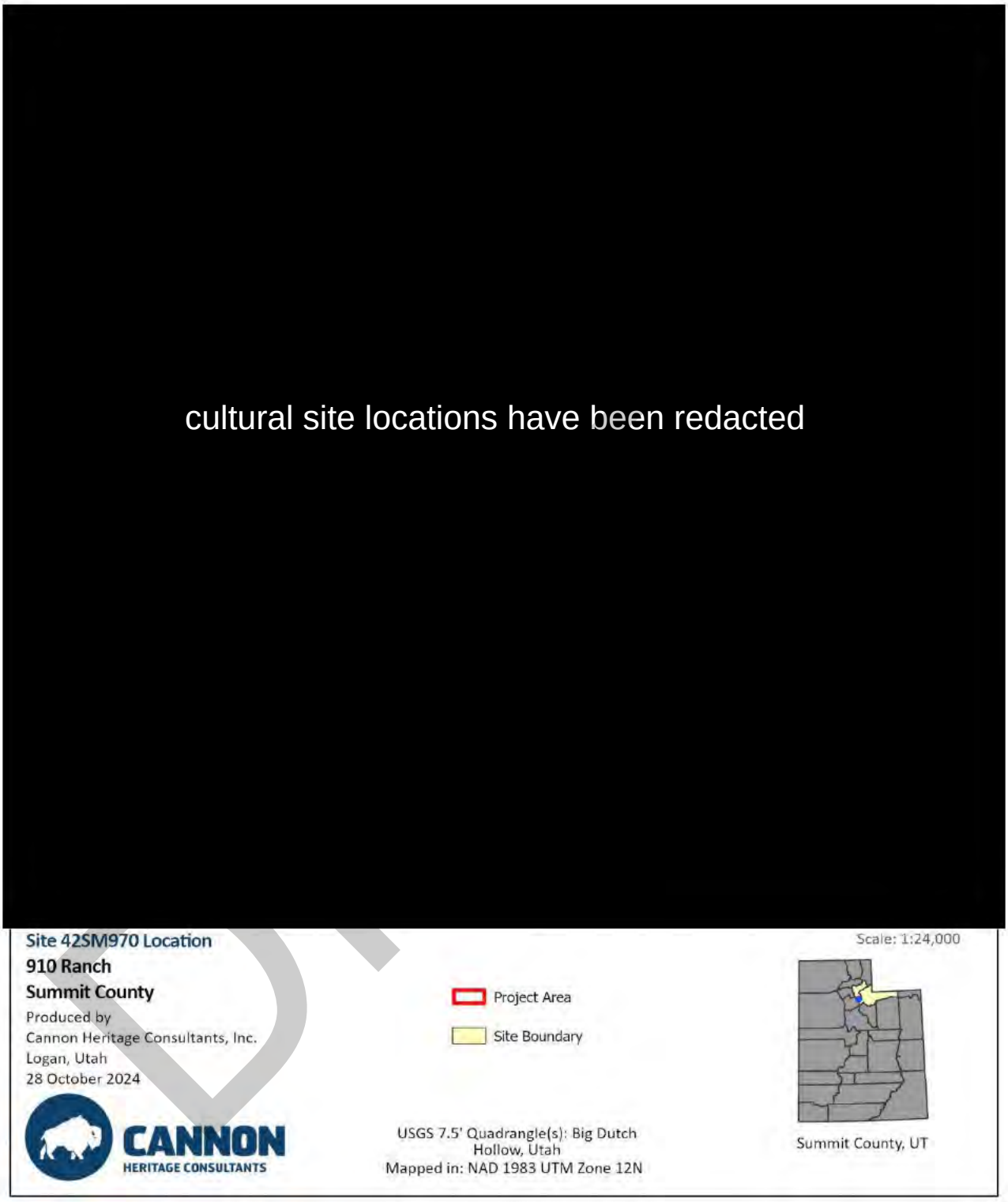

Figure 54. 42SM970 site location (S.B. Dersam).

Figure 55. 42SM971 Feature-01. A collapsed stack rock feature (Rob Godard, 29 September 2024).

Figure 56. 42SM971 FS-01. A non-diagnostic ferrule found in association with the feature (Rob Godard, 29 September 2024).

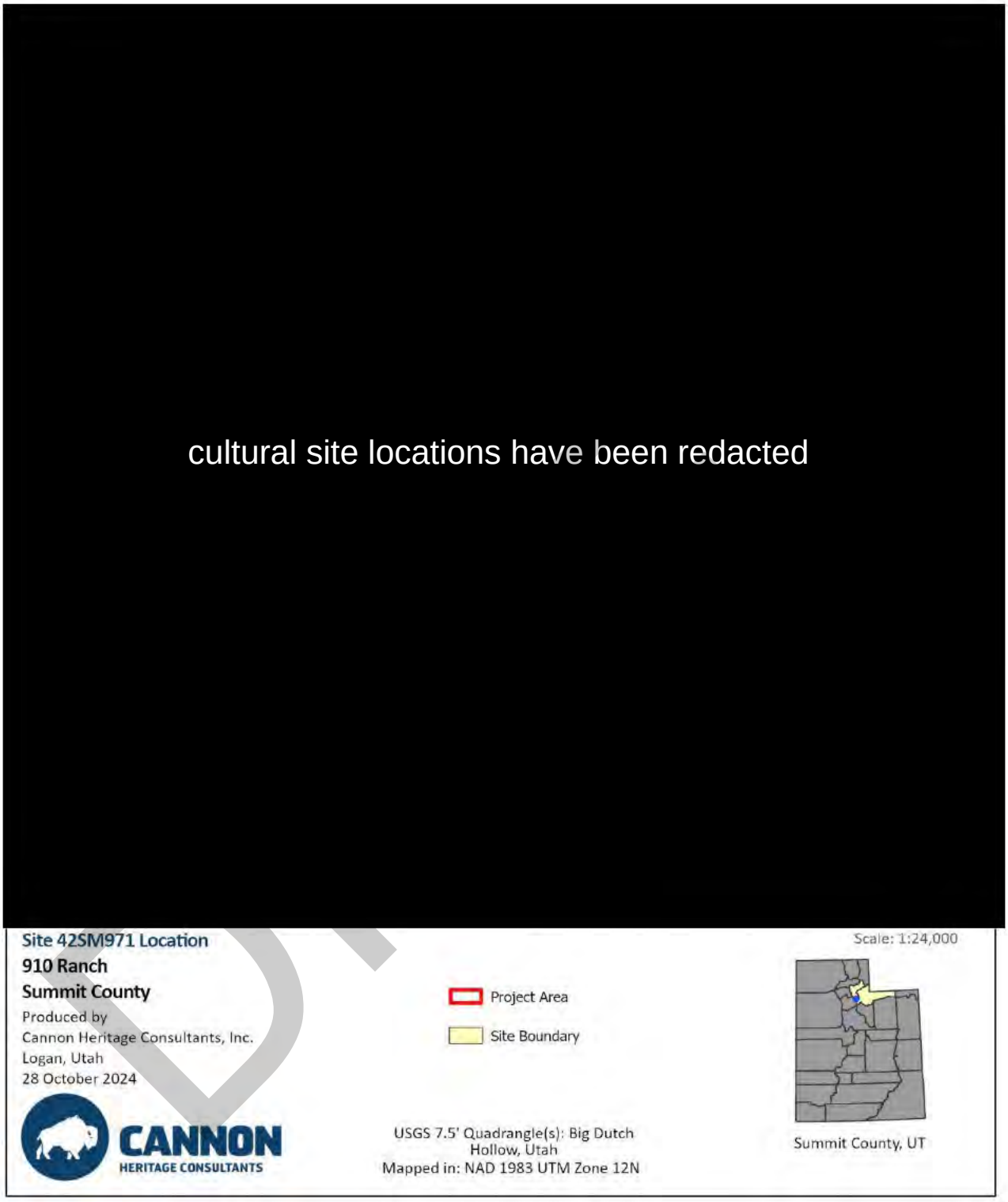

Figure 57. 42SM971 site location (S.B. Dersam).

42SM972

CHC recorded 42SM972 on 24 September. The site is a cluster of 7 aspen trees with historic markings, including dates such as 1943 through 1965. Images of women, female figures, names, letters, and dates are present at this site.

Figure 58. 42SM972 Dendroglyph-01. A dendroglphy drawing of a woman (Emma Raguskus, 24 September 2024).

Figure 59. 42SM972 Dendroglyph-04. A dendroglyph drawing of feminine features (Emma Raguskus, 29 September 2024).

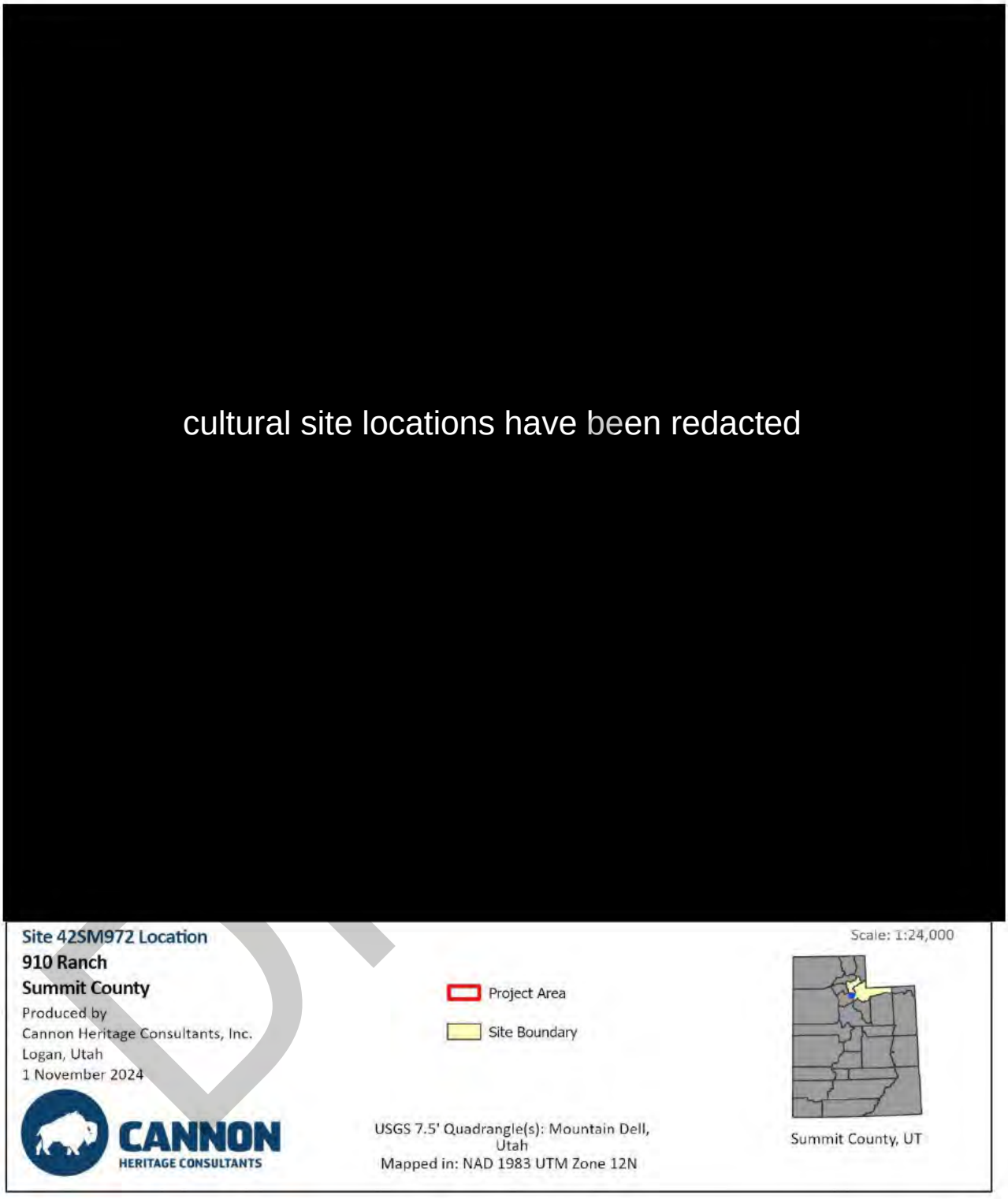

Figure 60. 42SM972 site location (S.B. Dersam).

42SM973

CHC recorded 42SM973 on 24 September. The site is a cluster of 10 aspen trees with historic markings with dates from 1965 through the 1970s.

Figure 61. 42SM973 Dendroglyph-15 "Manuel 8/18/72" (Emma Raguskus, 24 September 2024).

Figure 62. 42SM973 Dendroglyph-14 " I Love You" (Emma Raguskus, 24 September 2024).

Figure 63. 42SM973 site location (S.B. Dersam).

Isolated Finds

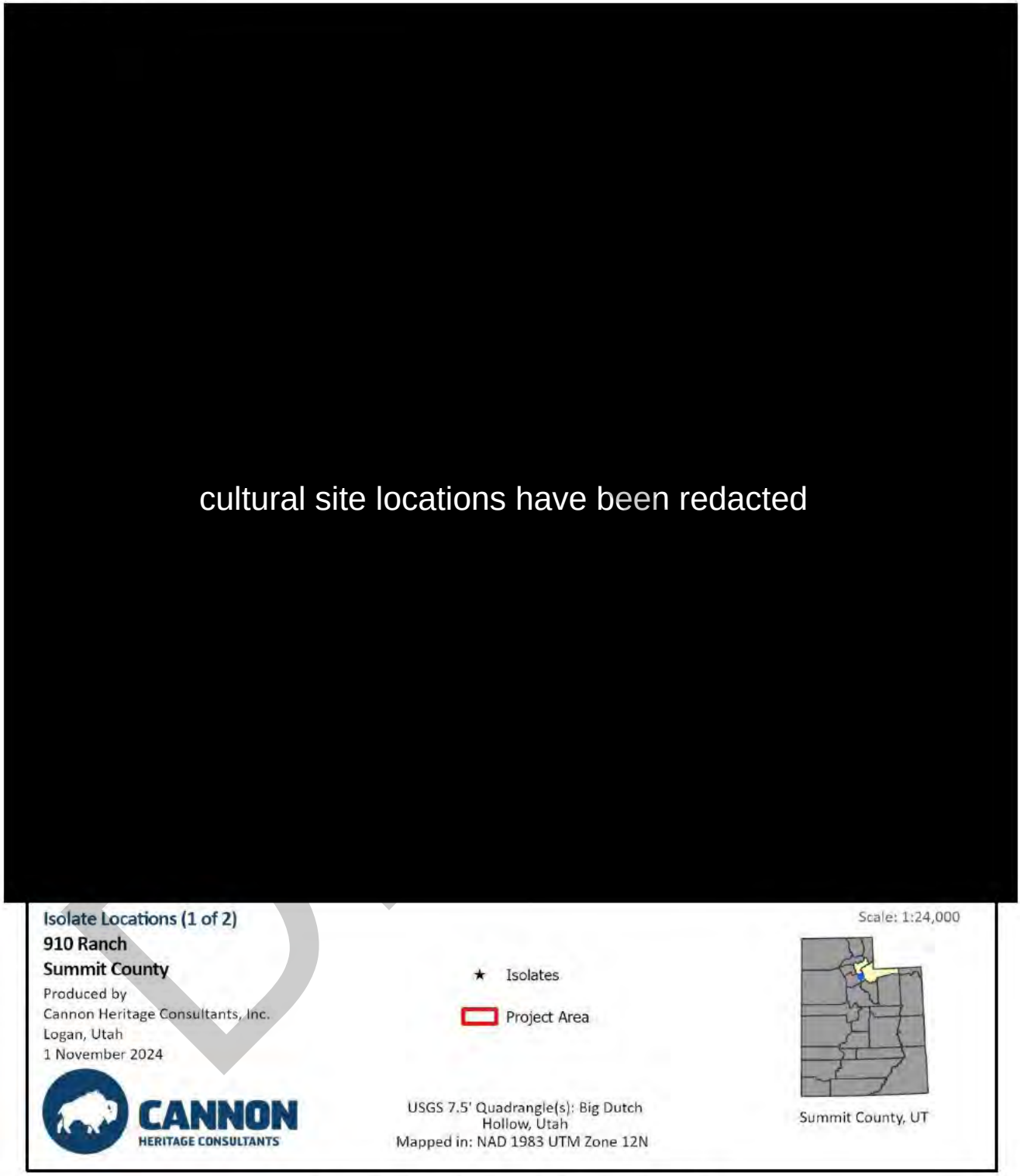

Figure 64. Map of isolates (1 of 2) (S.B. Dersam).

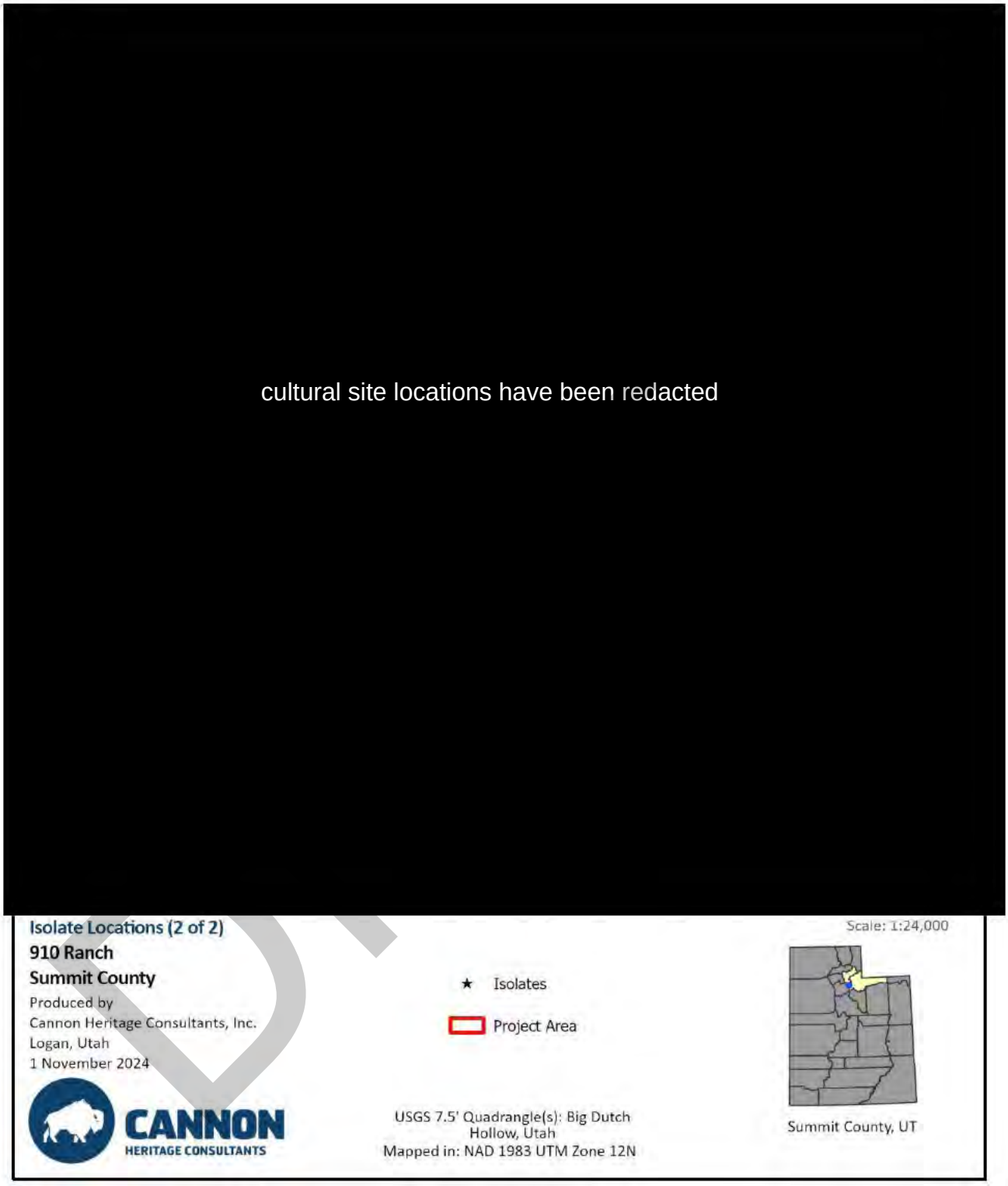

Figure 65. Map of isolates (2 of 2) (S.B. Dersam).

IF-01

IF-01 is a quartzite flake.

Figure 66. IF-01. A quartzite flake (Emma Raguskus, 23 September 2024).

Figure 67. IF-01 Overview (Emma Raguskus, 23 September 2024).

IF-02

IF-02 is a scatter of historic glass bottle fragments. The fragments were non-diagnostic.

Figure 68. IF-02 Overview facing (Emma Raguskus, 24 September 2024).

Figure 69. Sample of historic glass fragments (Emma Raguskus, 24 September 2024).

IF-03

IF-03 is a historic glass bottle. The bottle probably dates to the 1960s.

Figure 70. Overview of IF-03 facing east (Emma Raguskus, 24 September 2024).

Figure 71. Close-up of IF-03 beer bottle (Emma Raguskus, 24 September 2024).

IF-04

IF-04 is a scatter of historic glass bottle fragments.

Figure 72. Overview of IF-04 facing east (Emma Raguskus, 25 September 2024).

Figure 73. IF-04 bottle base made of clear glass (Emma Raguskus, 25 September 2024).

IF-05

IF-05 is a scatter of two quartzite flakes.

Figure 74.Overview of IF-05 facing east (Emma Raguskus, 25 September 2024).

Figure 75. Close-up of quartzite flake (Emma Raguskus, 25 September 2024).

IF-06

IF-06 is a historic Duraglass bottle made of brown glass.

Figure 76. Overview of IF-06 facing west (Emma Raguskus, 26 September 2024).

Figure 77. IF-06. Close-up of the base of the Duraglass bottle made of brown glass (Emma Raguskus, 26 September 2024).

IF-07

IF-07 is an old Goodyear shoe sole repaired with square nails.

Figure 78. Overview of IF-07, facing north (Emma Raguskus, 27 September 2024).

Figure 79. IF-07 historic Goodyear shoe sole, with square nails used to repair it (Emma Raguskus, 27 September 2024).

IF-08

IF-08 is a historic glass liquor bottle.

Figure 80. IF-08 overview facing east (Emma Raguskus, 27 September 2024).

Figure 81. IF-08 potentially historic liquor bottle (Emma Raguskus, 27 September 2024).

IF-09

IF-09 is a broken quartzite flake.

Figure 82. IF-09 overview, facing south (Emma Raguskus, 27 September 2024).

Figure 83. IF-09 quartzite flake fragments that refit (Emma Raguskus, 27 September 2024).

IF-10

IF-10 is a scatter of three quarzite flakes.

Figure 84. IF-10 overview, facing north (Emma Raguskus, 27 September 2024).

Figure 85. IF-10 quartzite flake sample (Emma Raguskus, 27 September 2024).

IF-11

IF-11 is a scatter of historic glass bottle fragments.

Figure 86. IF-11 overview, facing south (Emma Raguskus, 28 September 2024).

Figure 87. IF-11 Artifact 1. Halo Atlas Jug fragments (ca 1923-1982) made of clear glass (Emma Raguskus, 28 September 2024).

Figure 88. IF-11 Artifact 2. Duraglass bottle base (ca 1940-1964) made of brown glass (Emma Raguskus, 28 September 2024).

Figure 89. IF-11 Artifact 3 E & J Gallo Winery bottle base (1933 – present) made of clear glass (Emma Raguskus, 28 September 2024).

IF-12

IF-12 is a scatter of historic glass bottles.

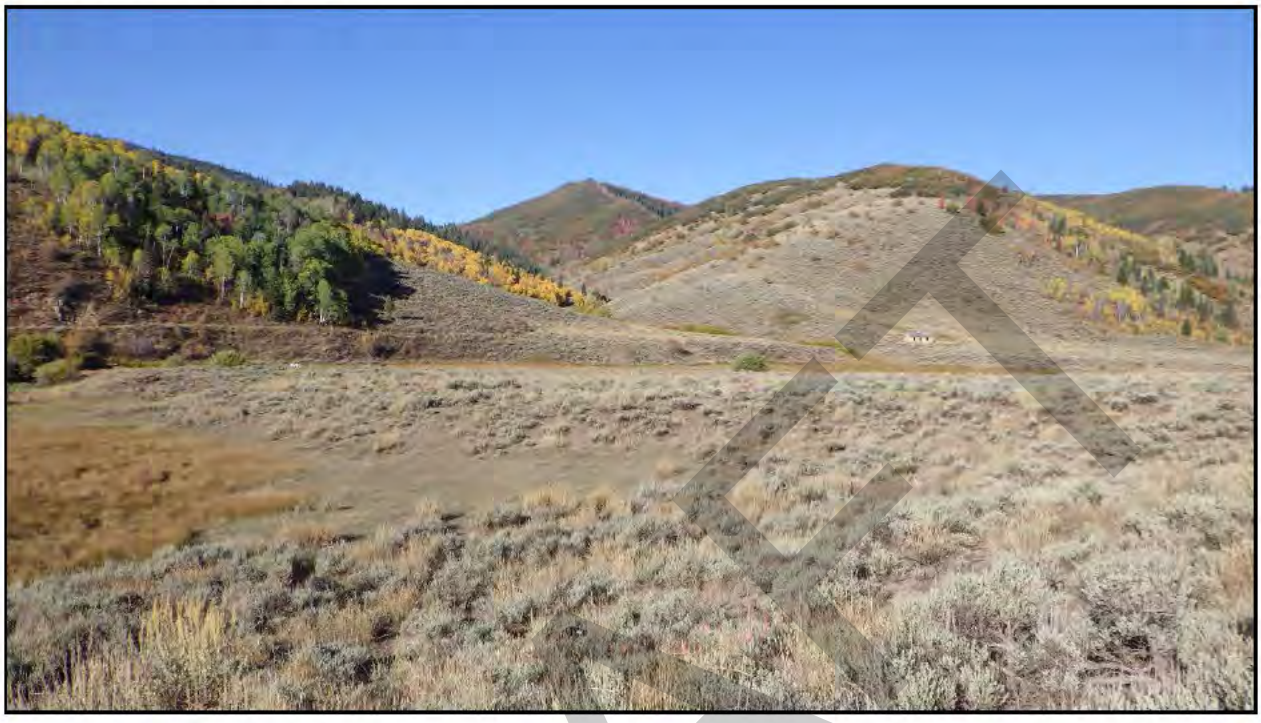

Figure 90. IF-12 overview facing west (Emma Raguskus, 28 September 2024).

Figure 91. IF-12 Artifact-02 bottle base fragment (ca 1929-1960) made of clear glass (Emma Raguskus, 28 September 2024).

Figure 92. IF-12 Artifact-02 Duraglass bottle base fragment (ca. 1929-1960) made of brown glass (Emma Raguskus, 28 September 2024).

IF-13

IF-13 is a broken bottle base fragment made of brown glass.

Figure 93. IF-13 overview facing west (Rob Godard, 29 September 2024).

Figure 94. IF-13 Artifact-01 brown glass bottle with off-center suction scar, age unknown (Rob Godard, 29 September 2024).

IF-14

IF-14 is a scatter of historic glass bottle fragments and a quartzite flake.

Figure 95. Overview of IF-14 facing southeast (Rob Godard, 29 September 2024).

Figure 96. A clear glass bottle base (Rob Godard, 29 September 2024).

Figure 97. A quartzite flake fragment (Rob Godard, 29 September 2024).

Chapter 6
Discussion and Conclusions

This report discusses the preliminary findings of CHC's Session 1 and 2 surveys conducted in September and November 2024 of over 1,870 acres. Ten sites were recorded along with 14 isolated finds of both Native American and Euroamerican origin. Archaeological sites should be treated as eligible for the NRHP until determined otherwise. CHC will perform NRHP evaluations for the final report.

Additional research will be conducted over the winter to be incorporated into the final report and the results of the spring 2025 survey.

Specific topics that will be addressed include:

- A full discussion of the specific criteria used in the NRHP evaluation of precontact Native American and Euroamerican sites.
- Documentation and NRHP evaluation all structures, such as culverts and bridges.
- A history of livestock ranching and rangeland management. This discussion will include maps based on the available historic records.
- Viewshed analyses of scenic landscapes that Summit County may want to preserve (see Figure 15). A rural ranching context will be used for the evaluation of these viewsheds. Which ones may be intact and not obstructed by modern development?
    - This analysis will require Summit County to identify those viewsheds so we can conduct the analysis.

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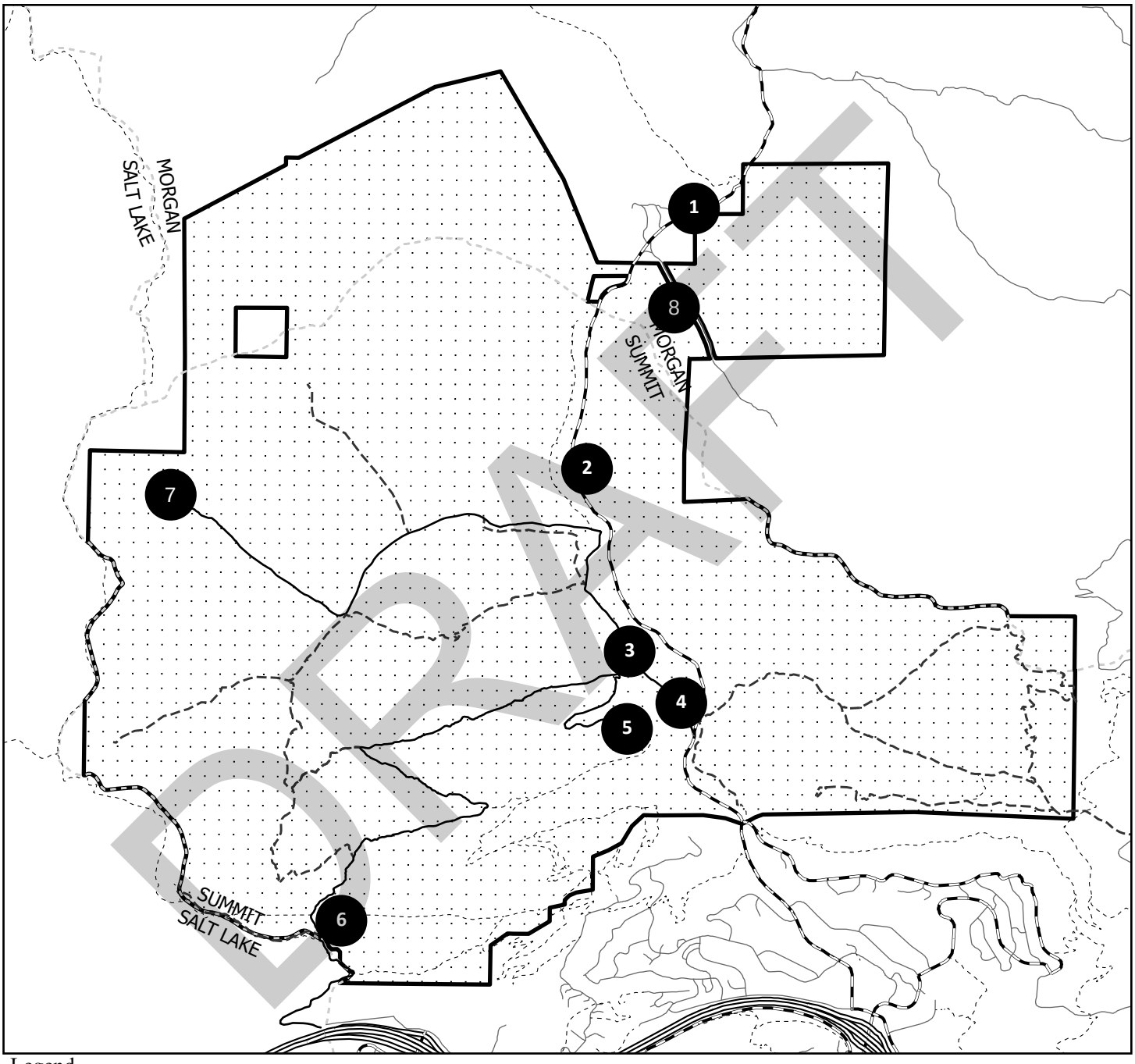
APPENDIX B. EXISTING STRUCTURES

Existing Structures and Improvements



Legend

Property Boundary

County Boundary

Interior Road & Trail

Two Track OHV Trail

Two Track Trail

Trails

Roads

Local Roads

Major County Roads

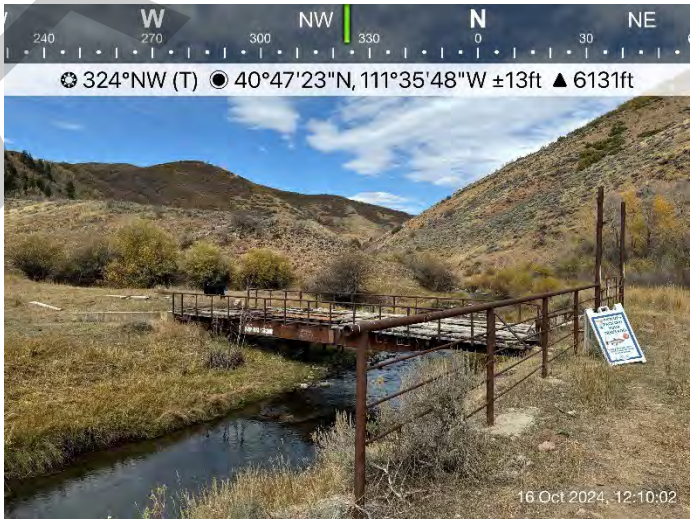
Interstate Hwy

N

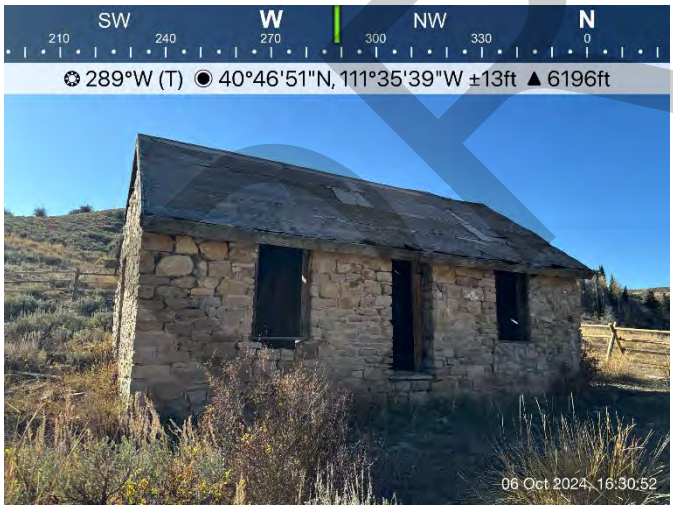
0 0.5 1 2 Miles

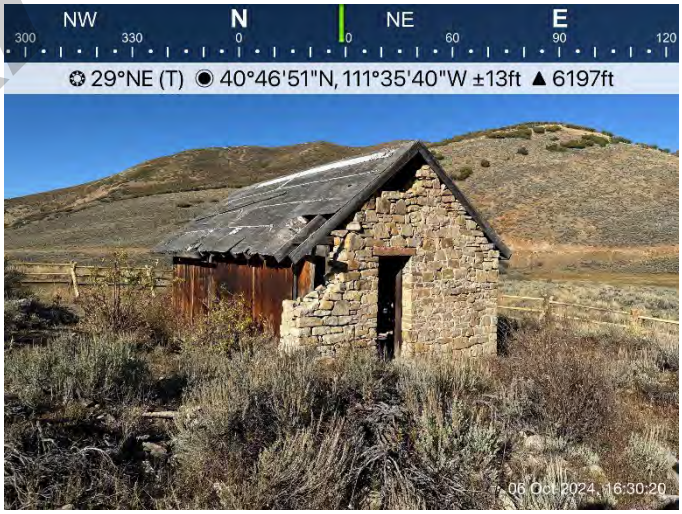
Site 1: Portion of the Property that is located adjoining the East Canyon State Park – Morman Flats Campground

Site 2: Big Bear Hollow Bridge crossing East Canyon Creek

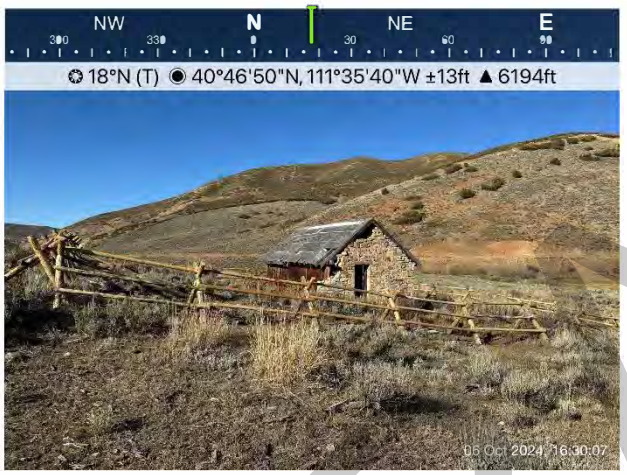


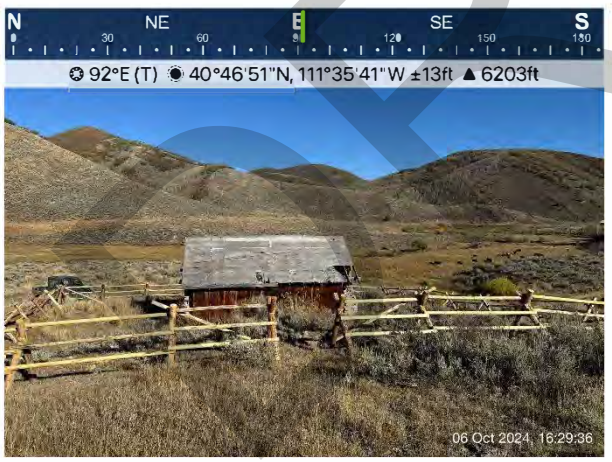
Site 3: Homestead Stone Cabin



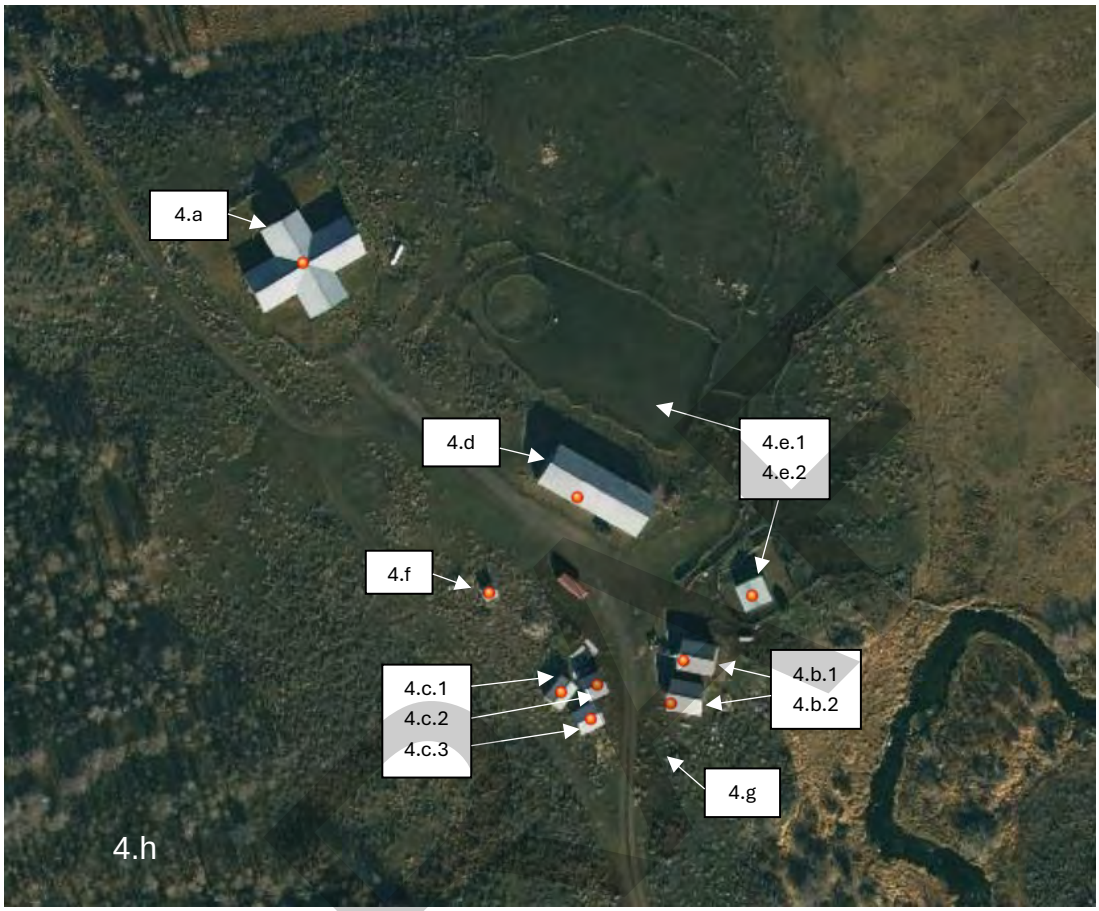


Site 3: Homestead Stone Cabin continued

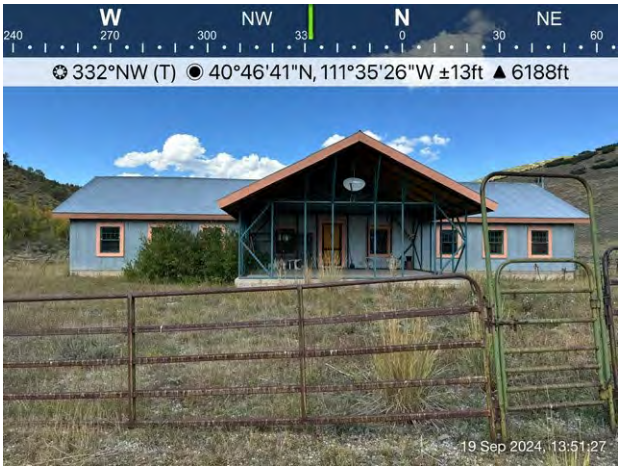


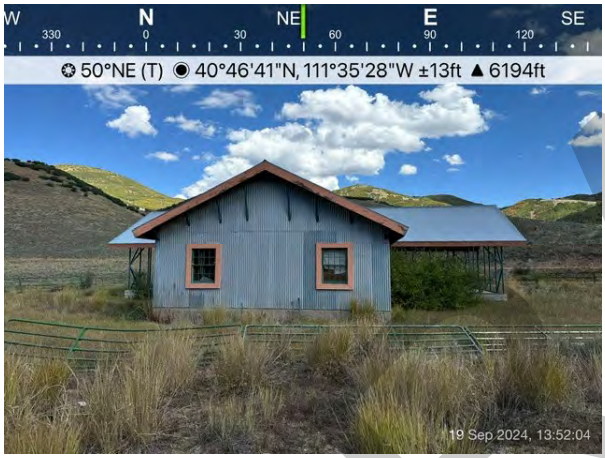


Site 4: Ranch Compound, including Residential home site (4.a), Ranch-hand home sites (4.b.1 & 2) ,sheds/outbuildings (4.c.1, 2, & 3) , barn(4.d) , horse and cattle corrals (4.e.1 & 2), water pumphouse (4.f), fencing material storage area (4.g), and underground water storage tanks (4.h).



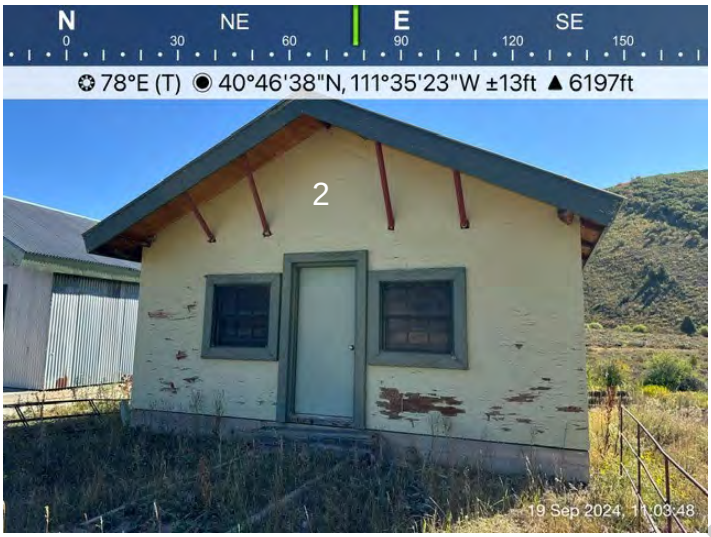
Site 4: Residential Home-site (4.a)



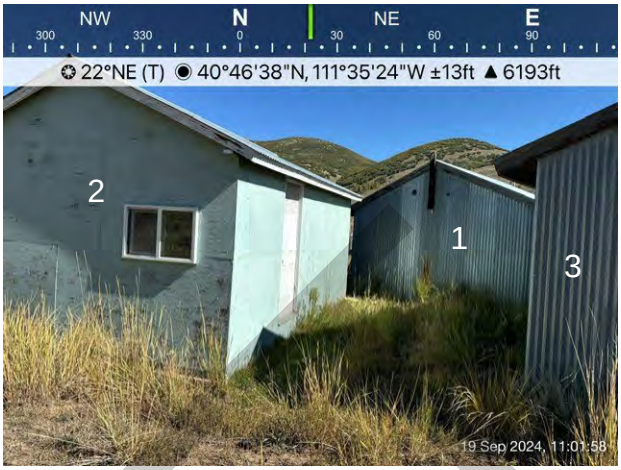


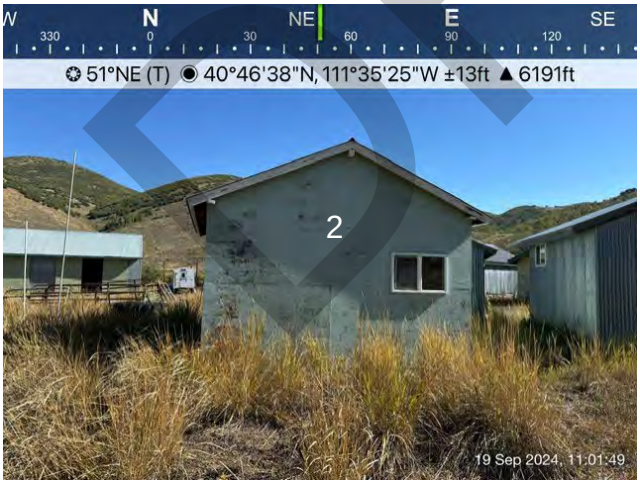
Site 4: Ranch-hand Buildings (4.b.1-2)

Site 4: Ranch-hand Buildings (4.b.1-2) continued



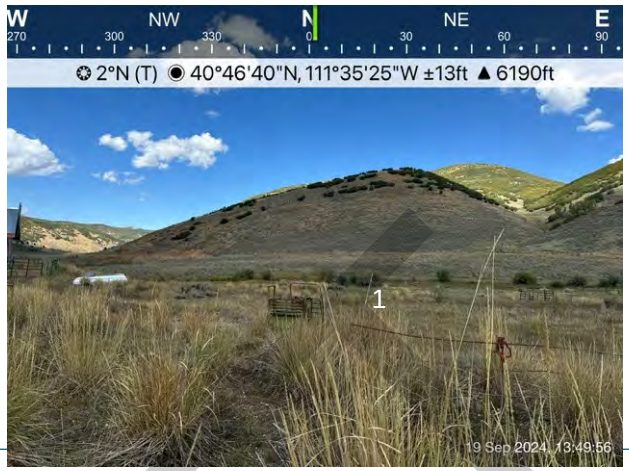
Site 4: Sheds/Outbuildings (4.c.1-3)

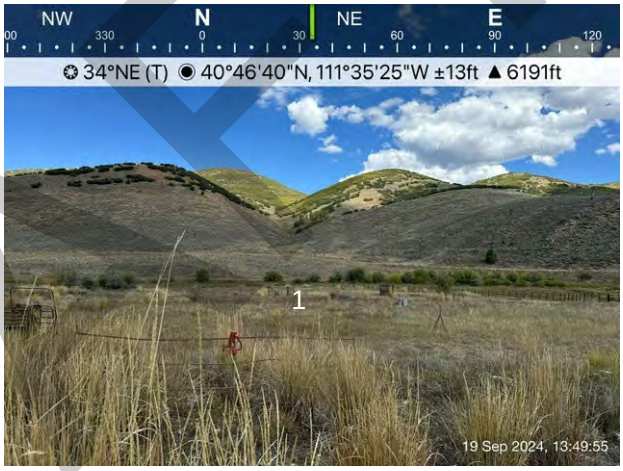




Site 4: Barn (4.d)

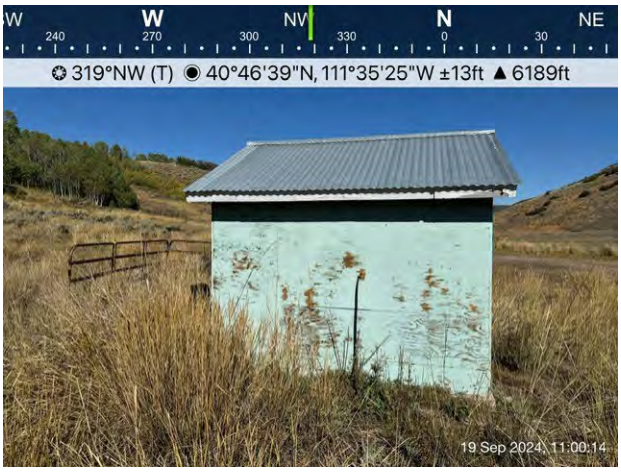
Site 4: Horse (4.e.1) and Cattle Corrals (4.e.2)

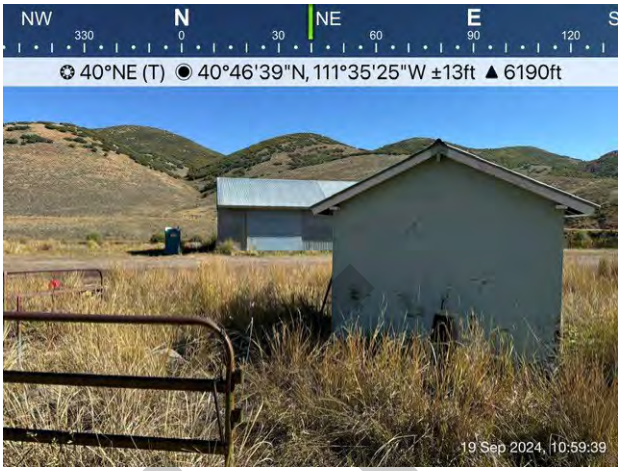




Site 4.f: Water Pump-house

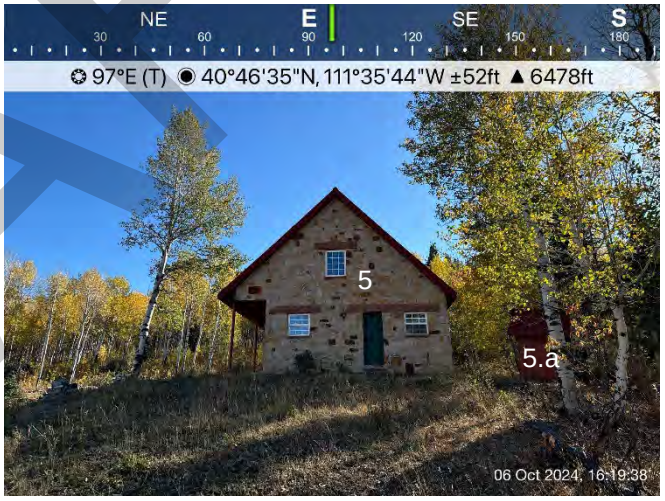
Site 4: Water Pump-house (4.f) continued



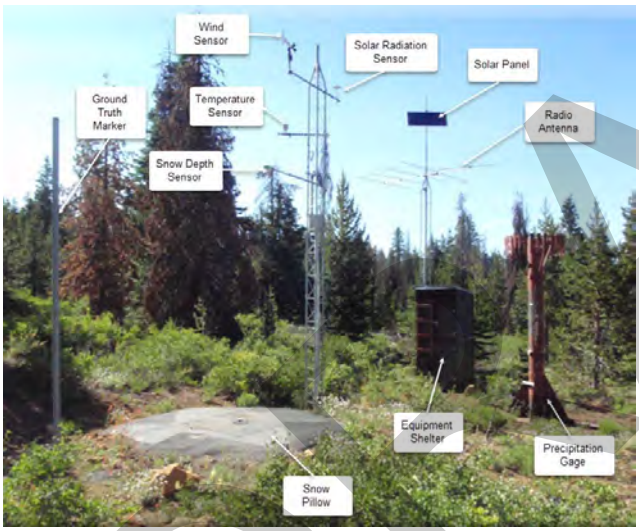


Site 4.g: Storage Area

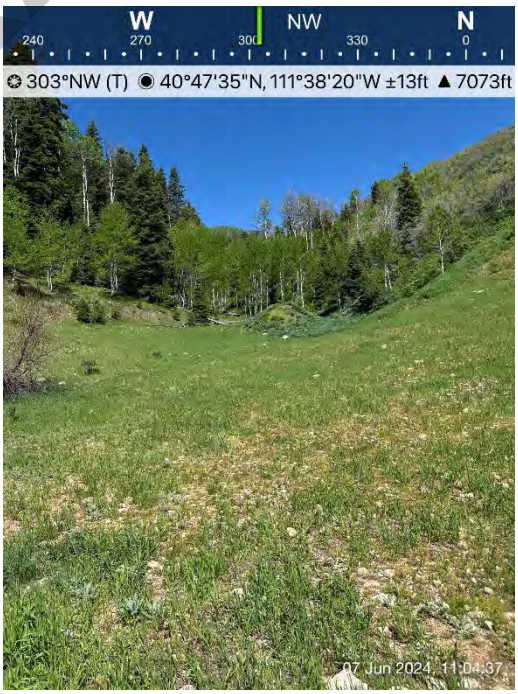
Site 5: Red Roof Cabin (5) and Shed (5.a)



Site 6: SNOTEL



Site 7: 1979 Well Pad



Site 8: Abandoned 1970's Mobile Travel Trailer
-111 35'25"W 40 48'23"N

APPENDIX C. VEGETATION ECOREGION CLASSIFICATIONS

Vegetation Mapping and Classification Results

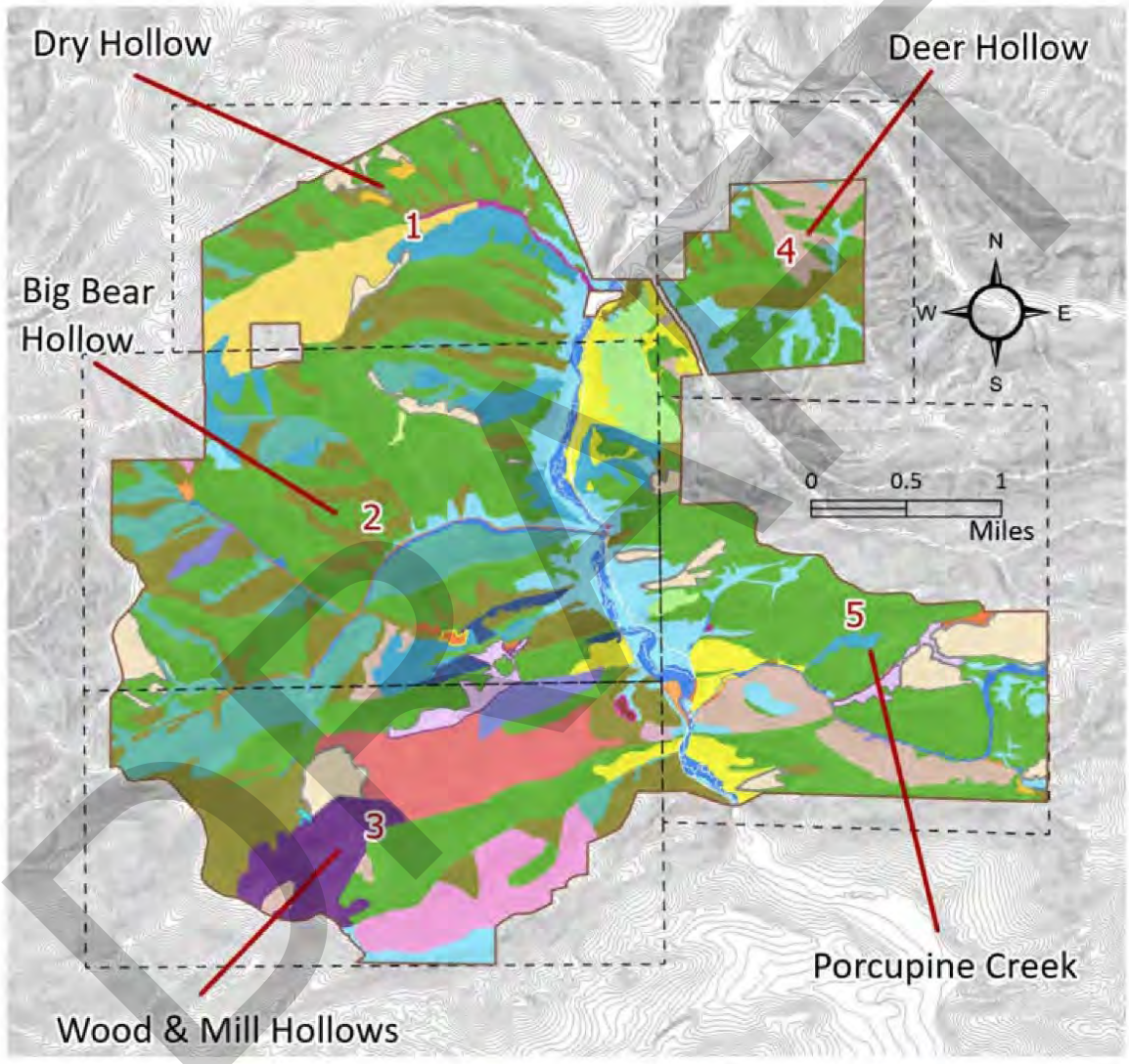
The results of the desktop vegetation-mapping analysis reveals that the Ranch is comprised of nineteen (19) dominant landcover classes (Table 2). An overview map of the landcover classes (vegetation communities) condensed into general cover types is shown within Attachment A. These consist of conifer forest and woodland, aspen forest and woodland, Gambel Oak-mixed shrubland, riparian shrubland, sagebrush steppe and shrubland, grassland and invasive perennial grassland, agricultural, and developed. Some of the landcover classes were not observed in the field during the ecological surveys. These included agricultural, Colorado Plateau pinyon-juniper woodland, invasive perennial grassland, Rocky Mountain lodgepole pine forest, Rocky Mountain subalpine mesic meadow, and Southern Rocky Mountain montane-subalpine grassland. A meadow area dominated by a mix of the invasive grass, smooth brome (*Bromus inermis*), and other native graminoids was observed but was not classified as invasive perennial grassland because it was not entirely dominated by invasive species and had a native plant component.

Conditions and vegetation composition observed in the field did not exhibit enough variation to split the sagebrush communities into three different landcover classes. Based on the descriptions of the sagebrush-dominated landcover classes, field ecologists combined the three landcover classes into two: Inter-Mountain Basins Big Sagebrush Shrubland and Inter-Mountain Basins Big Sagebrush Steppe. In addition, the mixed conifer and spruce-fir forest communities were consolidated into two main landcover types based on species composition and conditions observed during the ecological field surveys. These include Northern Rocky Mountain Dry- Mesic Montane Mixed Forest and Rocky Mountain Montane Mesic Mixed Conifer Forest and Woodland.

The following vegetation community classifications are the results of the ecological field survey observations compared to the desktop analysis and show variants from the landcover classes. The community classifications are adapted from landcover and vegetation community descriptions available in the Southwest Regional GAP Analysis Project, NatureServe Explorer, and US National Vegetation Classification Standard data sets (USGS 2005, NatureServe 2024, UNVCS 2024). The following maps illustrate the vegetation community mapping results for each region. Representative photos taken of each vegetation community are also below.

Summit County 910 Cattle Ranch Ecological
Field Assessment Results Maps

Vegetation Mapping Classification Results - Overview



Survey Area Boundary
20' Contour

Vegetation Class

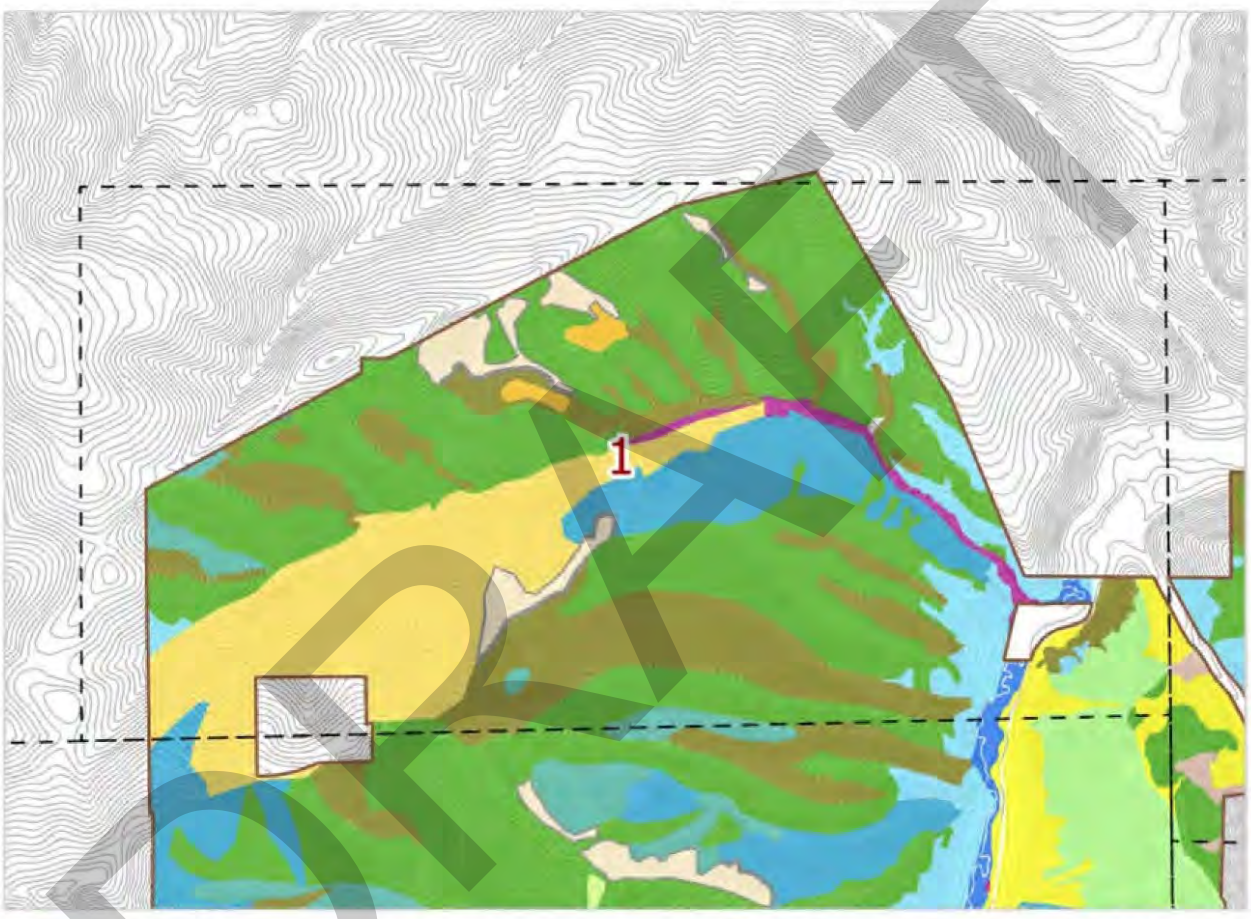
- Basin Wildrye Meadow
- Bigtooth Maple / Aspen Montane Forest
- Bigtooth Maple / Gambel Oak Forest
- Clustered Field Sedge - Common Spikerush Wet Meadow Alliance
- Disturbed
- Inter-Mountain Basins Big Sagebrush Shrubland
- Inter-Mountain Basins Big Sagebrush Shrubland - Disturbed
- Inter-Mountain Basins Big Sagebrush Steppe
- Narrowleaf Cottonwood / (Common Snowberry, Western Snowberry, Mountain Snowberry) Riparian Woodland
- Northern Rocky Mountain Dry-Mesic Montane Mixed Conifer Forest
- Quaking Aspen - Douglas-fir / Saskatoon Serviceberry Forest
- Quaking Aspen - White Fir / Mountain Snowberry Forest
- Rocky Mountain Aspen Forest and Woodland
- Rocky Mountain Aspen Forest and Woodland - Disturbed
- Rocky Mountain Bigtooth Maple Ravine Woodland
- Rocky Mountain Gambel Oak-Mixed Montane Shrubland
- Rocky Mountain Lower Montane Riparian Woodland and Shrubland
- Rocky Mountain Montane Mesic Mixed Conifer Forest and Woodland
- Rocky Mountain Subalpine-Montane Mesic Meadow
- Smooth Brome - (Western Wheatgrass) Ruderal Grassland
- Subalpine Fir - Engelmann Spruce / (Gooseberry Currant, Prickly Currant, White-stem Gooseberry) Forest
- Subalpine Fir - Quaking Aspen Rocky Mountain Moist Forest Alliance
- Water Birch Wet Shrubland Alliance
- White Fir - Douglas-fir / Rocky Mountain Maple Forest
- White Fir / Bigtooth Maple Forest
- White fir / Creeping Barberry Forest
- White fir / Creeping Barberry Forest - Potential Old Growth
- Yellow Rabbitbrush Steppe & Shrubland Alliance

Summit County 910 Cattle Ranch Ecological Field Assessment Results Maps

Vegetation Mapping Classification Results - Dry Hollow

N
W E
S

0 0.25 0.5 Miles



Survey Area Boundary

20' Contour

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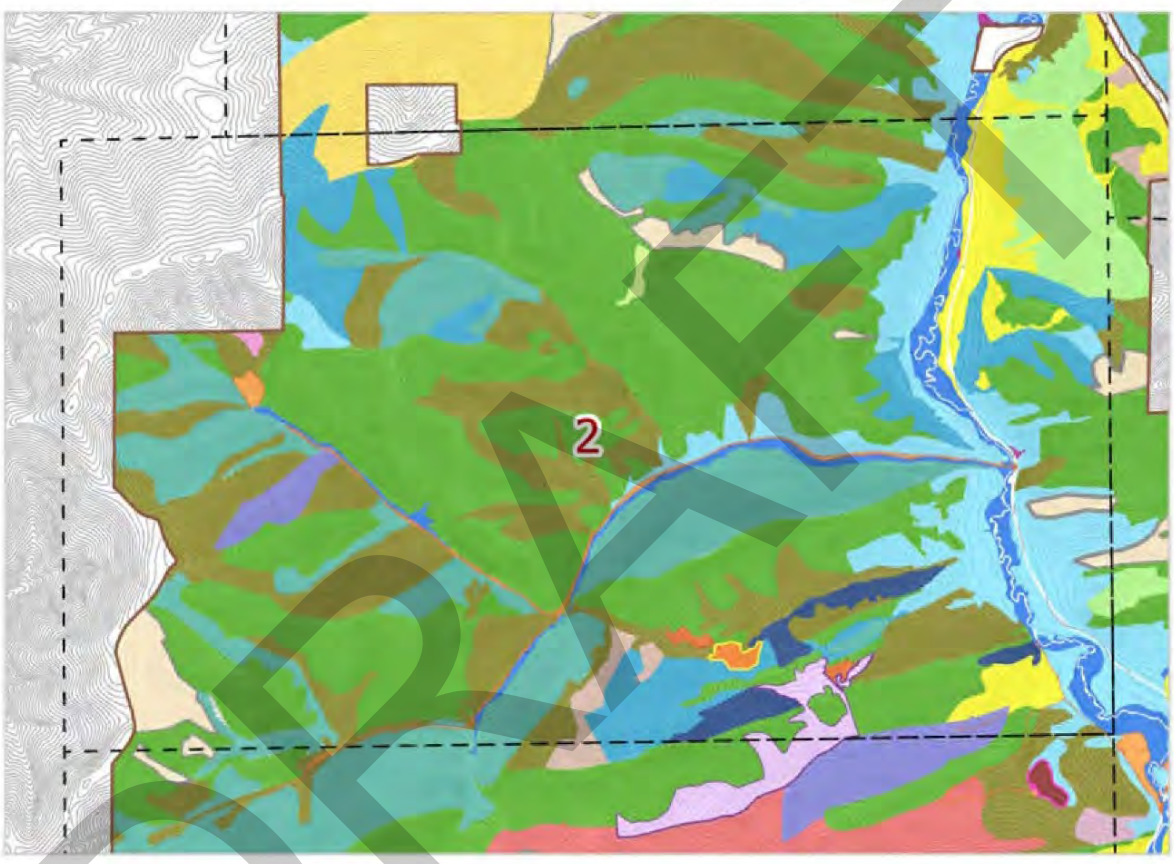
- White Fir / Bigtooth Maple Forest
- White fir / Creeping Barberry Forest
- White fir / Creeping Barberry Forest - Potential Old Growth
- Yellow Rabbitbrush Steppe & Shrubland Alliance

Summit County 910 Cattle Ranch Ecological Field Assessment Results Maps

Vegetation Mapping Classification Results - Big Bear Hollow



Survey Area Boundary

20' Contour

Vegetation Class

- Basin Wildrye Meadow
- Bigtooth Maple / Aspen Montane Forest
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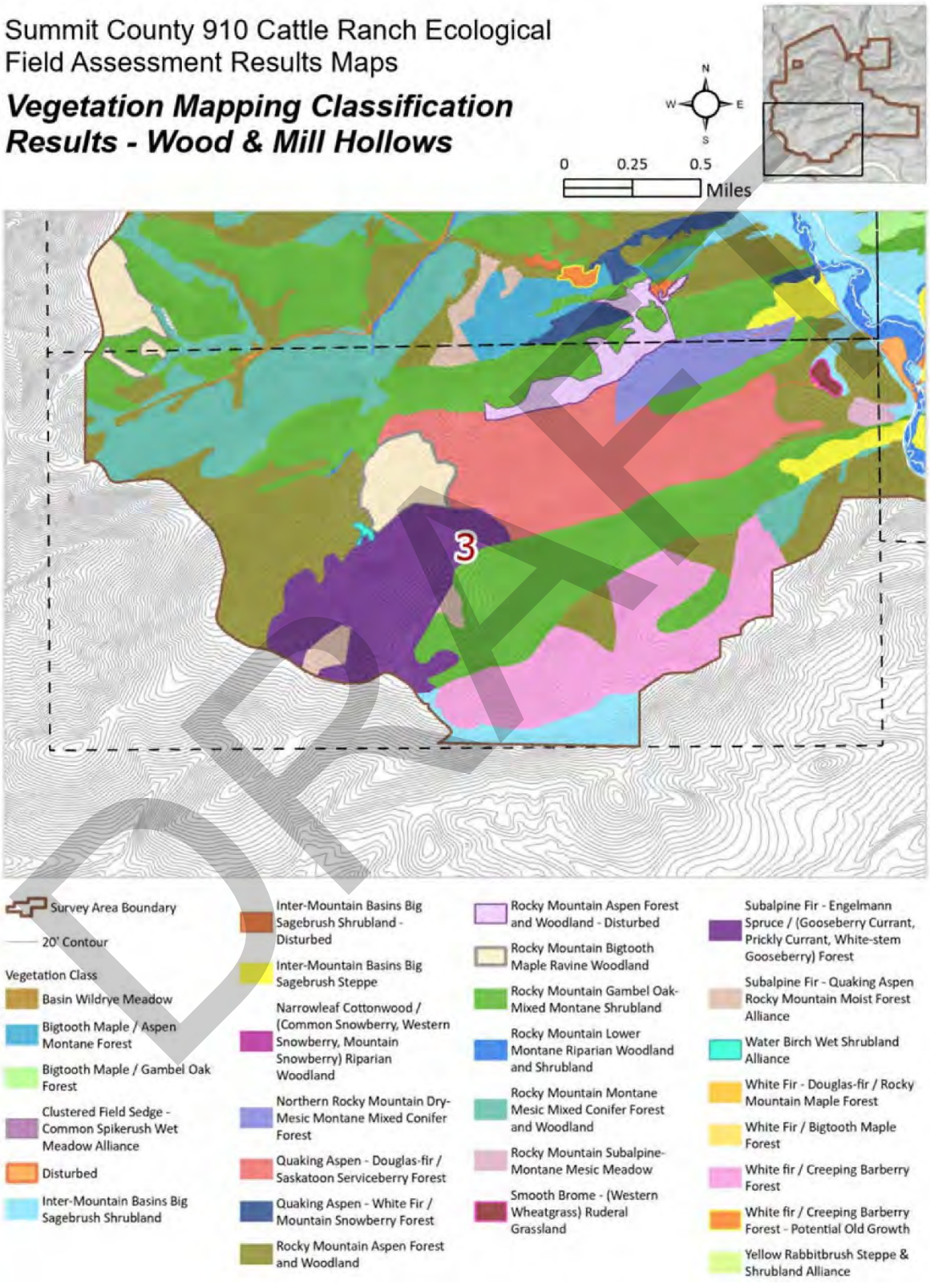
- White fir / Creeping Barberry Forest
- White fir / Creeping Barberry Forest - Potential Old Growth
- Yellow Rabbitbrush Steppe & Shrubland Alliance

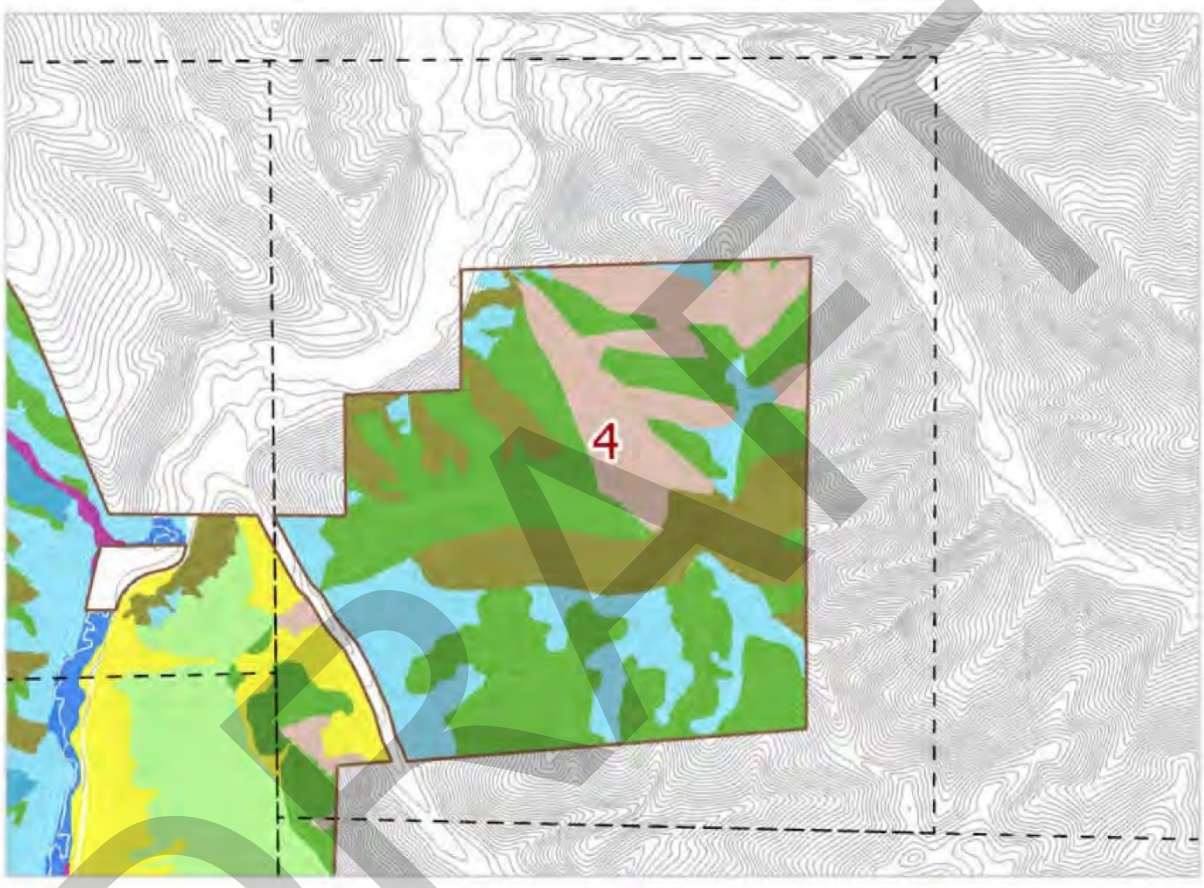
Summit County 910 Cattle Ranch Ecological Field Assessment Results Maps

Vegetation Mapping Classification Results - Wood & Mill Hollows



Summit County 910 Cattle Ranch Ecological Field Assessment Results Maps

Vegetation Mapping Classification Results - Deer Hollow



Survey Area Boundary

20' Contour

Vegetation Class

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- Bigtooth Maple / Aspen Montane Forest
- Bigtooth Maple / Gambel Oak Forest
- Clustered Field Sedge - Common Spikerush Wet Meadow Alliance
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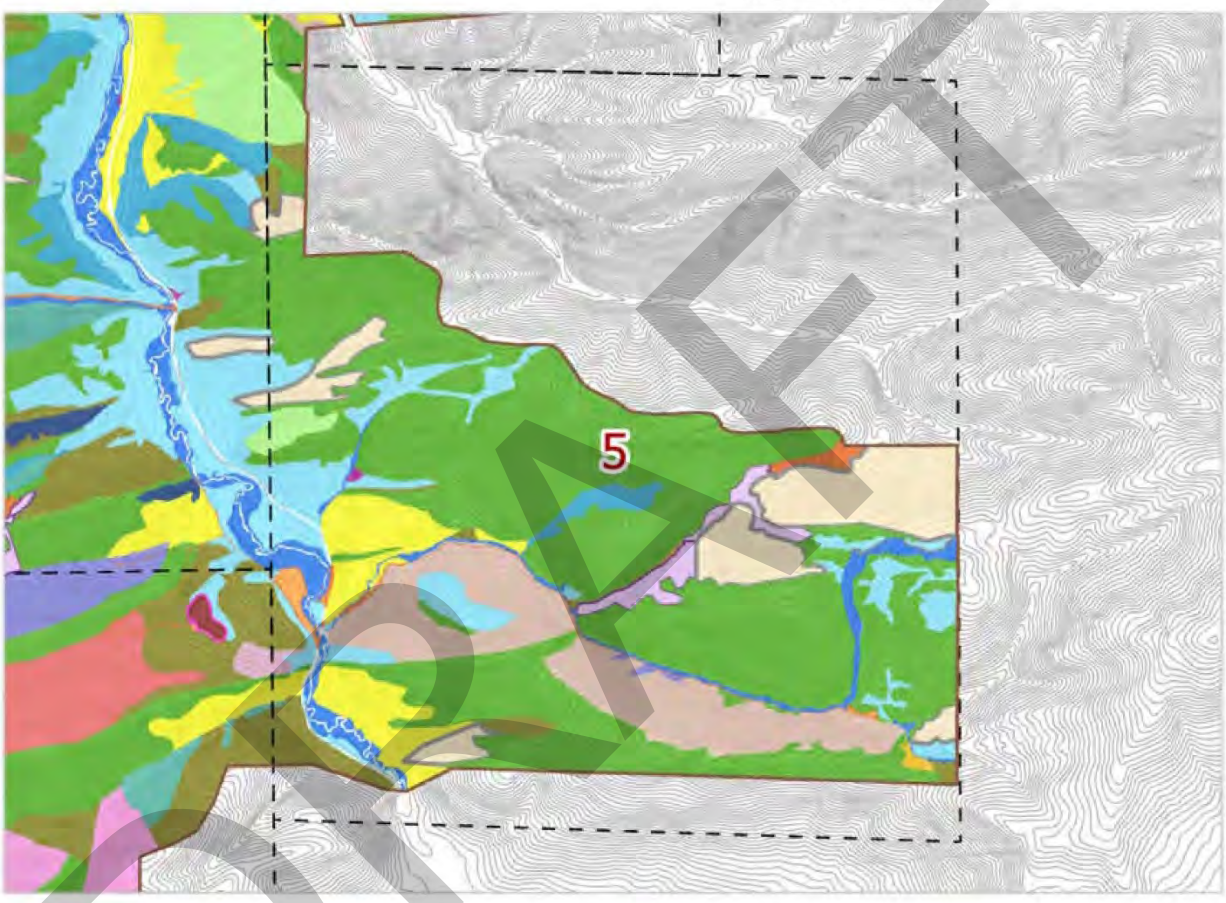
- White fir / Creeping Barberry Forest
- White fir / Creeping Barberry Forest - Potential Old Growth
- Yellow Rabbitbrush Steppe & Shrubland Alliance

Summit County 910 Cattle Ranch Ecological Field Assessment Results Maps

Vegetation Mapping Classification Results - Porcupine Creek



Survey Area Boundary

20' Contour

Vegetation Class

- Basin Wildrye Meadow
- Bigtooth Maple / Aspen Montane Forest
- Bigtooth Maple / Gambel Oak Forest
- Clustered Field Sedge - Common Spikerush Wet Meadow Alliance
- Disturbed
- Inter-Mountain Basins Big Sagebrush Shrubland
- Inter-Mountain Basins Big Sagebrush Shrubland - Disturbed
- Inter-Mountain Basins Big Sagebrush Steppe
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- White fir / Creeping Barberry Forest - Potential Old Growth
- Yellow Rabbitbrush Steppe & Shrubland Alliance

Inter-Mountain Basins Big Sagebrush Shrubland

This ecological system occurs throughout much of the western United States, typically in broad basins between mountain ranches, plains and foothills between 1,500 and 2300 meters (between 5,000 and 7,545 feet) in elevation. These shrublands areas are dominated by *Artemisia tridentata* ssp. *Tridentata. Ericameria nauseosa, Chrysothamnus viscidiflorus, Purshia tridentata,* or *Symphoricarpos oreophilus* may occur as codominants in disturbed stands. Perennial herbaceous components typically contribute less than 25 percent vegetative cover. Common graminoid species can include *Achnatherum hymenoides, Bouteloua gracilis, Elymus lanceolatus, Festuca idahoensis, Hesperostipa comata, Leymus cinereus, Pleuraphis jamesii, Pascopyrum smithii, Poa secunda,* and *Pseudoroegneria spicata.* Some semi-natural communities are included that often originate on abandoned agricultural land or on other disturbed sites. In these locations, *Bromus tectorum* or other annual bromes and invasive weeds can be abundant. Within the Property, the dominant vegetation consisted of big sagebrush, Great Basin wildrye (*Elymus cinereus*), Oregon grape (*Mahonia repens*), Kentucky bluegrass (*Poa pratensis*), and smooth brome. The majority of the sagebrush shrublands within the Property appeared to be disturbed by livestock grazing, which appeared to result in the dominance of introduced graminoids and reduce herbaceous understory diversity.

Inter-Mountain Basins Big Sagebrush Shrubland, southwest view. 40.793991, -111.5984027

Inter-Mountain Basins Big Sagebrush Steppe

This widespread matrix-forming sagebrush steppe group is similar to Inter-Mountain Basins Big Sagebrush Shrubland, but have a sparser shrub component and contains a dense herbaceous layer of perennial bunchgrasses. This shrub and shrub herbaceous group is characterized by communities dominated by *Artemisia tridentata* ssp. *Tridentata*, *Artemisia tridentata* spp. *Wyomingsis*, and *Purshia tridentata*. Other associated shrubs and dwarf-shrubs may include *Arctostaphylos uva-ursi*, *Artemisia frigida, Chrysothamnus visidiflorus*, *Ericameria* ssp., *Prunus virginiana, Ribes cereum*, and *Symphoricarpos rotundifolius*. Significant perennial graminoid cover is diagnostic of this community. Common grasses include *Achnatherum hymenoides*, *Acnatherum thurberianum, Elymus lanceolatus, Festuca idahoensis, Hersperostipa comata, Koeleria macrantha, Leymus cinereus, Pascopyrum smithii, Poa secunda*, and *Pseudoroegneria spicata*. Within the Project Area, this vegetation community was observed in areas where grazing animals had limited access due to steep terrain. Sagebrush was sparser in cover in those areas compared to Inter-Mountain Basins Big Sagebrush Shrubland and was co-dominated by rabbitbrush (*Chrysothamnus viscidiflorus* and *Ericameria nauseosa*), Antelope bitterbrush (*Purshia tridentata*). Other shrubs included bear berry (*Actostaphylos uva-ursi)* and snowberry. In addition, chokecherry and Utah serviceberry were scattered throughout. The herbaceous understory was diverse and contained forbs such as lupin (*Lupinus caudatus*), Richard's geranium (*Geranium richardsonis*) and showy goldeneye (*Heliomeris multiflora*) and native perennial graminoids including bluebunch wheatgrass (*Psuedoregnaria spicata*), Great Basin wildrye and Sandberg bluegrass (*Poa secunda*).

Inter-Mountain Basins Big Sagebrush Steppe, southwest view. 40.793991,-111.5984027

Rocky Mountain Aspen Forest and Woodland

This ecological system is more common in the southern and central Rocky Mountains but occurs in the montane and subalpine zones throughout much of the western United States and north into Canada. Elevations generally range from 1,525 to 3,050 meters (5,000–10,000 feet), but occurrences can be found at lower elevations in some regions. These are upland forests and woodlands dominated by *Populus tremuloides* without a significant conifer component (<25% relative tree cover). The understory structure may be complex with multiple shrub and herbaceous layers, or simple with just an herbaceous layer. The herbaceous layer may be dense or sparse, dominated by graminoids or forbs. Occurrences have a somewhat closed canopy of trees of 5–20 meters tall, dominated by the cold-deciduous, broad-leaved tree *Populus tremuloides*. Conifer species may contribute up to 15 percent of the tree canopy before the occurrence is reclassified as a mixed occurrence. Because of the open growth form of *Populus tremuloides,* enough light can penetrate for lush understory development. The herbaceous layer may be dense or sparse, dominated by graminoids or forbs. Common shrubs include *Acer glabrum, Amelanchier alnifolia, Artemisia tridentata, Juniperus communis, Prunus virginiana, Rosa woodsii, Shepherdia canadensis, Symphoricarpos oreophilus,* and the dwarf-shrubs *Mahonia repens* and *Vaccinium* spp. The herbaceous layers may be lush and diverse. Common graminoids may include *Bromus carinatus, Calamagrostis rubescens, Carex geyeri, Carex rossii, Elymus glaucus, Elymus trachycaulus, Festuca thurberi,* and *Hesperostipa comata*. Within the Property, dominants include aspen, snowberry, golden currant (*Ribes aureum*), Great Basin wildrye, false Solomon's seal (*Maianthemum racemosum*), lupin, bluebunch wheatgrass, Oregon grape, blue wildrye (*Elymus glaucus*). Some aspen stands within the Property appear disturbed and contain a nonnative plant component, have been impacted by grazing animals, or have exhibited drying conditions resulting in water-stressed stand conditions.

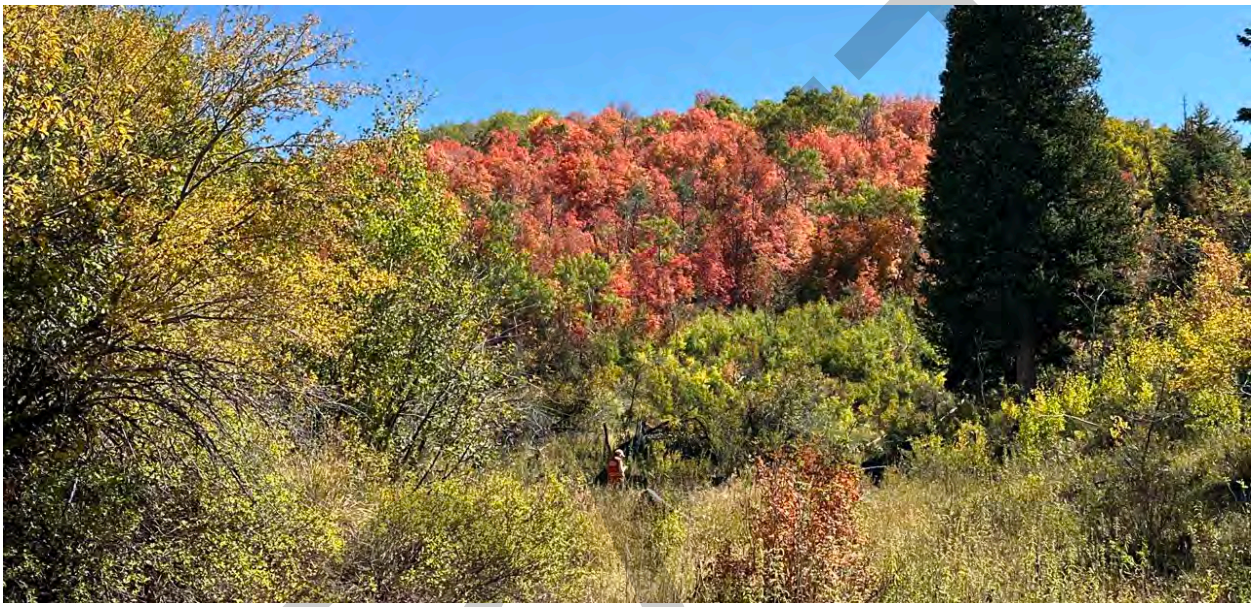
Rocky Mountain Aspen Forest and Woodland, west view. 40.795744, -111.595155

Bigtooth Maple / Aspen Montane Forest

This alliance includes mainly deciduous forests dominated by *Acer grandidentatum* occurring in relatively moist lower montane areas of the Utah-Wyoming Rocky Mountains and Columbia Plateau. Forests in this alliance within the Property are dominated by a moderately dense to dense canopy of *Acer grandidentatum*. *Populus tremuloides* often co-dominates the stands with *Psuedotsuga menziessi* occurring more sparsely within or along the transition zones. Shrub and herb strata are relatively sparse throughout the range of the alliance and are composed of short shrubs and annual or perennial graminoids and forbs. Tree and shrub associates include *Amelanchier alnifolia, Artemisia tridentata, Paxistima myrsinites, Physocarpus malvaceus, Populus tremuloides, Prunus virginiana, Quercus gambelii,* and *Symphoricarpos* spp. The alliance can occur on all aspects but is best developed on north-facing valleys or canyons with moderate insolation and favorable soil moisture. In the southern part of the range, these communities are typically associated with protected topographic positions with relatively moist soils and lower fire frequencies than surrounding hillsides. Elevations range from 1,200 to 2,600 meters. ***This community type was not included in the landcover data from the desktop assessment but was observed during the ecological surveys.***

Southwest view of Bigtooth Maple / Aspen Montane Forest. 40.796714, -111.619678

Rocky Mountain Bigtooth Maple Ravine Woodland
This ecological system occurs in cool ravines, on toeslopes and slump benches associated with riparian areas in the northern and central Wasatch Range. Substrates are typically rocky colluvial or alluvial soils with favorable soil moisture. These woodlands are dominated by *Acer grandidentatum* but may include mixed stands co-dominated by *Quercus gambelii* or with scattered conifers. Some stands may include *Acer negundo* or *Populus tremuloides* as minor components. It also occurs on steeper, north-facing slopes at higher elevations, often adjacent to Rocky Mountain Gambel Oak-Mixed Montane Shrubland or Rocky Mountain Aspen Forest and Woodland.



Rocky Mountain Bigtooth Maple Ravine Woodland, Southeast view. 40.772272, -11.556347

Rocky Mountain Gambel Oak-Mixed Montane Shrubland

This ecological system occurs in the mountains, plateaus and foothills of the southern Rocky Mountains and Colorado Plateau, including the Uinta and Wasatch ranges. The vegetation is typically dominated by *Quercus gambelii* alone or codominant with *Amelanchier alnifolia, Amelanchier utahensis, Artemisia tridentata, Cercocarpus montanus, Prunus virginiana, Purshia stansburiana, Purshia tridentata, Robinia neomexicana, Symphoricarpos oreophilus,* or *Symphoricarpos rotundifolius*. There may be inclusions of other mesic montane shrublands with *Quercus gambelii* absent or as a relatively minor component. This ecological system intergrades with the lower montane-foothills shrubland system and shares many of the same site characteristics. Density and cover of *Quercus gambelii* and *Amelanchier* spp. often increase after fire. The canopy is dominated by the broad-leaved deciduous shrub *Quercus gambelii*, which occasionally reaches small tree size. Occurrences can range from dense thickets with little understory to relatively mesic mixed-shrublands with a rich understory of shrubs, grasses and forbs. The herbaceous layer is sparse to moderately dense, ranging from 1 to 40 percent cover. Within the Property, *Quercus gambellii* occurs as a dense overstory tree with sparser occurrences of chokecherry in the shrub strata. Herbaceous plants are low in cover and include bluebunch wheatgrass, bulbous bluegrass (*Poa bulbosa*), and showy goldeneye.

Rocky Mountain Gambel Oak-Mixed Montane Shrubland, Facing Northeast. 40.7741415, -111.567488

Rocky Mountain Lower Montane Riparian Woodland and Shrubland
This ecological system is found throughout the Rocky Mountain and Colorado Plateau regions within a broad elevational range from approximately 9,00 to 2,800 meters (3,000–9,200 feet). This system often occurs as a mosaic of multiple communities that are tree-dominated with a diverse shrub component. This system is dependent on a natural hydrologic regime, especially annual to episodic flooding. It is found within the flood zone of rivers, on islands, sand or cobble bars, and immediate streambanks. Within the Property, the majority of this habitat type occurs along East Canyon Creek and does not include a tree overstory component. Cottonwood galleries do occur in small, fragmented locations within the Property, but are mostly absent from this habitat type. One divergence from the typical description of this habitat type is an area along a tributary to Porcupine Creek, where the overstory is dominated by aspen and herbaceous wetland plants occur within the understory along the tributary. Most of this habitat type at the Property is dominated by various willow species including peachleaf willow (*Salix amygdaloides*), Bebb's willow (*Salix bebbiana*), yellow willow (*Salix lutea*), and coyote willow *(Salix exigua*). The herbaceous understory includes wetland forbs such as scouring rush (*Equisetum longaeviatum*), fringed willow herb (*Epilobium ciliatum*), Missouri goldenrod *(Solidago missouriensis*), American speedwell (*Veronica americana*), and grasses and grass-like species such as common spikerush (*Eleocharis palustrus*), water sedge (*Carex aquatilis*), reed canarygrass (*Phalaris arundinacea*), and redtop (*Agrostic gigantea*). Some of this habitat type contains suitable habitat for the threatened orchid Ute-ladies'-tresses. The conservation of value of this community was classified as reference.

Rocky Mountain Lower Montane-Foothill Riparian Woodland and Shrubland, facing west. 40.7888625°N, -111.6070288°W

Narrowleaf Cottonwood / (Common Snowberry, Western Snowberry, Mountain Snowberry) Riparian Woodland

This deciduous forest occurs on narrow montane valley floodplains, on upper terraces, outer edges of floodplains, alluvial bars of major rivers, terraces of flashy washes, and around lakes and ponds. It occurs between 945 and 2,550 meters (3,100–8,350 feet) in elevation. Soils are shallow to deep, fine-textured sandy loams and clay loams over coarser materials. Few to many coarse fragments occur in the upper soil layers. This deciduous forest is dominated by a very open to nearly closed canopy of mature *Populus angustifolia,* other trees present may include *Populus balsamifera, Populus tremuloides,* and *Picea pungens.* The shrub layer in mesic stands is dominated by one of several species of *Symphoricarpos*: *Symphoricarpos albus, Symphoricarpos rotundifolius, Symphoricarpos occidentalis*, or *Symphoricarpos oreophilus*. Other shrub species that may be scattered but never as abundant as *Symphoricarpos* include *Prunus virginiana, Quercus gambelii, Cornus sericea, Ribes cereum, Rosa woodsii, Alnus incana, Betula occidentalis,* and *Salix bebbiana*. Graminoids and forbs present include *Agrostis stolonifera, Bromus inermis, Poa pratensis, Phleum pratense, Elymus* spp., *Balsamorhiza sagittata, Eriogonum umbellatum, Cirsium arvense, Glycyrrhiza lepidota, Melilotus officinalis, Maianthemum stellatum, Solidago canadensis,* and *Achillea millefolium*. Occurrences of this habitat type are sparse within the Property. Some of the areas occur along East Canyon Creek. Another area in Dry Hollow is dominated by narrowleaf cottonwood (*Populus angustifolia*) growing along an ephemeral creek. One area is on the east side of East Canyon Road, across from the main outbuildings of the Property and adjacent to a palustrine emergent wet meadow community. The riparian woodland conditions observed at the Property fit the above description. ***This community type was not included in the landcover data from the desktop assessment but was observed during the ecological surveys.***

Narrowleaf Cottonwood / (Common Snowberry, Western Snowberry, Mountain Snowberry) Riparian Woodland, facing east. 40.81076°N, -111.600063°W

Northern Rocky Mountain Dry-Mesic Montane Mixed Conifer Forest
This system is associated with a sub mesic climate regime with annual precipitation ranging from 50 to 100 centimeters, with a maximum in winter or late spring. Winter snowpacks typically melt off in early spring at lower elevations. Elevations range from 460 to 1,920 meters (1,500–6,300 feet). Most occurrences of this system are dominated by a mix of *Pseudotsuga menziesii* and other typically seral species. *Picea engelmannii* becomes increasingly common towards the eastern edge of the range. The nature of this forest system is a matrix of large patches dominated or co-dominated by one or combinations of the above species. Pre settlement fire regimes may have been characterized by frequent, low-intensity ground fires that maintained relatively open stands of a mix of fire-resistant species. Under present conditions, the fire regime is mixed severity and more variable, with stand-replacing fires more common, and the forests are more homogeneous. With vigorous fire suppression, longer fire-return intervals are now the rule, and multi-layered stands provide fuel "ladders," making these forests more susceptible to high-intensity, stand-replacing fires. Within the Property, these forests are dominated by a mix of Douglas fir, subalpine fir, and Engelmann spruce, with a variable shrub component consisting of Utah serviceberry, chokecherry, mountain lover (*Paxistima myrsinites*), and Oregon grape. Understories are dominated by forbs and graminoids, such as western wheatgrass (*Pascopyrum smithii*), nettle leaf giant hyssop (*Agastache urticifolia*), Fendler's rue (*Thalictrum fendleri*), and Ross' sedge (*Carex rossii*).

Northern Rocky Mountain Dry-Mesic Montane Mixed Conifer Forest, South view.
40.776686, -111.608849

Rocky Mountain Montane Mesic Mixed Conifer Forest and Woodland
These are mixed conifer forests of the Rocky Mountains extending west into the ranges of the Great Basin, occurring predominantly in cool ravines and on north-facing slopes. Elevations range from 1,200 to 3,300 meters (4,000–10,800 feet). Such sites include lower and middle slopes of ravines, along stream terraces, moist, concave topographic positions and north- and east-facing slopes which burn somewhat infrequently. *Pseudotsuga menziesii* and *Abies concolor* are most common canopy dominants, but *Picea engelmannii, or Picea pungens*, may be present. This system includes mixed conifer - *Populus tremuloides* stands. A number of cold-deciduous shrub species can occur, including *Acer glabrum, Acer grandidentatum, Alnus incana, Betula occidentalis, Cornus sericea, Physocarpus malvaceus, and Vaccinium membranaceum*. At the Property, these forests were characterized by Douglas fir dominance with white fir, Engelmann spruce, and occasionally subalpine fir as subdominants. Shrub species present included those listed above and herbaceous species included Ross' sedge, mountain timothy (*Phleum alpinum*), purple coneflower (*Rudbeckia occidentalis*), goldenrod (*Solidago* sp.), red elderberry (*Sambucus racemosa*), Fendler's rue, and blue wildrye.

Rocky Mountain Montane Mesic Mixed Conifer Forest and Woodland. Southeast view. 40.7911533, -111.6099390

Subalpine Fir—Quaking Aspen Rocky Mountain Moist Forest Alliance
This mixed evergreen-deciduous forest alliance is codominated by *Populus tremuloides* and *Abies lasiocarpa* and has been described from mountain slopes and plateaus in the Rocky Mountains from Alberta, Canada, south to Montana, Wyoming, Colorado, and west into Utah. Several other species of conifers may be scattered within the stands, including *Abies concolor, Picea engelmannii, Picea pungens,* and *Pseudotsuga menziesii*. Younger stands typically have dense *Populus tremuloides*, with *Abies lasiocarpa* or other conifers mixed in. As the stands age in this typically seral forest association, *Populus tremuloides* is slowly reduced until conifers become dominant. The understory is most often composed of a short-shrub layer often dominated by *Symphoricarpos oreophilus*. Other shrubs may include *Amelanchier alnifolia, Mahonia repens, Paxistima myrsinites, Physocarpus malvaceus,* and *Rosa woodsii*. The herbaceous layer is variable and may compete with shrub species for understory dominance or in some stands be dominant over shrubs. It is a mixture of graminoids and forbs. Characteristic herbaceous species may include *Delphinium x occidentale, Rudbeckia occidentalis, Thalictrum fendleri*, and *Valeriana occidentalis*. Soils are derived from alluvium and colluvium from sedimentary, metamorphic and igneous parent materials. The forest conditions observed at the Property fit the above description. ***This community type was not included in the landcover data from the desktop assessment but was observed during the ecological surveys***.

Subalpine fir—Quaking Aspen Rocky Mountain Forest Alliance, looking southwest.
40.778105, -111.574738

Subalpine Fir—Englemann Spruce Forest

This forested association occurs in southern Idaho, southern Montana, western Wyoming, central and southern Utah, and throughout the mountains of Colorado. This association is found at elevations between 2,225 and 3415 meters (7,300–11,200 feet). It occurs on plateaus, benchlands, and slopes ranging from gentle to very steep, but typically on cold northwest-to-northeast aspects. This forest can take the form of large, continuous stands or patch stands interspersed with open meadows. These forests are heavily shaded with a very open shrub layer of just a few individuals. *Abies lasiocarpa* and *Picea engelmannii* dominate the dense tree canopy. Within the Property, the shrub layer was dominated by gooseberry current (*Ribes montigenum*) and white-stem gooseberry (*Ribes inerme*). The herbaceous layer is depauperate but rich in forbs. Common forbs included Colorado blue columbine (*Aquilegia coerulea*), heart leaf arnica (*Arnica cordifolia*), mountain sweet cicely *(Osmorhiza berteroi)*, and Fendler's rue.A few graminoids were present and often included Ross' sedge, Elk sedge (*Carex geyeri*), Letterman's needlegrass (*Achnatherum lettermanii*), mountain brome (*Bromus carinatus*), and Idaho fescue (*Festuca idahoensis*). ***This community type was not included in the landcover data from the desktop assessment but was observed during the ecological surveys***.

Subalpine fir—Engelmann Spruce / Gooseberry Current Forest, looking southwest.
40.7607886°N, -111.6300194°W

Smooth Brome (Western Wheatgrass) Ruderal Grassland

This smooth brome grassland type occurs in disturbed montane meadows in the Rocky Mountains. Stands can occur in a wide variety of human-disturbed habitats, including highway rights-of-way, jeep trails, etc. The type is also widely planted for revegetating disturbed land, pasture and hay fields, and has escaped into a variety of habitats, including prairie, riparian grasslands, and mesic mountain meadows. The dominant grass is *Bromus inermis*, a naturalized species from Eurasia that forms moderately dense to dense stands that often develop into monocultures. Other weedy species, such as *Cirsium arvense, Poa pratensis,* and other introduced forage species, may occur as well, but native species are generally less than 10 percent cover. Native species may include mixed-grass prairie and montane meadow grasses. This type could be defined very broadly to include almost any *Bromus inermis*-dominated stand, in which case the variability of the minor species associated with the type would be very high. At the Property, smooth brome and bulbous bluegrass dominated this community. Noxious weed presence included hoary cress (*Cardia draba*) and houndstoungue (*Cynoglossum officinalis*). The native forbs lambstoungue ragwort (*Senecio integerrimus*) and curly cup gumweed (*Grindelia squarrosa*) were also observed. ***This community type was not included in the landcover data from the desktop assessment but was observed during the ecological surveys.***

Smooth Brome—(Western Wheatgrass) Ruderal grassland looking southeast.
40.776641, -111.595505

Bigtooth Maple / Gambel Oak Forest

This forest association has been reported from mountains and plateaus of Utah. Elevations range from 1,220 to 2,620 meters (4,000–8,600 feet). Sites include moderate to steep, middle and lower slopes with cool northern or eastern aspects, intermittently flooded canyon bottoms, alluvial benches, and shaded colluvial slopes. This association is characterized by a moderately dense to dense tree canopy of *Acer grandidentatum* that is typically codominated by *Quercus gambelii* with 10–50 percent cover. *Pseudotsuga menziesii* and *Abies concolor* trees may be scattered throughout the stand. The shrub layer is variable, depending on the stand age, elevation and habitat. It ranges from dense *Quercus gambelii*-dominated tall-shrub stratum to a mixed short-shrub layer that includes *Symphoricarpos oreophilus, Prunus virginiana, Amelanchier utahensis, Mahonia repens, Physocarpus malvaceus, Paxistima myrsinites, and Acer glabrum,*. The herbaceous layer is generally sparse because of shading. Associates include graminoids such as *Achnatherum hymenoides, Carex hoodii, Elymus glaucus, Poa fendleriana*, and *Pseudoroegneria spicata*, and forbs *Galium multiflorum, Heterotheca villosa, Heuchera parviflora, Thalictrum fendleri, Vicia americana*, and species of *Lathyrus, Osmorhiza, Eriogonum*, and *Polygonum*. The habitat observed at the Property met the above description but the herbaceous layer was more homogenous. ***This community type was not included in the landcover data from the desktop assessment but was observed during the ecological surveys.***

Bigtooth Maple / Gambel Oak Forest, east view. 40.79964, -111.600322

White Fir / Bigtooth Maple Forest

This forest association has been reported from mountains in Utah, New Mexico, and Arizona along the Mogollon Rim north into the high plateaus and Wasatch Range of Utah. Elevation ranges from 1,525 to 2,590 meters (5,000–8,500 feet). This mesic community generally occurs on steep, lower slopes and benches with northern aspects and in narrow canyons and ravines. Soils are generally deep, well-drained, coarse- and fine-textured alluvium. This mesic forest is characterized by a mixed-species tree canopy with *Abies concolor* and *Pseudotsuga menziesii* codominating the upper tree canopy and with the subcanopy or tall-shrub layer dominated by *Acer grandidentatum*. Short shrub species include *Mahonia repens, Paxistima myrsinites, Prunus virginiana, Quercus gambelii* (<5% cover), *Ribes cereum*, and *Symphoricarpos oreophilus*. The herbaceous layer is an open to moderately dense mixture of graminoids and forbs. Grasses commonly present include *Achnatherum hymenoides*, blue wildrye, redtop, *Koeleria macrantha, Poa palustrus*, and *Pseudoroegneria spicata*. Scattered forbs include *Aquilegia chrysantha, Clematis ligusticifolia, Galium multiflorum, Maianthemum racemosum (= Smilacina racemosa),* purple coneflower, and *Thalictrum fendleri*. Seedling trees of *Abies concolor* and *Pseudotsuga menziesii* may occur throughout. The habitat observed at the Property met the above description but the herbaceous layer was more homogenous. ***This community type was not included in the landcover data from the desktop assessment but was observed during the ecological surveys.*** The conservation value of this community was classified as reference. This community is located on the northern forested slopes of the Dry Creek area and did not appear to be affected by grazing animals as much as similar forest within the Property. The overstory was sparser than other forest communities and contained a diverse herbaceous understory. This forest type could be a reference community for long-term monitoring as restoration is implemented.

White Fir / Bigtooth Maple Forest, looking west. 40.81310, -111.618338

Yellow Rabbitbrush Steppe & Shrubland Alliance
This alliance is characterized by a sparse to dense layer of *Chrysothamnus viscidiflorus* and sparse to dense layer of graminoids and is found on lower slopes of mountains in western Wyoming and northern Utah. Stands occur on a variety of sites and range from level to moderately sloping, disturbed sites on ridges and in valleys. Elevations range from 1,300 to 2,440 meters (4,250–8,000 feet). Substrates include eolian sands, alluvium, metamorphic rocks, granite, and limestone, and the soil is variable, with textures that include silt loam, sandy loam, loamy sand, and silty clay loam. The vegetation is characterized by an open to moderate shrub layer dominated by *Chrysothamnus viscidiflorus* with 3 to 35 percent cover. Other shrub species may be present with low cover, such as *Amelanchier utahensis, Artemisia tridentata, Gutierrezia sarothrae, Mahonia repens, and Symphoricarpos oreophilus.* The herbaceous layer is variable and ranges from being moderately dense, diverse and bunchgrass-dominated to sparse and often depauperate. In some stands the herbaceous layer is dominant over shrubs. Dominant and common grasses may include *Achnatherum hymenoides, Bouteloua gracilis, Elymus elymoides, Hesperostipa comata, Koeleria macrantha, Pascopyrum smithii, Poa fendleriana, Poa secunda, Pseudoroegneria spicata,* and *Leymus cinereus* may be present in mesic gully bottoms in Utah. Scattered forbs are present, such as *Astragalus bisulcatus, Castilleja* spp. Within the Property, shrub cover was dominated by green rabbitbrush and big sagebrush, with brome snakeweed (*Gutierrezia sarothrae*) and rubber rabbitbrush (*Ericameria nauseosa*) occurring as subdominants. Herbaceous plants included little sunflower (*Helianthera uniflora*), tansy aster (*Machaeranthera tanacetifolia*), and the introduced bulbous bluegrass and cheatgrass (*Bromus tectorum*). ***This community type was not included in the landcover data from the desktop assessment but was observed during the ecological surveys.*** The conservation value of this community was classified as desirable. This alliance was observed at only one location, but there are most likely other areas within the Property that would fall into this classification under the Intermountain Sagebrush Shrubland group. Cheatgrass was present.

Yellow Rabbitbrush Steppe & Shrubland Alliance, north view.
40.798505, -111.617194

Quaking Aspen—White Fir / Mountain Snowberry Forest

This mixed evergreen-deciduous forest is documented from the mountains and plateaus of Utah and northern Nevada at montane elevations. This association is characterized by a moderately dense to dense, mixed evergreen-deciduous tree canopy that is codominated by *Populus tremuloides* and *Abies concolor*. *Abies lasiocarpa* is typically not present, but individuals of *Pseudotsuga menziesii, Picea engelmannii,* or *Picea pungens,* are not uncommon. Often the conifers form a subcanopy that will eventually overtake the *Populus tremuloides* in this early seral type. *Symphoricarpos oreophilus* is the characteristic species of the short-shrub layer and typically dominates. Associates include several other common species in lesser amounts such as *Amelanchier* spp., *Arctostaphylos patula, Mahonia repens, Juniperus communis, Paxistima myrsinites,* and *Rosa woodsii*. The moderately dense herbaceous layer is usually luxuriant and species-rich in comparison to adjacent conifer forests because light is able to penetrate the *Populus tremuloides* tree canopy. Herbaceous species are diverse and variable. Common graminoids are *Achnatherum occidentale, Bromus carinatus, Carex geyeri, Carex rossii, Elymus glaucus, Elymus trachycaulus,* and *Poa fendleriana*. Forbs may include *Achillea millefolium, Frasera speciosa, Geranium* spp., *Lathyrus* spp., *Rudbeckia occidentalis,* and *Thalictrum fendleri*. The introduced graminoids *Poa pratensis* and *Dactylis glomerata* are common in many stands. Soils are generally well-drained loams or sandy loams with substantial organic matter. Past disturbance appears to be a key factor in distribution of these forests. At drier or rocky sites these forests may be somewhat stable, but in mesic areas they are seral communities, which become established following fire. *Abies concolor* is much more shade-tolerant than *Populus tremuloides* and is the most important regenerating species under closed-canopy conditions. Most of these mixed stands are seral, and in the absence of fire will eventually be dominated by *Abies concolor*. This unique forest alliance is linked to gap-forming disturbances, such as fire or windthrow, which allow regeneration of *Populus tremuloides* and limit abundances of *Abies concolor.* The forest conditions observed at the Property fit the above description. ***This community type was not included in the landcover data from the desktop assessment but was observed during the ecological surveys.***

Quaking Aspen—White Fir / Mountain Snowberry Forest, west view. 40.780125, -111.608689

Quaking Aspen—Douglas-Fir Saskatoon Serviceberry Forest
This mixed deciduous-evergreen forest is uncommon but wide-ranging, occurring from the southern Rocky Mountains and Colorado Plateau to the Yellowstone Plateau of eastern Idaho and northwestern Wyoming. It occurs between 1,700 and 2,695 meters (5,600–8,840 feet) elevation. Stands are usually on moderate to steep slopes of various aspects, and soils are generally derived from sedimentary parent materials. The vegetative structure of this association is complex. It consists of multi-layers of trees, shrubs and herbs. The characteristic features are the moderately dense to dense mixed canopy of *Populus tremuloides* and *Pseudotsuga menziesii* in the overstory with 25–75 percent relative canopy cover of each and a tall-shrub stratum dominated by one or a combination of *Amelanchier alnifolia, Prunus virginiana,* or *Acer grandidentatum*. A distinct low-shrub layer is also present and is composed of *Symphoricarpos* spp., *Rosa woodsii, Lonicera utahensis, Mahonia repens,* and *Paxistima myrsinites*. The sparse to moderately dense herbaceous layer is a mixture of graminoids and forbs. Common species include *Bromus porteri, Elymus trachycaulus, Eucephalus engelmannii, Galium boreale, Geranium viscosissimum, Lathyrus lanszwertii, Ligusticum porteri, Maianthemum racemosum, Osmorhiza* spp., and *Thalictrum* spp. Occasionally, *Calamagrostis rubescens, Elymus glaucus, Carex geyeri,* or *Arnica cordifolia* may be abundant (Mueggler 1988). Introduced perennial grass *Poa pratensis* is reported from some stands. The forest conditions observed at the Property fits the above description. ***This community type was not included in the landcover data from the desktop assessment but was observed during the ecological surveys.***

Quaking Aspen—Douglas-Fir Saskatoon Serviceberry Forest, east view.
40.798422, -111.598563

Basin Wildrye Meadow

This grassland-dominated vegetation alliance is adapted from the Basin Wildrye Alkaline Wet Meadow alliance but is an area with dryer soil conditions and less plant diversity than what is described for that alliance. The grassland occurs at the junction of the Big Bear Hollow two-track road and Glory Hole Fork on a southeasterly facing hillslope. The vegetation is characterized by a tall (over 1.5 meter), moderately dense to more typically dense grassland dominated by high cover (30–95%) of *Leymus cinereus*. Other plants are found mainly between the clumps of *Leymus cinereus* or on the edges of the dense stands. Scattered shrubs may be present, including *Artemisia tridentata, Chrysothamnus viscidiflorus, Ericameria nauseosa,* and *Symphoricarpos oreophilus*. Associated species occurring at lower cover include graminoids such as *Achnatherum hymenoides, Elymus glaucus, Hesperostipa comata, Juncus arcticus* ssp. *littoralis, Pascopyrum smithii*, and introduced species *Bromus tectorum* and *Poa pratensis*, and forbs such as *Achillea millefolium, Agastache urticifolia, and Rumex crispus*. The location observed within the Property had lower species diversity and appeared disturbed. Musk thistle (*Carduus nutans*), a state-listed noxious weed, was observed at the location. ***This community type was not included in the landcover data from the desktop assessment but was observed during the ecological surveys.***

Basin Wildrye Meadow, west view. 40.779255, -111.628894

Rocky Mountain Subalpine-Montane Mesic Meadow

This Rocky Mountain ecological system is restricted to sites from lower montane to subalpine, where finely textured soils, snow deposition, or windswept dry conditions limit tree establishment. Many occurrences are small-patch in spatial character, and are often found in mosaics with woodlands, denser shrublands, or just below alpine communities. It is typically found above 2,000 meters (6.600 feet) in elevation in the southern part of its range and above 600 meters (2,000 feet) in the northern part. These upland communities occur on gentle to moderate-gradient slopes and relatively moist habitats. The soils are typically seasonally moist to saturated in the spring, but if so will dry out later in the growing season. Vegetation is typically forb-rich, with forbs often contributing more to overall herbaceous cover than graminoids. Some stands are composed of dense grasslands, these often being taxa with relatively broad and soft blades, but where the moist habitat promotes a rich forb component. Important taxa include *Erigeron* spp., Asteraceae spp., *Mertensia* pp., *Penstemon* spp., *Campanula* spp., *Lupinus* spp., *Solidago* spp., *Ligusticum* spp., *Thalictrum occidentale, Valeriana sitchensis, Rudbeckia occidentalis, Balsamorhiza sagittata*, and *Wyethia* spp. Important grasses include *Deschampsia cespitosa, Koeleria macrantha*, perennial *Bromus* spp., and a number of *Carex* species. *Dasiphora fruticosa* ssp. *floribunda* and *Symphoricarpos* spp. are occasional but not abundant. Burrowing mammals can increase the forb diversity. This vegetation community occurs in a few small open meadows perched on a terrace near a small cabin in the Property where elk are known to graze. The community consisted of arrowleaf balsamroot (*Balsamorhiza sagittate)*, mule's ear, Rocky Mountain penstemon (*Penstemon strictus*), bluebunch wheatgrass, mountain brome, Kentucky bluegrass, and lupin.

Southeast view of Rocky Mountain Subalpine Mesic Meadow. 40.775319, -111.592765

Water Birch Wet Shrubland Alliance

This riparian shrubland alliance occurs in the Rocky Mountains and the intermountain ranges of Nevada and Sierra Nevada of California on moderately wide stream benches and floodplains. It may also occur on hillside seeps in the mountains and foothills. Sites are relatively flat (1–5% slope) often on stream benches and often extending away from the channel edge. The substrate is usually exposed, but surface water can be present for variable periods without detectable seasonal periodicity. Inundation is not predictable to a given season and is dependent upon highly localized rainstorms (e.g., summer thunderstorms in eastern Oregon and Idaho). Soils are derived from alluvium and are fairly shallow, ranging from 30 centimeters to greater than 60 centimeters. Substrates are typically alluvial and range from fairly shallow, finer-textured soils to gravel and boulders. Soils usually have signs of saturation (mottles). In this alliance, *Betula occidentalis* forms a dense, closed canopy with cover up to 95 percent. The shrub layer may also include *Alnus incana, Artemisia tridentata* ssp. *vaseyana, Cornus sericea, Crataegus douglasii, Dasiphora fruticosa* ssp. *floribunda, Juniperus horizontalis, Purshia tridentata, Purshia tridentata, Rosa woodsii*, and *Salix* spp. Due to the dense shrub canopy, herbaceous undergrowth is usually limited. Forb species include *Aquilegia formosa, Maianthemum stellatum*, and *Urtica dioica*. Graminoid cover is usually low and is typically composed of introduced hay grasses. This unique wetland community type occurred in one place within the Property, near the upper portions of Wood Hollow and Mill Hollow, where a series of cattle ponds had been built to collect and pond natural spring discharge. Water birch (*Betula occidentalis*) dominated the overstory with coyote willow and Bebb's willow occurring as subdominants. The herbaceous layer was composed of starry false lily of the valley (*Maianthemum stellatum*), spearmint (*Mentha spicata*), and mountain rush (*Juncus arcticus* spp. *littoralis*). ***This community type was not included in the landcover data from the desktop assessment but was observed during the ecological surveys.***

Southwest view of Water Birch Wet Shrubland Alliance. 40.7685817°N, -111.6271162°W

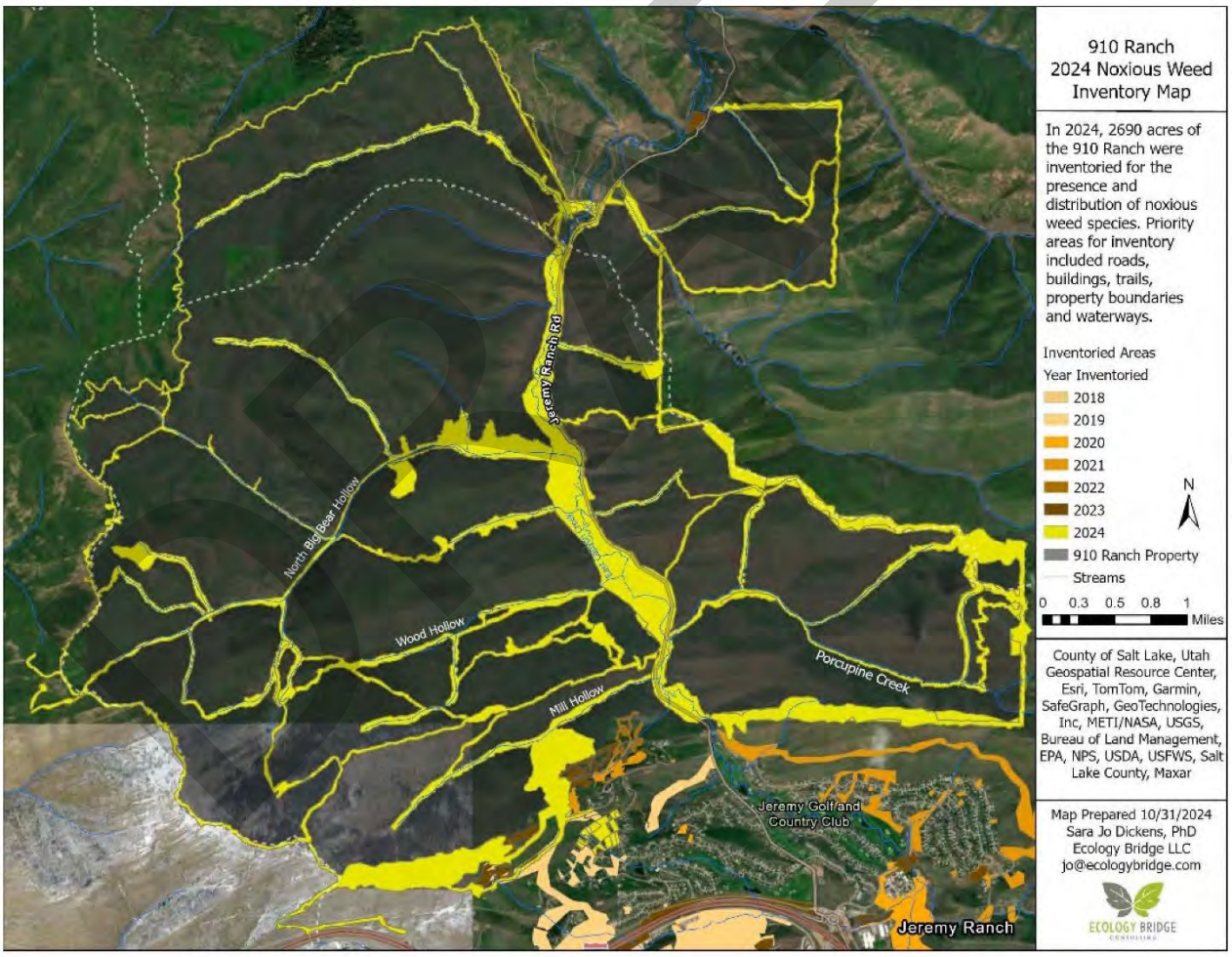
Clustered Field Sedge—Common Spikerush Wet Meadow Alliance
This herbaceous wetland alliance is characterized by an herbaceous layer that is dominated or codominated by *Eleocharis palustris*. Associates include *Carex praegracilis, Deschampsia cespitosa, Distichlis spicata, Juncus arcticus* ssp. *littoralis, Muhlenbergia asperifolia,* and *Phalaris arundinacea*. Forb cover is also variable and may include *missouriensis, Lemna* spp., *Mentha arvensis, Ranunculus cymbalaria, Nasturtium officinale,* and *Rumex crispus*. Stands occur in shallow, mostly still water throughout much of the western United States and into northern Mexico, from sea level to upper montane altitudes. Stands occur on a variety of landforms, including lake margins, stream terraces, floodplains, gravel bars, and around springs or wet basins (cienegas). At the Property, these areas occur along East Canyon Creek, along pond margins, around springs, and along the intermittent tributaries to East Canyon Creek. Some of these areas contained obliterated beaver dams that have the potential for restoration using the installation of beaver dam analogues. This wetland habitat type contains suitable habitat for Ute ladies'-tresses. Within the Property, this habitat type was dominated by mountain rush, Nebraska sedge (*Carex nebrascensis*), water sedge, common spikerush, fringed willow herb, common horsetail (*Equisetum arvense*), fowl mannagrass (*Glyceria striata*), American speedwell, creeping bentgrass (*Agrostis stolonifera*), and seep monkeyflower (*Mimulus guttatus*). ***This community type was not included in the landcover data from the desktop assessment but was observed during the ecological surveys.***

Clustered Field Sedge—Common Spikerush Wet Meadow Alliance.
40.7687196°N, -111.6281074°W

APPENDIX D. PRELIMINARY NOXIOUS WEED REPORT

910 RANCH NOXIOUS WEED ASSESSMENT

A full description of the noxious weed distribution on 910 Ranch will require several years of inventory and mapping. Focusing on areas most likely to have experienced invasion due to disturbance or proximity to vectors of weed seed spread provides a solid base from which to begin managing weeds at the landscape scale. In 2024, 2,690 acres of 910 Ranch were inventoried. Priority areas for inventory included roads, human infrastructure, trails (ATV, human and some wild game), East Canyon Creek and associated wetlands and other waters (creeks, streams, ponds and springs) because all are considered high risk for weed spread. The main drainages, particularly those that indicated having potential to contain a creek or stream (Dry Hollow, Mill Hollow, Porcupine Creek, North Big Bear Hollow, and Dry Hollow), along with most waterways have been monitored. Additionally, 90 percent of the property boundary has been inventoried to assess what noxious weeds may be entering the property from adjacent lands currently and in the future.



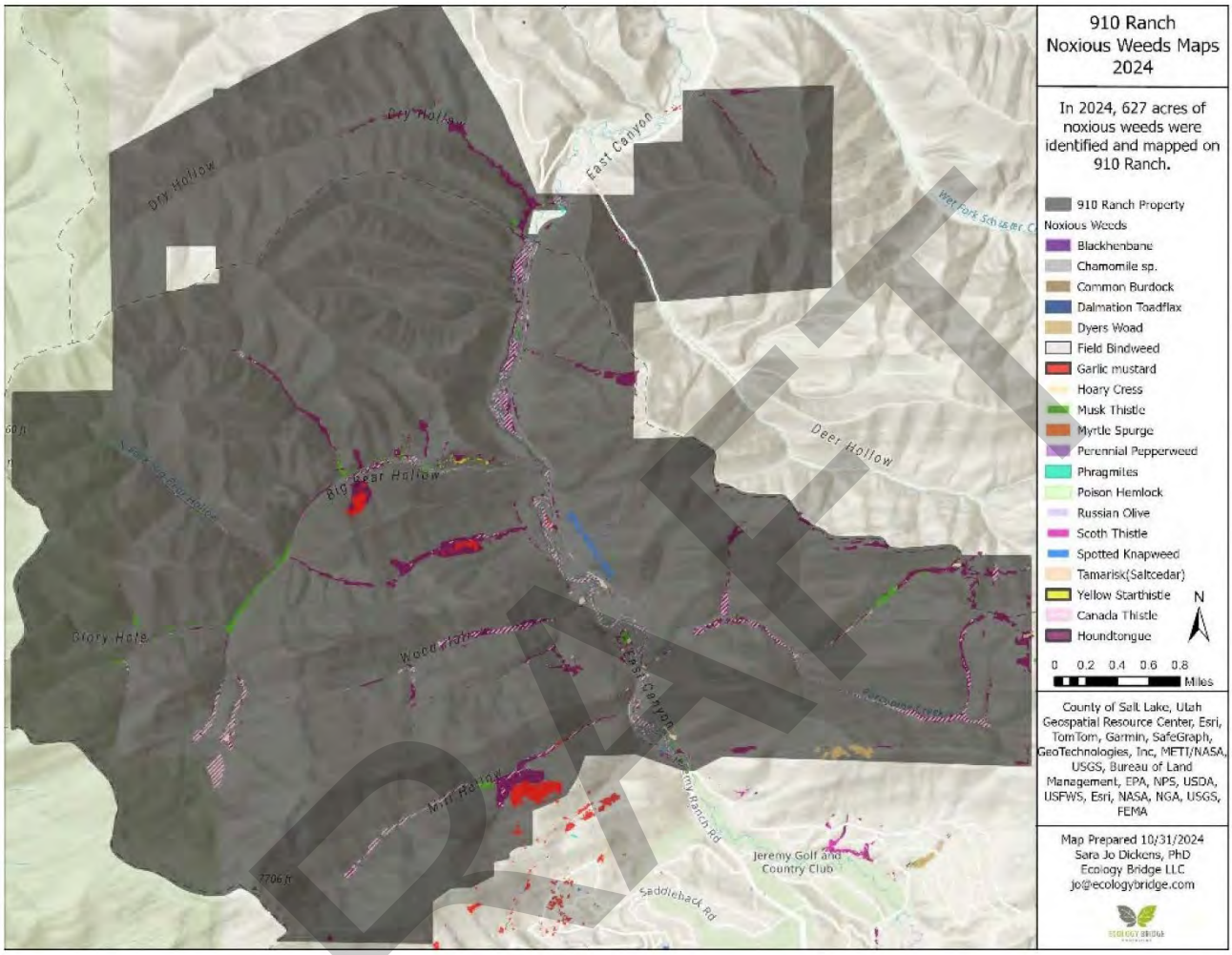
A total of 19 noxious weed species were identified and 627 acres of noxious weeds were mapped. The most prevalent species included houndstongue, Canada thistle, and musk thistle. The most

concerning species identified include garlic mustard, Myrtle spurge, Phragmites, spotted knapweed and yellow starthistle due to the potential for each of these species to significantly alter natural resources and wildlife habitat. In general, the greatest distribution and density of noxious weeds are associated with buildings, roads/ATV trails, waterways and open meadows, particularly when cattle frequently use these areas. The western boundary, the northwestern corner and the northeastern corner remain mostly uninvaded by noxious weeds. These areas of 910 Ranch are not currently accessed by cattle. Unlike most noxious weeds identified on the ranch, garlic mustard was not associated with areas of disturbance or water. Instead, garlic mustard was associated with forested (conifer or maple/oak woodlands) areas, game trails and areas adjacent to Jeremy Ranch and Moose Hollow residential communities.

Noxious Weed Species	*Latin Name*	Number of Populations	Acres Present
Houndtongue	*Cynoglossum officinale*	1434	337.41
Canada Thistle	*Cirsium arvense*	505	151.45
Musk Thistle	*Carduus nutans*	828	70.51
Garlic mustard	*Alliaria petiolata*	87	37.37
Dyers Woad	*Isatis tinctoria*	42	10.82
Hoary Cress	*Cardaria draba*	40	5.62
Field Bindweed	*Convolvulus arvensis*	50	4.48
Common Burdock	*Arctium minus*	154	2.47
Scotch Thistle	*Onopordum acanthium*	71	1.80
Common Reed	*Phragmites australis*	3	0.73
Dalmatian Toadflax	*Linaria dalmatica*	7	0.44
Spotted Knapweed	*Centaurea stoebe*	23	0.42
Perennial Pepperweed	*Lepidium latifolium*	46	0.40
Black Henbane	*Hyoscyamus niger*	8	0.08
Poison Hemlock	*Conium maculatum*	3	0.04
Myrtle Spurge	*Euphorbia myrsinites*	1	0.02
Chamomile spp.	*Chamomile spp.*	5	0.02
Russian Olive	*Elaeagnus angustifolia*	1	0.01
Yellow Starthistle	*Centaurea solstitialis*	29	3.28
Total		**3337**	**627.38**

All noxious weeds within North Big Bear Hollow and along much of Jeremy Ranch Road were treated with herbicide by contractors in 2024. Additional treatments were applied by county staff. Additional weed inventory along the southwestern boundary, north boundary and

three additional drainages may yet occur this year, however, recent snowfall may prevent further field work until the 2025 season.



APPENDIX E. UDWR WILDLIFE ANALYSIS TOOL

Utah Division of Wildlife Resources
1594 W. North Temple
Salt Lake City, UT 84116
(801) 538-4700, wildlife.utah.gov

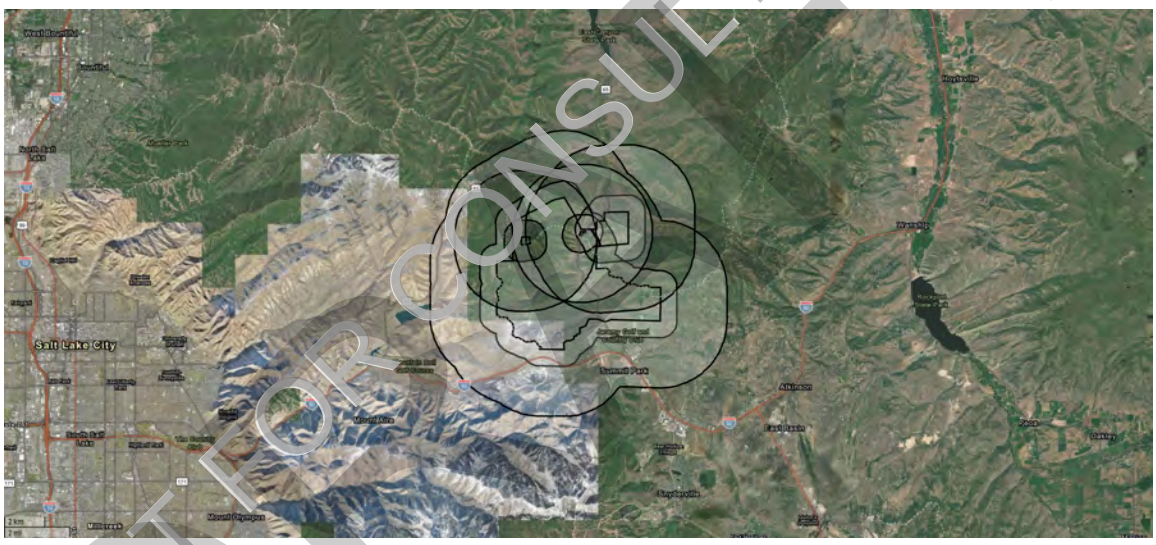
WHAT WILDLIFE HABITAT ANALYSIS TOOL

Report Number: vez_16229

Report Date: 2024-11-19 10:59:54

910 Ranch

Location: Summit County
Description: Summit County 910 Ranch Baseline Ecological Assessment



Project Area of Interest with a half-mile and two-mile radius.

Half-Mile Radius

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Western Pearlshell	*Margaritifera falcata*	SGCN	None	1929-PRE	
Western bumble bee	*Bombus occidentalis*	None	None	6/5/2021	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Bear Lake Springsnail	*Pyrgulopsis pilsbryana*	SGCN	None	1990-04-20	
Creeping Ancylid	*Ferrissia rivularis*	None	None	1935-PRE	
Green River Pebblesnail	*Fluminicola coloradoensis*	SGCN	None	1998-08-06	
Ridged-beak Peaclam	*Pisidium compressum*	None	None	1935-PRE	
Triangular Peaclam	*Pisidium variabile*	None	None	1935-PRE	
Suboval Ambersnail	*Catinella vermeta*	None	None	1935-PRE	
Golden Fossaria	*Galba obrussa*	None	None	1990-04-20	
Tadpole Physa	*Physa gyrina*	None	None	1990-04-20	
[No Common Name]	*Galba rustica*	None	None	1935-PRE	
New Zealand Mudsnail	*Potamopyrgus antipodarum*	None	None	2019-06-18	
Gray Fieldslug	*Deroceras reticulatum*	None	None	1990-04-20	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Marsh Pondsnail	*Stagnicola elodes*	None	None	1935-PRE	
	Bombus rufocinctus	None	None	2023-06-17	
Charity	*Polemonium caeruleum*	None	None	2009-07-09 00:00:00	
Starflower Solomon's-plume	*Smilacina stellata*	None	None	2013-06-02 00:00:00	
Brandegee's Onion	*Allium brandegeei*	None	None	2010-06-25 00:00:00	
Spiny-leaf Sowthistle	*Sonchus asper*	None	None	2009-07-09 00:00:00	
Longleaf Hawk's-beard	*Crepis acuminata*	None	None	2009-07-09 00:00:00	
Common Mouse-ear Chickweed	*Cerastium fontanum*	None	None	2009-07-09 00:00:00	
Garden Yellow-rocket	*Barbarea vulgaris*	None	None	2013-06-02 00:00:00	
Alaska Rein Orchid	*Piperia unalascensis*	None	None	2009-07-09 00:00:00	
Common Hop	*Humulus lupulus*	None	None	2009-07-09 00:00:00	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Musk Thistle	*Carduus nutans*	None	None	2009-07-09 00:00:00	
Red Clover	*Trifolium pratense*	None	None	2009-07-09 00:00:00	
Hairy Arnica	*Arnica mollis*	None	None	2009-07-09 00:00:00	
Wasatch Biscuitroot	*Lomatium bicolor*	None	None	2010-06-25 00:00:00	
Ternate Desert-parsley	*Lomatium triternatum ssp. triternatum var. anomalum*	None	None	2013-06-02 00:00:00	
Northern Leopard Frog	*Lithobates pipiens*	SGCN	None	2022-07-09	
Northern Goshawk	*Accipiter atricapillus*	None	None	1965-03-12	
Bonneville Cutthroat Trout	*Oncorhynchus clarkii utah*	SGCN	None	1981-07-09	
Green River Pebblesnail	*Fluminicola coloradoensis*	SGCN	None	2019-06-18	
Tadpole Physa	*Physa gyrina*	None	None	1990-04-20	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
New Zealand Mudsnail	*Potamopyrgus antipodarum*	None	None	2019-06-18	
	Bombus centralis	None	None	2020-05-19	
Longleaf Hawk's-beard	*Crepis acuminata*	None	None	2009-07-09 00:00:00	
Spiny-leaf Sowthistle	*Sonchus asper*	None	None	2009-07-09 00:00:00	
Garden Yellow-rocket	*Barbarea vulgaris*	None	None	2013-06-02 00:00:00	
Western St. John's-wort	*Hypericum scouleri*	None	None	2009-07-09 00:00:00	
Alaska Rein Orchid	*Piperia unalascensis*	None	None	2009-07-09 00:00:00	
Common Hop	*Humulus lupulus*	None	None	2009-07-09 00:00:00	
Charity	*Polemonium caeruleum*	None	None	2009-07-09 00:00:00	
Common Bugloss	*Anchusa officinalis*	None	None	2009-07-09 00:00:00	
Red Clover	*Trifolium pratense*	None	None	2009-07-09 00:00:00	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Hairy Arnica	*Arnica mollis*	None	None	2009-07-09 00:00:00	
Ternate Desert-parsley	*Lomatium triternatum ssp. triternatum var. anomalum*	None	None	2013-06-02 00:00:00	
Bonneville Cutthroat Trout	*Oncorhynchus clarkii utah*	SGCN	None	1981-07-09	
New Zealand Mudsnail	*Potamopyrgus antipodarum*	None	None	2019-06-18	
Red Clover	*Trifolium pratense*	None	None	2009-07-09 00:00:00	
Alaska Rein Orchid	*Piperia unalascensis*	None	None	2009-07-09 00:00:00	
Garden Yellow-rocket	*Barbarea vulgaris*	None	None	2013-06-02 00:00:00	
Charity	*Polemonium caeruleum*	None	None	2009-07-09 00:00:00	
Spiny-leaf Sowthistle	*Sonchus asper*	None	None	2009-07-09 00:00:00	
Ternate Desert-parsley	*Lomatium triternatum ssp. triternatum var. anomalum*	None	None	2013-06-02 00:00:00	

Two-Mile Radius

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Suboval Ambersnail	*Catinella vermeta*	None	None	1935-PRE	
	Bombus flavifrons	None	None	2022-07-16	
Alaska Rein Orchid	*Piperia unalascensis*	None	None	2009-07-09 00:00:00	
Wasatch Biscuitroot	*Lomatium bicolor*	None	None	2010-06-25 00:00:00	
Red Clover	*Trifolium pratense*	None	None	2009-07-09 00:00:00	
Yellow Navarretia	*Navarretia breweri*	None	None	2008-07-06 00:00:00	
Striped Coralroot	*Corallorhiza striata*	None	None	2008-07-06 00:00:00	
Musk Thistle	*Carduus nutans*	None	None	2009-07-09 00:00:00	
Charity	*Polemonium caeruleum*	None	None	2009-07-09 00:00:00	
Starflower Solomon's-plume	*Smilacina stellata*	None	None	2013-06-02 00:00:00	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Brandegee's Onion	*Allium brandegeei*	None	None	2010-06-25 00:00:00	
Longleaf Hawk's-beard	*Crepis acuminata*	None	None	2009-07-09 00:00:00	
Spiny-leaf Sowthistle	*Sonchus asper*	None	None	2009-07-09 00:00:00	
Great Basin Nemophila	*Nemophila breviflora*	None	None	2010-06-25 00:00:00	
Common Mouse-ear Chickweed	*Cerastium fontanum*	None	None	2009-07-09 00:00:00	
Ternate Desert-parsley	*Lomatium triternatum ssp. triternatum var. anomalum*	None	None	2013-06-02 00:00:00	
Holboell Rock-cress	*Boechera holboelii*	None	None	2010-06-25 00:00:00	
Common Gartersnake	*Thamnophis sirtalis*	None	None	2003-06-26	
Rubber Boa	*Charina bottae*	None	None	2018-06-03	
Western Pearlshell	*Margaritifera falcata*	SGCN	None	1929-PRE	
Western bumble bee	*Bombus occidentalis*	None	None	6/5/2021	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Glossy Valvata	*Valvata humeralis*	None	None	1989-05-15	
Bear Lake Springsnail	*Pyrgulopsis pilsbryana*	SGCN	None	1990-04-20	
Creeping Ancylid	*Ferrissia rivularis*	None	None	1935-PRE	
Glossy Pillar Snail	*Cochlicopa lubrica*	None	None	2018-05-14	
Green River Pebblesnail	*Fluminicola coloradoensis*	SGCN	None	2019-06-18	
Ridged-beak Peaclam	*Pisidium compressum*	None	None	1935-PRE	
Toquerville Springsnail	*Pyrgulopsis kolobensis*	None	None	2012-06-28	
Suboval Ambersnail	*Catinella vermeta*	None	None	1935-PRE	
Triangular Peaclam	*Pisidium variabile*	None	None	1935-PRE	
Ubiquitous Peaclam	*Pisidium casertanum*	None	None	1990-05-22	
Golden Fossaria	*Galba obrussa*	None	None	1990-04-20	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Tadpole Physa	*Physa gyrina*	None	None	1990-04-20	
[No Common Name]	*Galba rustica*	None	None	1935-PRE	
Cross Snaggletooth	*Gastrocopta quadridens*	SGCN	None	1928-1931	
Gray Fieldslug	*Deroceras reticulatum*	None	None	1990-04-20	
New Zealand Mudsnail	*Potamopyrgus antipodarum*	None	None	2019-06-18	
Marsh Pondsnail	*Stagnicola elodes*	None	None	1990-05-22	
	Bombus rufocinctus	None	None	2023-06-17	
Small-flower Nemophila	*Nemophila parviflora var. austiniae*	None	None	2009-07-09 00:00:00	
Johnston Stickseed	*Hackelia patens*	None	None	2013-06-02 00:00:00	
Long-tubed Evening-primrose	*Oenothera flava*	None	None	2007-06-01 00:00:00	
Spiny-leaf Sowthistle	*Sonchus asper*	None	None	2009-07-09 00:00:00	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Blue Stickseed	*Hackelia micrantha*	None	None	2012-06-03 00:00:00	
Longleaf Hawk's-beard	*Crepis acuminata*	None	None	2009-07-09 00:00:00	
Common Hop	*Humulus lupulus*	None	None	2009-07-09 00:00:00	
Yellow Navarretia	*Navarretia breweri*	None	None	2008-07-06 00:00:00	
False Mermaidweed	*Floerkea proserpinacoides*	None	None	2007-05-13 00:00:00	
Starflower Solomon's-plume	*Smilacina stellata*	None	None	2013-06-02 00:00:00	
Charity	*Polemonium caeruleum*	None	None	2009-07-09 00:00:00	
Brandegee's Onion	*Allium brandegeei*	None	None	2010-06-25 00:00:00	
Musk Thistle	*Carduus nutans*	None	None	2009-07-09 00:00:00	
Striped Coralroot	*Corallorhiza striata*	None	None	2008-07-06 00:00:00	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Common Bugloss	*Anchusa officinalis*	None	None	2009-07-09 00:00:00	
Panicled Willowherb	*Epilobium brachycarpum*	None	None	2008-07-06 00:00:00	
Hairy Arnica	*Arnica mollis*	None	None	2009-07-09 00:00:00	
Garlic Mustard	*Alliaria petiolata*	None	None	2013-06-02 00:00:00	
Red Clover	*Trifolium pratense*	None	None	2009-07-09 00:00:00	
Common Mouse-ear Chickweed	*Cerastium fontanum*	None	None	2009-07-09 00:00:00	
Great Basin Nemophila	*Nemophila breviflora*	None	None	2010-06-25 00:00:00	
Alaska Rein Orchid	*Piperia unalascensis*	None	None	2009-07-09 00:00:00	
Western St. John's-wort	*Hypericum scouleri*	None	None	2009-07-09 00:00:00	
Garden Yellow-rocket	*Barbarea vulgaris*	None	None	2013-06-02 00:00:00	
Wasatch Biscuitroot	*Lomatium bicolor*	None	None	2010-06-25 00:00:00	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Ternate Desert-parsley	*Lomatium triternatum ssp. triternatum var. anomalum*	None	None	2013-06-02 00:00:00	
Holboell Rock-cress	*Boechera holboelii*	None	None	2010-06-25 00:00:00	
Utah Sucker	*Catostomus ardens*	None	None	2007-06-26	
Redside Shiner	*Richardsonius balteatus*	None	None	2007-06-26	
Longnose Dace	*Rhinichthys cataractae*	None	None	2007-06-26	
Pacific Marten	*Martes caurina*	None	None	1988-08-03	
Northern Leopard Frog	*Lithobates pipiens*	SGCN	None	2022-07-09	
Northern River Otter	*Lontra canadensis*	None	None	PRE-1981	
Northern Goshawk	*Accipiter atricapillus*	None	None	1965-03-12	
Bonneville Cutthroat Trout	*Oncorhynchus clarkii utah*	SGCN	None	2018-07-05	
Rubber Boa	*Charina bottae*	None	None	2018-06-03	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Common Gartersnake	*Thamnophis sirtalis*	None	None	2003-06-26	
Speckled Dace	*Rhinichthys osculus*	None	None	2007-06-26	
Virginia's Warbler	*Leiothlypis virginiae*	None	None	1997	
Bear Lake Springsnail	*Pyrgulopsis pilsbryana*	SGCN	None	1990-04-20	
Green River Pebblesnail	*Fluminicola coloradoensis*	SGCN	None	2019-06-18	
Toquerville Springsnail	*Pyrgulopsis kolobensis*	None	None	2012-06-28	
Suboval Ambersnail	*Catinella vermeta*	None	None	1935-PRE	
Triangular Peaclam	*Pisidium variabile*	None	None	1935-PRE	
Tadpole Physa	*Physa gyrina*	None	None	1990-04-20	
New Zealand Mudsnail	*Potamopyrgus antipodarum*	None	None	2019-06-18	
	Bombus centralis	None	None	2020-05-19	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Small-flower Nemophila	*Nemophila parviflora var. austiniae*	None	None	2009-07-09 00:00:00	
Johnston Stickseed	*Hackelia patens*	None	None	2013-06-02 00:00:00	
Western St. John's-wort	*Hypericum scouleri*	None	None	2009-07-09 00:00:00	
Garden Yellow-rocket	*Barbarea vulgaris*	None	None	2013-06-02 00:00:00	
Alaska Rein Orchid	*Piperia unalascensis*	None	None	2009-07-09 00:00:00	
Common Hop	*Humulus lupulus*	None	None	2009-07-09 00:00:00	
Common Bugloss	*Anchusa officinalis*	None	None	2009-07-09 00:00:00	
Musk Thistle	*Carduus nutans*	None	None	2009-07-09 00:00:00	
Common Mouse-ear Chickweed	*Cerastium fontanum*	None	None	2009-07-09 00:00:00	
Red Clover	*Trifolium pratense*	None	None	2009-07-09 00:00:00	
Hairy Arnica	*Arnica mollis*	None	None	2009-07-09 00:00:00	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Garlic Mustard	*Alliaria petiolata*	None	None	2013-06-02 00:00:00	
Longleaf Hawk's-beard	*Crepis acuminata*	None	None	2009-07-09 00:00:00	
Spiny-leaf Sowthistle	*Sonchus asper*	None	None	2009-07-09 00:00:00	
Charity	*Polemonium caeruleum*	None	None	2009-07-09 00:00:00	
Brandegee's Onion	*Allium brandegeei*	None	None	2010-06-25 00:00:00	
Starflower Solomon's-plume	*Smilacina stellata*	None	None	2013-06-02 00:00:00	
Ternate Desert-parsley	*Lomatium triternatum ssp. triternatum var. anomalum*	None	None	2013-06-02 00:00:00	
Bonneville Cutthroat Trout	*Oncorhynchus clarkii utah*	SGCN	None	1981-07-09	
Bear Lake Springsnail	*Pyrgulopsis pilsbryana*	SGCN	None	1990-04-20	
Green River Pebblesnail	*Fluminicola coloradoensis*	SGCN	None	2019-06-18	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Toquerville Springsnail	*Pyrgulopsis kolobensis*	None	None	2012-06-28	
Suboval Ambersnail	*Catinella vermeta*	None	None	1935-PRE	
Tadpole Physa	*Physa gyrina*	None	None	1990-04-20	
New Zealand Mudsnail	*Potamopyrgus antipodarum*	None	None	2019-06-18	
	Bombus centralis	None	None	2020-05-19	
Musk Thistle	*Carduus nutans*	None	None	2009-07-09 00:00:00	
Common Bugloss	*Anchusa officinalis*	None	None	2009-07-09 00:00:00	
Garden Yellow-rocket	*Barbarea vulgaris*	None	None	2013-06-02 00:00:00	
Alaska Rein Orchid	*Piperia unalascensis*	None	None	2009-07-09 00:00:00	
Western St. John's-wort	*Hypericum scouleri*	None	None	2009-07-09 00:00:00	
Longleaf Hawk's-beard	*Crepis acuminata*	None	None	2009-07-09 00:00:00	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Spiny-leaf Sowthistle	*Sonchus asper*	None	None	2009-07-09 00:00:00	
Wasatch Biscuitroot	*Lomatium bicolor*	None	None	2010-06-25 00:00:00	
Common Hop	*Humulus lupulus*	None	None	2009-07-09 00:00:00	
Johnston Stickseed	*Hackelia patens*	None	None	2013-06-02 00:00:00	
Small-flower Nemophila	*Nemophila parviflora var. austiniae*	None	None	2009-07-09 00:00:00	
Charity	*Polemonium caeruleum*	None	None	2009-07-09 00:00:00	
Brandegee's Onion	*Allium brandegeei*	None	None	2010-06-25 00:00:00	
Starflower Solomon's-plume	*Smilacina stellata*	None	None	2013-06-02 00:00:00	
Garlic Mustard	*Alliaria petiolata*	None	None	2013-06-02 00:00:00	
Red Clover	*Trifolium pratense*	None	None	2009-07-09 00:00:00	
Hairy Arnica	*Arnica mollis*	None	None	2009-07-09 00:00:00	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Common Mouse-ear Chickweed	*Cerastium fontanum*	None	None	2009-07-09 00:00:00	
Ternate Desert-parsley	*Lomatium triternatum ssp. triternatum var. anomalum*	None	None	2013-06-02 00:00:00	
Bonneville Cutthroat Trout	*Oncorhynchus clarkii utah*	SGCN	None	1981-07-09	

Definitions

State Status	
SGCN	Species of greatest conservation need listed in the Utah Wildlife Action Plan (UWAP) and also included in the Utah Field Guide
U.S. Endangered Species Act	
LE	A taxon that is listed by the U.S. Fish and Wildlife Service as "endangered" with the probability of worldwide extinction
LT	A taxon that is listed by the U.S. Fish and Wildlife Service as "threatened" with becoming endangered
LE;XN	An "endangered" taxon that is considered by the U.S. Fish and Wildlife Service to be "experimental and nonessential" in its designated use areas in Utah
C	A taxon for which the U.S. Fish and Wildlife Service has on file sufficient information on biological vulnerability and threats to justify it being a "candidate" for listing as endangered or threatened
PT/PE	A taxon "proposed" to be listed as "endangered" or "threatened" by the U.S. Fish and Wildlife Service

Species Distribution and Habitat Suitability Models

Species distribution and habitat suitability models (SDHMs) can inform wildlife management decisions such as habitat protection, enhancement, and restoration. They may also help assess environmental impacts by identifying species' habitats. When reevaluating SDHMs with new information, they can help identify or track changes or trends in habitat quality. SDHMs assess habitats' spatial arrangement and connectivity, identify crucial habitats, or describe the

environmental conditions a species selects. SDHMs provide an understanding of the impacts of invasive species spread and identify suitable areas for species translocations/re-introductions.

SDHMs show a predicted suitable habitat for a species based on various biotic and abiotic environmental factors. These models may be useful for statewide evaluation but should not be considered verified species presence or absence. Field survey information should be utilized to verify the presence or absence of taxa when making species-specific decisions. Models produced by the Utah Division of Wildlife Resources (DWR) were conducted using a blend of Generalized Linear Models, Generalized Additive Models, Random Forest Models, Boosted Regression Tree Models, and Maximum Entropy Models.

Mitigation Strategies

Typical recommendations to consider and help guide project activities to avoid, minimize or mitigate impacts on wildlife and their habitats from project disturbances are displayed below for some wildlife species found within/near your project area.

Common Name	Strategy
Elk	Avoid disturbance in crucial summer range during calving May 15 - July 15. Avoid, minimize or mitigate impacts from large-scale development that occur within crucial elk habitats. Voluntary mitigation is recommended at a 4:1 ratio, meaning 4 acres of improved or conserved habitat for every 1 acre of disturbance.
moose	Avoid disturbance in crucial winter habitats Nov. 1 - May 15 and crucial summer range May 15 - July 5. Consider voluntary mitigation if avoidance is not possible or there is permanent habitat loss.
mule deer	Avoid, minimize or mitigate impacts from large-scale development that occur within crucial elk habitats. Voluntary mitigation is recommended at a 4:1 ratio, meaning 4 acres of improved or conserved habitat for every 1 acre of disturbance.
mule deer	Avoid disturbance in crucial summer range during fawning May 15 - July 15. Avoid, minimize or mitigate impacts from large-scale development that occur within crucial elk habitats. Voluntary mitigation is recommended at a 4:1 ratio, meaning 4 acres of improved or conserved habitat for every 1 acre of disturbance.

The DWR understands that mitigation strategies might conflict. Please reach out to DWR staff to develop strategies to minimize impacts on wildlife while still achieving project goals. Your project is located in the following UDWR region(s):

DWR Region Full Name	Regional Phone	Impact Analysis Biologist	Email	Phone
Central Region	801-491-5678	Josee Seamons	jseamons@utah.gov	385-421-1277
Northern Region	801-476-2740	Melissa Early	mearly@utah.gov	801-386-4885

This project area contains multiple valuable wildlife habitats, where standard recommendations may conflict or be overburdensome. We strongly recommend reaching out to our team of experts for tailored/project-specific suggestions and solutions and DWR staff may contact you.

Wildlife Action Plan

The Utah Wildlife Action Plan (UWAP) is Utah's guiding document for native species conservation. The DWR encourages parties to use the UWAP in their environmental planning, as it provides a conservation framework to prevent future listings under the ESA.

Disclaimer

The information provided in this report is based on data existing in the Utah Division of Wildlife Resources' central database at the time of the request. It should not be regarded as a final statement on the occurrence of any species on or near the designated site, nor should it be considered a substitute for on-the-ground biological surveys. Moreover, because the Utah Division of Wildlife Resources' central database is continually updated, any given response is only appropriate for its respective request.

The Utah DWR provides no warranty nor accepts any liability occurring from any incorrect, incomplete, or misleading data or from any incorrect, incomplete, or misleading use of these data.

The results include a query of species tracked by the Utah Natural Heritage Program and Utah Division of Wildlife Resources, which includes all species listed under the U.S. Endangered Species Act, species in the Utah Wildlife Action Plan, and other species. Other significant wildlife values might also be present on the designated site.

For additional information about species listed under the Endangered Species Act and their Critical Habitats that may be affected by activities in this area or for information about Section 7 consultation under the Endangered Species Act, please visit https://ecos.fws.gov/ipac/ or contact the U.S. Fish and Wildlife Service Utah Ecological Services Field Office at (801) 975-3330 or utahfieldoffice_esa@fws.gov.

Supplemental Data

Unmapped Corridors

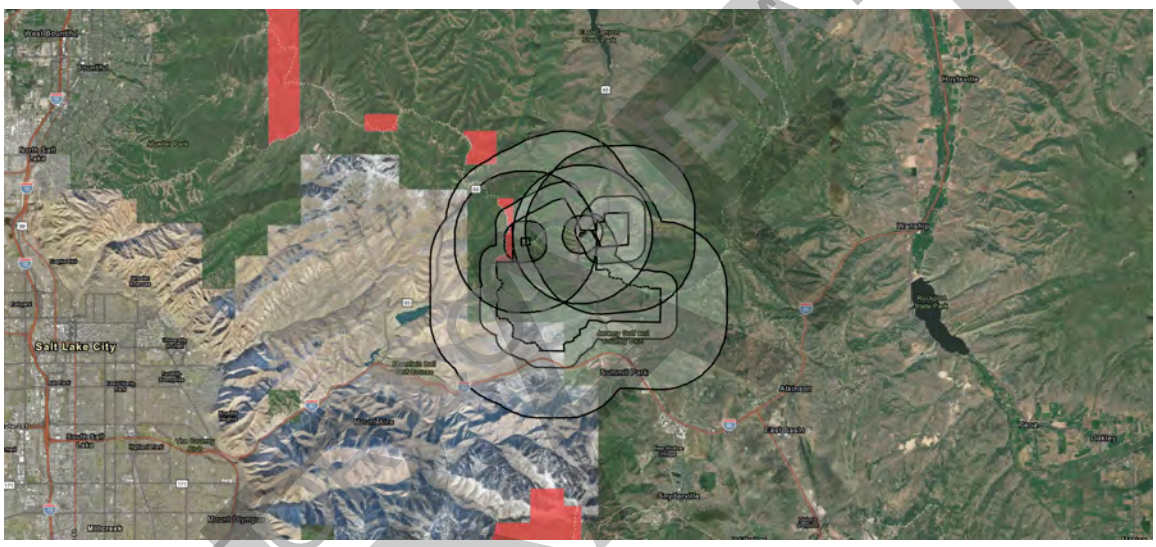
Unmodeled Corridors: Present

Wildlife Habitat Information

Species	Season	Value	Comments
Band-Tailed Pigeon	spring-fall	substantial	
Black Bear	year-long	crucial	
California Quail	year-long	crucial	
Dusky Grouse	year-long	crucial	
Elk	summer/fall	crucial	
Moose	year-long	crucial	Calving habitat.

Species	Season	Value	Comments
Mule Deer	spring/fall	crucial	
Mule Deer	summer	crucial	
Ruffed Grouse	year-long	substantial	
Snowshoe Hare	year-long	substantial	
White-Tailed Jackrabbit	year-long		

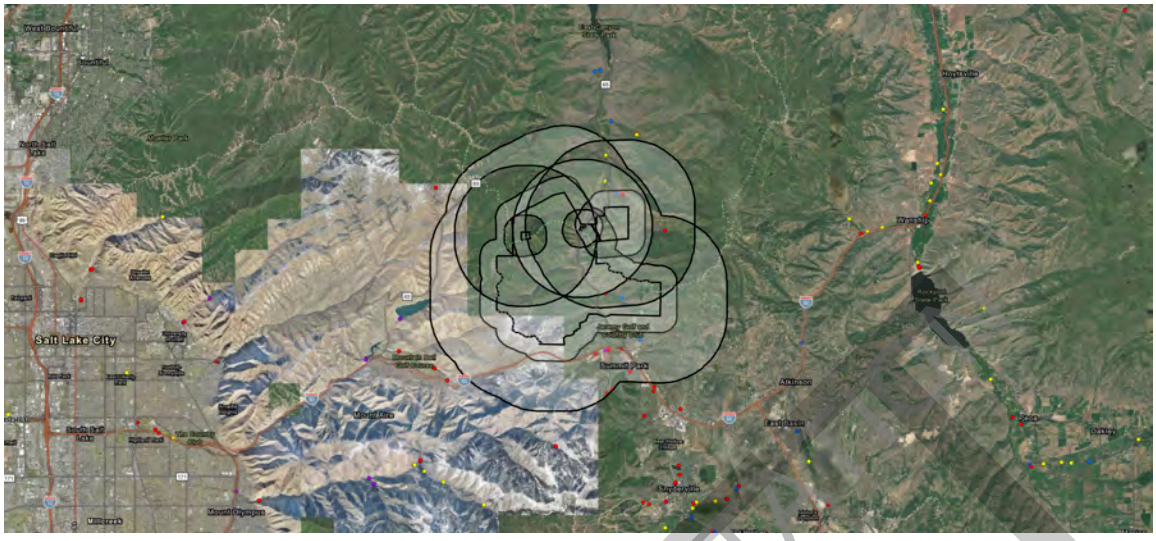
USFS Grazing Allotments



Description: Allotment is a feature class in the Range Management Unit (RMU) data set. It represents the area boundaries of livestock grazing allotments.

Allotment_Name	Allotment_Num
CLEGG (CLOSED)	00109

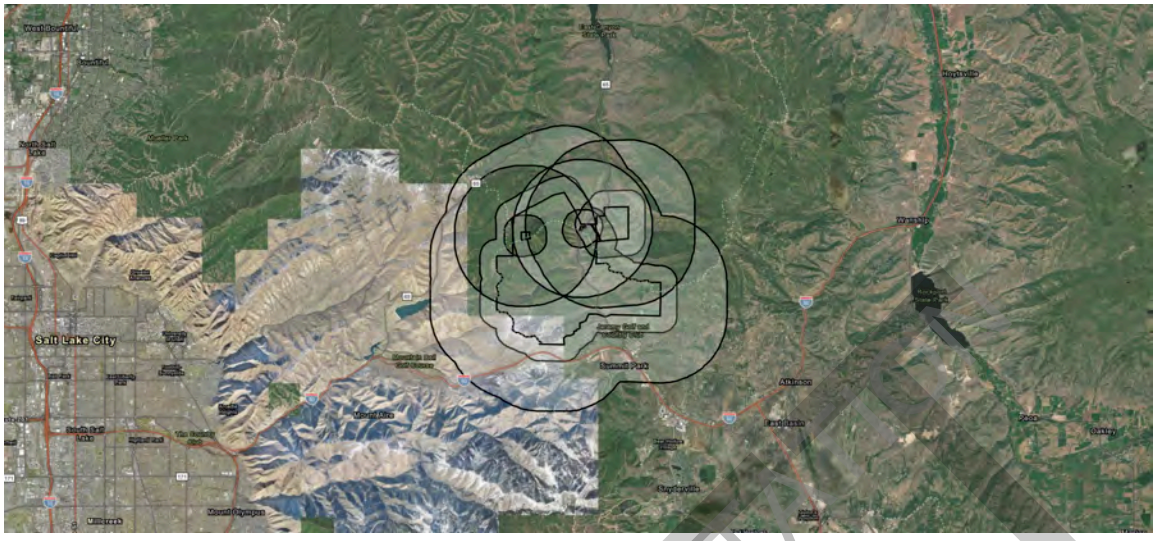
Barrier Assessment and Inventory Tool (BAIT)



Description: Barriers and Fish Passage Barriers

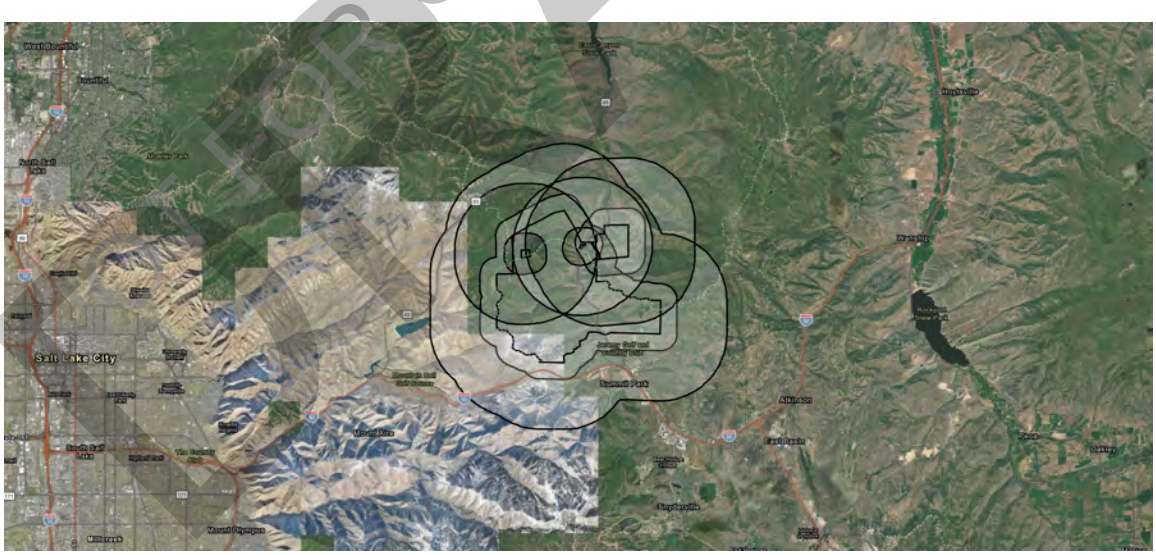
Barrier Name:	Barrier Type:	Comments:	Data Source:	Primary Species Of Benefit:	Year Of Modification:	Stream Name:	Countattachments
On channel pond	Impoundment		None	None	None	None	0
	Road Crossing	Needs to be evaluated, looks problematic	None	None	None	None	0

Fish and Wildlife Service



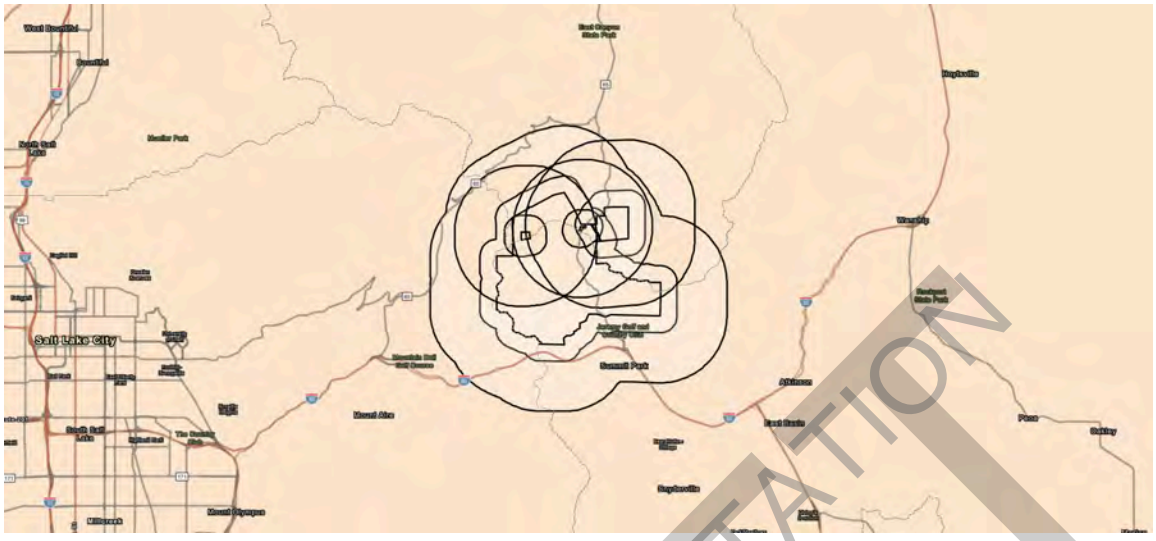
Region	Region Name
6	Mountain Prairie Region

Waterfowl Flyways



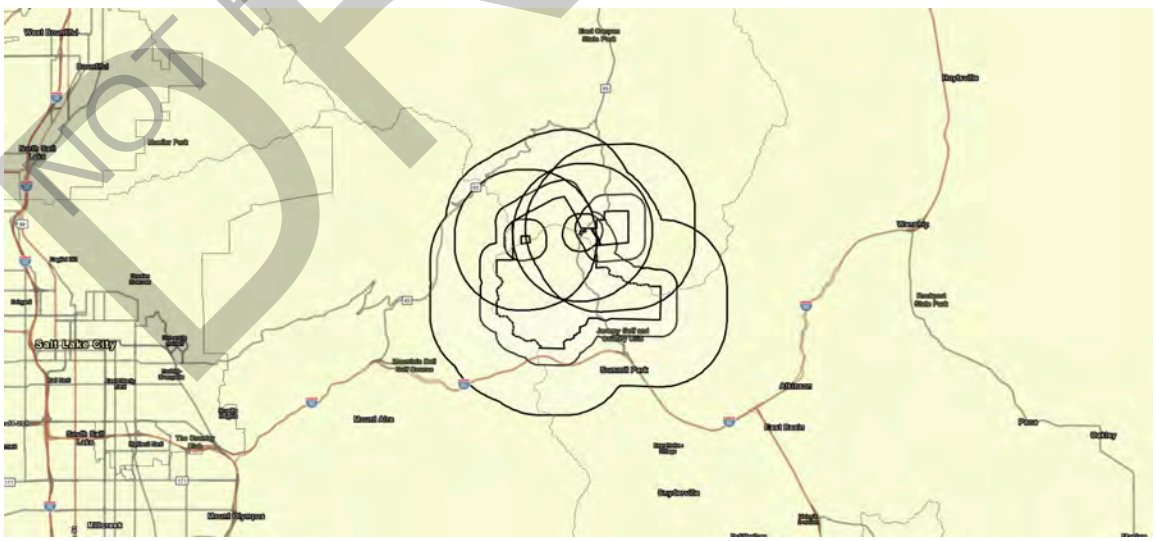
Name
Pacific Flyway

Counties



Name
SUMMIT
MORGAN
SALT LAKE

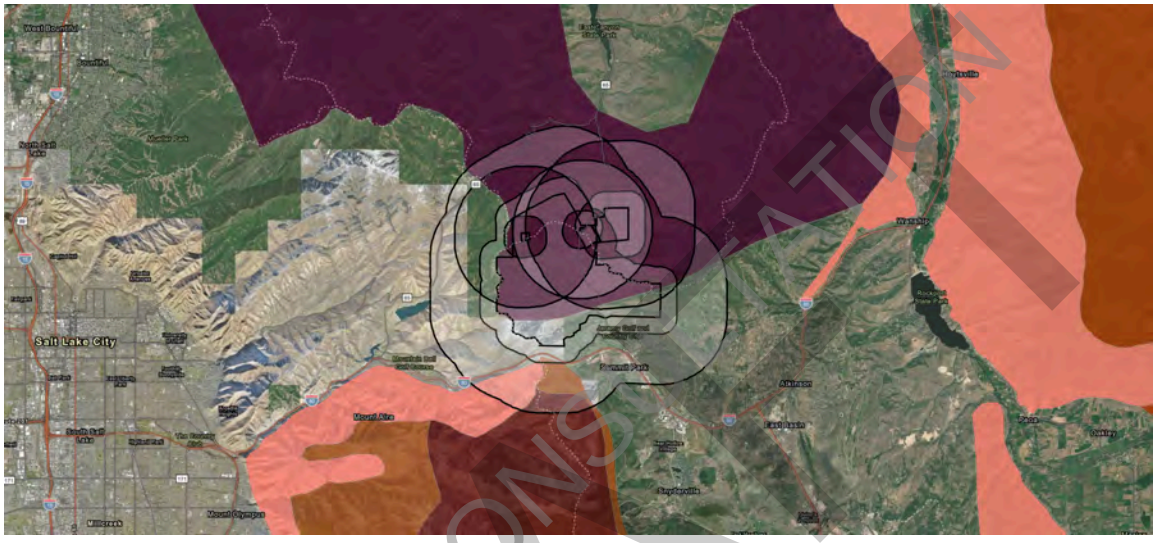
Dispatch Boundaries



Name
Salt Lake Valley Emergency Communications Center

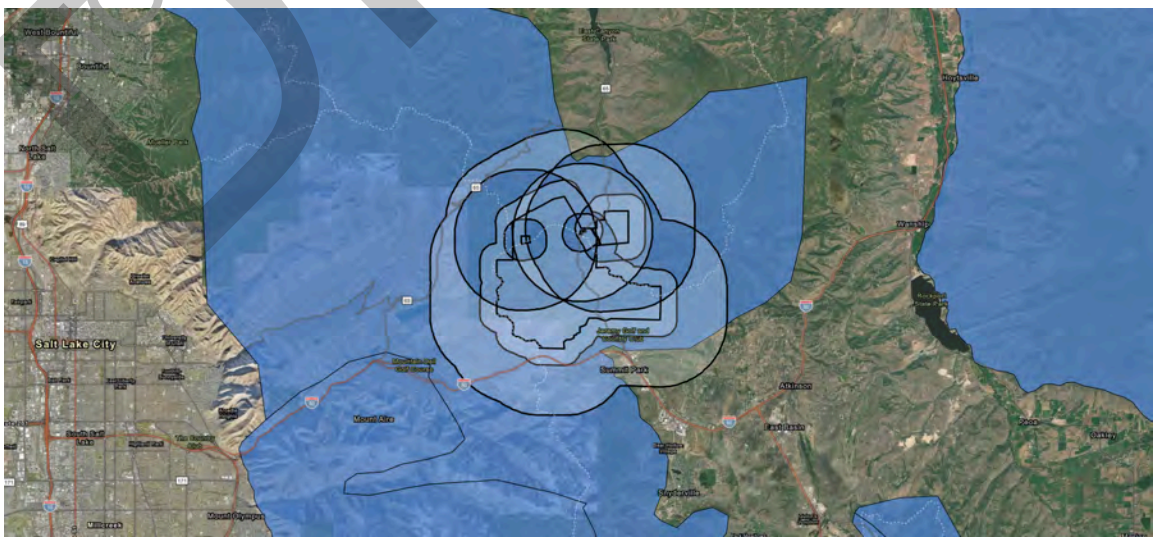
Name
Weber Area Dispatch 911
Summit County Sheriff's Office

Elk Habitat



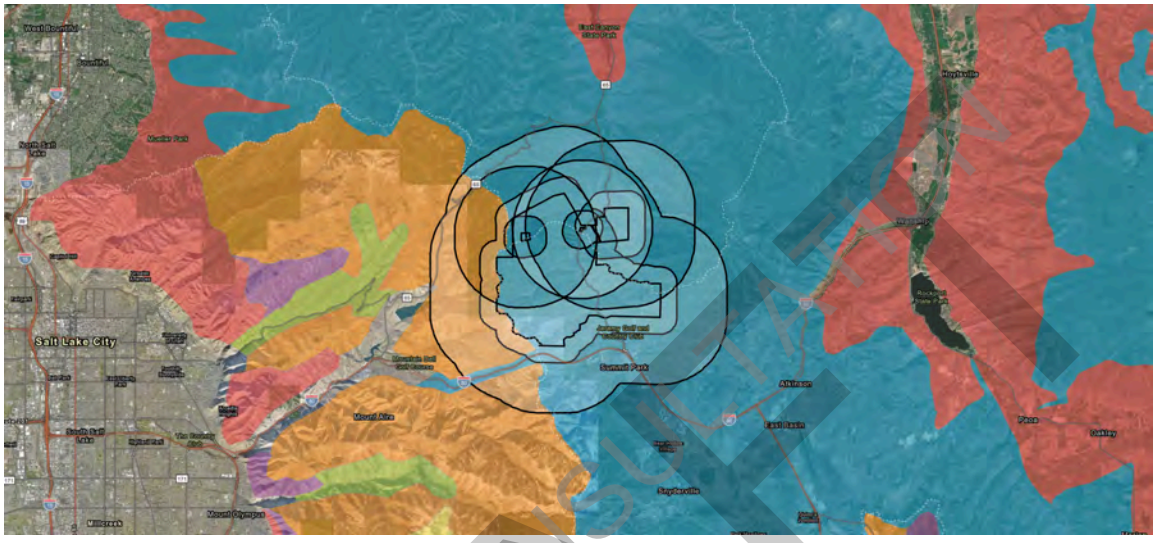
Season	Species	Value	Comments
summer/fall	Elk	crucial	

Moose Habitat



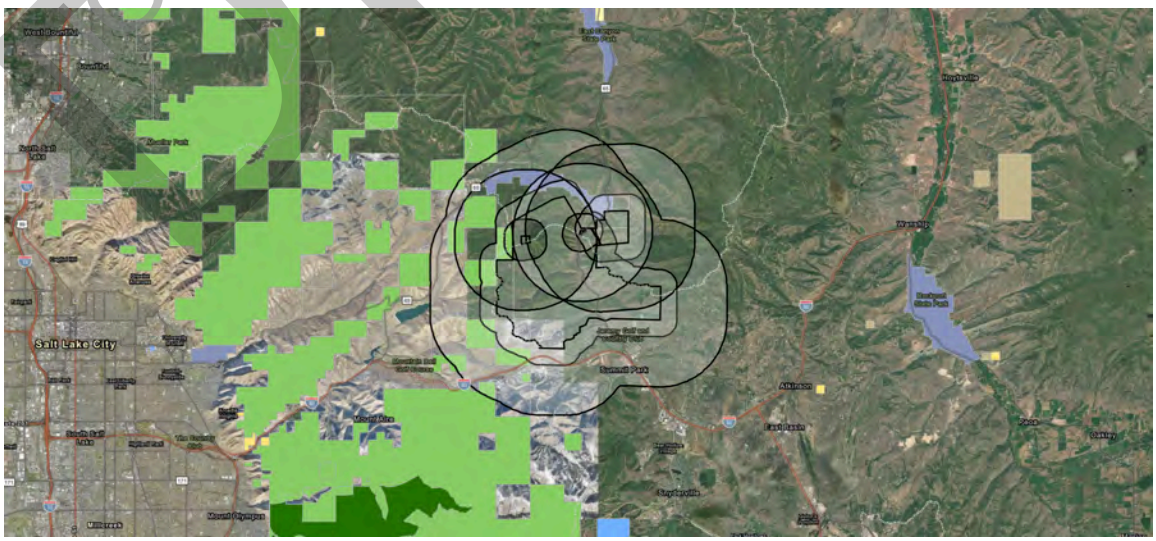
Species	Season	Comments	Value
Moose	year-long	Calving habitat.	crucial

Mule Deer Habitat



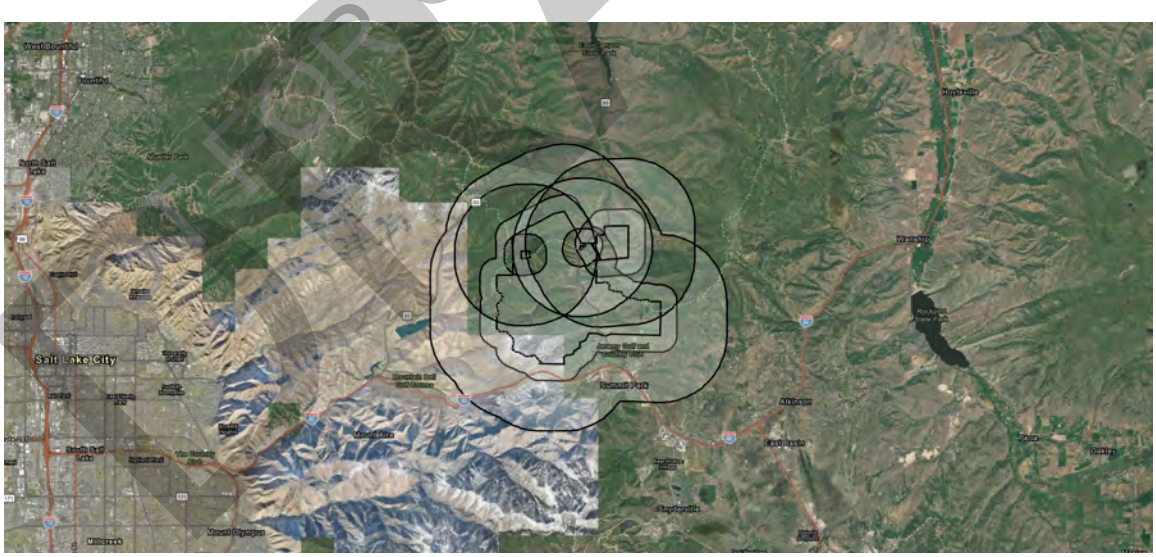
Comments	Season	Species	Value
	spring/fall	Mule Deer	crucial
	summer	Mule Deer	crucial

Land Ownership



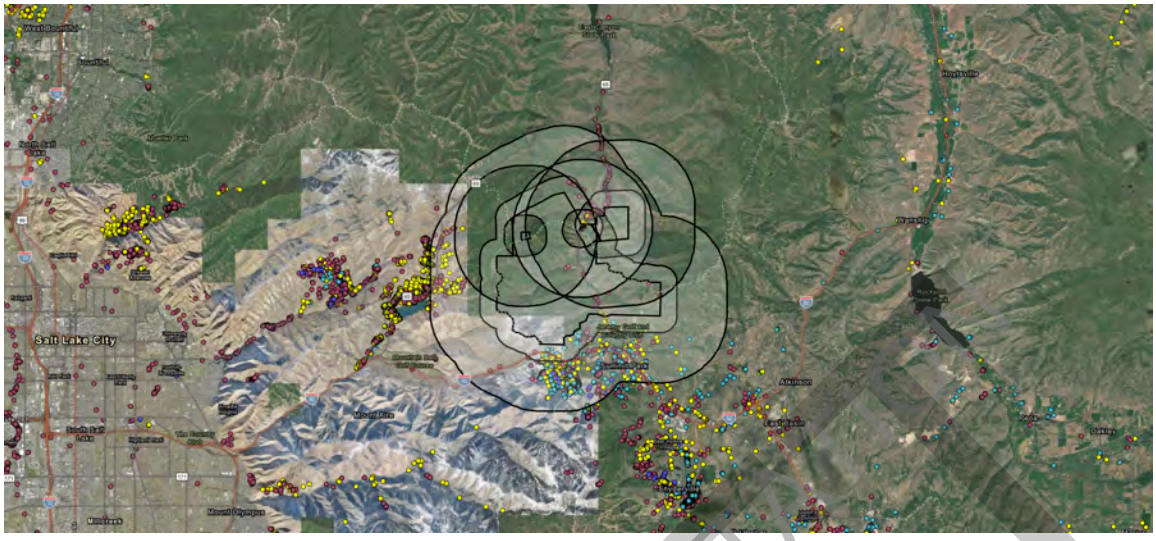
Tribe	Owner	Owner Agency	Designation	State Of Utah Legend
None	Federal	USFS	National Forest	National Forest
None	Federal	USFS	National Forest	National Forest
None	Private	Private	N/A	Private
None	Private	Private	N/A	Private
None	Private	Private	N/A	Private
None	Private	Private	N/A	Private
None	Private	Private	N/A	Private
None	Private	Private	N/A	Private
None	Private	Private	N/A	Private
None	State	DNR	Parks and Recreation	State Parks and Recreation

Unmapped Mule Deer Migration Corridors



Species
Mule Deer

UDAF Utah Weed Points

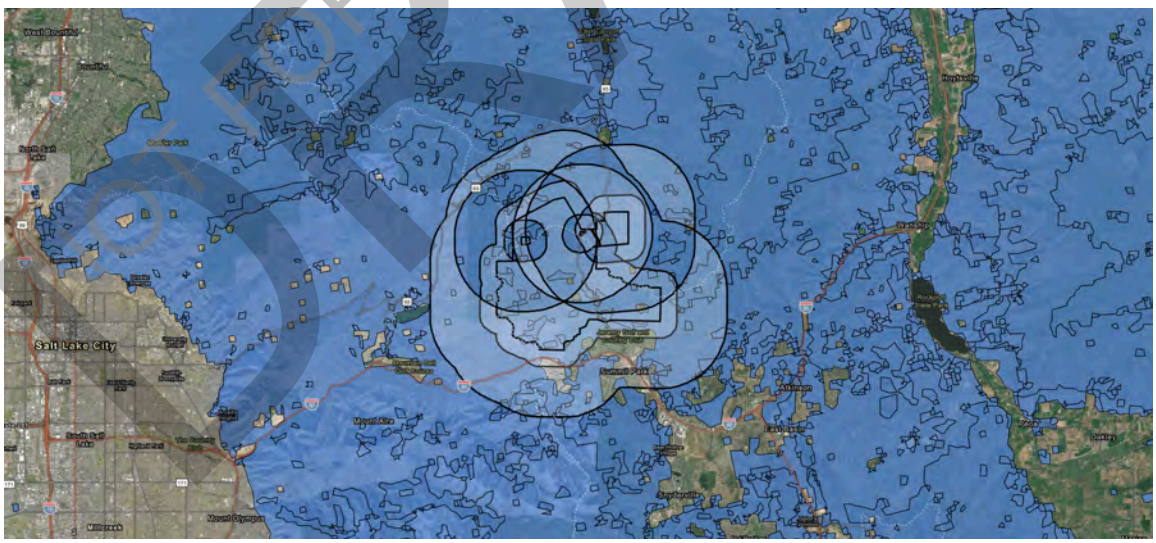


Description: Data Source: Utah Department of Agriculture (UDAF)

Infested Acres	Scientific Name	Common Name	Weed Rank	Status
0.25	Lepidium draba	hoary cress	3	1
0.0114784	Lepidium draba	hoary cress	3	1
0.00918272	Centaurea solstitialis	yellow starthistle	2	1
0.00459136	Centaurea solstitialis	yellow starthistle	2	1
0.25	Lepidium draba	hoary cress	3	1
0.00057392	Alliaria petiolata	garlic mustard	1B	1
2	Lepidium draba	hoary cress	3	1
None	Carduus nutans	musk thistle, nodding thistle	3	2
0.00229568	Lepidium draba	hoary cress	3	1
0.25	Isatis tinctoria	Dyer's woad	2	1
0.25	Lepidium draba	hoary cress	3	1
0.000459136	Lepidium draba	hoary cress	3	1
None	Isatis tinctoria	Dyer's woad	2	2

Infested Acres	Scientific Name	Common Name	Weed Rank	Status
4.5	Carduus nutans	musk thistle, nodding thistle	3	1
1	Lepidium draba	hoary cress	3	1
0.2	Echium vulgare	common viper's bugloss, blueweed	1B	2
0.25	Lepidium draba	hoary cress	3	1
0.00918272	Onopordum acanthium	Scotch thistle	3	1
None	Lepidium draba	hoary cress	3	3
4	Onopordum acanthium	Scotch thistle	3	1
4.59136e-05	Cynoglossum officinale	houndstongue	3	2
4.5	Cynoglossum officinale	houndstongue	3	1

Terrestrial Key Habitat



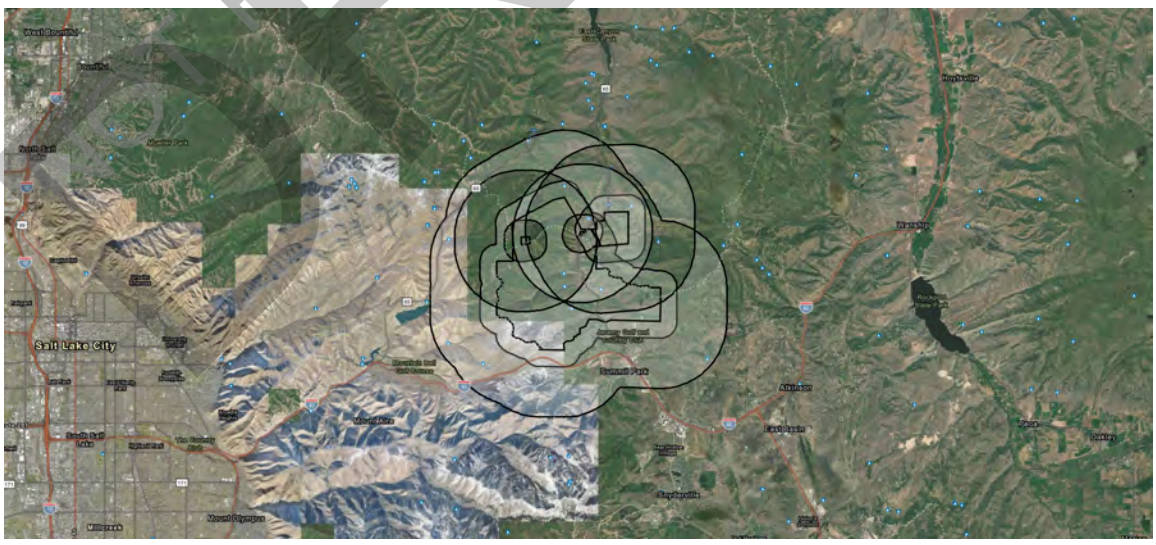
Description: These polygons representing 13 terrestrial key habitats have been generalized for web mapping applications, and often under-represent the presence of key habitats, particularly small areas of discontinuous habitat.

Habitat Name
Montane and Subalpine Conifer

Habitat Name
Montane and Subalpine Conifer
Aspen Conifer
Mountain Shrub
Subalpine Grassland
Subalpine Grassland
Subalpine Grassland
Aspen Conifer
Subalpine Grassland
Subalpine Grassland
Montane and Subalpine Conifer
Mountain Shrub
Subalpine Grassland
Riparian
Montane and Subalpine Conifer
Montane and Subalpine Conifer
Montane and Subalpine Conifer
Riparian
Aspen Conifer
Aspen Conifer
Aspen Conifer
Riparian
Riparian
Montane and Subalpine Conifer
Aspen Conifer
Riparian
Montane and Subalpine Conifer

Habitat Name
Riparian
Aspen Conifer
Riparian
Mountain Shrub
Mountain Shrub
Montane and Subalpine Conifer
Montane and Subalpine Conifer
Aspen Conifer
Riparian
Mountain Sagebrush
Aspen Conifer
Montane and Subalpine Conifer
Mountain Sagebrush

Springs



Site Description	Site Name	Site Classification	Ssi Global Id
Imported in 2013 from NHD Database	60584592 NHD_ID	None	459a3a72-1eaa-47c5-b0d3-9568905ed06b

Site Description	Site Name	Site Classification	Ssi Global Id
Imported in 2013 from NHD Database	60584698 NHD_ID	None	351e03d3-01e4-41ec-857a-1eab914079bf
Imported in 2013 from NHD Database	60584700 NHD_ID	None	059b050d-5c5e-471f-a8c3-852115735657
Imported in 2013 from NHD Database	60584594 NHD_ID	None	8170b573-402b-4e69-bb47-505e2a60ba51

Report Generated For

Name: Travis Taylor
Organization: BIO-WEST, Inc.
Email: vezdrums@gmail.com
Phone: (435)-881-0500

End of Report

Thank you for using the Utah Wildlife Habitat Analysis tool. Feel free to reach out to the department for additional information or assistance.

APPENDIX F. WILDLIFE WATCH AND HIGHLIGHT PHOTOS

Photo of an American black bear (*Ursus americanus*). Photo taken from game camera (Summit County).

Photo of a coyote (*Canis latrans*) and elk carcass. Photo taken from game camera (Summit County).

Photo of a mountain lion (*Puma concolor*). Photo taken from game camera (Summit County).

Photo of a great horned owl (*Bubo virginianus*). Photo taken from game camera (Summit County).

Photo of a bobcat (*Lynx rufus*). Photo taken from game camera (Summit County).


Photo of a striped skunk (*Mephitis mephitis*). Photo taken from game camera (Summit County)

Photo of an elk (*Cervus canadensis*). 08/05/2024. Photo taken from game camera (Summit County)

Photo of an elk calves (*Cervus canadensis*). 08/23/2024. Photo taken from game camera (Summit County)

Photo of a moose (*Alces alces*). Photo taken by game camera (Summit County)

Photo of mule deer (*Odocoileus hemionus*). Photo taken by game camera (Summit County)

Photo of a dobsonfly (*Corydalidae spp.*). 7/16/2024

Photo of a bird nest found within the survey area. 7/9/2024

Photo of a Bald eagle (*Haliaeetus leucocephalus*). Photo taken from Jenny Alison 11/7/2018

Photo of a ruffed grouse (*Bonasa umbellus*). 9/26/2024

Photo of a shrew (*Sorex sp.*). 7/9/2024

Photo of a chipmunk (*Neotamias sp.*). 6/23/2024

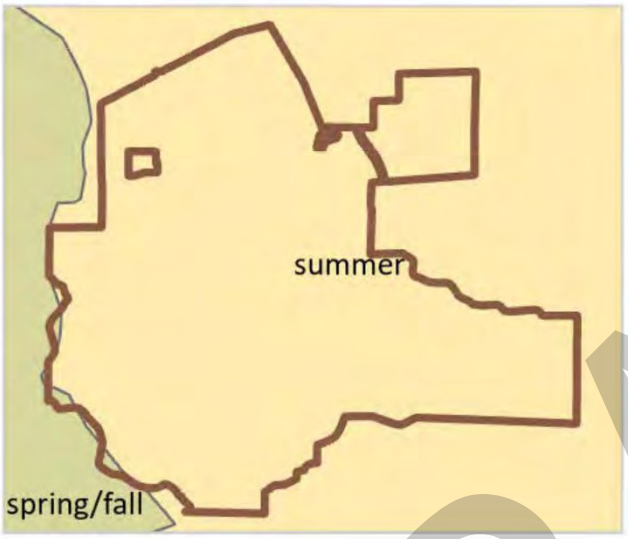
Photo of a North American porcupine (*Erethizon dorsatum*). Photo taken from Jenny Alison 4/12/2017

Photo of a Badger (*Taxidea taxus*). 5/24/2024

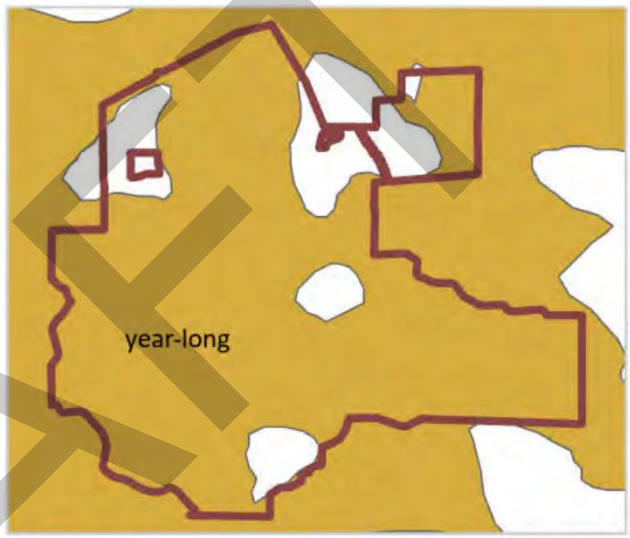
APPENDIX G. THE NATURAL HERITAGE PROGRAM HABITAT MAPS

The Natural Heritage Program habitat maps compile information on Utah's species from a variety of sources, including scientific literature, museum collections and field surveys. This information is provided to government agencies, businesses, researchers, land managers, conservation groups and the public to help inform decisions regarding land use, development and conservation. The following Spring, Summer, Fall, Winter, and Year-long habitat map are provided as general overviews of habitat for select species.

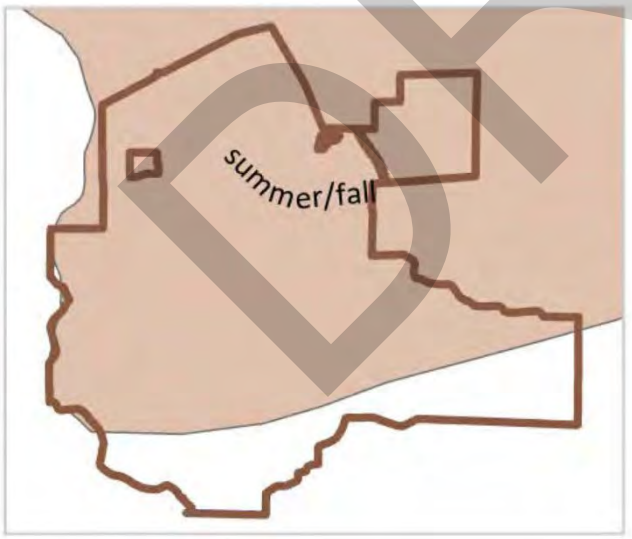
Mule Deer



California Quail

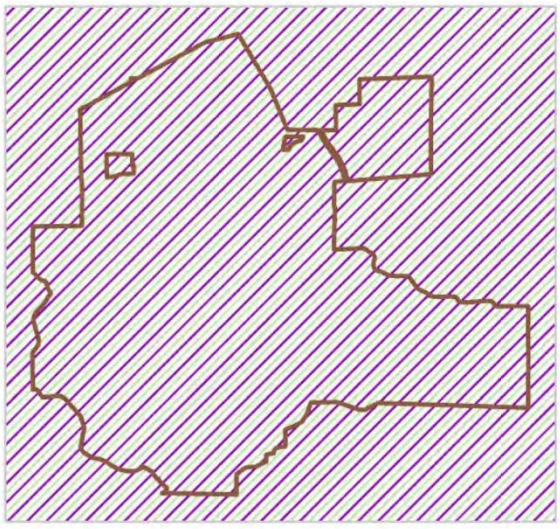


Elk

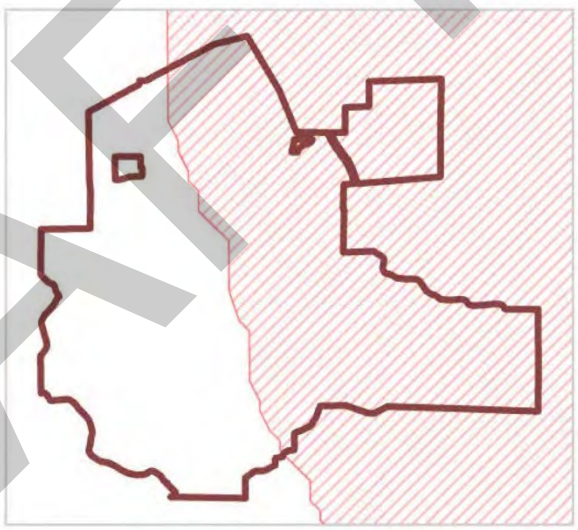


Moose and Black Bear (throughout property boundary)

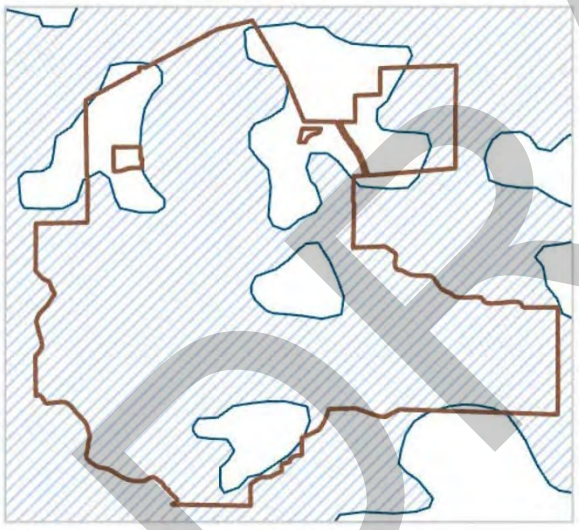
Snowshoe Hare and Ruffed Grouse
(throughout property boundary)



White-tailed Jackrabbit



Utah Band-tailed Pigeon



APPENDIX H. REPTILES AND AMPHIBIANS

Western Terrestrial Garter Snake (*Thamnophis elegans*)

The western terrestrial garter snake's range extends from the southwestern extent of Canada, south through the western United States, and into parts of Nevada, California, New Mexico, and Arizona (Stebbins, 2003). They occur from sea level to approximately 13,100 feet. While there are many subspecies, the wandering garter snake (*Thamnophis elegans vagrans*) is the only subspecies that occurs in Utah (Washington County, 2024). Western terrestrial garter snakes utilize a variety of habitats, including brushland, grassland, open forest, and woodland. They also occur at a wide range of elevations from sea level to high mountains (Stebbins, 2003). They may be semi-aquatic and are usually found near rivers, streams, ponds, and lakes. These garter snakes are generalist predators, eating a variety of food items including amphibians, tadpoles, lizards, other snakes, small mammals, fish, birds, invertebrates, and carrion. They are eaten by mammals and birds (PEEC, 2024). Garter snakes hibernate from October until April in groups called hibernacula (NPS, 2024) using cavities, burrows, rock piles, and stumps (Hibernation, 2024).

Photo of a garter snake (*Thamnophis sirtalis*). 7/3/2024.

Western Yellow Belly Racer (*Thamnophis elegans*)

The western yellow belly racer's range extends from the southwestern extent of Canada, south through the western United States into parts of Nevada, California, Colorado, and Utah (Stebbins, 2003). They occur from sea level to approximately 8,300 feet. These snakes are usually associated with open habitats, including meadows, prairies, pinon-juniper woodland, forest glades, sagebrush, and chaparral. They seem to avoid high mountains and very dry areas, but can be found in semiarid and moist environments. Yellow belly racers are usually found in habitat with nearby structures including rocks and downed trees. They can climb shrubs and trees. They eat birds, eggs, frogs, insects, and other reptiles. Western racers hibernate during cold months in holes and hollows between rocks, abandoned burrows, talus slopes, and anthropogenic structures (Stebbins, 2003; CHS, 2024). They are known to hibernate alone and communally, with their own and other species (Animalia, 2024; CHS, 2024). They use mammal burrows, rock crevices, talus slopes, logs, and other structure for shelter, refuge, and thermoregulation (CHS, 2024). Females lay eggs in rotten logs and stumps, loose sand, under rocks, and in animal burrows (CHS, 2024).

Photo of a yellow bellied racer (*Coluber constrictor mormon*). 7/3/2024

Rubber Boa (*Charina bottae*)

The rubber boa's range extends from the southwestern extent of Canada, south through the western United States, and into parts of Nevada, California, Colorado, and Utah (Stebbins, 2003). They occur from sea level to approximately 10,000 feet. Rubber boas are typically associated with woodland, forest, grassland, and broken chaparral habitats. They hunt, den, and thermoregulate under rotting logs, rocks, and tree bark (Stebbins, 2003). Rubber boas are known to swim, climb, and burrow. They eat birds, salamanders, small mammals, and other reptiles, including snakes and lizards. Rubber boas can endure cooler temperatures than most other snakes, but do not tolerate the warmer, dryer habitats many other snakes occupy. They use their tails to fight off adult mammals while consuming their prey. When in danger, a rubber boa will curl its body around its head for protection while exposing its tail to mimic its head.

Photo Credit: iNaturalist

Great Basin Gopher Snake (*Pituophis catenifer*)

The Great Basin gopher snake's range extends from the southern extent of British Columbia, south through the western United States, and into parts of California, Arizona, and New Mexico. Gopher snakes are found throughout the majority of Nevada and Utah (Stebbins, 2003). They are found at low elevations to high mountains and in many different habitats, including prairie, desert, woodland, coniferous forest, farmland, and brushland. Gopher snakes are good climbers, swimmers, and burrowers. Gopher snakes are carnivores, eating small mammals, birds, bird eggs, and lizards. They hunt in underground tunnels, retreat places, and perching locations during the day, or by capturing prey during rest at night (Rodriguez-Robles, 2002). When threatened, gopher snakes coil and hiss, and may flatten their body and shake their tail against dry litter to mimic the behavior of the rattlesnake.

Photo Credit: iNaturalist

Tiger Salamander (*Ambystoma tigrinum*)

Tiger salamanders are found throughout much of the United States. In the western United States, their range extends from the southern extent of Canada, south through the western United States, and into parts of Texas, California, Arizona, and New Mexico. However, they are most abundant in their native range, which is east of approximately 115° longitude, with only small populations to the west (Stebbins, 2003). Irrigation and the use of tiger salamander larvae as fishing bait appear to be the causes for the expansion of their range. They are found at low elevations near sea level to approximately 12,000 feet, high in the mountains, and are usually associated with quiet waterbodies, such as ponds, lakes, reservoirs, streams, rain pools, and stock ponds. Tiger salamanders can be found in deserts, grasslands, mountain meadows, forests, and sagebrush plains (Stebbins, 2003). Adults spend much of their time under objects or in self-made or pre- existing burrows near water, but can be found traveling between breeding sites at night. Larval tiger salamanders eat mostly insect larvae, small crustaceans, mollusks, leeches, frog tadpoles, and sometimes small fish. Adults feed on insects, worms, snails, slugs, and small vertebrates such as frogs, lizards, and mice. Some become cannibalistic. Tiger salamanders are prey for other animals including fish, snakes, birds, and larger mammals (Active Wild, 2024).

Photo of a tiger salamander (*Ambystoma tigrinum*). 7/17/2024

Greater Short-Horned Lizard (*Phrynosoma hernandesi*)

The greater short-horned lizard's range extends from the southern extent of Alberta and Saskatchewan in Canada, south through the west-central portion of the United States, and into Mexico. Most of their United States range is in Montana, Wyoming, Utah, Colorado, New Mexico, and Arizona (Stebbins, 2003) They are found at low elevations starting around 900 feet. up to approximately 11,300 feet in the high mountains, in habitats ranging from open pinyon-juniper, pine-spruce, and spruce-fir forests, to sagebrush and shortgrass prairies. They are more tolerant of cold temperatures than most other horned lizards and are found associated with a variety of substrates with some fine, loose soil typically present (Degenhardt, 1996; Stebbins, 2003). During cold temperatures they can bury themselves in the loose soil and become inactive (UDWR, 2024). Horned lizards eat primarily spiders, snails, and insects, especially ants (Stebbins, 2003).

Photo Credit – iNaturalist

Western Fence Lizard (*Sceloporus occidentalis*)

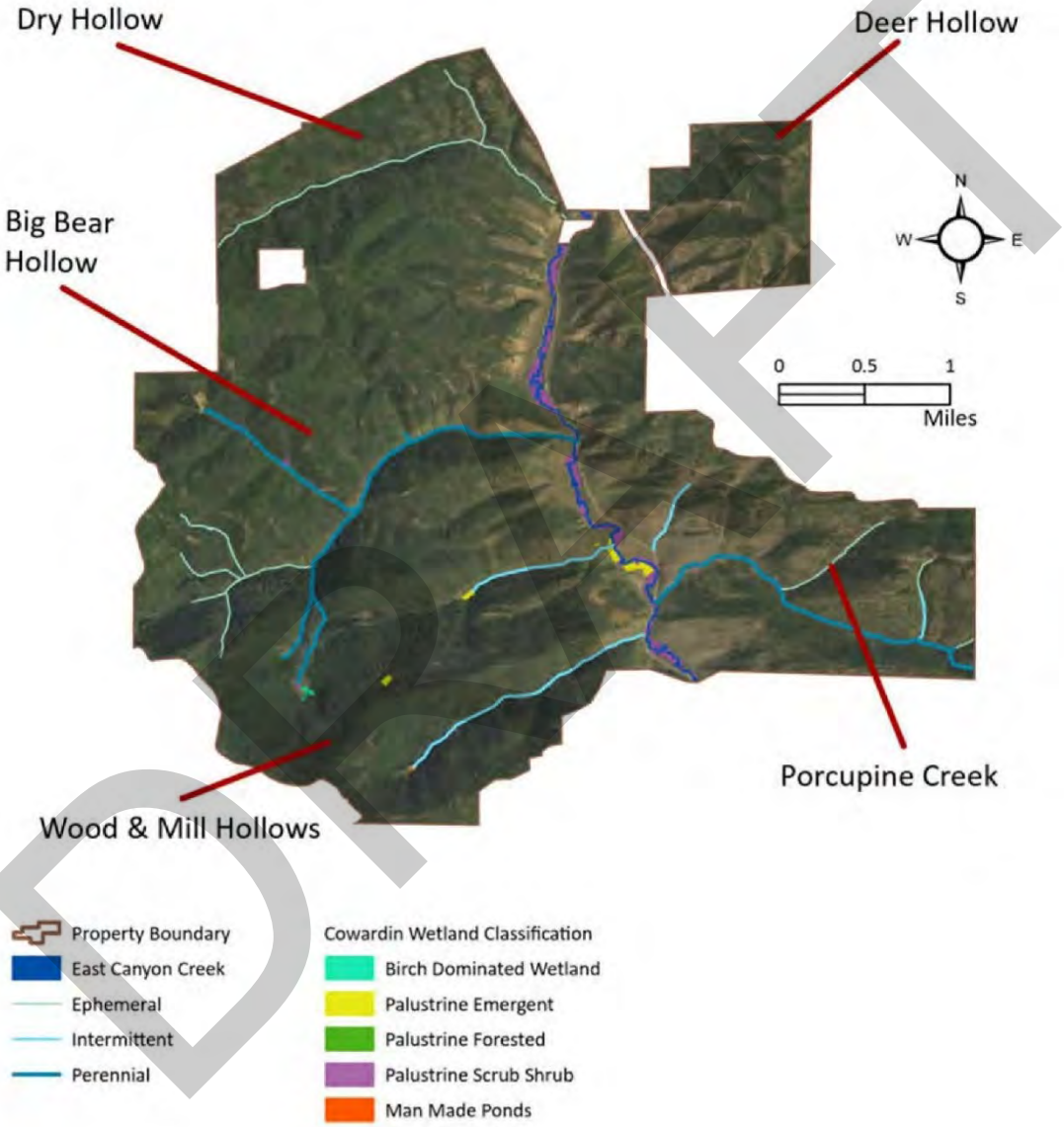
Western fence lizards are common throughout the western United States. Their range extends from the west coast east into Idaho, Utah, and Nevada (Stebbins, 2003). They generally occur between 7,000 feet and 11,000 feet in habitats such as farmland, forests, prairie, shrublands, sand dunes, rocky hillsides, and woodland. Fence lizards seek refuge under rocks and logs, and in bushes, trees, woodpiles, and rodent burrows when frightened (Stebbins, 2003). They primarily eat insects and spiders.

Photo Credit - iNatalist

APPENDIX I. AQUATIC MAPPING RESULTS

Summit County 910 Cattle Ranch Ecological
Field Assessment Results Maps

Aquatic Resources Results - Overview



Summit County 910 Cattle Ranch Ecological
Field Assessment Results Maps

Aquatic Resources Results - Dry Hollow

Property Boundary
East Canyon Creek
Ephemeral
Intermittent
Perennial

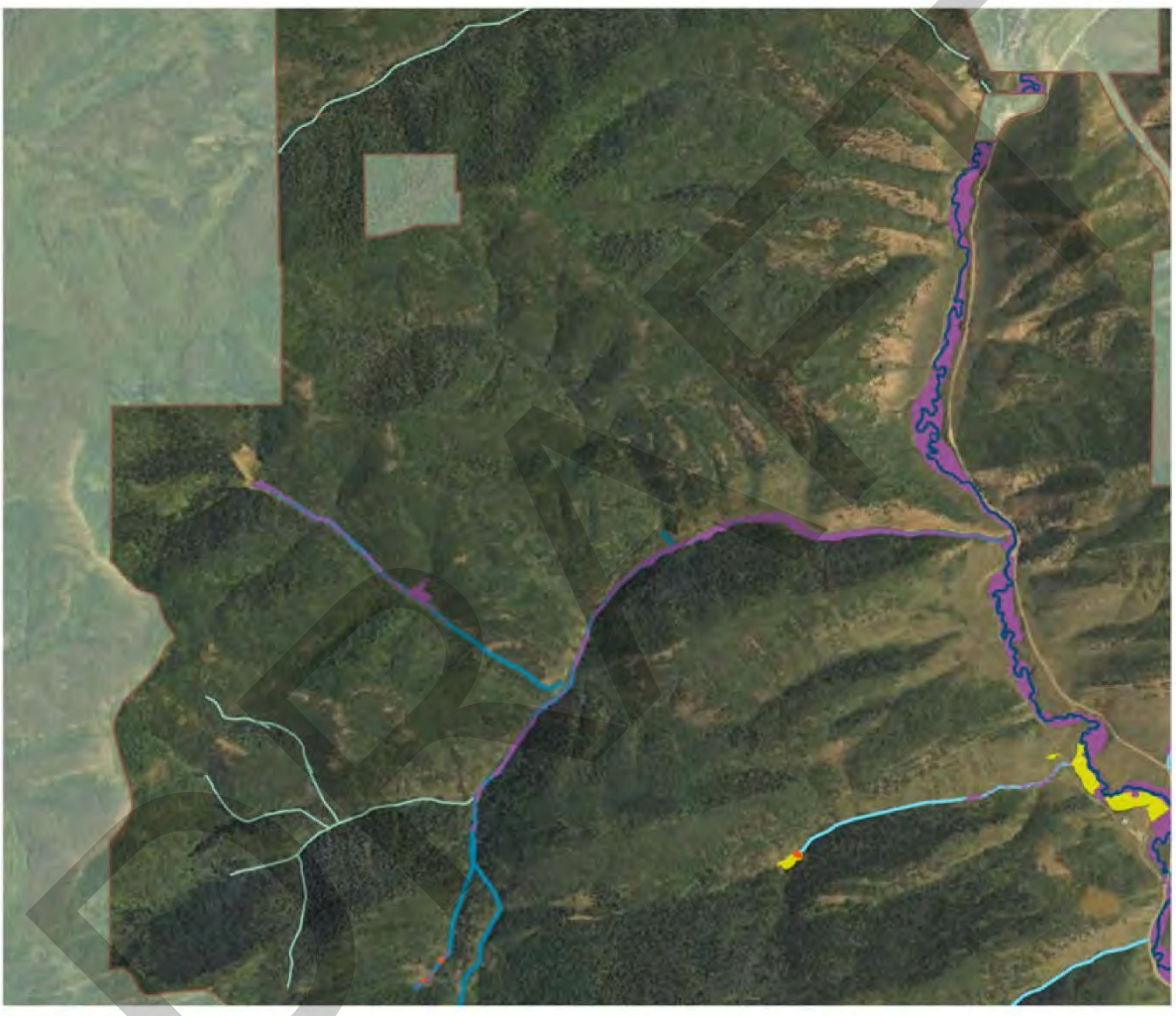
Cowardin Wetland Classification
Birch Dominated Wetland
Palustrine Emergent
Palustrine Forested
Palustrine Scrub Shrub
Man Made Ponds

N
W E
S

0 0.25 0.5
Miles

Summit County 910 Cattle Ranch Ecological
Field Assessment Results Maps

Aquatic Resources Results - Big Bear Hollow



Property Boundary
East Canyon Creek
Ephemeral
Intermittent
Perennial

Cowardin Wetland Classification
Birch Dominated Wetland
Palustrine Emergent
Palustrine Forested
Palustrine Scrub Shrub
Man Made Ponds

N
W E
S

0 0.25 0.5
Miles

Summit County 910 Cattle Ranch Ecological
Field Assessment Results Maps

Aquatic Resources Results - Wood & Mill Hollows

Property Boundary
East Canyon Creek
Ephemeral
Intermittent
Perennial

Cowardin Wetland Classification
Birch Dominated Wetland
Palustrine Emergent
Palustrine Forested
Palustrine Scrub Shrub
Man Made Ponds

N
W E
S

0 0.25 0.5
Miles

Summit County 910 Cattle Ranch Ecological
Field Assessment Results Maps

Aquatic Resources Results - Deer Hollow

Property Boundary
East Canyon Creek
Ephemeral
Intermittent
Perennial

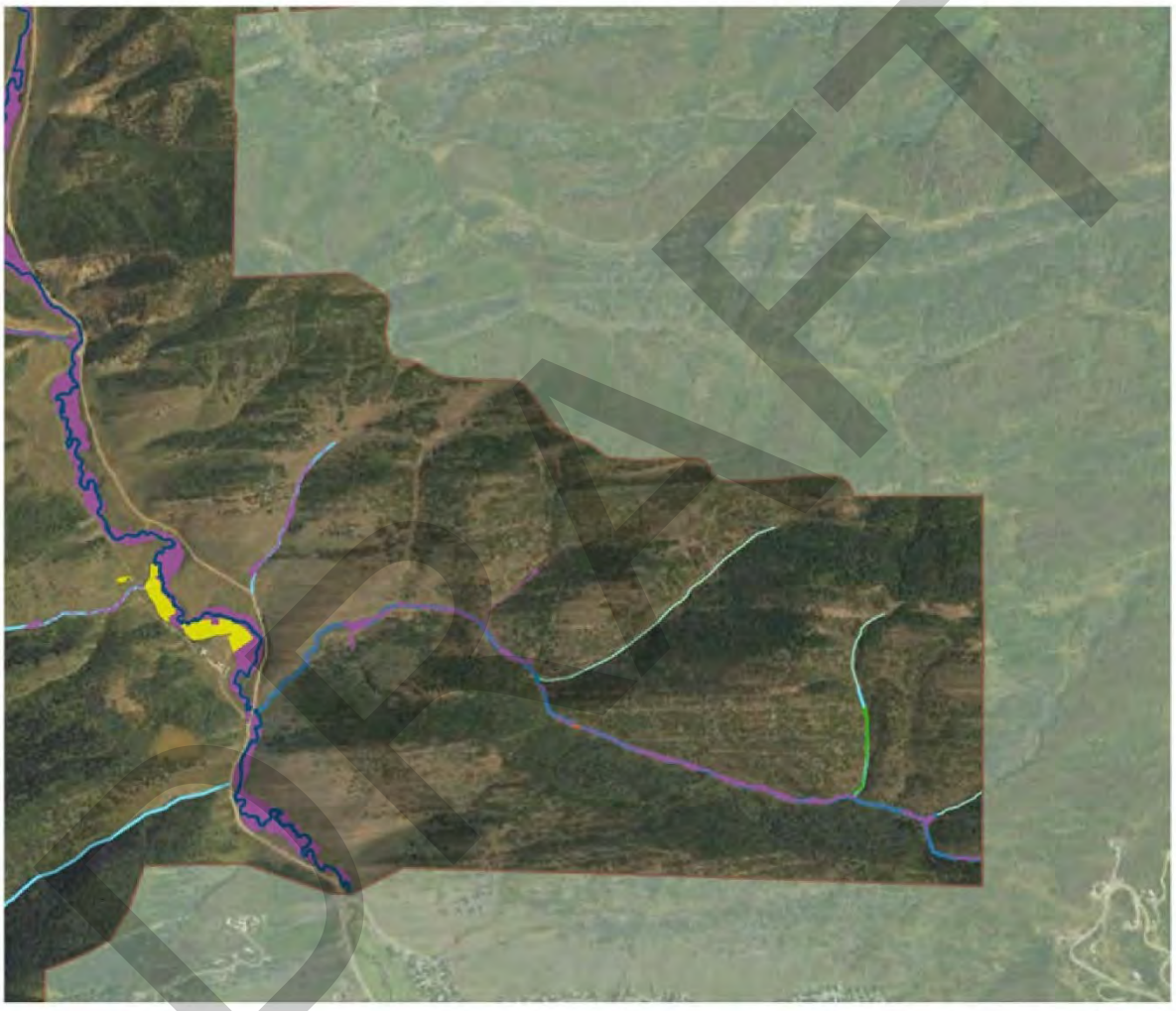
Cowardin Wetland Classification
Birch Dominated Wetland
Palustrine Emergent
Palustrine Forested
Palustrine Scrub Shrub
Man Made Ponds

N
W E
S

0 0.25 0.5
Miles

Summit County 910 Cattle Ranch Ecological
Field Assessment Results Maps

Aquatic Resources Results - Porcupine Creek



Property Boundary
East Canyon Creek
Ephemeral
Intermittent
Perennial

Cowardin Wetland Classification
Birch Dominated Wetland
Palustrine Emergent
Palustrine Forested
Palustrine Scrub Shrub
Man Made Ponds

N
W E
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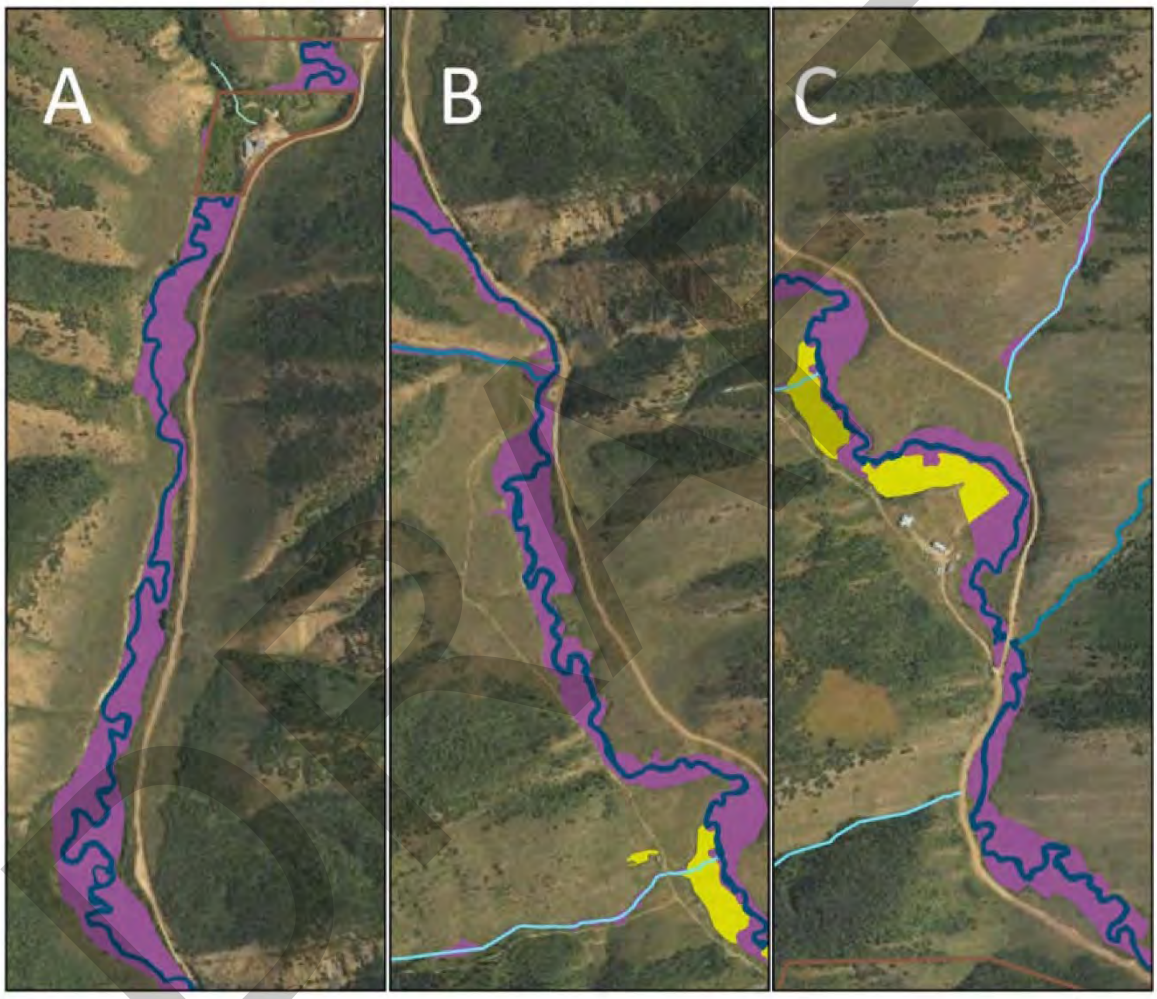
0 0.25 0.5
Miles

Summit County 910 Cattle Ranch Ecological
Field Assessment Results Maps

Aquatic Resources - East Canyon Creek Detail Map



Property Boundary

Rivers and Streams
- East Canyon Creek
- Ephemeral
- Intermittent
- Perennial

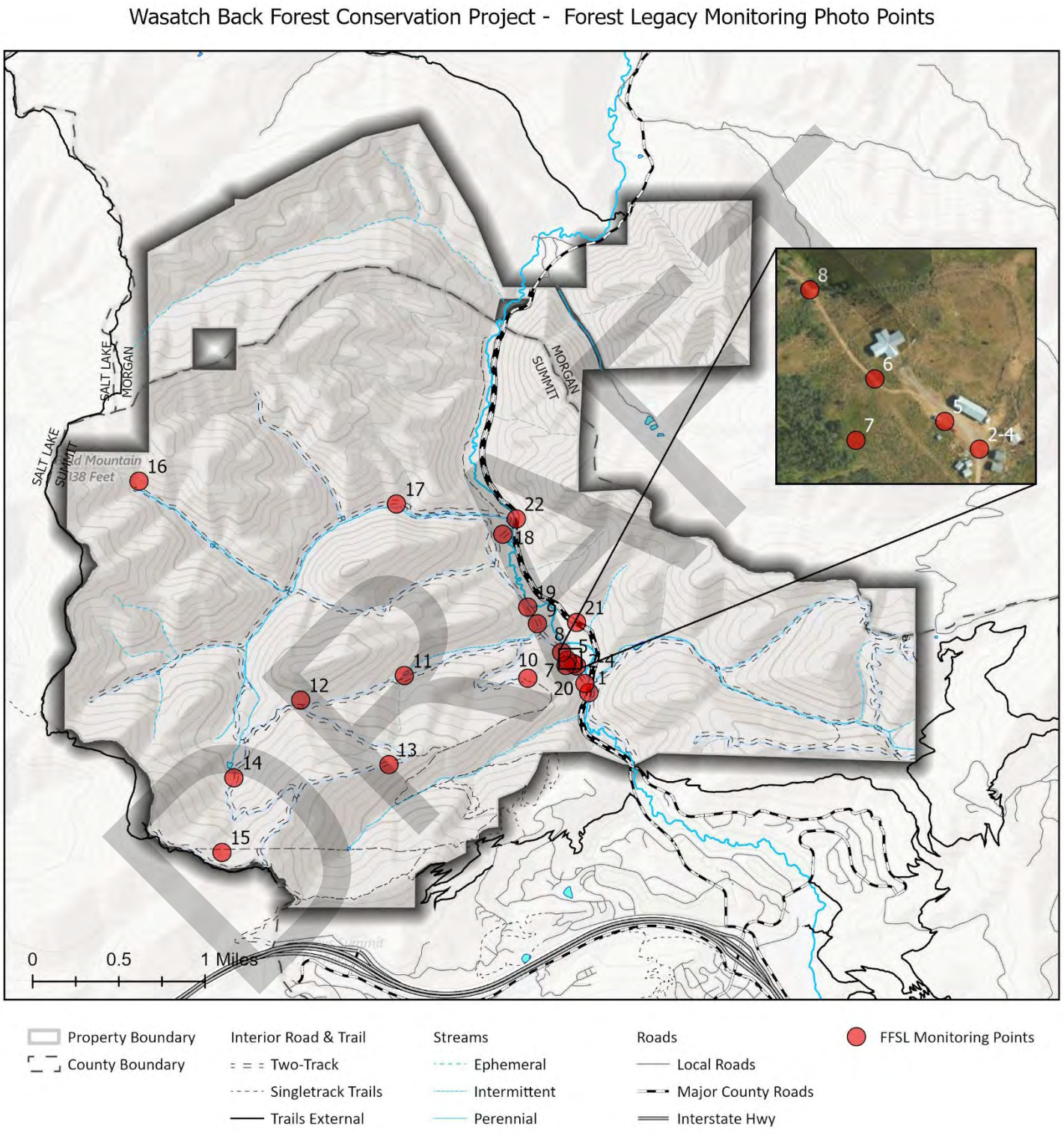
Cowardin Wetland Classification
- Birch Dominated Wetland
- Palustrine Emergent
- Palustrine Forested
- Palustrine Scrub Shrub

N
W E
S

0 0.25 0.5
Miles

APPENDIX J. MONITORING PHOTO POINTS MAP

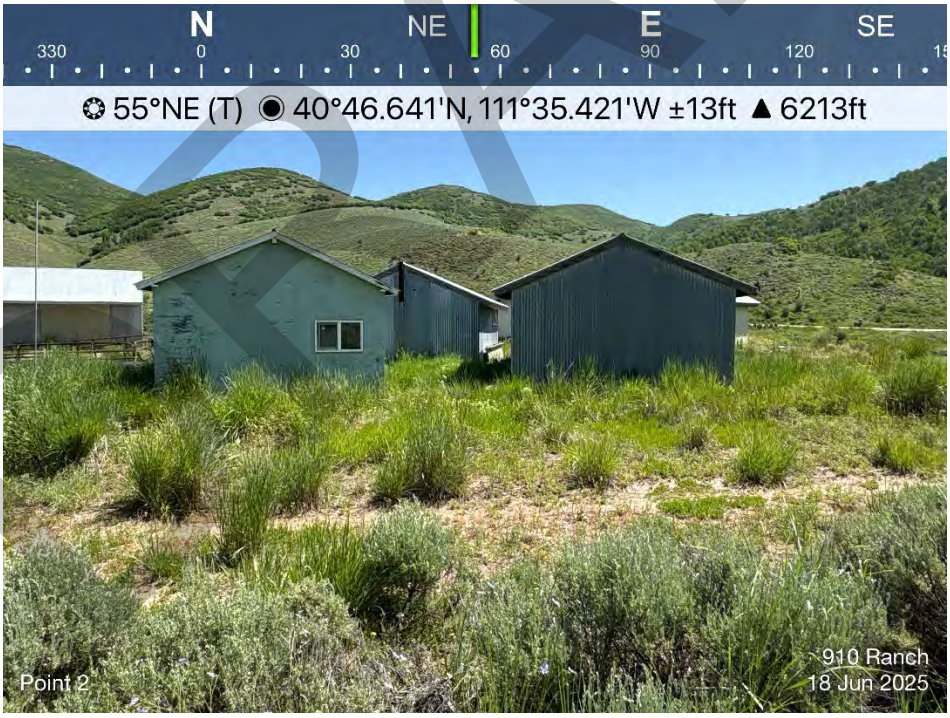
Forest Legacy Baseline Photo Monitoring

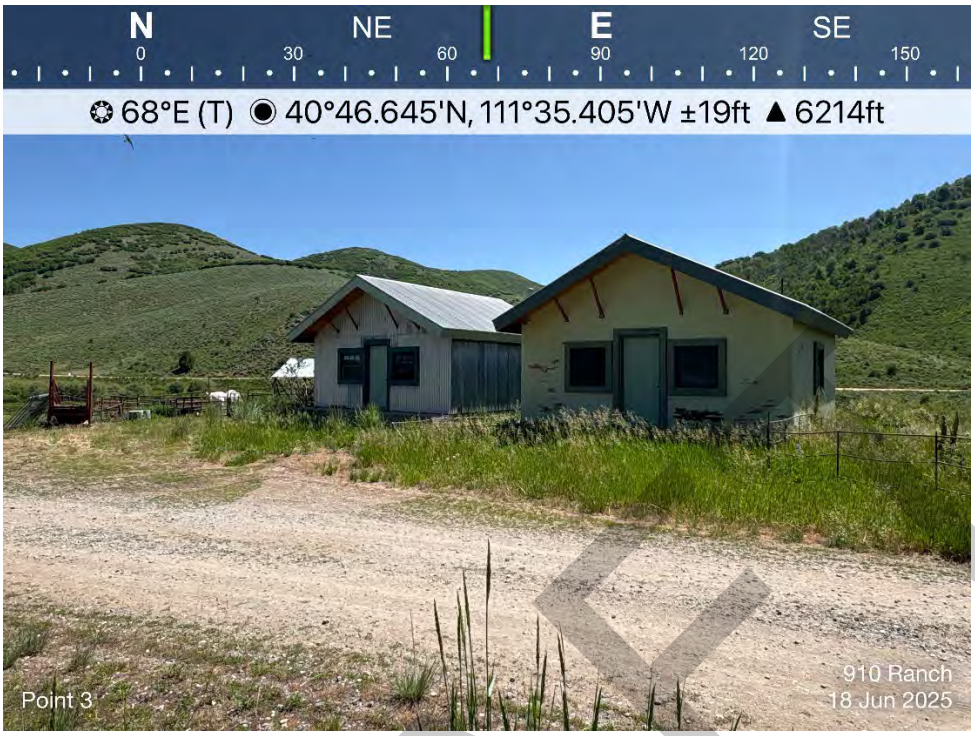


Point 1. Entrance gate off East Canyon Road (Class B road).

Point1 looking south at East Canyon Road.

Figure 2. Point 2. Three outbuildings





Point 3. Two bunkhouse structures

Point 3. Two bunkhouse structures and horse corrals.

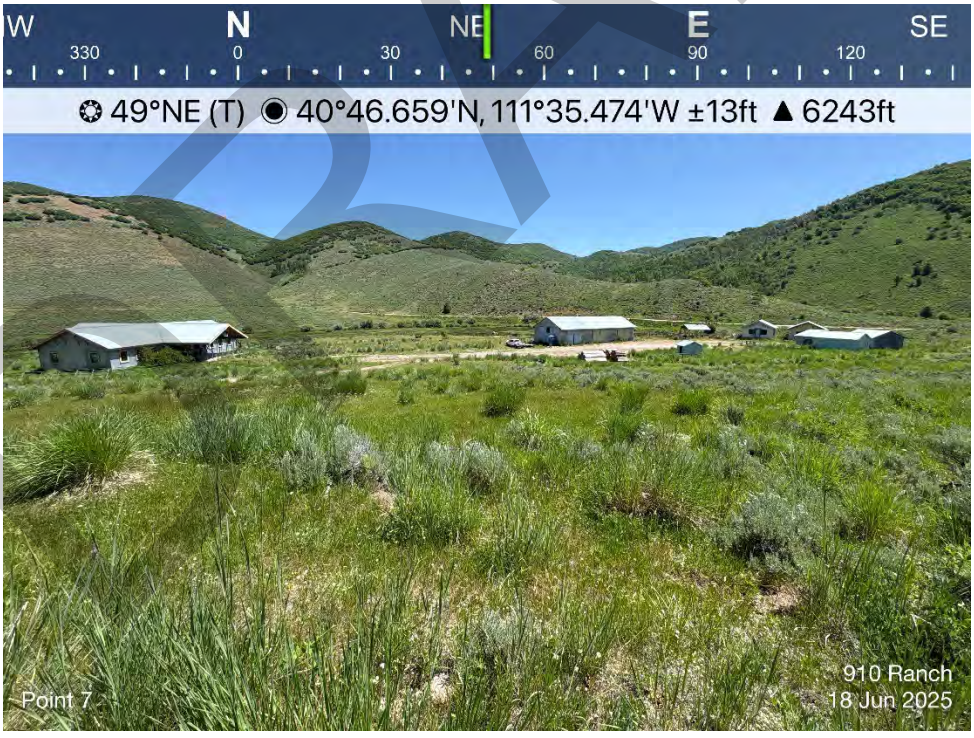
Point 4. Shed

Point 4. Shed

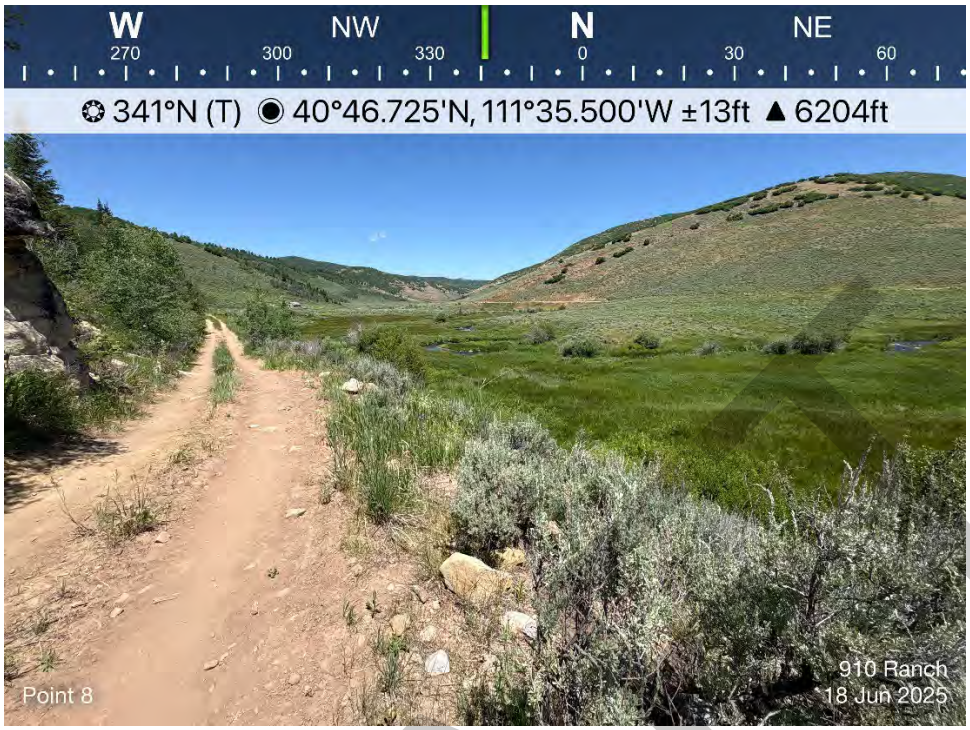
Point 5. Outbuilding

Point 6. Residential Structure

Point 6. Residential Structure

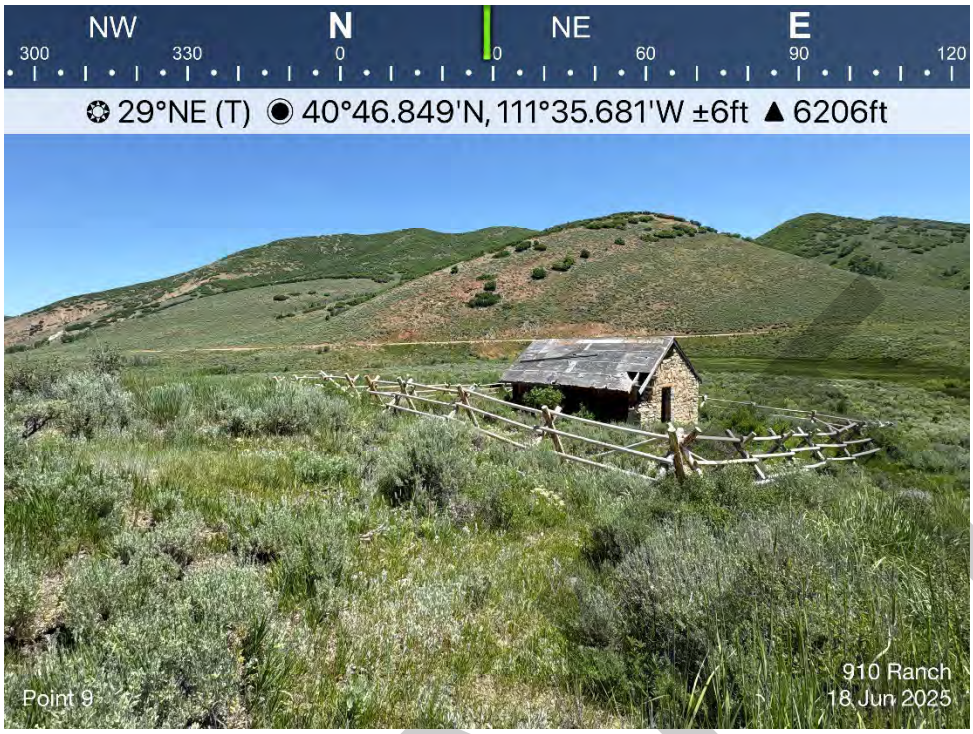


Point 7 Overlooking Structures



Point 8. Overlooking East Canyon Creek/riparian & unimproved dirt single track road.

Point 9. Historical structure

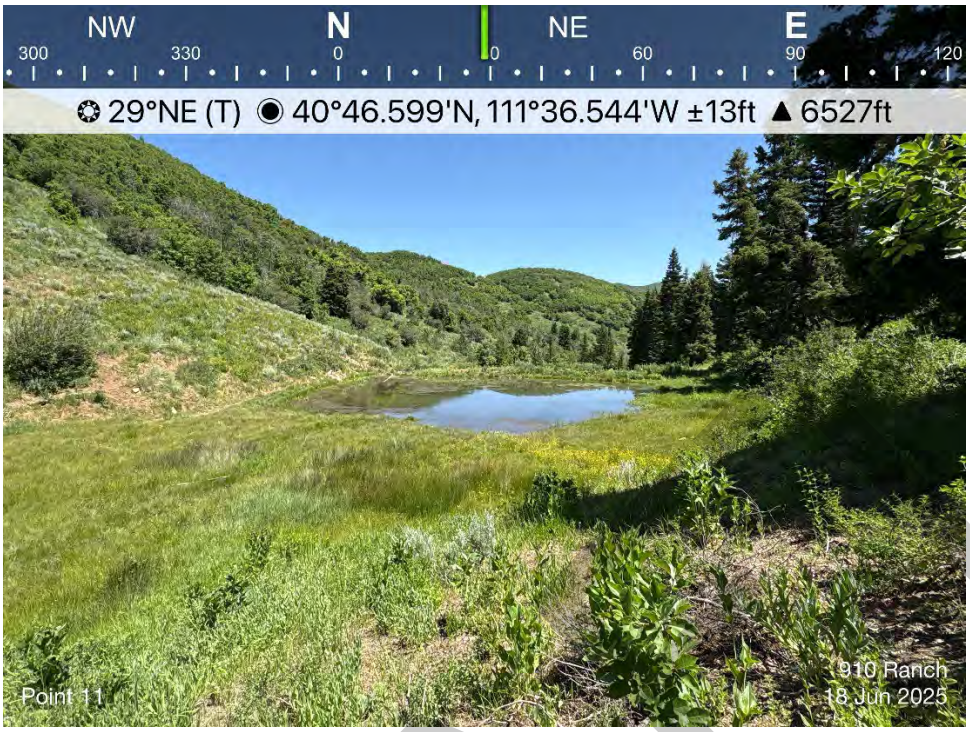


Point 9. Historical structure

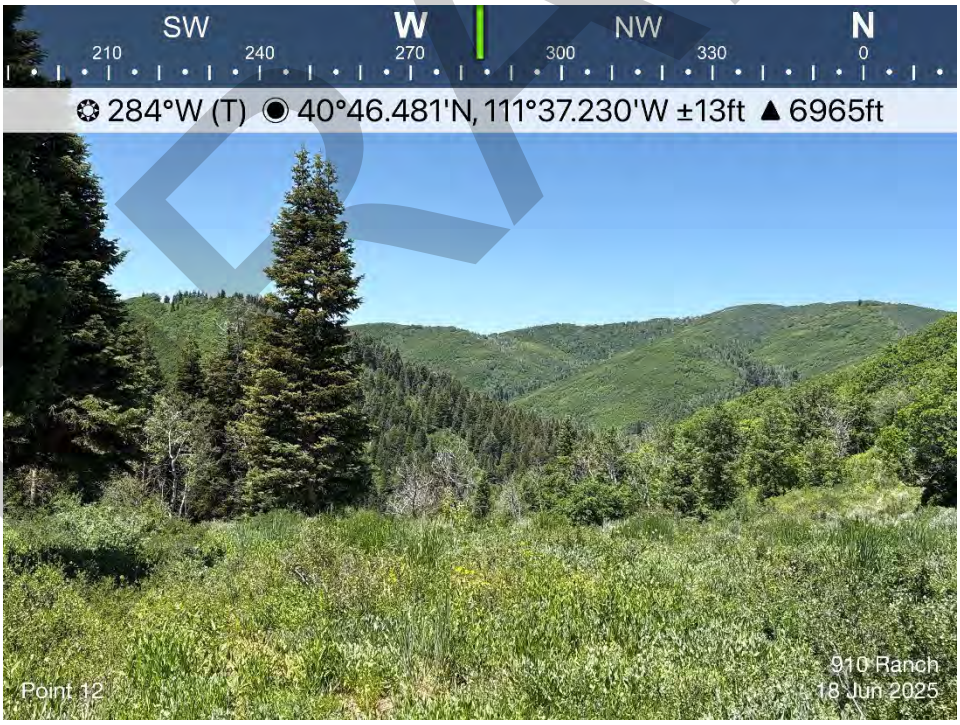
Point 10. Stone structure

Point 10. Stone structure

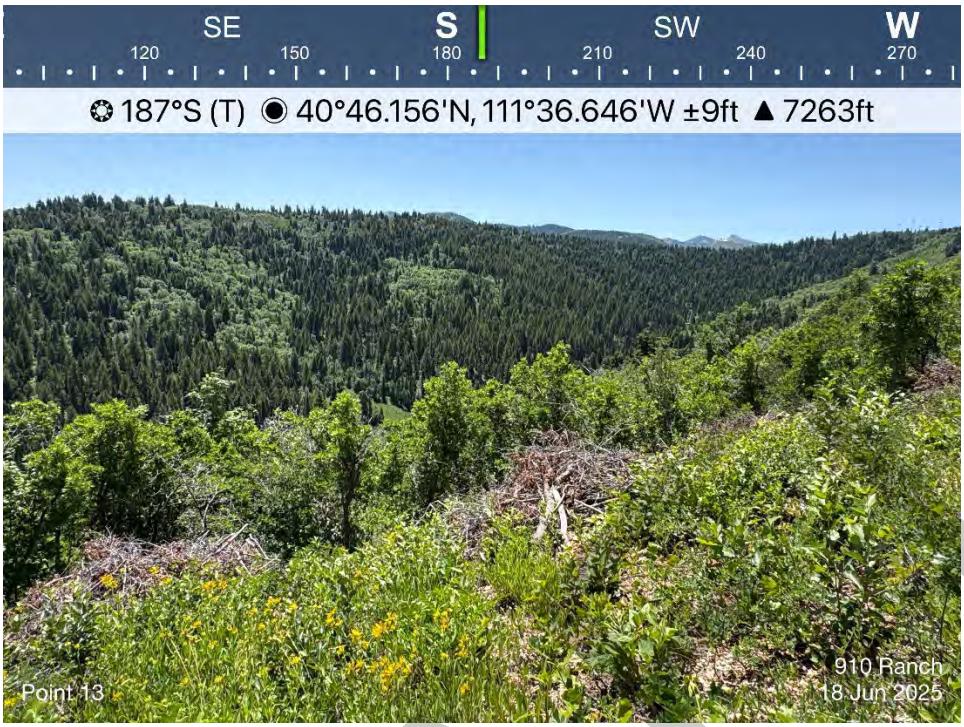
Point 10. Open meadow adjacent (east) of stone structure



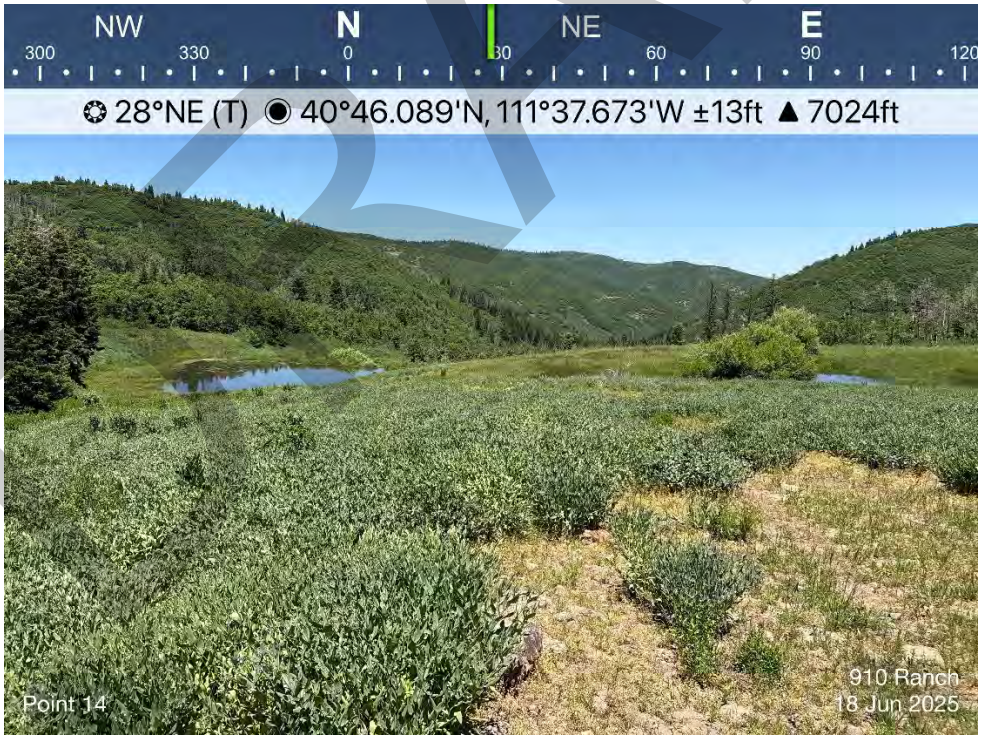
Point 11. Pond



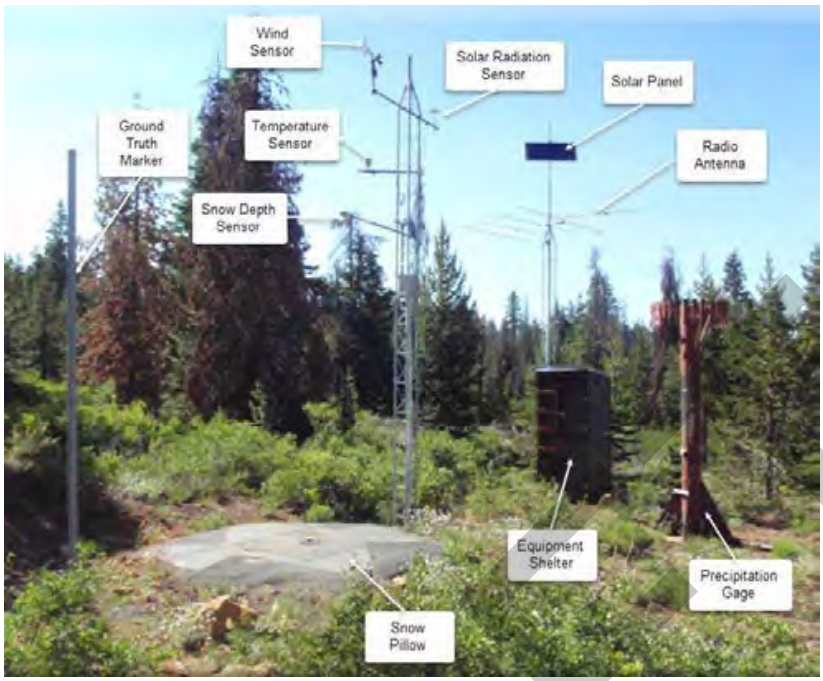
Point 12. Overlooking Glory Hole Fork



Point 13. Overlooking Mill Hollow Canyon

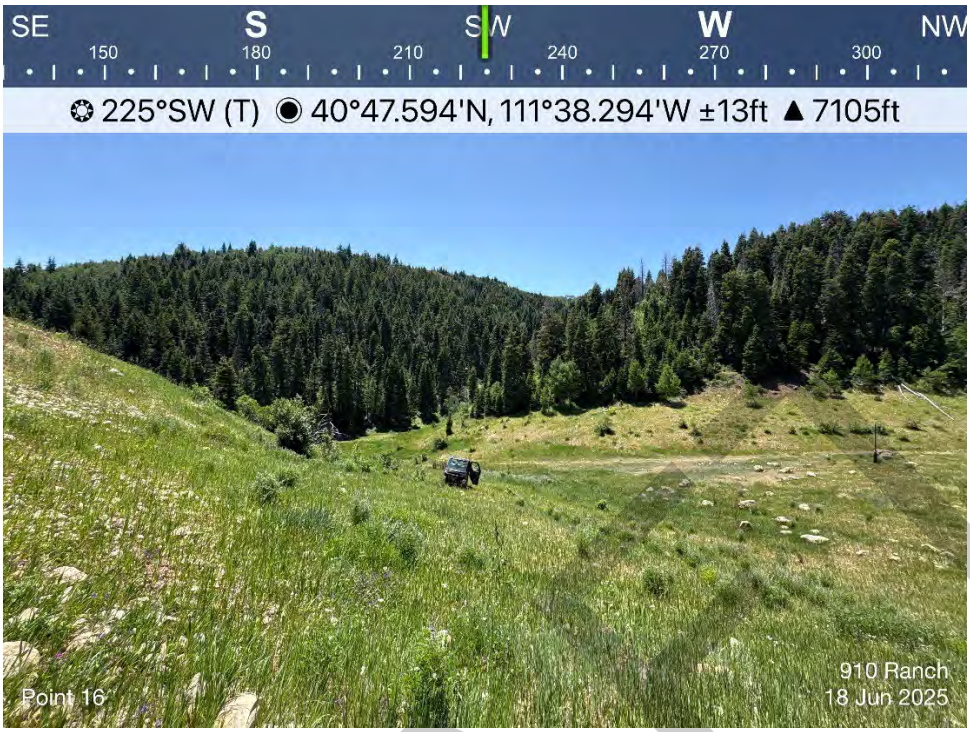


Point 14. Pond



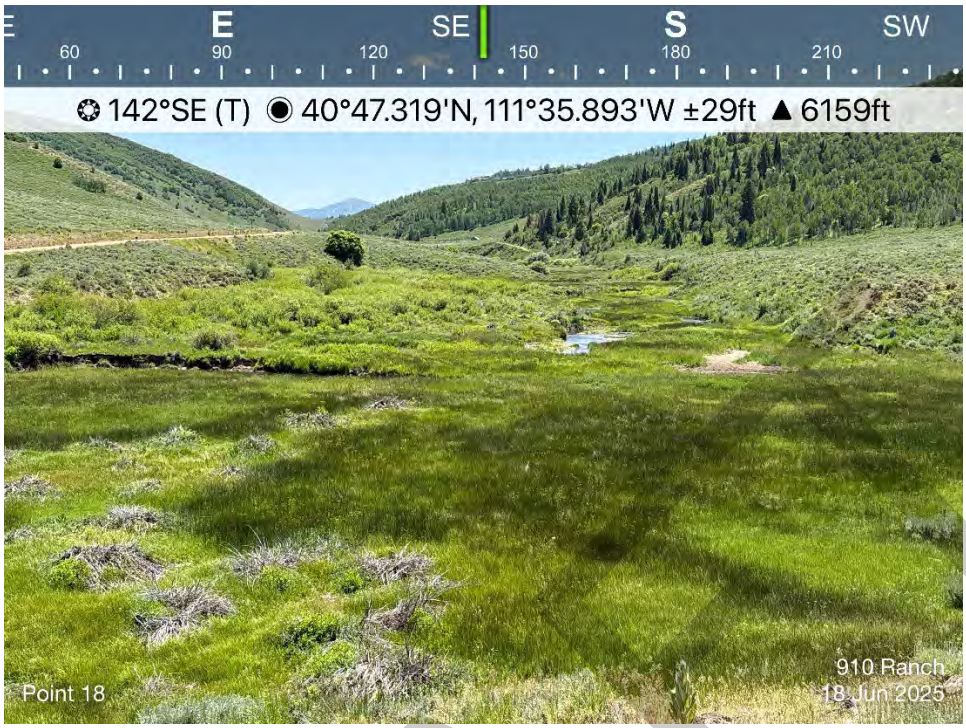
Point. 15. Parley's Canyon Summit SNOTEL Site

Point 16. Exploration pad



Point 16. Exploration pad

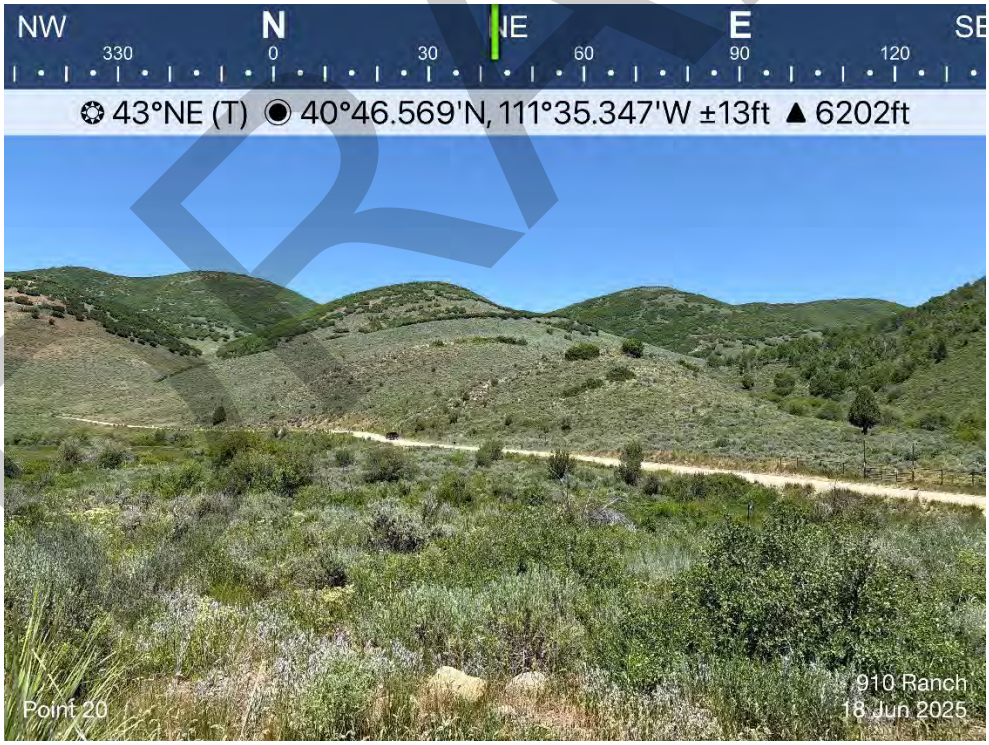
Point 17. Overlooking Forest Stewardship Plan Stand 5 in Big Bear Hollow



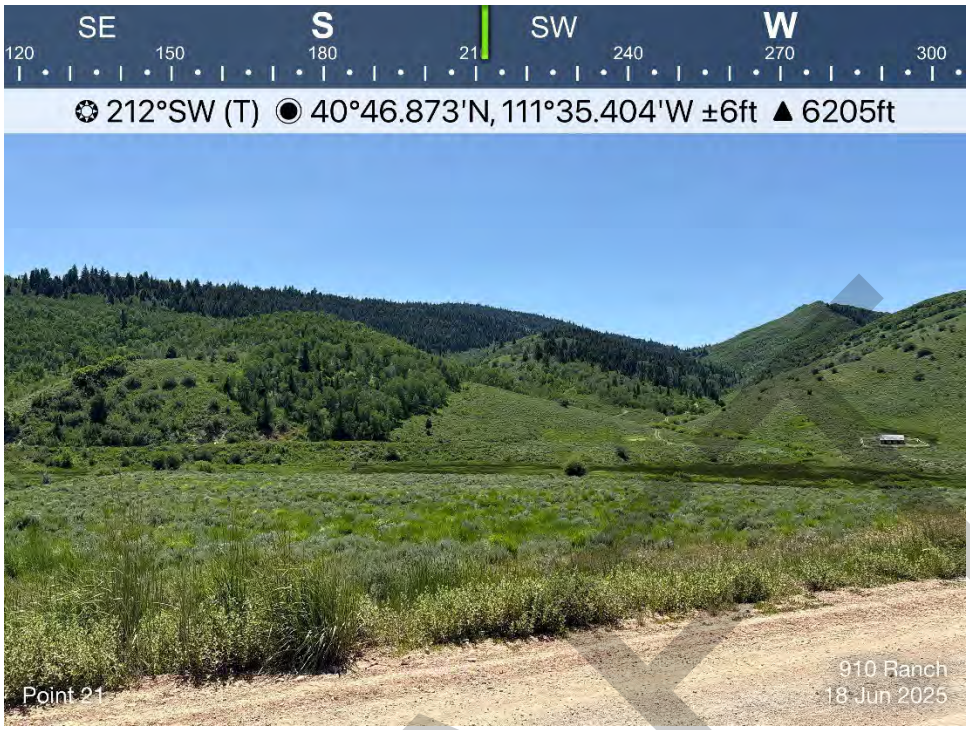
Point 18. Overlooking East Canyon Creek

Point 19. Overlooking East Canyon Creek

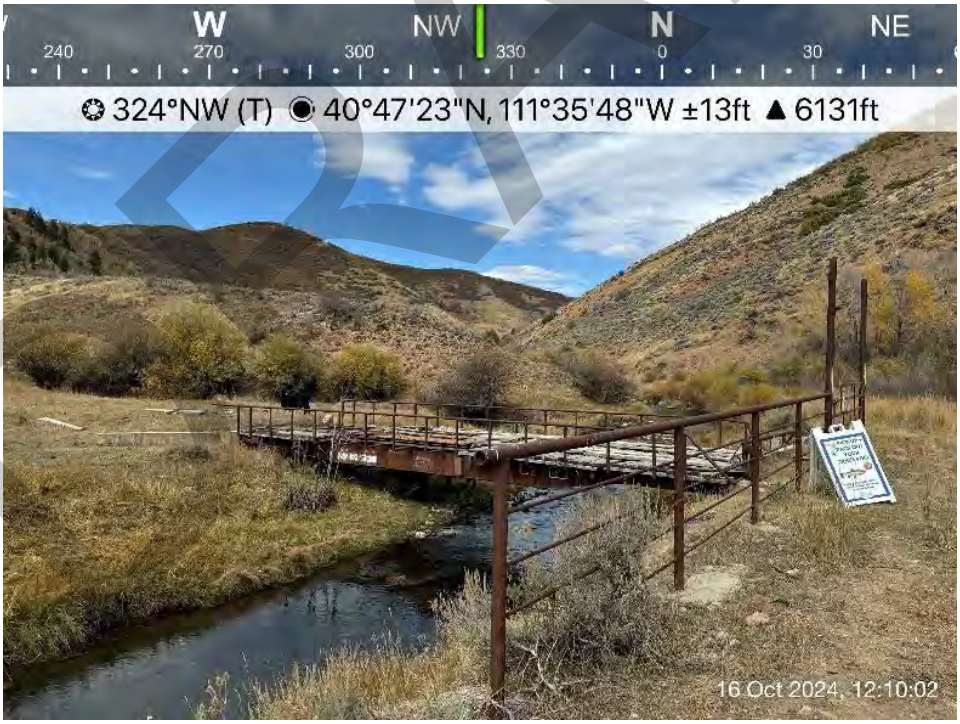
Point 19. Overlooking East Canyon Creek



Point 20. Looking across East Canyon Road



Point 21. Looking up towards Wood Hollow



Point 22. Old Bridge Crossing East Canyon Creek

OTHER PHOTO POINTS

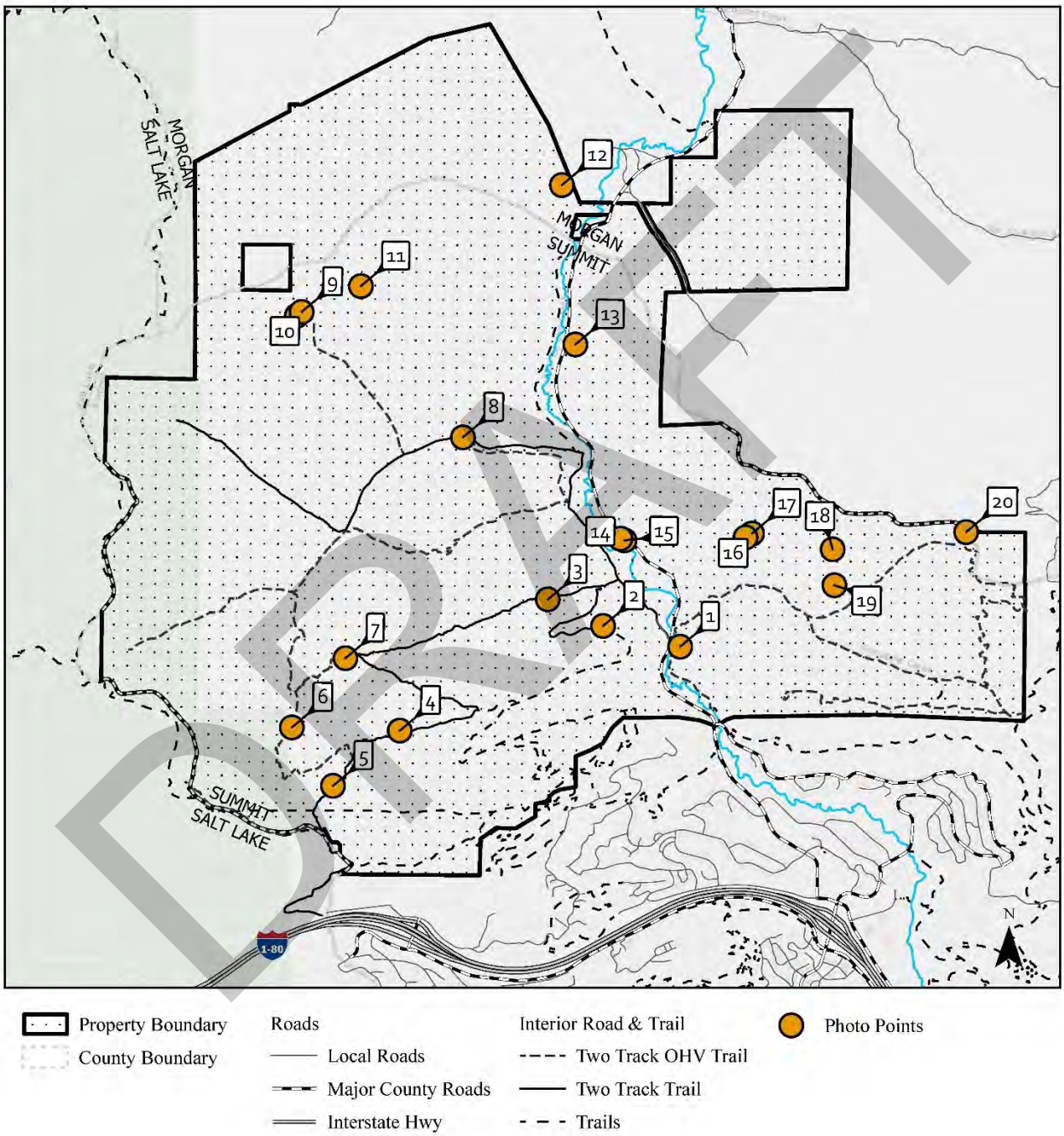


PHOTO NUMBER	PHOTO DESCRIPTION	PHOTO AND GPS COORDINATES
Photo 1	North view of East Canyon Creek and ranch buildings from above East Canyon near southern ranch boundary.	 North view. 40.775082, -111.587634
Photo 2	Meadow, near Red Roof Cabin	 Ruderal grassland looking southeast. 40.776641, -111.595505
Photo 3	Aspen Shaded Fuels Break	 40.7788220, -111.6012590

PHOTO NUMBER	PHOTO DESCRIPTION	PHOTO AND GPS COORDINATES
Photo 4	Mixed Conifer Shaded Fuel Break	 40.7684174, -111.6161646
Photo 5	Mixed Conifer Shaded Fuel Break	 40.7640938, -111.6228681

PHOTO NUMBER	PHOTO DESCRIPTION	PHOTO AND GPS COORDINATES
Photo 6	Water Birch Wet Shrubland	 40.7685817, -111.6271162
Photo 7	Mixed Conifer Shaded Fuel Break	 40.7739780, -111.6217066
Photo 8	Rocky Mountain Montane Mesic Mixed Conifer Forest and Woodland	 Southeast view. 40.7911533, -111.6099390

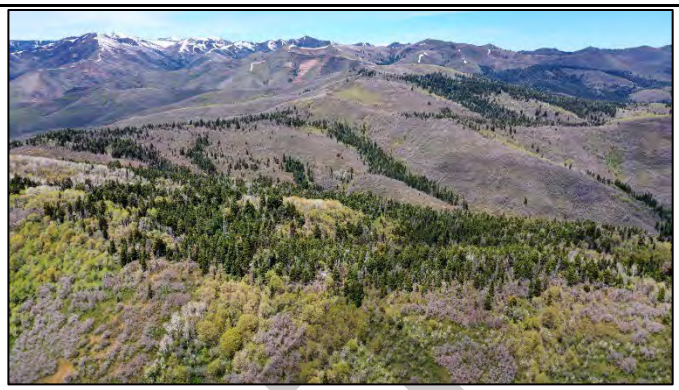
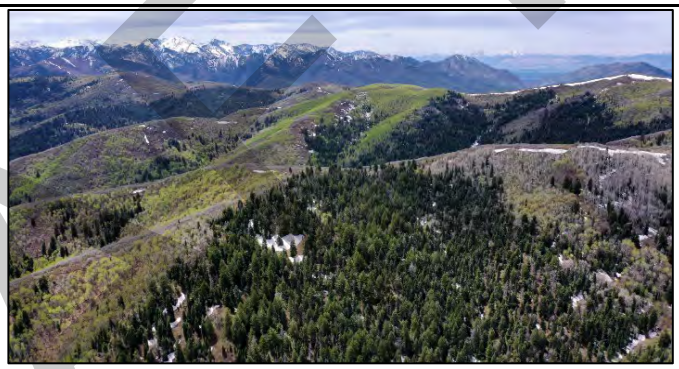
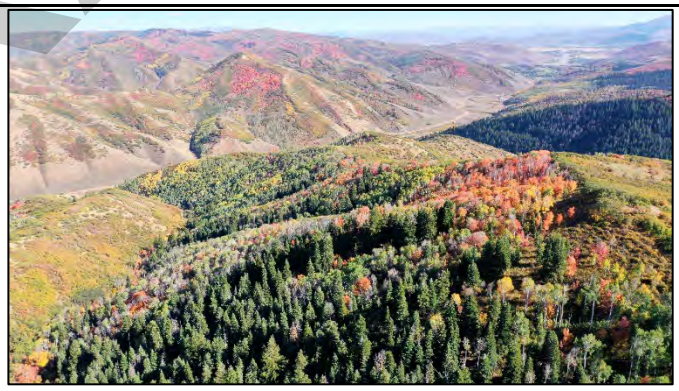
PHOTO NUMBER	PHOTO DESCRIPTION	PHOTO AND GPS COORDINATES
Photo 9	Looking west toward Wasatch Crest from above Big Bear Hollow near SuMo Ridge.	 West View. 40.80077, -111.626477
Photo 10	South view from above Big Bear Hollow near SuMo Ridge.	 South View. 40.800768, -111.626478
Photo 11	Southeast view of a mosaic of forest types from near SuMo Ridge.	 Southeast view. 40.802801, -111.620465

PHOTO NUMBER	PHOTO DESCRIPTION	PHOTO AND GPS COORDINATES
Photo 12	Narrowleaf Cottonwood / (Common Snowberry, Western Snowberry, Mountain Snowberry) Riparian Woodland	 facing east. 40.81076, -111.600063
Photo 13	Quaking Aspen—Douglas-Fir Saskatoon Serviceberry Forest	 East view. 40.798422, -111.598563
Photo 14	East view of oak woodland and ridgelines above Porcupine Creek from central portion of the ranch.	 East view. 40.783276, -111.593397

PHOTO NUMBER	PHOTO DESCRIPTION	PHOTO AND GPS COORDINATES
Photo 15	East view of 910 Ranch, Jeremy Ranch, I-80, and Park City from above East Canyon Creek.	 East View. 40.783279, -111.593397
Photo 16	South view of Porcupine Creek, Jeremy Ranch, and Wasatch Hollow.	 South view. 40.783582, -111.581066
Photo 17	West view of ranch buildings from above Porcupine Creek.	 West View. 40.783582, -111.581066

PHOTO NUMBER	PHOTO DESCRIPTION	PHOTO AND GPS COORDINATES
Photo 18	Northwest view of ridgeline that forms the eastern property boundary.	 Northwest view. 40.782715, -111.572183
Photo 19	Aerial view of game trail network through oak and sagebrush above Porcupine Creek.	 Aerial view. 40.779934, -111.571975
Photo 20	South view overlooking the southeast portion of the property.	 South view. 40.784907, -111.558297

ONCE RECORDED, PLEASE RETURN TO:

State of Utah
Department of Natural Resources
Division of Forestry, Fire and State Lands
1594 West North Temple, Suite 3520
PO Box 145703
Salt Lake City, UT 84116-5703
Attn: Forest Legacy Program Coordinator

DEED OF CONSERVATION EASEMENT
WASATCH BACK FOREST CONSERVATION PROJECT
910 RANCH PROPERTY

THIS DEED OF CONSERVATION EASEMENT ("**Easement**") is made effective the ___day of _____, 2025 ("**Effective Date**") by and between **SUMMIT COUNTY**, a political subdivision of the State of Utah, having an address at 60 N. Main Street, P.O. Box 128, Coalville, Utah 84017, ("**Grantor**"), in favor of the STATE OF UTAH, by and through the **DEPARTMENT OF NATURAL RESOURCES, DIVISION OF FORESTRY, FIRE & STATE LANDS**, a government entity, having an address at 1594 W. North Temple, Suite 3520, PO Box 145703, Salt Lake City, Utah 84114-5703 ("**Grantee**"), (each is a "**Party**" and are collectively referred to herein as the "**Parties**").

The following Exhibits are attached to and are incorporated into this Easement by this reference:

Exhibit A: Legal Description of the Property
Exhibit B: Property Map
Exhibit C: Water Rights
Exhibit D: Baseline Documentation Report, Signed "Acknowledgment of Property Condition"
Exhibit E: Forest Stewardship Plan
Exhibit F: Designated Improvement Areas: Existing Structures, Description of Use & Maps
Exhibit G: Definitions

RECITALS

WHEREAS, the Grantor is the sole owner of certain parcels of real property spanning both Summit and Morgan counties in the State of Utah; and

WHEREAS, the United States Department of Agriculture (USDA) Forest Service and the Utah's Forest Legacy Program (collectively the "**Forest Legacy Program**") and the Grantor entered into a Fee Simple Deed of Acquisition for the purchase the Property; and

WHEREAS, as fee owner of the Property, Grantor owns the affirmative rights to identify, preserve, and protect forever the Conservation Values of the Property; and

WHEREAS, the Grantor desires to grant this Easement to the Grantee pursuant to the "Land Conservation Easement Act" of Utah's statutes, *Utah Code Sections 57-18-1 to 57-18-7*, which authorizes a governmental entity to acquire a conservation easement "for the purpose of preserving and maintaining land or water areas predominantly in a natural, scenic, or open condition, or for recreational, agricultural, cultural, wildlife habitat or other use or condition consistent with the protection of open land," all purposes that are of great importance to Grantor, the Grantee, the people of Summit County, and the people of the State of Utah; and

WHEREAS, the specific Conservation Values of the Property are documented in an inventory of relevant features of the Property. Of which the data and explanatory text are presented in the "***910 Cattle Ranch - Wasatch Back Forest Conservation Project Forest Legacy Baseline Documentation Report***" dated 07 day of February 2025, ("**Baseline Documentation Report**"), which consists of reports, maps, photographs, and other documentation. Grantor and Grantee have acknowledged in a signed statement, a copy of which is attached hereto as **Exhibit D**, that the Baseline Documentation Report represents the current condition of the Property at the time of conveyance; and

WHEREAS, as a condition of the Forest Legacy Program, the Grantee has prepared a Forest Stewardship Plan, attached hereto as **Exhibit E**, for the Property that promotes the management practices for forest sustainably; and

WHEREAS, preservation of the Conservation Values of the Property is consistent with the goals of the Forest Legacy Program and the establishment of this Easement will provide public benefits by: (1) preventing future conversions of forest land and forest resources to non-forest uses; (2) protecting and enhancing water quality and water supplies; (3) protecting wildlife; (4) protecting and restoring habitat and maintaining habitat connectivity and related values to ensure biodiversity; (5) protecting riparian area; (6) maintaining and restoring natural ecosystem functions; (7) providing and enhancing public non-motorized recreation opportunities; and (8) maintaining forest sustainability and the cultural and economic vitality of rural communities; and

WHEREAS, Grantor intends, as owner of the Property, to convey to Grantee the right to preserve and protect the Conservation Values of the Property in perpetuity; and

WHEREAS, Grantee is a governmental unit qualified for holding this Easement under the Internal Revenue Code, *26 U.S.C. Section 170(b)(1)(A)(v) and Title 57, Chapter 18* of the Utah Code; and

WHEREAS, Grantee agrees by accepting this Easement to honor the intentions of Grantor stated herein to preserve and protect in perpetuity the Conservation Values of the Property for the benefit of this generation and the generations to come.

CONSERVATION EASEMENT TERMS

IN CONSIDERATION of the recitals set forth above, the mutual covenants, terms, conditions, and restrictions contained herein, and other good and valuable consideration and pursuant to the laws of the State of Utah and in particular, *Chapter 18, Title 57 of the Utah Code*, Grantor does hereby voluntarily grant and convey to Grantee this Easement in perpetuity over the Property of the nature and character and to the extent hereinafter set forth.

I. CONSERVATION VALUES, PURPOSE AND THE PROPERTY.

a) The purpose of this Easement is to forever protect and preserve in perpetuity the Conservation Values of the Property by prohibiting any use of the Property that may materially impair or interfere with such protection and preservation (the "**Conservation Purpose**"). This may include protecting important forest areas that are threatened by conversion to non-forest uses and for protecting open space land for the conservation of wildlife habitat and for the enjoyment of the public by way of limited recreational use.

b) Conservation Values means the scenic, open space, forested, aesthetic, scientific, historic, cultural, hydrologic, ecological, agricultural, wildlife, and public non-motorized recreation values of the Property (collectively the "**Conservation Values**").

c) For the purposes of this Easement the Property is the so-called "*910 Cattle Ranch*", and consists of approximately 8,587.70 acres located in Summit County (approximately 6,862.99 acres) and Morgan County (approximately 1,724.71 acres), the legal description of which is attached hereto as **Exhibit A** and shown for reference purposes on the Property Map attached as **Exhibit B**; the Water Rights are also attached hereto as **Exhibit C** collectively together with all **Water Rights** , the "**Property**").

II. BASELINE DOCUMENTATION REPORT. By the execution of this Easement, the Grantee acknowledges that the present condition of Grantor's Property is compatible with the Conservation Purpose. In order to evidence the present condition of the Property, including both natural and man-made features, and to facilitate future monitoring and enforcement of this Easement, the Parties acknowledge that a Baseline Documentation Report has been prepared, which provides a collection of baseline surveys, maps, photos, and data points on the Property. The Baseline Documentation Report is an accurate representation of the Property's current conditions and its natural resources and is representative of an assessment of the current and historical uses. By their signatures to and certification of the Baseline Documentation Report, **Exhibit D**, and further by signature of this Easement, the Parties agree that the Baseline Documentation Report contains an

accurate representation of the ecological, biological, and physical condition of the Property as of the Effective Date and of the current and historical uses of the Property. The Baseline Documentation Report is an accurate representation of the Property at the time of conveyance of this Easement and is intended to serve as an objective information baseline for monitoring compliance within the terms of this Easement. A copy of the Baseline Documentation Report is on file with both Grantor and Grantee and by this reference made a part hereof.

III. WATER RIGHTS. Water Rights means the water rights as identified in **Exhibit C**. The Water Rights shall remain subject to the Easement in perpetuity and not be subject to sale, transfer or removal from the Property, unless otherwise authorized by the Grantee.

IV. DEFINITIONS. For the purposes of this Easement terms are defined in **Exhibit G**.

V. THE GRANTEE'S RIGHTS. In order to accomplish the Conservation Purpose, the rights and interests that are granted and conveyed to the Grantee by this Easement consist of the following:

a) Preserve and Protect. The right to preserve, protect, identify, monitor, and enhance the Conservation Values in perpetuity, and to prevent or enjoin any activity on or use of the Property that constitutes a breach of this Easement or is materially inconsistent with the purpose of this Easement and, in the event of their degradation or destruction, to require the restoration of such areas or features of the Property that may be damaged by any inconsistent activity or use. Grantee agrees by accepting this Easement to honor the intentions of Grantor stated herein to preserve and protect in perpetuity the Conservation Values of the Property for the benefit of this generation and the generations to come.

b) Entry and Access Rights. The Grantee is, by this Easement, granted rights of access, whether by public ways or otherwise and including, but not limited to, any access easements appurtenant to the Property or held by Grantor, to enter upon the Property in order to monitor compliance with and otherwise enforce the terms of this Easement, an activity that will occur at least annually; to study and make scientific observations of the Property and of natural elements and ecosystems and other features of the Property, and to determine whether the Grantor's activities are in compliance with the terms of this Easement, all upon reasonable prior notice to Grantor and in a manner that does not unreasonably disturb the use of the Property by Grantor consistent with this Easement. Notwithstanding the Grantee's right to access the Property, Grantee shall not be permitted to access or enter any dwellings on the Property without the express consent of the Grantor.

c) Approval. To review, comment upon, approve or object to any proposed plans

relating to prohibited uses and permitted uses, subject to any approvals required by **Section X** of this easement.

d) Signage. To place signs on the Property that identify the Property as being protected by this Easement. The number and location of the signs are subject to **Section VIII** of this Easement and Grantor's approval, which will not be unreasonably withheld.

VI. GRANTOR'S USES OF THE PROPERTY. Except as prohibited or otherwise limited by this Easement, Grantor reserves the right to use and enjoy the Property in any manner that is consistent with the Conservation Purpose. Grantor will not perform, or allow others to perform, any act on or affecting the Property that is inconsistent with the Conservation Purpose.

VII. PERMITTED USE AND RESERVED RIGHTS. The Grantor reserves to itself, and to its members, personal representatives, heirs, successors, and assigns, all rights accruing from their ownership of the Property, including the right to engage in, or permit or invite others to engage in, all uses of the Property that are not expressly prohibited herein and are not inconsistent with the Conservation Purpose of this Easement. Without limiting the generality of the foregoing, the following rights are expressly reserved.

a) Forest Management. Except as specifically prohibited in this Easement, forest management activities are permitted on the Property in accordance with all federal, state, and County laws and regulations, and in accordance with the approved Forest Stewardship Plan, set forth in **Exhibit E** and as set forth in the *State of Utah's Forest Water Quality Guidelines* (available from the Utah Division of Forestry, Fire and State Lands). Sound management practices, in accordance with the Forest Stewardship Plan, shall be implemented. The Forest Stewardship Plan will be updated by the Grantee and signed by the Grantor every ten (10) years or when ownership of the Property changes, whichever occurs first.

i. Minimum Forest Cover Requirement. The Property shall maintain a minimum of 75% "forest cover," as required by Forest Legacy Program and as defined by the *State of Utah's Forest Action Plan* and as determined by the Grantee. Grantor will take measures to ensure that the Property does not fall below this threshold. If the Property falls below the 75% forest cover threshold, Grantor shall reforest within three (3) years and maintain minimum stocking in the reforested area(s) as defined by state productivity standards. In the event of a wildfire, Grantor will consult with Grantee on appropriate reforestation methods including monitoring for natural regeneration of tree species.

ii. Compatible Non-Forest Lands. No more than twenty-five percent

(25%) of the Property may be used for "Compatible Non-Forest Lands" such as cultivated farmland, pasture, grassland, shrubland, open water, and wetlands, as defined in the *2017 Forest Legacy Program Implementation Guidelines*. Any portion of the Property in Compatible Non-Forest Use at the time of conveyance of this Easement that becomes forested shall not return to Compatible Non-Forest Uses, and no forested land on the Property after the Effective Date of this Easement shall be converted to Compatible Non-Forest Uses, unless expressly permitted herein.

iii. Wildfire Mitigation. Grantor may remove brush and vegetation necessary to minimize the potential risk of wildfire on the Property. All fire management shall be done in accordance with the Forest Stewardship Plan, **Exhibit E**. Removal methods shall limit the effect on the native biological diversity and may include, but would not be limited to hand removal, mechanized methods, prescribed fire, and biological methods such as short-duration grazing. To the best of its ability, Grantor may take any and all precautions to prevent wildfire. Grantor will allow unrestricted access and entry to suppress wildfires and/or pre-treat land or vegetation in advance of approaching wildfire.

iv. Defensible Space for Fire Protection. Any existing or new structure will require proper management of the surrounding vegetation to reduce wildfire risk and intensity. The recommended treatment of vegetation is dependent on fuel type (kinds of trees/shrubs/grass) and slope. Grantor shall follow all County regulations and refer to the publication "*Living With Fire, A Guide for the Homeowner*" for detail in creating and maintaining defensible space (available from the Utah Division of Forestry, Fire and State Lands) and/or contact a resource management professional.

b) Maintenance and Restoration of the Native Ecosystem. Grantor may use techniques and methods recognized as effective in maintaining and restoring the native biological diversity of the Property, including but not limited to invasive weed mitigation, watershed restoration, restoration of forests, and other restoration efforts.

c) Leases and Permits. The Grantor reserves all rights to (1) issue permits, and collect fees for issuing permits to authorize activities on the Property that do not adversely impact or conflict with Conservation Values of the Property or any Prohibited Uses stated in herein; and (2) enter into leases, contracts or other agreements, and collect fees or other consideration for such leases, contracts or other agreements that allow

uses of the Property that do not adversely impact or conflict with Conservation Values of the Property or any Prohibited Uses.

d) Existing Structures**.** Grantor may use, maintain, expand, and repair the existing structures, fences, corrals, barns, sheds, outbuilding, cabins, houses, and other structural improvements located on the Property as of the Effective Date of this Easement and as identified in the Baseline Documentation Report (collectively "**Existing Structures**"), provided that maintenance, improvement, expansion, or repair of such Existing Structure or improvement will not result in: (1) a Footprint greater than twice (2x) the size of the existing structure; and/or (2) a height that is no greater than twice (2x) the existing height but in no event may the new height exceed any height limitations imposed by the County Code. If any or all such existing structure(s) are demolished, removed, or destroyed, Grantor may replace them with similar structures of the same general use and appearance.

e) Transient Structures. The Grantor is permitted to erect transient structures solely for the purpose of engaging in the Permitted Uses as set forth herein. Examples of Transient Structures include, but are not limited to, event canopies, sleeping tents, yurts, seasonal bridges, and portable buildings.

f) Residential Use. The Grantor retains the right to use the Existing Structures and/or the Property as described in **Exhibit F**, for residential purposes that support the Conservation Purpose and Conservation Values of the Easement. This includes housing for caretakers, agricultural workers, Grantor staff, or other individuals whose presence and activities directly contribute to the protection and/or maintenance of the Property. Such residential use must be consistent with and not impair the Conservation Values, and must comply with all applicable Federal, State, and County regulations.

g) Limited Building Right. The Grantor may, with prior approval from the Grantee, construct and install a limited number of certain new structures within the Designated Improvement Areas, more particularly described in **Exhibit F**. Any structures that are built shall be constructed in a manner that will minimize the structure(s) impact on the Conservation Values of the Property and shall comply with all Federal, State, and County regulations.

    i. Designated Improvement Areas. The Grantor retains the right to make improvements and construct new buildings and structures within the Designated Improvement Areas of the Property as described in **Exhibit F**. With the Grantee's approval, pursuant to **Section X**, the Grantor may designate a Building Envelope to be located anywhere within each

Designated Improvement Area. All new and existing buildings and structures shall be constructed within a Building Envelope.

ii. Building Envelope. Grantor may construct, place, repair, improve, and/or replace new and/or existing structures within the approved Building Envelope for existing structures, as documented in the Baseline Documentation Report, and for new construction of structures as permitted by this Easement, pursuant to the restrictions contained within **Exhibit F**, and in accordance with all Federal, State, and County regulations. A Building Envelope may include ancillary structures, sheds and greenhouses, landscaping, parking, telecommunications, storage, water facilities, ponds, fences, and other such structures or facilities necessary for the support, maintenance, and ongoing operation of permitted use such as agricultural, residential, recreational, educational, and forest uses, so long as also allowed under the County Code and all other applicable laws and regulations approved by the County. A professional or cadastral survey is not required by this provision, but the Baseline Documentation Report will be updated to show the Building Envelope using a legal description or referenced Global Position System (GPS) points. The following standards must be met for the location of each Building Envelope:

- May not be within one hundred (100) feet of any Watercourse. Establishment of a Watercourse-crossing, Watercourse enhancement, or Watercourse restoration is permitted, but shall comply with all applicable Federal, State, and County regulations.
- Must be sited to minimize impacts to forest resources.
- Shall not occur within wetlands as defined by the United States Army Corps of Engineers or other Federal, State or County regulatory authority, except in the case where mitigation is permitted by such regulatory authority. Within the Building Envelope, development shall minimize the impact on critical habitat and the species that depend on it.

h) Recreational Uses and Activities. The following recreation uses and activities are permitted on the Property.

i. Recreation Management Plan. Grantor is required to have a comprehensive recreation management plan (RMP) in place prior to

allowing for, or implementation of, any recreational use or activity described in this subsection on the Property. The RMP may be created, or modified, following the Execution Date of this Easement to reflect current and changing needs precipitate the need for the same. Activities contemplated in the RMP and any changes or modifications to the RMP shall comply with the terms of this Easement and protection of the Conservation Purpose. The RMP will describe appropriate user capacity, types of recreation, location of recreation uses within recreation zones, adaptive management strategies, and sustainable management best practices for the construction and maintenance of Trails and Paths. RMP shall be approved by the Grantee, upon which the Grantor may implement the RMP without further approval from the Grantee. If the approved RMP is significantly modified, the Grantor shall seek additional approval from the Grantee prior to implementation.

ii. Limited Use, Permit System, and Fees. To support the Conservation Purpose, the Grantor may implement, in its sole discretion, any, or all, of the following as necessary to implement recreation uses and activities on the Property: (1) limit the duration and capacity of recreation uses and activities; (2) create a permitting system for recreation uses and activities; (3) require a permit for recreation uses and activities; and/or (4) charge a fee for recreation uses and activities.

iii. Trails and Paths: Upon approval of the RMP, Grantor may, in its sole discretion, design, construct, install, maintain, groom, and extend up to sixty-five (65) miles of new Natural Surface Trails (not to exceed Tread width of five (5) feet) and Soft Surfaced Trails and/or Paths (not to exceed Tread width of twelve (12) feet) for the purpose of Non-Motorized Recreation. In addition, the Grantor may adopt any existing, as of the Effective Date, Two-Track Road, Trail or Path (including Doubletrack or Single-Track), to be part of the greater Property recreation network. Additional Trail and Path miles may be allowed upon mutual agreement of the Grantor and Grantee. Hard Surfaced Trails, Roads or Paths are prohibited, except as allowed by the mutual agreement of the Grantor and Grantee.

- Location, Construction and Maintenance. The Grantor's RMP shall identify the locations of existing Trails and Paths and the proposed location for new Trails and Paths on the

Property. New construction of and/or maintenance of existing Trails and Paths shall adhere to the most current sustainable trail building best practices, such as those referenced in the Summit County Snyderville Basin General Plan and those sanctioned by Professional Trail Builders Association and/or the USFS. Trails and Paths shall be located in recreational zones as defined by the Grantor's RMP. It is understood that the construction of new trails will necessarily require disturbance of an area greater than the tread of the planned trail. Disturbance associated with new trail construction will not exceed a width of 12 ft. The disturbed area will be allowed to naturally revegetate, and Grantor will endeavor to narrow the trail to the minimum width necessary to achieve its recreational purpose.

- Mountain Biking Trails. Grantor, at its sole discretion, may allow mountain biking as a Permitted Use on the Property, but such use shall be limited, giving preference to travel by foot, ski, and equestrian, and should be focused on creating connections to Trails and Paths networks existing as of the Effective Date.

- Critical Area Avoidance. In constructing new Trails or Paths, Grantor shall avoid sensitive and/or critical habitat and known populations of noxious/invasive weeds, to the extent avoidance is reasonably possible. If avoiding such areas is not reasonably possible, Grantor may temporarily or reasonably close the Trail(s) or Path(s) to the public to avoid conflict with wildlife (ex. calving and nesting seasons) or to reduce the spread of unwanted plants (ex. while plants are in seed).

iv. Recreational Related Structures. Grantor may construct, install, use, improve, and maintain bridges, boardwalks, culverts, gates, picnic tables, benches, restrooms, parking areas and trailheads, and/or other recreational-related improvements to support the Permitted Uses herein. Unless otherwise agreed upon by the Grantor and Grantee, parking areas and trailheads shall comply with the parameters set forth in **Exhibit F**.

v. Camping, Campgrounds and Overnight visitation. Grantor may design, construct, install, maintain, operate, and expand overnight backcountry camping areas and/or a Yurt/"Hut-to-Hut" camping systems on the Property, as depicted within **Exhibit F**, for limited individual and/or group camping, including, but not limited to personal, educational, business or civic groups, youth camps, scout troops, social or health groups, and similar organizations or groups so long as such activity does not adversely damage and is consistent with the Conservation Purpose. Grantor may charge a fee for camping use and may employ an on-site manager to supervise and manage such camping. Camping and overnight visitation areas are limited to those areas identified by **Exhibit F**, except as may be necessary in conjunction with carrying out any Permitted Uses on the Property, for general monitoring, or administrative purposes (i.e. security/law enforcement, monitoring trail conditions, ensure conservation values are intact, etc.), or in case of an emergency for emergency access by the Grantor, Grantee, or its authorized representative.

vi. Fishing. Grantor, at its sole discretion, may allow fishing as a Permitted Use on the Property only to the extent such activities are consistent with Federal, State, and County laws and regulations and the Conservation Purpose. The intent of this provision is to allow for recreational fishing to the extent those activities are not detrimental to sustainable levels of fish populations and contingent on the successful restoration and ongoing sustainability of a cold-water fishery as determined by the Grantor.

i) Agriculture, Grazing, and Ranching Activities. Grantor may use the Property for historical or common ranching and farming activities, including grazing, feeding, breeding, raising, and managing livestock, provided these activities do not impair the Conservation Purpose. Grazing and pasturing, on the entire Property, of "Traditional Livestock" (namely cattle, sheep, goats, horses, bison) is permitted provided that range conditions shall be maintained at, or improved from, those documented in the Baseline Documentation Report. Grazing of privately-owned wildlife and/or game, including but not limited to elk or deer, is prohibited.

i. Sustainable Range Stewardship and Range Management. Sustainable range stewardship and proper management of Traditional Livestock grazing or pasturing are integral to the protection of the Conservation Purpose of this Easement. Traditional Livestock grazing shall not

exceed the appropriate degree of use prescribed by the United States Department of Agriculture, Natural Resource Conservation Service, to ensure the renewable range resource remains in proper ecological health including the riparian habitat.

ii. Grazing and Range Management Plan. Grantor shall have a grazing and range management plan (GRMP) in place prior to any application of grazing, pasturing, ranching, or farming on the Property. The GRMP shall be prepared in consultation with grazing and agricultural Federal, State, or local professionals. A GRMP may be created, or modified, following the execution of this Easement where changing needs and uses precipitate the need for the same. Grazing activities contemplated in the GRMP and any changes or modifications to the GRMP shall comply with the terms of this Easement and ensure protection of the Conservation Purpose identified therein. The GRMP shall describe appropriate use levels, pasture rotation schedule, seasons of use, type of Traditional Livestock that can be grazing or pasture and sustainable management best practices. The GRMP shall meet all applicable Federal, State, and County laws, policies, guidelines, and regulations. Upon approval by the Grantee the GRMP shall be implemented at the sole discretion of the Grantor. A copy of the GRMP shall remain available with the Grantor.

j) Chemicals, Biocides, Fertilizers, and Biological Control. Use of chemicals and biological controls is permitted for the following purposes and under the following conditions: (1) The use of chemical herbicides for the control of noxious weeds, other invasive exotic plant species or plants toxic to Traditional Livestock, wildlife or human life; provided that chemical herbicides may be used only in those amounts as directed by the product label, as recommended by a certified and licensed pesticide applicator professionals, and with a frequency of application that constitute the minimum necessary for control; except with the prior approval of Grantee herbicide shall not be applied by aerial spraying; (2) Use of chemical biocides for the control of agricultural, forest, or rangeland pests; provided that chemical biocides may be used only when no other generally accepted method of control is effective, that the biocide is used only in those amounts and with a frequency of application constituting the minimum necessary to accomplish reasonable outcomes, that the biocide has minimal adverse effects on non-target species of plants or animals; except with the prior approval of Grantee the biocide shall not be applied by aerial spraying; (3) Use of chemical fertilizers for the enhancement of rangeland forage; provided that the use of fertilizer does not adversely affect the

aquatic or terrestrial ecosystems in a significant manner; and (4) Use of biological controls, or biocontrol, for the effective management of invasive and noxious weeds; all use or application of any chemicals, biocides, fertilizers, or biological control shall only be done in accordance with Federal, State, and County laws and regulations.

k) Stock Water and Irrigation Improvements. Grantor may construct a new stock water system and an irrigation system to support permitted grazing, pasturing, ranching or farming activities contemplated within the GRMP and/or may make improvements to any embankment, excavation, or other earthwork necessary to impound water for that purpose in accordance with Federal, State, and County regulations. Existing stock ponds, water tanks, and water lines may be maintained, restored, and repaired at the sole discretion of the Grantor. Any extension, expansion, and/or improvement to existing or new stock water and irrigation improvements require prior approval from the Grantee.

l) Fence and Gating. Grantor may place fencing and cattleguards, replace existing fencing and cattleguards, and place gates and/or cattleguards for the purpose of defining Property boundaries, delineating specific uses or sensitive areas, or restricting unauthorized access across the Property, provided that fencing, when reasonably possible, shall be constructed in a manner that promotes safe wildlife passage and migration. Grantor shall refer to the guidance and information provided by the Utah Division of Wildlife Resources regarding safe wildlife fencing. Snow fences may be constructed as necessary to control drifting snow. Big game proof fences are permitted around harvested crops (e.g. haystacks), domestic gardens, or as needed for restoration enclosures. No other big game proof fences will be constructed on the Property unless for the purpose of protecting the Conservation Purpose. Grantor may construct fences without prior approval of Grantee.

m) Roads and Parking. As of the Effective Date, and as documented in the Baseline Documentation Report, there are known to be approximately twenty four (24) miles of Two-Track Natural Surface Roads, three and one half (3.5) miles of a Maintained Road (i.e. County Class-B Soft Surfaced Road), and 33,000 square feet of Natural Surface parking areas, and 45,000 square feet of Natural Surface pull-out parking areas on the Property. Each Road (Two-Track or Maintained) and parking area or pull-out may be used, repaired, maintained, improved, and/or replaced. This includes the area within the sixty (60) foot right-of-way either side of the centerline (totaling a one hundred twenty (120) foot right-of-way) of the Class B County Road, otherwise known as North Jeremy Ranch Road, also known as N. East Canyon Road.

i. Existing Roads. Existing Roads may be repaired, maintained, and improved so as to (1) minimize the width and length, (2) and minimize the overall impact on the Property and its Conversation Purpose. Grantor shall not pave or cause to be paved any existing Road, parking area or pull-out with pavement, concrete, hot or cold press asphalt or any other Hard Surfaced impervious material, unless such need is deemed necessary to protect the Conservation Purpose and is mutual agreed upon by Grantee and Grantor and approved by Grantee.

ii. Temporary Two-Track Roads. Temporary Two-Track Roads are permitted for the purpose of assisting, supporting, accessing, or installing a Permitted Use, such as, but not limited to, Yurts/Hut access, timber harvest, wildfire fuel reduction efforts, wildfire suppression, or as needed to respond to an emergency. Temporary Two-Track Roads shall be constructed to (1) maximize the ability of roads to be reclaimed and returned to a natural state when it is no longer required or needed, and (2) minimize the road's overall impact on the Property and its Conservation Values.

iii. New Road Construction. Grantor reserves the right to construct up to five (5) miles of new Two-Track Roads as are reasonably necessary for Grantor to exercise Permitted Uses, provided that the construction of such new Roads do not significantly interfere with the Conservation Purpose of the Property and that prior to constructing any new road Grantor shall submit to Grantee, for review and approval. Any new Road construction shall be done with minimal improvements, shall not exceed a14-ft wide Tread (with additional room for turnouts) or a width as required to comply with Summit County Development Code. New Roads shall be Natural Surface or Soft Surfaced, and shall be prohibited from being Hard Surfaced, unless approved by Grantee to protect the Conservation Purpose.

iv. Third-Party Road. In the event that a court of competent jurisdiction grants a third-party road easement on, in or through the Property, Grantor shall be authorized to negotiate for the least intrusive alignment and width that (1) does not significantly interfere with the Conservation Purpose of the Property, and (2) are consistent with Federal, State, and County regulations and ordinances. The third-party and/or Grantor shall have the right to construct a Road or Trail on said easement consistent with such regulations and ordinances.

v. Parking, Trailheads, and Pull-Outs. Grantor shall be permitted to construct, repair, maintain, improve, and replace parking, trailheads and pull-outs (collectively "**Parking Areas**") on the Property provided that the Parking Areas do not significantly interfere with the

Conservation Purpose of the Property and that prior to any new construction of such, Grantor shall submit to Grantee, for review and approval, the Grantor's Parking Area plans. Grantor shall not pave, or cause to be paved, any such new or existing Parking Area with pavement, concrete, hot or cold pressed asphalt or any other Hard Surfaced impervious material, unless such paving is deemed explicitly necessary, by Grantee and Grantor, to protect the Conservation Purpose of this Easement. Parking Areas include parking lots, trailheads, turnouts, overlooks, and similar areas and shall be reserved for motorized vehicle and trailer parking. Supporting infrastructure such as restrooms, trash receptacles, signage, electric charging stations, and picnic areas are permitted within parking areas. Parking surfaces shall comply with County regulations. Designated Improvement Areas for new construction of parking areas are detailed in **Exhibit F**.

n) Property Inclusion. Private inholdings within the Property's boundaries and adjacent lands may be incorporated into this Easement if such inholdings are purchased by, donated to, or otherwise acquired by the Grantor and if the inholding is consistent with the Conservation Purpose and improves the overall public benefit of the Property. Any land incorporated into this Easement pursuant to this paragraph must be made expressly subject to all terms and conditions of this Easement, and the incorporation must be (1) documented through appropriate legal descriptions and updates to the Baseline Documentation Report at the time of incorporation, and (2) promptly recorded in the records of the appropriate County of which the parcel resides.

o) Utilities. Grantor may use, maintain, and replace or reconstruct existing utilities and easements of record, provided that, following such activity, any area of disturbance to the Property is restored, to the extent reasonably practical, to the state of the Property prior to the disturbance. Grantor has the right to install renewable energy utilities within Designated Improvement Areas, such as but not limited to, solar panels, small-scale wind turbines (not to exceed one hundred fifty (150) feet in height), and electric car charging stations, to support any Permitted Uses herein. Grantor also reserves the right to allow for new buried utilities to be installed within the County Class B right-of-way easement running the length of N. East Canyon Road. With prior approval from the Grantee, Grantor may also install new utilities to support a Permitted Use granted by this Easement.

p) Industrial or Commercial Uses. The following industrial or commercial uses are permitted, except if determined by Grantee to adversely impact the Conservation Purpose: (1) agricultural production and related uses in accordance with the terms and conditions of this Easement; (2) the sale of excess power generated in the

operation of renewable energy structures and associated equipment or other energy structures that the Grantee approves as being consistent with the Conservation Purpose and in accordance with the terms and conditions of this Easement; (3) temporary or seasonal educational, research, or outdoor recreation activities, or events; and (4) commercial enterprises related to agriculture or forestry including but not limited to agrotourism, grazing operations, processing, packaging, and marketing and sale of farm or forest products.

q) Memorials. The installation of a limited number of memorial benches or monuments may be permitted by the Grantor within any Building Envelope or along a Trail, Path or Road. These installations must adhere to the guidelines set forth by the Grantor in the Property's management plan, ensuring they do not obstruct public access or natural views and must not adversely impact on the Conservation Purpose. Each memorial must be approved on a case-by-case basis by the Grantee, considering the significance, public benefit, and appropriateness of the tribute. The use of any portion of the Property as a cemetery, tomb, or final resting place for any human or domesticated animal remains is strictly prohibited, unless such remains are defined by the Utah State Historic Preservation Office as having historical or archaeological significance, or as documented in the Baseline Assessment Report at the Effective Date.

VIII. PROHIBITED USES. Any activity on or use of the Property that is inconsistent with the purpose of this Easement or is inconsistent with the Conservation Values is prohibited. Grantor shall not convert the Property to other uses. Activities and uses that are prohibited include the following:

a) Subdivision. Any separate conveyance of a portion of the Property by division or subdivision of the Property is prohibited, except for the purpose of protecting the Conservation Values, Conservation Purpose, or a Permitted Use. Any transfer of development rights associated with the Property, whether existing presently or created in the future, is contrary to the Conservation Purposes and is expressly prohibited. The correction of a boundary line location, the maintenance of existing recreational leases, or the creation of new leases shall not constitute a subdivision for the purposes of this provision.

b) Structures and Improvements. Except to support the Conservation Purpose, the Conservation Values, or as otherwise explicitly permitted in this Easement, there shall be no additional building, structure, development, installation, expansion or other improvements of any kind, temporary or permanent, constructed on the Property including, but not limited to, buildings, houses, towers, satellite dishes,

sheds, tanks, mobile homes, billboards, hunting stands, impoundments, septic systems, docks, aircraft landing strips, memorials/headstones, gravesites, mortuary facilities, and communication equipment.

c) Ski Infrastructure. Any infrastructure associated with enabling uphill travel for downhill skiing including, but not limited to, aerial trams, cables, lifts, towers, and other modes of conveyance is prohibited.

d) Drones, Unmanned Aircraft Systems, and Model Aircraft. Drones, unmanned aircraft (or aerial) systems, and model aircraft ("**Unmanned Aircraft**") are prohibited from taking off on, landing on, and, to the extent consistent with applicable law, flying over the Property. However, Grantor may use or direct the use of Unmanned Aircraft in emergency situations, for training purposes, for routine maintenance, and for monitoring or other stewardship purposes.

e) Surface Disturbance and Mineral Exploration. Changes in the existing general topography of the landscape or land surface of the Property, excluding changes as a result of activities expressly permitted herein, are prohibited unless such changes were caused by the forces of nature or are otherwise outside of Grantor's control. In the event of an imminent or current emergency or circumstance that are reasonably likely to result in harm to property, human life, or animal or wildlife, Grantor may modify topography and may do so without the prior consent of the Grantee. There shall be no disturbance of the surface, including but not limited to filling, excavation, and removal of topsoil, sand, gravel, rocks, or minerals, or change of the topography of the land in any manner, except as may be reasonably necessary to carry out the Permitted Uses on the Property under the terms of this Easement. Surface disturbance associated with the mining of subsurface oil, gas, or other minerals is not permitted unless the extraction is limited and localized, does not adversely impact the purposes of the Forest Legacy Program, the Property's Conservation Values, or Conservation Purpose, and approved by Grantee.

f) Motorized Vehicle Use. The use of motorized vehicles or Motorized Recreation equipment including, but not limited to, snowmobiles, off highway vehicles (OHV), all-terrain vehicles (ATV/UTV), e-bikes (throttle propelled class III or equivalent electric bikes), motorcycles or electric motorcycles/dirt bikes, electric vehicles of any kind, other motorized or electric recreational vehicles, scooters, boards, or alike are prohibited on Property Roads, Trails, and Paths unless as may be necessary for general monitoring or administrative purposes (i.e. security/law enforcement, monitoring trail conditions, ensure conservation values are intact,

etc.), or as necessary to respond to an emergency by the Grantor, Grantee, or its authorized representative. This provision does not exclude motorized vehicle use of the Class B County Road, otherwise known as North Jeremy Ranch Road, also known as N. East Canyon Road, which runs through the Property.

g) Electronic Bicycles (E-Bikes). All classes of electric bicycles (e-bikes), whether classified as motorized or non-motorized by Federal, State, and/or County regulations, are prohibited on the Properties Roads, Trails, and Paths; except as deemed necessary in the discretion of the Grantor for the purpose of facilitating Permitted Uses on the Property, and for general monitoring or administrative purposes or in the event of an emergency, including security/law enforcement, monitoring trail conditions, ensuring Conservation Values are intact, by the Grantor, Grantee, or its authorized representative. This provision does not exclude E-Bike use of the Class B County Road, otherwise known as North Jeremy Ranch Road, also known as N. East Canyon Road, which runs through the Property and this does not prohibit the use of an e-bike under the Americans with Disabilities Act or for individuals granted age-related allowances by County ordinance as of the Effective Date.

h) Water Rights, Alteration of Watercourses, and Topography. Grantor will not change, disturb, alter, excavate, or impair any Watercourse, surface or subsurface water systems, wetland, or the topography of the ground on the Property, except as authorized in the Easement, by the Forest Stewardship Plan, to implement restoration, or to support a Permitted Uses. Removal of groundwater for use off the Property including, but not limited to, the sale, removal, or transfer of Water Rights for use off of the Property, is not allowed unless as expressly agreed to by Grantee or for the dedicated purpose to maintaining instream flow that supports the ecological health of East Canyon Creek or Great Salt Lake, ensuring that the water remains in its natural course for the benefit of fish, wildlife, and recreational activities. Grantor will not allow uses of the Property that would alter the water systems, wetlands, or riparian habitat on the Property except to the extent provided in the Permitted Uses, herein. Grantor shall not allow uses of the Property that would be detrimental to water quality or that would permanently alter the normal water level and/or flow of surface or groundwater, except as Grantor determines as reasonable to carry out the ranching and other Permitted Uses on the Property.

i) Waste Disposal and Hazardous Materials. No portion of the Property shall be used for dumps, landfills, or the storage or deposit of waste materials of any kind. Placing, filling, storing or dumping on the Property of trash, debris, refuse, inoperable vehicles, junk, ash (except as a result of any wildfire mitigation as a Permitted Use), or waste is prohibited. No portion of the Property shall be used for dumping, depositing, abandoning, discharging, storing, maintaining, or releasing any gaseous, liquid, solid, radioactive, or hazardous waste materials or pollutants of whatever nature on, in, or over the ground or into the subsurface or groundwater of the Property. Disposal of any waste materials generated by activities expressly

permitted herein shall be in accordance with applicable Federal, State, and County laws. Slash and other debris associated with timber harvesting or wildfire mitigation activities shall be disposed of according to standard forestry practices. This prohibition does not impose liability on Grantee, nor shall Grantee be construed as having liability as a "responsible party" under Comprehensive Environmental Response, Compensation, and Liability Act CERCLA or similar federal or state statutes.

j) Industrial or Commercial Uses. Except as expressly permitted herein, the Property shall not be used for industrial or commercial uses. Industrial Use refers to activities involving manufacturing, processing, storage, and distribution of goods, while Commercial Use refers to activities involving the sale of goods or services.

k) Residential Uses. Except as expressly permitted herein, the Property shall not be used for residential uses.

l) Hunting. Hunting on the Property is prohibited, subject to the Utah Division of Wildlife Resource's statutory and/or constitutional management authority over wildlife.

m) Game Farming or Game Farm Animals. Grantor will not construct or operate a domesticated game farm on the Property, nor will Grantor raise or hold domesticated game farm animals on the Property. Domesticated game includes those animals regulated or prohibited by the Utah Legislature, the Division of Wildlife Resources, and/or the US Department of Agriculture and Food.

n) Non-Native Species. Grantor will not knowingly introduce or release non-native or non-naturalized plant or animal species, with the exception of agricultural crops identified in the Baseline Documentation Report, as prescribed in the Forest Stewardship Plan, as biocontrol as allowed by the State of Utah for noxious and invasives species management, or as needed to maintain Conservation Values. Desirable non-native plant species needed to improve the forest or range may be introduced but should comply with recommendations in the Forest Stewardship Plan.

o) Commercial Feedlot. Grantor will not establish or maintain any commercial feedlot on the Property. For purposes of this Easement, a commercial feedlot is defined as a permanently constructed, confined area or facility, within which the land is not grazed or cropped annually, and which is used for purposes of engaging in the business of receiving and feeding livestock.

p) Signs and Billboards. No sign or billboard shall be placed on the Property, except those that comply with all provisions of County regulations and for the purpose of: (1) stating the name and address of the Property owner and manager; (2) informing users about activities that are Permitted Use or Prohibited Use on the Property; (3) advertising the sale or rental of the Property; (4) identifying natural environmental features or provide interpretive education; (5) giving Road, Trail, or Path name, guidance, or directions; (6) controlling unauthorized entry or use of the Property; (7) identifying lands under this Easement and the terms of the Easement; (8) identifying permitted Trails, Paths and trailheads; and/or (10) protecting public health, safety, and welfare.

q) Utility Rights-of-Way. Subject to existing rights of record upon the Effective Date of this Easement, no utility rights-of-way shall be located within the Property after the Effective Date unless such utilities are: (1) necessary for a Permitted Use or support a compelling public benefit as determined by the Grantor; (2) located underground, except that necessary above ground appurtenances as may be provided; or (3) located within the established Class B County Road, North East Canyon Road right-of-way. Grantor shall be responsible to restore and reseed all lands disturbed created by the construction of new utility systems.

q. Linear Non-forest Corridors and Other Easements. Except as otherwise permitted under this Easement, no rights-of-way, easements of ingress or egress, driveways, roads, or utility lines or easement shall be constructed, developed, or maintained into, on, over, under, or across the Property, without the prior written permission of the Grantee. No additional easements or deed restrictions that conflict with the Conservation Purpose or that negatively impact the Conservation Values shall be placed on the Property without the prior written permission of the Grantee. Grantee may grant such permission if it determines, in its sole discretion, that any such easement or deed restriction would be consistent with the objectives of the Easement or would support a Permitted Use.

IX. APPROVALS: REVIEW OF GRANTOR PLANS PURSUANT TO PROHIBITED USES AND RESERVED RIGHTS. Before undertaking any activity, not falling within the scope of a previously approved plan, pursuant to any reserved right or Permitted Use herein or any exception to a prohibited use herein, Grantor shall submit to Grantee a detailed written plan and map describing the undertaking. Grantee shall have a period of forty-five (45) days from receipt of said plan to review said plan and approve or make objections to the same. All such objections shall be based upon inconsistencies between the plan and the purpose of this Easement or the Conservation Values of the Property. If within said 45-day period,

Grantee makes no objections, then Grantee shall be deemed to have approved said plan, but nothing else not contained in the plan. If Grantee raises objections, the Parties agree to meet and resolve in good faith all such objections prior to Grantor undertaking such development. If no agreement can be reached between the Parties regarding the plan despite use of the Parties' best efforts to do so, either one of the Parties may submit the matter to a mutually agreed upon mediator to facilitate dispute resolution prior to initiating any judicial review.

X. APPROVAL BY COUNTY AUTHORITY. Grantee is not the local land use authority and therefore, Grantor must comply with all provisions of the Summit County Development Code, Title 10 of the Summit County Code and receive approvals as required by the Code before undertaking any development on the Property. Approval by the appropriate County authority of any applications made pursuant to Title 10 of the Summit County Code will be considered a condition of approval by the Planning Commission or other approving authority.

XI. ARCHAEOLOGICAL, CULTURAL AND HISTORIC SITES. Any steps to protect archaeological resources that may be found on the Property are highly encouraged. If evidence of a site, as that term is defined in *Utah Code Section 9-8a-302*, is discovered during the course of implementing any activity, the Grantor must notify the State Historic Preservation Office (SHPO) as required under *Utah Code Section 9-8a-307* and shall notify the Grantee. After review of the proposed activity, the Grantee may determine that an archeological clearance is required before on-the-ground implementation. If, upon completion of a survey done by the SHPO, archaeological resources are found to be present, the Grantor may be required to implement mitigating measures to protect the archeological resources. The Grantor should consider any of all viable management alternatives if such sites are discovered on or near areas designated for management. This information is provided to assist in identifying historic properties, per the consultation procedures of the *National Historic Preservation Act's Section 106* regulations (36 CFR 800).

Utah Code Section 9-8a-302, Definitions, states:

> *(4) "Archaeological resources" means all material remains and their associations, recoverable or discoverable through excavation or survey, that provide information pertaining to the historic or prehistoric peoples of the state.*
> *(9) "Excavate" means the recovery of archaeological resources.*
> *(17) "Site" means any petroglyphs, pictographs, structural remains, or geographic location that is the source of archaeological deposits or specimens.*
> *(18) "Specimen" means all man-made artifacts and remains of an archaeological or anthropological nature found on or below the surface of the earth, excluding structural remains.*

Utah Code Section 9-8a-307, Report of discovery on state or private lands, states:

> *(2) Any person who discovers any archaeological resources on privately owned*

lands shall promptly report the discovery to the SHPO.
(4) Nothing in this section may be construed to authorize any person to survey or excavate for archaeological resources.

*Utah Code Section 9-8a-40*4 requires that the state ensure that cultural resources are taken into account on this Property.

XII. ACCESS. No right of access by the general public to any portion of the Property is conveyed by this Easement. However, access may be granted by the Grantor to the general public into, on, or over the Property at its sole discretion. A public County Class B Road right of way, otherwise known as North Jeremy Ranch Road, also known as N. East Canyon Road, is located on Property running along East Canyon Creek. The public Class B County Road has historically not been maintained by the Grantor during winter months and may, by ordinance, be seasonally closed.

XIII. TRANSFER. This Easement may be transferred or assigned only (i) to a government entity that: (a) is eligible to hold this Easement under the Forest Legacy Program (FLP), (b) is willing and able to hold this Easement for the purpose for which it was created, and (c) expressly agrees to assume the responsibility imposed on the holder by the terms of this Easement; and (ii) with the consent of Grantee. If the Easement holder ever ceases to exist, or is no longer willing and able to hold this Easement for the purpose for which it was created or carry out the responsibility imposed on the holder by the terms of this Easement, the Grantee must identify and select an appropriate entity to which this Easement must be transferred.

XIV. AMENDMENT. This Easement may be amended only with the written approval of the Grantee. Grantee is under no obligation to agree to any amendment or consult or negotiate regarding any amendment. An amendment may be approved by Grantee only if it will (i) serve the public interest and not diminish the benefits provided to the public, (ii) have a beneficial or neutral effect on the Conservation Values protected by this Easement, (iii) be consistent with the purpose of the Forest Legacy Program and the Purpose of this Easement, (iv) not confer an economic benefit on private persons (private inurement or private benefit in the case of a charitable organization holder), (v) be consistent with the intent of the original Grantor of this Easement and any funding entities, (vi) not diminish the perpetual duration of this Easement or negatively affect the status or rights of the Grantee with regard to this Easement, and (vii) otherwise comply with all applicable Federal, State, and local laws and regulations. Amendments to make boundary line adjustments are permitted only in the case of technical errors made in the survey or legal description. Any approved amendment must be recorded in the appropriate local land use records and a copy of the recorded amendment must be provided to the Grantee within 30 days of recordation. Any

purported amendment that is recorded without the prior written approval of the Grantee will be null and void.

XV. EXTINGUISHMENT. This Easement may be extinguished in whole or in part (whether through release, termination, eminent domain, abandonment, swap, exchange, reconfiguration, or otherwise) only (i) in a judicial proceeding in a court of competent jurisdiction, (ii) upon a finding by the court that subsequent unexpected change in conditions has made impossible or impractical the continued use of the Property (or the portion thereof to be removed from this Easement) for conservation purposes, and (iii) with a payment of proceeds to Grantor and Grantee as provided in the following subsection. Any removal of land from this Easement constitutes an extinguishment regardless of how such removal might be characterized.

a. If all or any part of the Property is taken under the power of eminent domain, Grantor and Grantee shall participate in appropriate proceedings at the time of such taking to recover the full value of their respective interests subject to the taking as well as all incidental or direct damages resulting from the taking. All reasonable expenses incurred by Grantor or Grantee in any such action shall first be reimbursed out of the recovered proceeds; the remainder of such proceeds shall be divided evenly between Grantor and Grantee.

b. The fact that any use of the Property expressly prohibited by this Easement or otherwise determined to be inconsistent with the Conservation Purpose of this Easement may become significantly more valuable or economical than uses permitted by this Easement, or that neighboring properties may in the future be put entirely to uses inconsistent with the Conservation Purpose of this Easement, has been considered by Grantor in granting and by Grantee in accepting this Easement; and it is the intent of both Grantor and Grantee that any such changes shall not impair the validity of this Easement or be considered grounds for its extinguishment in whole or in part. In addition, the inability to carry on any or all of the uses and practices permitted by this Easement, or the unprofitability of doing so, shall not impair the validity of this Easement or be considered grounds for its extinguishment in whole or in part.

c. All provisions of this Section shall survive any extinguishment of this Easement in whole or in part.

16. ASSIGNMENT. The terms “Grantor” and “Grantee” as used herein shall include, without limitation, the successors and assigns of Grantor and the permitted assigns of Grantee, and the covenants, terms, conditions or restrictions of this Easement shall be binding upon and inure to the benefit of such successors and assigns and shall continue as a servitude running

in perpetuity with the Property. This Easement and all rights granted hereunder, including but not limited to Grantee's rights to monitor the Easement, are transferable only to another state governmental entity. Any and all transferees or assignees of the Grantee will be required to carry out in perpetuity the Purposes of this Easement and shall be responsible for the obligations, responsibilities and duties of Grantee. Any assignee of this Easement, its successors or assigns, shall have the same right to assign this Easement as provided to Grantee herein.

17. ONE PARCEL. Even if the Property consists of more than one parcel for real estate tax or any other purpose or if the Property was acquired previously as separate parcels, it will be considered one parcel for purposes of this Easement, and the restrictions and covenants of this Easement will apply to the Property as a whole.

18. GENERAL PROVISIONS.

    a. Successors. The covenants, terms, conditions, and restrictions of this Easement shall be binding upon, and inure to the benefit of, the Parties hereto and their respective personal representatives, heirs, successors, and assigns and shall continue as a servitude running in perpetuity with the Property.

    b. Taxes. Pursuant to *Utah Code § 59-2-1101(3)(a)(ii)(A)*, Grantor is exempt from the payment of all taxes, assessments, fees and charges of whatever description levied on or assessed against the Property by competent authority, including any taxes imposed upon, or incurred as a result of, this Easement.

    c. Maintenance. Each party shall bear sole responsibility for any cost or expense reasonably required for the maintenance of any structure, building, road, fence or other improvement or enhancement made to or existing on the Property by that party.

    d. Reversion. The Grantee acknowledges that the Property and this Easement were acquired with Federal funds under the Forest Legacy Program (See *Public Law 101-624; 104 Stat. 3359*) and that the interest acquired cannot be sold, exchanged, or otherwise disposed unless the United States is reimbursed the market value of the interest in land at the time of disposal. Provided, however, the Secretary may exercise discretion to consent to such sale, exchange, or disposition upon the State's tender of equal valued consideration acceptable to the Secretary.

    e. Indemnification. Grantor shall hold harmless, indemnify, and defend the Grantee and its officers, employees, agents, and contractors, its successors and assigns of

each of them (collectively "**Indemnified Parties**") from and against all liabilities, penalties, fines, costs, losses, damages, expenses, causes of action, claims, demands, or judgments of any kind or nature arising from the past, present and future acts or omissions of the Grantor or its employees, agents, contractors, or lessees, (collectively "**Grantor et al**."), including without limitation, reasonable attorney and expert fees, arising from or in any way connected with Grantor et al.'s use, occupancy, or operation on the Property which has already resulted or does hereafter result in: (1) violations of federal, state, and County laws and regulations that are now or may in the future become, applicable to the Property; (2) judgments, claims or demands of any kind against the Indemnified Parties unless due solely to the negligence or willful misconduct of any of the Indemnified Parties; (4) injury to or the death of any person, or physical damage to any property, resulting from any act, omission, condition, or other mater related to or occurring on or about the Property, regardless of cause, unless due solely to the negligence or willful misconduct of any of the Indemnified Parties; (5) the breach by Grantor et al. of any of its obligations set forth in this Easement; (6) the existence or administration of this Easement; and (7) the existence or release or threatened release off, on, into, or under the Property of any solid or hazardous waste(s), substance or other contaminants as they are now and may hereafter be defined under any local, state, and federal statute, law or regulation; (8) activities by which solid waste or hazardous substances or waste, as defined by federal or state laws are generated, released, stored, used or otherwise disposed of on the Property, and any cleanup response, remedial action or other actions related in any manner to said solid or hazardous substances or wastes; or (9) natural resource damages as defined by federal state law. Grantor's obligations under this section shall not apply with respect to any such hazardous waste, substance or other contaminants released on the Property by Grantee or Grantee's representatives or agents.

19. ENFORCEMENT AND REMEDIES.

a. Notice of Violation. If Grantee determines that Grantor is in violation of the terms of this Easement or that a violation is threatened, Grantee shall give written notice to Grantor of such violation and demand corrective action sufficient to cure the violation and, where the violation involves injury to the Property resulting from any use or activity inconsistent with the purpose of this Easement, to restore the portion of the Property so injured to its condition before the violation occurred, or to a condition otherwise acceptable to Grantee, in accordance with a plan approved by Grantee.

b. Remedies. If Grantor fails to cure the violation within thirty (30) days after receipt

of notice from Grantee, or under circumstances where the violation cannot reasonably be cured within a thirty (30) day period, fails to begin curing such violation within the thirty (30) day period, or fails to continue diligently to cure such violation until finally cured, Grantee may bring an action at law or in equity in a court of competent jurisdiction to enforce the terms of this Easement. Grantee may bring an action at law or in equity in a court of competent jurisdiction to enforce the terms of this Easement to enjoin the violation, *ex parte* as necessary, by temporary or permanent injunction, to recover any damages to which it may be entitled for violation of the terms of this Easement or injury to any Conservation Values protected by this Easement, including damages for the loss of scenic, aesthetic, environmental or resource values, and to require the restoration of the Property to the condition that existed prior to any such injury or to a condition otherwise acceptable to Grantee (regardless of whether the costs of restoration exceed the value of the Property). Without limiting Grantor's liability therefore, Grantee shall apply any damages recovered to the cost of undertaking any corrective action on the Property. If Grantee, in its sole discretion, determines that circumstances require immediate action to prevent or mitigate significant damage to the Conservation Values of the Property, Grantee may pursue its remedies under this paragraph. Furthermore, the provisions of *Utah Code § 57-18-1 to 57-19-7*, are incorporated into this Easement by reference, and this Easement includes all of the rights and remedies set forth therein.

c. Costs of Enforcement. Grantor will reimburse the Grantee for all reasonable expenses incurred by the Grantee in enforcing the terms of this Easement against Grantor, or with respect to actions by third parties for whom Grantor is responsible, including but not limited to, reasonable attorneys' fees and any costs of restoration necessary to cure the violation. In addition, any costs of restoration will be borne by the Grantor if Grantor is determined to be responsible for damage to the Property. If Grantor prevails in any action to enforce the terms of this Easement, Grantor's costs of suit, including, without limitation, attorneys' fees, shall be borne by Grantee.

d. Emergency Enforcement. If the Grantee, in its sole discretion, reasonably determines that circumstances require immediate action to prevent or mitigate significant damage to the Conservation Values or to prevent breach or extinguishment of this Easement, the Grantee may pursue its remedies under this Easement without prior notice to Grantor and without waiting for the cure period to expire, provided however, Grantee will provide notice to Grantor at the earliest practicable time under the circumstances.

e. Waiver of Right to Enforce. The failure of the Grantee to discover a violation or to

take action under this Easement will not be deemed or construed to be a waiver of the Grantee's rights under this Easement. In no event will any delay or omission by the Grantee in exercising any right or remedy constitute an impairment of or waiver of such right or remedy.

f. Acts Beyond the Grantor's Control. Nothing contained in this Easement will be construed to entitle the Grantee to bring any action against Grantor for, or to require the Grantee or Grantor to actively restore destruction of or damage to the Conservation Values resulting from, any injury to or change in the Property resulting from causes beyond Grantor's control, including but not limited to trespass, fire, flood, storm, earth movement, or other natural disasters or from any prudent action taken by Grantor under emergency conditions to prevent, abate, or mitigate significant injury to the Property resulting from such causes. This paragraph will not be construed to relieve the Grantor of the obligation to clean up garbage or materials dumped on the Property by third parties and the obligation to take action to prevent third party violations of this Easement, or to otherwise maintain the Property in a condition consistent with the purposes of this Easement.

20. NOTICES. Any notices required by this Easement shall be in writing and shall be served by any of the following means: (i) by delivery in person, in which case notice shall be deemed given upon delivery (or refusal of delivery), (ii) by certified U.S. mail, return receipt requested, postage prepaid, in which case notice shall be deemed given upon the earlier of the date of first attempted delivery or the third day after deposit in the mail, or (iii) by reputable commercial courier service, charges prepaid, in which case notice shall be deemed given upon the earlier of the date of first attempted delivery or the third day after deposit with the courier service. All notices shall be sent to the following addresses, or such other address as either party may hereafter specify by written notice to the other:

Grantor Contact	**Grantee Contact**
SUMMIT COUNTY County Administration Lands and Natural Resources Department PO Box 128 Coalville, UT 84017 435-336-3200	STATE OF UTAH Department of Natural Resources, Division of Forestry, Fire & State Lands 1594 W North Temple St #3520, Salt Lake City, UT 84116 801-538-5418

21. COMPLIANCE WITH APPLICABLE LAWS. Grantor shall comply with all statutes, laws, ordinances, rules, regulations, codes, orders, guidelines, or other restrictions, or requirements applicable to the Property. Nothing herein shall be construed to allow Grantor to engage in any activity which is restricted or prohibited by law, restrictions or other

requirements applicable to the Property.

22. SEVERABILITY. If any provision of this Easement is found to be invalid, the remaining provisions shall not be altered thereby.

23. COUNTERPARTS. The Parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by all Parties; each counterpart shall be deemed an original instrument as against any party who has signed it.

24. ENTIRE AGREEMENT. This instrument sets forth the entire agreement of the parties with respect to the Easement and supersedes all prior discussions, negotiations, understandings, or agreements relating to the Easement, all of which are merged herein. No alteration or variation of this instrument shall be valid or binding unless contained in an amendment that complies with the terms of this Easement.

25. GOVERNING LAW. This Easement will be interpreted in accordance with the laws of the State of Utah.

TO HAVE AND TO HOLD this Easement, together with all appurtenances and privileges belonging or in any way pertaining thereto, either in law or in equity, either in possession or expectancy, for the proper use and benefit of Grantee, its successors, and assigns forever.

IN WITNESS WHEREOF, the Parties have executed this Easement as of the Effective Date.

[SIGNATURE PAGE TO FOLLOW]

GRANTOR

SUMMIT COUNTY

By: _____
Name: Shayne Scott
Title: County Manager
Email: sscott@summitcountyutah.gov

Approved as to form:

_____
David L. Thomas
Chief Civil Deputy

State of Utah)
) ss
County of _____)

On this_____ day of , in the year 2025, before me _____, the undersigned notary public, personally appeared Shayne Scott, Summit County Manager, personally known to me to be the person who executed the within instrument.

Notary Public _____

GRANTOR:

SUMMIT COUNTY COUNCIL

By: ___._____
Name: Tonja B. Hanson
Title: Summit County Council Chair
Email: tbhanson@summitcountyutah.gov

Approved as to form:

_____
David L. Thomas
Chief Civil Deputy

State of Utah)
) ss
County of _____)

On this_____ day of_____, in the year 2025, before me _____, the undersigned notary public, personally appeared Tonja B. Hanson, Summit County Council Chair, personally known to me to be the person who executed the within instrument.

Notary Public _____

GRANTEE:

STATE OF UTAH, by and through the Department of Natural Resources, Division of Forestry, Fire & State Lands

By: _____
Name: Jamie Barnes
Title: Director/State Forester
Utah Department of Natural Resources
Division of Forestry, Fire & State Lands
Email: jamiebarnes@utah.gov

Approved as to form:

Name: _____
Title: _____

State of Utah)
) ss
County of _____)

On this _____ day of _____, in the year 2025, before me _____, the undersigned notary public, personally appeared Jamie Barnes , Director, Division of Forestry, Fire and State Lands, Department of Natural Resources, State of Utah, personally known to me to be the person who executed the within instrument.

Notary Public _____

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK, EXHIBITS TO FOLLOW]

EXHIBIT A
LEGAL DESCRIPTION OF THE PROPERTY

TOTAL ACRES: 8,587.70
SOURCE: AS RECORDED LEGAL DESCRIPTION FOR THE LAND. SUMMIT COUNTY AND MORGAN COUNTY TAX PARCEL METES & BOUNDS AND PUBLIC LAND SURVEY SYSTEM (PLSS)

PARCEL 1 (SUMMIT COUNTY TAX PARCEL NO. SS-5):
THE NORTH HALF OF THE SOUTH HALF AND THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER AND THE SOUTH HALF OF THE NORTH HALF AND LOTS 1 THRU 4, INCLUSIVE, OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

LESS AND EXCEPTING THE FOLLOWING:

BEGINNING AT A POINT WHICH IS 528.81 FEET NORTH AND 1127.92 FEET EAST OF THE SOUTHWEST CORNER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN, AND RUNNING THENCE NORTH 200 FEET; THENCE EAST 200 FEET; THENCE SOUTH 200 FEET; THENCE WEST 200 FEET TO THE POINT OF BEGINNING.

ALSO LESS AND EXCEPTING THE FOLLOWING:

A 2.50-ACRE PARCEL OF LAND LOCATED IN THE SOUTH HALF OF THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN, SUMMIT COUNTY, UTAH, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A BRASS CAP IN CONCRETE BEING A SALT LAKE COUNTY AND SUMMIT COUNTY LINE MONUMENT, SAID POINT LIES EAST 1371.41 FEET AND NORTH 591.44 FEET FROM THE SOUTHWEST CORNER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN, AND RUNNING THENCE ALONG THE COMMON LINE OF SALT LAKE COUNTY AND SUMMIT COUNTY NORTH 49°46’45” WEST 56.96 FEET MORE OR LESS TO THE EAST LINE OF THAT CERTAIN PARCEL CONVEYED TO THE MOUNTAIN STATES TELEPHONE & TELEGRAPH COMPANY, RECORDED IN THE OFFICE OF THE SUMMIT COUNTY RECORDER AS ENTRY NO. 110768; THENCE ALONG THE EAST AND NORTH LINES OF SAID PROPERTY THE FOLLOWING TWO (2) COURSES AND DISTANCES: 1) NORTH 100.59 FEET MORE OR LESS TO THE NORTHEAST CORNER OF SAID PARCEL AND 2) WEST 118.95 FEET MORE OR LESS TO SAID COMMON LINE; THENCE ALONG SAID COMMON LINE THE FOLLOWING TWO (2) COURSES AND DISTANCES: NORTH 49°46’45” WEST 151.93 FEET TO A BRASS CAP IN CONCRETE DELINEATING SAID COMMON LINE OF SALT LAKE COUNTY AND SUMMIT COUNTY AND 2) NORTH 27°04’40” WEST 383.87 FEET TO A BRASS

CAP IN CONCRETE DELINEATING SAID COMMON LINE OF SALT LAKE COUNTY AND SUMMIT COUNTY; THENCE NORTH 62°55’20” EAST 120.00 FEET; THENCE SOUTH 27°04’40” EAST 359.78 FEET; THENCE SOUTH 49°46’45” EAST 83.90 FEET; THENCE EAST 149.26 FEET; THENCE SOUTH 45°00’00” EAST 100.05 FEET; THENCE SOUTH 274.43 FEET TO SAID COMMON LINE; THENCE NORTH 49°08’30” WEST ALONG SAID COMMON LINE 134.21 FEET TO THE POINT OF BEGINNING.

ALSO LESS AND EXCEPTING ANY PORTION LYING WITHIN SALT LAKE COUNTY, STATE OF UTAH.

PARCEL 2 (SUMMIT COUNTY TAX PARCEL NO. SS-5-A):
THE SOUTH HALF OF THE SOUTHEAST QUARTER AND THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

LESS AND EXCEPTING THE FOLLOWING: A 2.50-ACRE PARCEL OF LAND LOCATED IN THE SOUTH HALF OF THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN, SUMMIT COUNTY, UTAH, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A BRASS CAP IN CONCRETE BEING A SALT LAKE COUNTY AND SUMMIT COUNTY LINE MONUMENT, SAID POINT LIES EAST 1371.41 FEET AND NORTH 591.44 FEET FROM THE SOUTHWEST CORNER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN, AND RUNNING THENCE ALONG THE COMMON LINE OF SALT LAKE COUNTY AND SUMMIT COUNTY NORTH 49°46’45” WEST 56.96 FEET MORE OR LESS TO THE EAST LINE OF THAT CERTAIN PARCEL CONVEYED TO THE MOUNTAIN STATES TELEPHONE & TELEGRAPH COMPANY, RECORDED IN THE OFFICE OF THE SUMMIT COUNTY RECORDER AS ENTRY NO. 110768; THENCE ALONG THE EAST AND NORTH LINES OF SAID PROPERTY THE FOLLOWING TWO (2) COURSES AND DISTANCES: 1) NORTH 100.59 FEET MORE OR LESS TO THE NORTHEAST CORNER OF SAID PARCEL AND 2) WEST 118.95 FEET MORE OR LESS TO SAID COMMON LINE; THENCE ALONG SAID COMMON LINE THE FOLLOWING TWO (2) COURSES AND DISTANCES: NORTH 49°46’45” WEST 151.93 FEET TO A BRASS CAP IN CONCRETE DELINEATING SAID COMMON LINE OF SALT LAKE COUNTY AND SUMMIT COUNTY AND 2) NORTH 27°04’40” WEST 383.87 FEET TO A BRASS CAP IN CONCRETE DELINEATING SAID COMMON LINE OF SALT LAKE COUNTY AND SUMMIT COUNTY; THENCE NORTH 62°55’20” EAST 120.00 FEET; THENCE SOUTH 27°04’40” EAST 359.78 FEET; THENCE SOUTH 49°46’45” EAST 83.90 FEET; THENCE EAST 149.26 FEET; THENCE SOUTH 45°00’00” EAST 100.05 FEET; THENCE SOUTH 274.43 FEET TO SAID COMMON LINE; THENCE NORTH 49°08’30” WEST ALONG SAID COMMON LINE 134.21 FEET TO THE POINT OF BEGINNING.

ALSO LESS AND EXCEPTING ANY PORTION LYING WITHIN SALT LAKE COUNTY, STATE OF UTAH.

PARCEL 3 (SUMMIT COUNTY TAX PARCEL NO. SS-129):
ALL OF SECTION 32, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

LESS AND EXCEPTING ANY PORTION LYING WITHIN SALT LAKE COUNTY, STATE OF UTAH.

PARCEL 4 (SUMMIT COUNTY TAX PARCEL NO. SS-7):
ALL OF SECTION 5, TOWNSHIP 1 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN. LESS AND EXCEPTING ANY PORTION LYING WITHIN SALT LAKE COUNTY, STATE OF UTAH.

PARCEL 5 (SUMMIT COUNTY TAX PARCEL NO. SS-130):
ALL OF SECTION 33, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

PARCEL 6 (SUMMIT COUNTY TAX PARCEL NO. SS-131):

ALL OF SECTION 34, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN, SUMMIT COUNTY, UTAH.

PARCEL 7 (SUMMIT COUNTY TAX PARCEL NO. SS-4-D):
BEGINNING AT A POINT APPROXIMATELY 1827.36 FEET WEST FROM THE NORTHEAST CORNER OF SECTION 3, TOWNSHIP 1 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN (SAID POINT BEING 11400 FEET, MORE OR LESS, ALONG SECTION LINE FROM THE SOUTHEAST CORNER OF SECTION 36, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN), AND RUNNING THENCE SOUTH 20°00' WEST 600 FEET, MORE OR LESS, TO THE RIDGE LINE OF MILL HOLLOW; THENCE SOUTHWESTERLY ALONG SAID RIDGE LINE 4800 FEET, MORE OR LESS, TO THE WEST LINE OF SAID SECTION 3 (SAID POINT BEING NORTH 1000 FEET, MORE OR LESS, FROM THE SOUTHWEST CORNER OF SAID SECTION 3); THENCE NORTH 00°02' WEST ALONG THE WEST SECTION LINE TO THE NORTHWEST CORNER OF SAID SECTION 3; THENCE EASTERLY ALONG THE NORTH SECTION LINE TO THE POINT OF BEGINNING.

PARCEL 8 (SUMMIT COUNTY TAX PARCEL NO. SS-3-C):
BEGINNING AT THE NORTHWEST CORNER OF SECTION 2, TOWNSHIP 1 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN, AND RUNNING THENCE SOUTH 88°15'10" EAST ALONG THE NORTH LINE OF SAID SECTION 1919.45 FEET; THENCE SOUTH 63°00'00" WEST 793.43 FEET; THENCE NORTH 86°44'00" WEST 310.00 FEET; THENCE NORTH 71°05'00" WEST 1264.83 FEET; THENCE SOUTH 88°15'10" EAST 294.54 FEET TO THE POINT OF BEGINNING.

PARCEL 9 (SUMMIT COUNTY TAX PARCEL NO. SS-BDY-14):
ALL OF SECTION 29, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

LESS AND EXCEPTING ANY PORTION LYING WITHIN SALT LAKE COUNTY, STATE OF UTAH.

PARCEL 10 (SUMMIT COUNTY TAX PARCEL NO. SS-BDY-4):
ALL OF SECTION 16, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN. LESS AND EXCEPTING ANY PORTION LYING WITHIN MORGAN COUNTY, STATE OF UTAH.

PARCEL 11 (SUMMIT COUNTY TAX PARCEL NO. SS-BDY-13):
ALL OF SECTION 27, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

PARCEL 12 (SUMMIT COUNTY TAX PARCEL NO. SS-BDY-12):
ALL OF SECTION 28, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

PARCEL 13 (SUMMIT COUNTY TAX PARCEL NO. SS-134):
ALL OF SECTION 36, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN. LESS AND EXCEPTING ANY PORTION LYING WITHIN MORGAN COUNTY, STATE OF UTAH.

PARCEL 14 (SUMMIT COUNTY TAX PARCEL NO. SS-BDY-9):
THAT PORTION OF SECTION 26, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN, LYING SOUTH OF THE NORTH HALF OF THE NORTH HALF OF SAID SECTION.

LESS AND EXCEPTING ANY PORTION LYING WITHIN MORGAN COUNTY, STATE OF UTAH.

PARCEL 15 (SUMMIT COUNTY TAX PARCEL NO. SS-133-A):
THE EAST HALF AND THE EAST HALF OF THE WEST HALF OF SECTION 35, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

PARCEL 16 (SUMMIT COUNTY TAX PARCEL NO. SS-133):
THE WEST HALF OF THE WEST HALF OF SECTION 35, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

PARCEL 17 (SUMMIT COUNTY TAX PARCEL NO. SS-BDY-1):
THE SOUTHEAST QUARTER OF SECTION 20, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

LESS AND EXCEPTING ANY PORTION LYING WITHIN MORGAN COUNTY, STATE OF UTAH.

PARCEL 18 (SUMMIT COUNTY TAX PARCEL NO. SS-BDY-10):
ALL OF SECTION 25, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN. LESS AND EXCEPTING ANY PORTION LYING WITHIN MORGAN COUNTY, STATE OF UTAH.

PARCEL 19 (SUMMIT COUNTY TAX PARCEL NO. SS-BDY-6):
ALL OF SECTION 22, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN. LESS AND EXCEPTING ANY PORTION LYING WITHIN MORGAN COUNTY, STATE OF UTAH.

PARCEL 20 (SUMMIT COUNTY TAX PARCEL NO. SS-BDY-3):
ALL OF SECTION 21, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN. LESS AND EXCEPTING ANY PORTION LYING WITHIN MORGAN COUNTY, STATE OF UTAH.

PARCEL 21 (SUMMIT COUNTY TAX PARCEL NO. SS-BDY-5):
ALL OF SECTION 15, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

LESS AND EXCEPTING ANY PORTION LYING WITHIN MORGAN COUNTY, STATE OF UTAH.

PARCEL 22 (MORGAN COUNTY TAX PARCEL NO. 00-0000-0362):
SOUTHEAST 1/4, EAST 1/2 OF THE SOUTHWEST 1/4, SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 14, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

PARCEL 23 (MORGAN COUNTY TAX PARCEL NO. 00-0000-0370):
BEGINNING AT A POINT ON SOUTH BOUNDARY OF SECTION 15; 285 FEET NORTH 89°23' EAST FROM SOUTH 1/4 CORNER OF SAID SECTION 15; THENCE ALONG RIDGE SEP DRAINAGE DRY HALLOW & EAST CANYON CREEK NORTH 19°50' WEST 2457 FEET; THENCE ALONG RIDGE SEP DRAINAGE DRY HOLLOW & LITTLE EMIGRATION CREEK; NORTH 30°52' WEST 1477 FEET; THENCE ALONG SAID LATTER RIDGE NORTH 32°54' WEST 1798 FEET; THENCE ALONG LATTER RIDGE SOUTH 76°10' WEST 1778 FEET; THENCE ALONG LATTER RIDGE SOUTH 62°8' WEST 3839 FEET; THENCE ALONG LATTER RIDGE SOUTH 61°32' WEST 3598 FEET MORE/LESS TO INTERSECT OF LATTER RIDGE WITH WEST BOUNDARY OF SOUTHEAST 1/4 OF SECTION 17; THENCE ALONG SAID WEST BOUNDARY SOUTH 1154 FEET MORE/LESS TO SOUTH 1/4 CORER OF SECTION 17, THENCE SOUTH 89°33' EAST 2659 FEET MORE/LESS TO CORNER OF SECTION 16, 17, 20, & 21; THENCE ALONG WEST BOUNDARY OF SECTION 16 NORTH 2640 FEET MORE/LESS TO WEST 1/4 CORNER OF SECTION 16, THENCE ALONG CENTER

LINE OF SECTION 16 NORTH 89°26' EAST 5240 FEET MORE/LESS TO EAST 1/4 CORNER OF SECTION 16; THENCE ALONG EAST BOUNDARY SECTION 16, SOUTH 2640 FEET MORE/LESS TO CORNER SECTION 15, 16, 21 & 22 THENCE ALONG SOUTH BOUNDARY SECTION 15, NORTH 89°23' EAST 2952 FEET MORE/LESS TO POINT OF BEGINNING.

LESS THAT PORTION LYING IN SUMMIT COUNTY, STATE OF UTAH.

PARCEL 24 (MORGAN COUNTY TAX PARCEL NO. 00-0000-0388):
THE SOUTH 1/2 OF SECTION 16, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

LESS THAT PORTION LYING IN SUMMIT COUNTY, STATE OF UTAH.

PARCEL 25 (MORGAN COUNTY TAX PARCEL NO. 00-0000-0453):
THE EAST 1/2 OF SECTION 20, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

EXCEPTING SOUTHEAST 1/4 OF NORTHEAST 1/4 OF SECTION 20, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

ALSO LESS THAT PORTION LYING IN SUMMIT COUNTY, STATE OF UTAH.

PARCEL 26 (MORGAN COUNTY TAX PARCEL NO. 00-0000-0479):
ALL OF SECTION 21, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN. LESS THAT PORTION LYING IN SUMMIT COUNTY, STATE OF UTAH.

PARCEL 27 (MORGAN COUNTY TAX PARCEL NO. 00-0000-0487):
ALL OF SECTION 22, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN. LESS THAT PORTION LYING IN SUMMIT COUNTY, STATE OF UTAH.

ALSO LESS AND EXCEPTING: A TRACT OF LAND LOCATED IN THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN AND HAVING A BASIS OF BEARING ALONG THE NORTH LINE OF SAID SECTION 22 OF SOUTH 89°23'00" WEST, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT WHICH IS SOUTH 89°23'38" WEST 1655.42 FEET ALONG THE SECTION LINE, SOUTH 342.70 FEET AND SOUTH 89°23'00" WEST 918.20 FEET FROM THE NORTHEAST CORNER OF SECTION 22, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN AND RUNNING THENCE SOUTH 13°08'00" WEST 443.62 FEET; THENCE NORTH 89°23'00" EAST 203.83 FEET, MORE

OR LESS TO THE CENTER OF EAST CANYON CREEK; THE NEXT (8) COURSES ARE ALONG THE CENTER OF EAST CANYON CREEK, THENCE NORTH 08°25'45" WEST 133.11 FEET; THENCE NORTH 22°40'34" EAST 76.30 FEET; THENCE NORTH 88°20'12" EAST 62.47 FEET; THENCE NORTH 62°41'53' EAST 82.41 FEET; THENCE NORTH 21°48'36" EAST 125.70 FEET; THENCE SOUTH 88°51'32" EAST 51.52 FEET; THENCE NORTH 43°22'57" EAST 53.63 FEET; THENCE NORTH 82°17'39" EAST 61.58 FEET; THENCE NORTH 30.00 FEET; THENCE SOUTH 89°23'00" WEST 444.70 FEET TO THE POINT OF BEGINNING.

ALSO LESS AND EXCEPTING: A 145.0 FOOT WIDE STRIP OF PROPERTY OVER SECTIONS 22 AND 23 OF TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN, THE BOUNDARY OF WHICH IS DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTH LINE OF SAID SECTION 22, AT A POINT SOUTH 89°23'00" WEST 781.67 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 22 AND RUNNING THENCE SOUTH 89°23'00" WEST 161.40 FEET ALONG SAID NORTH LINE OF SECTION 22 THENCE SOUTH 26°40'00" EAST 129.33 FEET; THENCE SOUTH 29°30'00" EAST 543.81 FEET; THENCE SOUTH 31°35'00" EAST 229.57 FEET; THENCE SOUTH 45°20'00" EAST 172.45 FEET; THENCE SOUTH 38°00'00" EAST 84.94 FEET; THENCE SOUTH 31°45'00" EAST 278.16 FEET; THENCE SOUTH 41°40'00" EAST 301.60 FEET; THENCE SOUTH 30°00'00" EAST 275.74 FEET; THENCE SOUTH 25°00'00" EAST 477.64 FEET; THENCE SOUTH 17°00'00" EAST 318.71 FEET; THENCE SOUTH 27°00'00" EAST 174.26 FEET; THENCE SOUTH 21°00'00" EAST 71.62 FEET TO THE EAST-WEST CENTERLINE OF SAID SECTION 23, THENCE SOUTH 89°40'30" EAST 152.29 FEET; THENCE NORTH 21°00'00" WEST 133.60 FEET; THENCE NORTH 27°00'00" WEST 168.83 FEET; THENCE NORTH 17°00'00" WEST 319.73 FEET; THENCE NORTH 25°00'00" WEST 496.19 FEET; THENCE NORTH 30°00'00" WEST 293.41 FEET; THENCE NORTH 41°40'00" WEST 326.47 FEET; THENCE NORTH 31°45'00" WEST 267.93 FEET; THENCE NORTH 38°00'00" WEST 31.61 FEET; THENCE NORTH 45°20'00" WEST 171.11 FEET; THENCE NORTH 31°35'00" WEST 256.33 FEET; THENCE NORTH 29°30'00" WEST 536.09 FEET; THENCE NORTH 26°40'00" WEST 54.92 FEET TO THE POINT OF BEGINNING.

PARCEL 28 (MORGAN COUNTY TAX PARCEL NO. 00-0000-0529):
THE NORTH 1/2 OF SECTION 23, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN.

LESS AND EXCEPTING: A 145.0 FOOT WIDE STRIP OF PROPERTY OVER SECTIONS 22 AND 23 OF TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN, THE BOUNDARY OF WHICH IS DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTH LINE OF SAID SECTION 22, AT A POINT SOUTH 89°23'00" WEST 781.67 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 22 AND RUNNING THENCE SOUTH 89°23'00" WEST 161.40 FEET ALONG

SAID NORTH LINE OF SECTION 22 THENCE SOUTH 26°40'00" EAST 129.33 FEET; THENCE SOUTH 29°30'00" EAST 543.81 FEET; THENCE SOUTH 31°35'00" EAST 229.57 FEET; THENCE SOUTH 45°20'00" EAST 172.45 FEET; THENCE SOUTH 38°00'00" EAST 84.94 FEET; THENCE SOUTH 31°45'00" EAST 278.16 FEET; THENCE SOUTH 41°40'00" EAST 301.60 FEET; THENCE SOUTH 30°00'00" EAST 275.74 FEET; THENCE SOUTH 25°00'00" EAST 477.64 FEET; THENCE SOUTH 17°00'00" EAST 318.71 FEET; THENCE SOUTH 27°00'00" EAST 174.26 FEET; THENCE SOUTH 21°00'00" EAST 71.62 FEET TO THE EAST-WEST CENTERLINE OF SAID SECTION 23, THENCE SOUTH 89°40'30" EAST 152.29 FEET; THENCE NORTH 21°00'00" WEST 133.60 FEET; THENCE NORTH 27°00'00" WEST 168.83 FEET; THENCE NORTH 17°00'00" WEST 319.73 FEET; THENCE NORTH 25°00'00" WEST 496.19 FEET; THENCE NORTH 30°00'00" WEST 293.41 FEET; THENCE NORTH 41°40'00" WEST 326.47 FEET; THENCE NORTH 31°45'00" WEST 267.93 FEET; THENCE NORTH 38°00'00" WEST 31.61 FEET; THENCE NORTH 45°20'00" WEST 171.11 FEET; THENCE NORTH 31°35'00" WEST 256.33 FEET; THENCE NORTH 29°30'00" WEST 536.09 FEET; THENCE NORTH 26°40'00" WEST 54.92 FEET TO THE POINT OF BEGINNING.

PARCEL 29 (MORGAN COUNTY TAX PARCEL NO. 00-0005-0912):
ALL OF SECTION 36, TOWNSHIP 1 NORTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN. LESS THAT PORTION LYING IN SUMMIT COUNTY, STATE OF UTAH.

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EXHIBIT B
PROPERTY MAP – TAX PARCEL NUMBERS

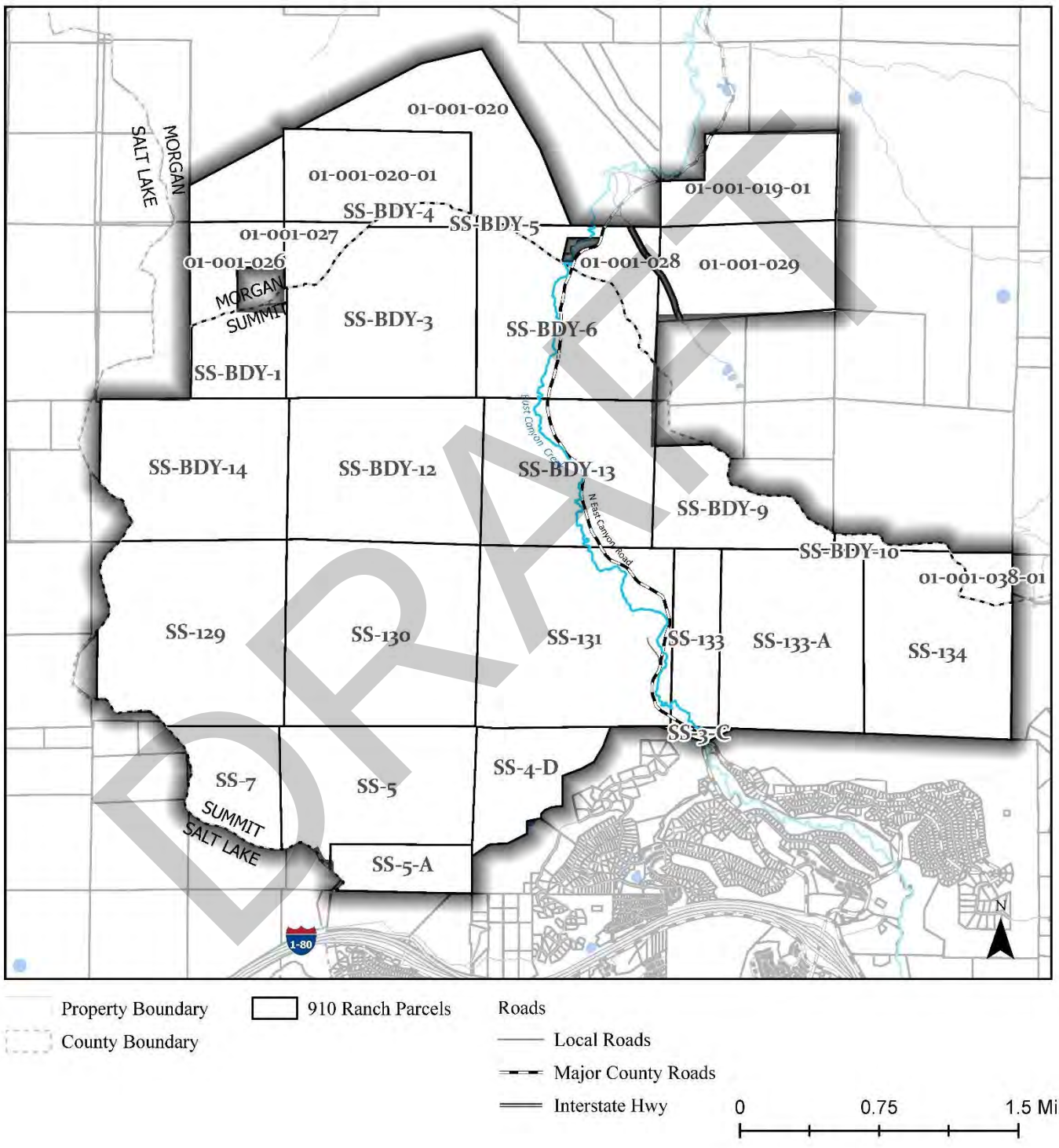

EXHIBIT C
WATER RIGHTS

Water Rights: Water Right No. 35-9565 (E3020) associated with Weber Basin Water Conservancy District Contract No. 5062 for one (1) acre foot of water.

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EXHIBIT D

SIGNED ACKNOWLEDGMENT OF BASELINE DOCUMENTATION REPORT

ACKNOWLEDGEMENT OF PROPERTY CONDITION

The undersigned accept and acknowledge that this Baseline Documentation Report is an accurate representation of the property at the time the conservation easement was transferred to the grantee.

LANDOWNER GRANTOR(S)

Signature: _____ Date: _____
TONJA HANSON, Council Chair
Summit County, Utah

Signature: _____ Date: _____
SHAYNE SCOTT, County Manager
Summit County, Utah

Approve as to form:

Signature: _____ Date: _____
DAVID L. THOMAS, Chief Civil Deputy Attorney
Summit County, Utah

EASEMENT GRANTEE(S)

Signature: _____ Date: _____
JAMIE BARNES, Director/State Forester
Utah Department of Natural Resources, Division of Forestry, Fire & State Lands

PREPARERS CERTIFICATION AND QUALIFICATIONS

This statement certifies that I, Travis Taylor, prepared this 910 Cattle Ranch-Wasatch Back Forest Conservation Project Forest Legacy Baseline Documentation Report, in collaboration with Summit County Lands and Natural Resources Department, through site visits to the Property, field and desktop research, review of publicly accessible data and personal interviews. Photographs in this report were taken on the dates specified by BIO-WEST, Summit County staff, and others listed in the Baseline Documentation Report.

Signature: Travis A. Taylor Date: 02/07/2025
TRAVIS TAYLOR, Ecologist
Bio-West Inc

EXHIBIT E
FOREST STEWARDSHIP PLAN

910 RANCH FOREST STEWARDSHIP PLAN

Summit County Lands & Natural Resources
60 N Main St.
P.O. Box 128
Coalville, Utah 84017
435-336-3200
sscott@summitcountyutah.gov

Prepared by:
PJ Abraham, NE Area Forester
Department of Natural Resources
Division of Forestry, Fire & State Lands
2210 S. Hwy. 40 Ste. B
Heber City, UT 84032
(435) 671-3326
pjabraham@utah.gov

We have reviewed this plan, which has been prepared at our request to guide our stewardship management activities, and we will apply them on our Property to the best of our abilities.

_____ _____
Shayne Scott, Summit County Manager Date

This plan meets the criteria for Forest Stewardship Plans established by the USDA Forest Service's Forest Stewardship Program.

_____ _____
Forest Stewardship Program Manager Date

Approved By:

_____ _____
Area Manager Date

_____ _____
Forestry Operations Manager Date

Table of Contents

Contents

General Property Description

This Forest Stewardship Plan (FSP) guides natural resource management activities and provides the general, broad-level management direction for the 910 Ranch Property ("910 Ranch", "910 Cattle Ranch", or the "Property").

The 910 Ranch is located in Park City, Utah adjacent to Interstate 80 on the north side, from Parley's Summit to the entrance at NE Canyon Road. Access to the Property is currently obtained by exiting Jeremy Ranch off Interstate 80 (Exit 141), following signs indicating Jeremy Road to where the pavement ends at the "cattle guard", which then turns into East Canyon Road and is the Property boundary line.

In 2025, Summit County secured ownership of the formerly privately held 8,588-acre property known as 910 Ranch. The acquisition was made possible through a combination of funding sources, including a $15 million general obligation open space bond issued by Summit County in 2021 and a $40 million grant awarded under the Inflation Reduction Act (IRA) via the U.S. Forest Service's Forest Legacy Program. This program is administered by the Utah Department of Natural Resources, Division of Forestry, Fire & State Lands (FFSL).

Summit County intends to manage the property under a FFSL- held conservation easement to support the long-term preservation of wildlife habitat, the protection and stewardship of a significant wildland ecosystem, and the promotion of public recreation, agricultural use, and opportunities for education and scientific research.

910 Ranch covers 8,588 acres of land, located within the East Canyon Creek (HUC 1602010201) watershed. Approximately 1,686 acres or 20% of the Property resides in Morgan County and the remaining acres are located in Summit County.

The Property exhibits considerable ecological and topographic diversity, with elevations ranging from approximately 6,200 feet in the lower reaches to 7,800 feet along the upper ridgelines. Forest cover is composed of a mosaic of native species, including quaking aspen (*Populus tremuloides*), Gambel oak (*Quercus gambelii*), bigtooth maple (*Acer grandidentatum*), white fir (*Abies concolor*), Douglas-fir (*Pseudotsuga menziesii*), and subalpine fir (*Abies lasiocarpa*). Expansive sagebrush and native grass meadows are interspersed throughout the property, contributing to its ecological complexity.

The landscape is further enriched by numerous small streams, many of which feed into historic or active beaver ponds. East Canyon Creek functions as the primary hydrological drainage for the area.

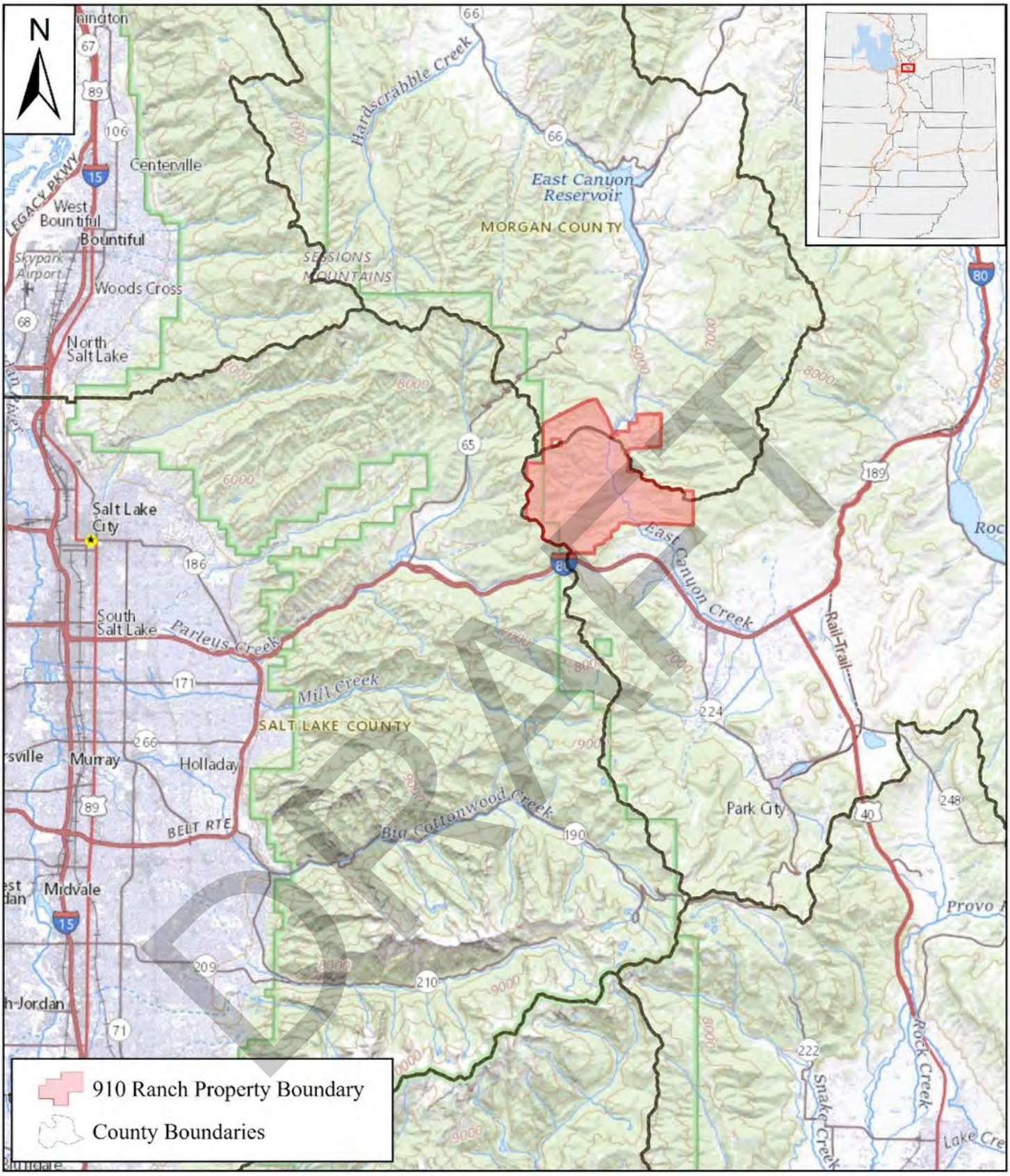
Given the dominance of aspen and maple in the forest canopy, the understory vegetation is relatively uniform and characterized by a diverse array of native species, including snowberry,

serviceberry, chokecherry, geranium, mule's ear, meadow-rue, bluebell, false Solomon's seal, yarrow, field mint, goldenrod, and coneflower.

The property also supports a wide range of soil types. For a comprehensive listing and detailed descriptions of soil classifications, topography, and mapping data, refer to Appendix B of this document.

Noxious weeds have been identified on the property, primarily concentrated in drainage areas and along transportation corridors.

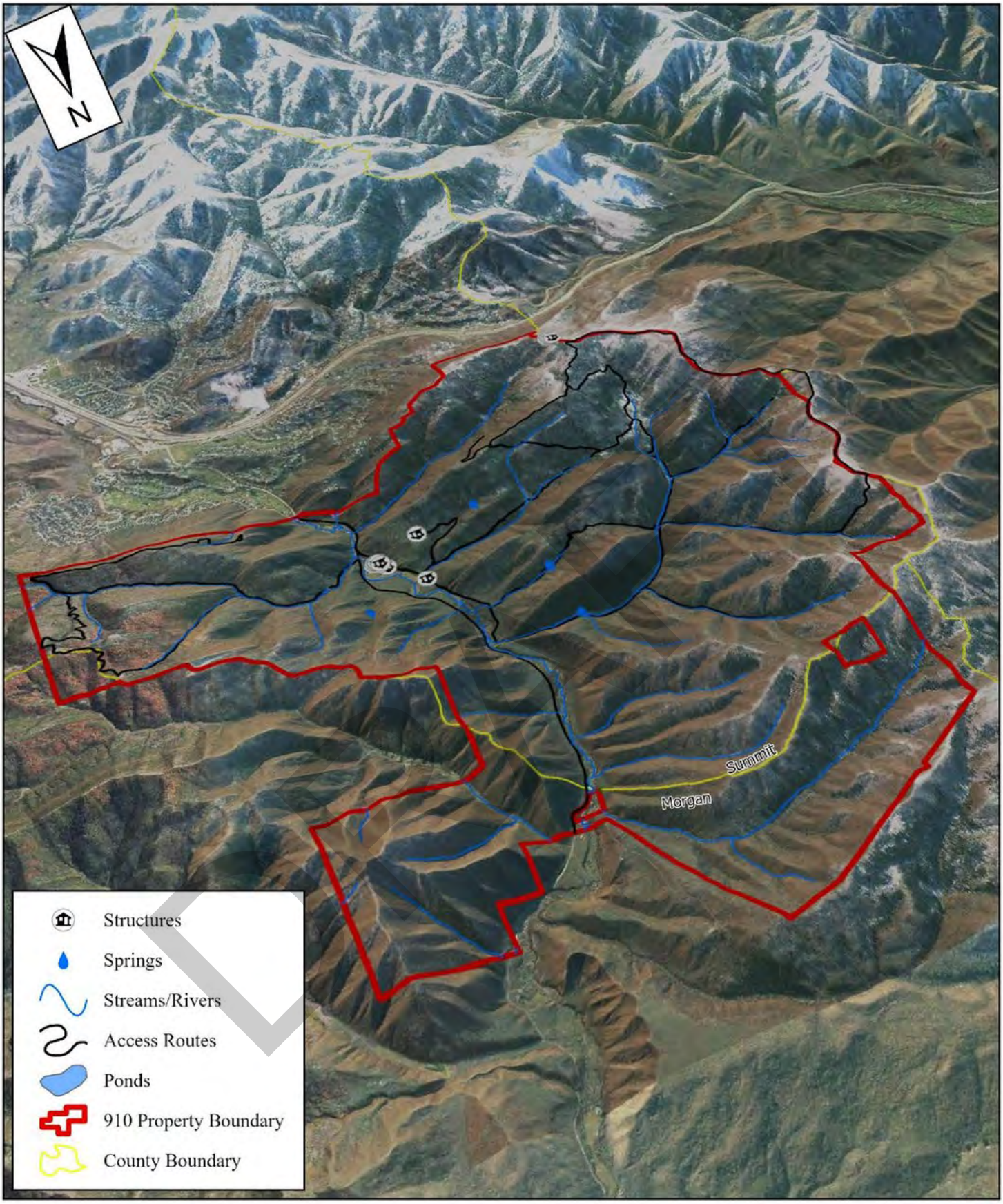
Overlooking Big Bear Hollow drainage towards East Canyon Creek



910 Ranch Property Overview

Scale: 1:250,000

0 2.5 5 10 15 20 Miles

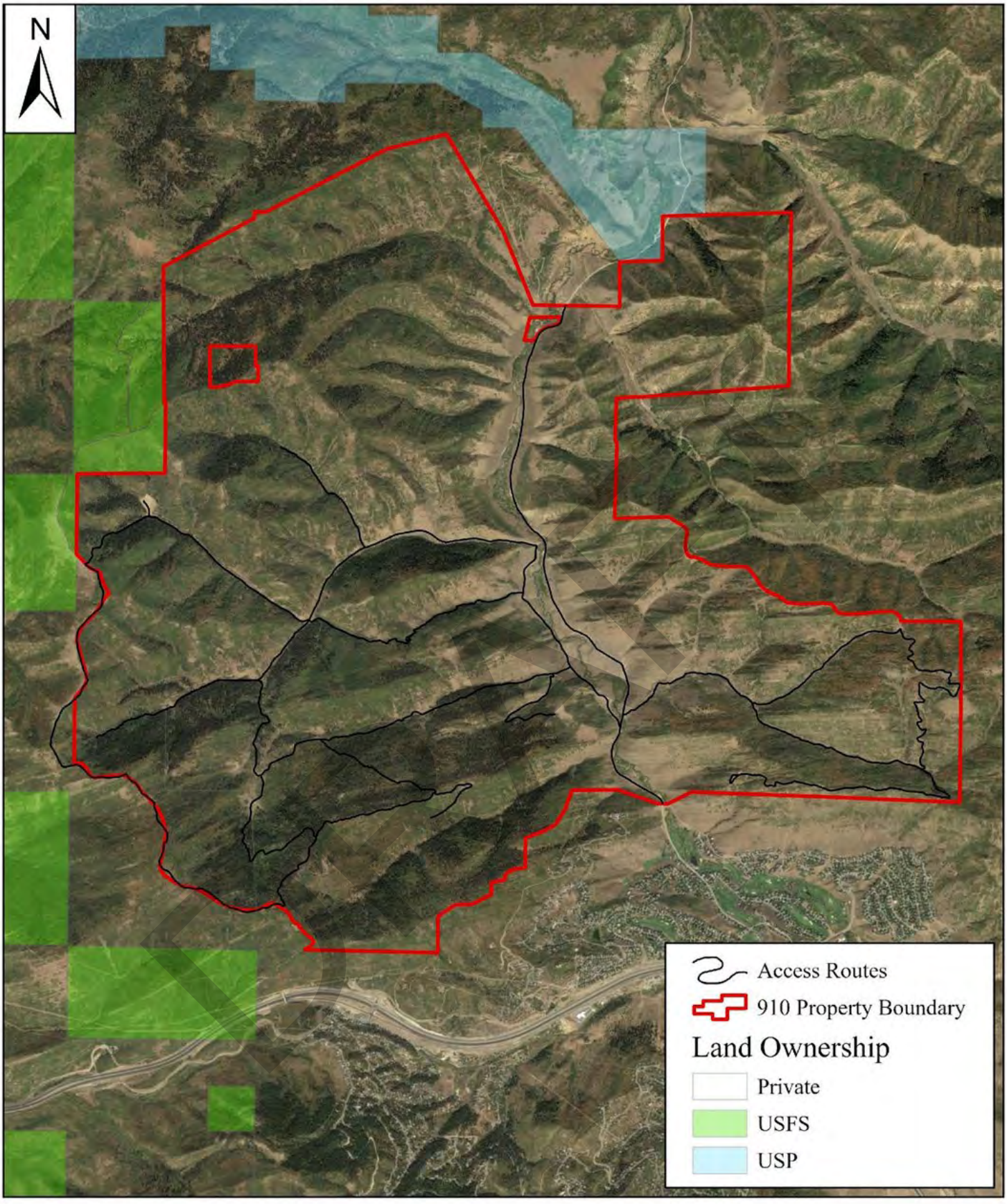


910 Ranch Property Detailed

Scale: 1:33,000

0 0.25 0.5 1 1.5 2 Miles

UTAH DNR



910 Ranch Land Ownership

Scale: 1:47,000

0 0.5 1 2 3 4 Miles

Landowner Objectives/Desired Future Condition

910 Ranch has been primarily used for ranching which may continue with an added public benefit of recreational use. Therefore, the overarching Landowner/Summit County objectives are to practice long-term stewardship, utilizing the principles of ecosystem-based, multiple-use management, and protection of the natural resources on the Property through adaptive management. Development of practical, scientifically sound methods, will guide the implementation of treatments, recommended in this FSP.

Primary concerns regarding forest health and conservation values, has led to the interest and development of a FSP. The recommendations in this plan will lead to desirable future outcomes.

More specifically, long-term resource management objectives include:

- Manage forest resources in the best interest of forest health, which should minimize losses associated with injurious insects and diseases. Detection and monitoring will be key components in minimizing forest pest impacts.
- Reduce potential of high intensity/severity catastrophic wildfire risk by reduction of fuels in overstocked conifer stands and along roads, structures, and ridgelines.
- Optimize timber stand improvement in aspen stands by promoting aspen regeneration.
- Maintain or enhance wildlife use by a variety of big games species.
- Maintain favorable aesthetics, by means of preventing large scale tree mortality.
- Maintain, improve and utilize range resources, for long-term forage production and wildlife habitat.
- Actively manage to reduce and control/spread of noxious weeds, found throughout the Property.
- Increase water quantity/quality within riparian corridors and reduce impacts of erosion and sediment transport downstream.
- Create, maintain and adhere to the Deed of Conservation Easement parameters.
- Provide educational, research and public recreational opportunities.

Division's Purpose

The purpose of Forestry, Fire & State Lands (FFSL) or the "Division" Forest Stewardship Program is to encourage long-term stewardship of non-industrial private forestlands, by assisting private landowners with the active management of their forest and natural resources. The recommended management activities, during a 10-year planning period, should help private forestlands move toward a future desired condition.

The Division receives funding to construct this FSP from the United States Forest Service-State and Private Forestry Program. As a requirement for receiving this funding, the plan name and the shapefile of the Property boundary of this FSP will be submitted to the United States Forest Service-State and Private Forestry Forest Stewardship Program, and will be placed in their SMART (Stewardship Mapping and Reporting Tool) database.

This FSP supports the goals and objectives outlined in the *2020 Utah Forest Action Plan*, which are: 1) Restore resilient forests, 2) Reduce wildfire risk to communities and water resources, and 3) Increase landscape-scale forest restoration. The Property is located in a High Priority Area.

The Division receives federal aid and prohibits discrimination on the basis of race, color, sex, age, national origin or disability. For information or complaints regarding discrimination, contact Executive Director, Utah Department of National Resources, P.O. Box 145610, Salt Lake City, UT 84114-5610 or Equal Employment Opportunity Commission, 1801 L Street, NW, Washington DC 20507-0001.

Plan Elements Description and Assessment

Soil and Water

Soils:

Please refer to Appendix B for a soils report developed from the Natural Resource Conservation Service (NRCS) web-soil survey.

Thirteen soil types exist on the Property. The soil report in Appendix B covers important information about basic description, name of soil types, and more specific assessments based on landowner objects concerning erosion, fire damage susceptibility, and range production. Web-soil survey provides many other assessments depending on Landowner needs. FFSL Area Forester can help in navigating the website to obtain future assessments.

Ninety-five percent of the soils experience moderate erosion hazards for off-road, off-trail sites where soils will be exposed with removal or disturbance of vegetation. Site-specific planning will need to occur before stand treatments are undertaken.

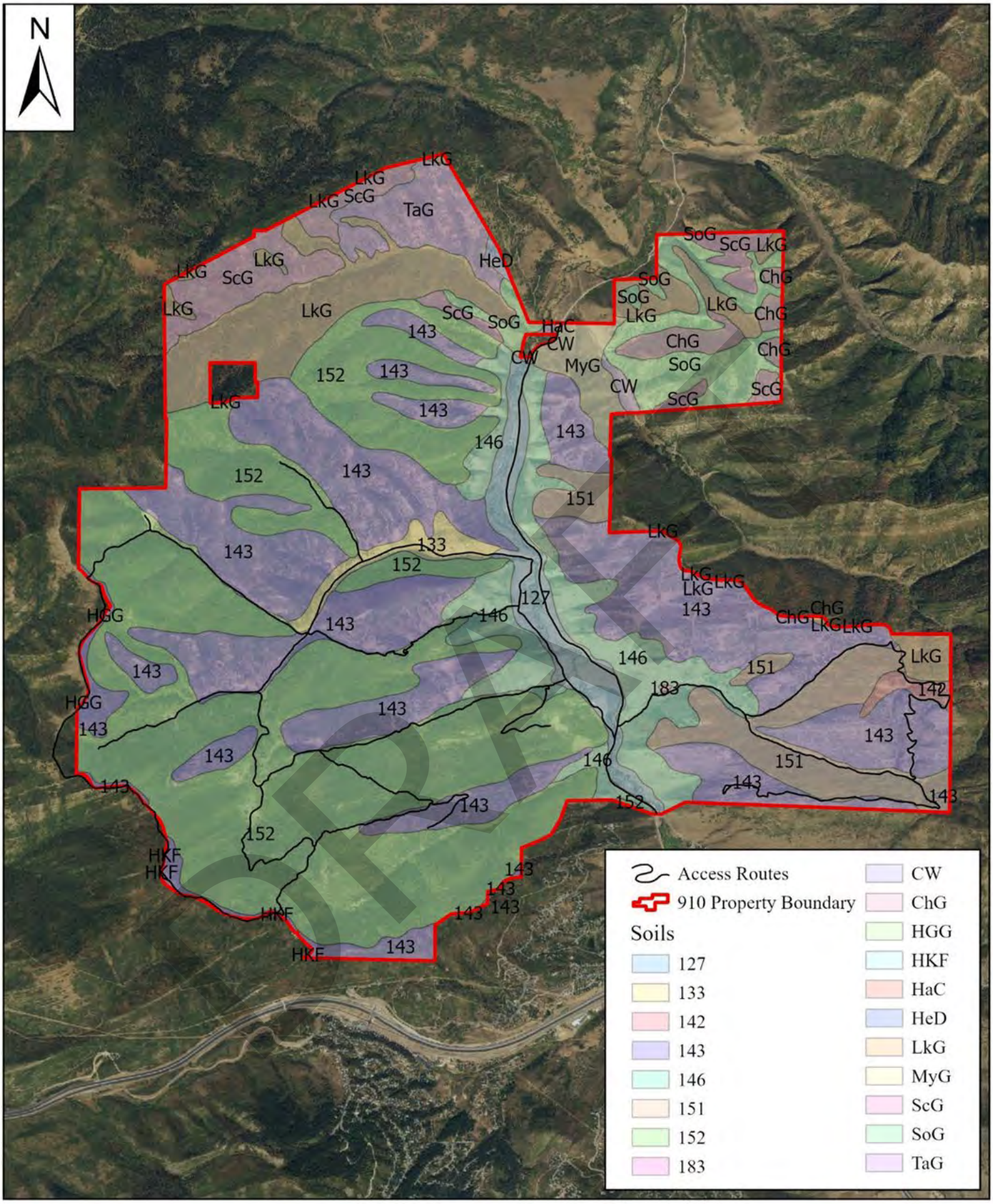
The prolific soil types: Horrocks-Agasiz (143), and Lucky Star-Dromedary (152) produce anywhere between 670 to 1,400 pounds of forage per acre per year, when there is normal precipitation amounts.

Ninety-six percent of soils are highly susceptible to fire damage. The susceptibility to fire damage ratings represent the relative risk of creating a water repellant layer, volatilization of essential soil nutrients, destruction of soil biological activity, and vulnerability to water and wind erosion prior to reestablishing adequate watershed cover on the burned site. Highly susceptible indicates that the soil has one or more features that are very favorable for soil damage by fire.

Soils represent one of the most important resources in any forest community. Without soils, timber, vegetation, wildlife and the ecosystem itself cannot exist. Soil protection with regard to human activities is paramount in importance. Practices that are recommended in the Forest Stewardship Plan should always be conducted using *Utah's Forest Water Quality Guidelines* along with NRCS Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm).

The biggest threats to soils are human activities. Losses of soil resources could be attributed to several activities, such as the incorrect removal of forest products, road building in unsuitable areas, and construction can dramatically speed water erosion, creating need for costly repairs. Resource professionals should be consulted whenever there is a threat of potential soil loss due to human activity. Foresters, civil engineers, range conservationists and many others should be allowed to comment whenever a management activity is likely to impact the soil resource. It is always better to expend additional effort in seeking out sound advice than to mitigate a management activity, which has caused resource damage.

For more detail description of the soils on the Property, consult the NRCS Ogden, UT office at (801) 629-0575.



910 Ranch Soils

Scale: 1,47,000

0 0.5 1 2 3 4 Miles

Streams:

The 910 Ranch includes 5 miles of East Canyon Creek, a federally listed impaired waterway (2000, 303(d) of Clean Water Act). The creek is critically important for sustaining cold-water native fisheries.

The *Utah Forest Water Quality Guidelines* classifies East Canyon Creek and Big Bear Hollow as a Class I stream, as these creeks contribute to fisheries. Ephemeral streams located within major water corridors consist of Dry Hollow, Deer Hollow, Wood Hollow, Mill Hollow and Porcupine Creek, as they contribute significant flow to downstream fisheries mainly in the form of spring runoff. East Canyon Creek, which is the main watershed, flows into East Canyon Reservoir. East Canyon Creek is approved for Total Maximum Daily Loads (TMDLs) for some parameters. The parameters identified are for phosphorus, total dissolved solids, and temperature.

Riparian vegetation along streams provides necessary cover and shade that support Bonneville cutthroat trout habitat. This is important, even though streams need some sunlight for production. Keeping riparian zones healthy is of primary concern for the health of the overall ecosystem and most of the associated wildlife. Riparian areas should be left undisturbed as much as possible. Planting willows and cottonwood trees along the stream corridor will help with stabilizing the stream bank, reduce sediment and erosion, provide shade and aid in water nutrients for fish microbial activity, and beaver. Installing beaver dam analogs (BDAs) act as natural filters, catching sediment and improving water quality/quantity for both human water use (irrigation and municipal) as well as wildlife and livestock, while promoting increased habitat for beaver use.

Springs:

Several springs are located on the Property. It is encouraged to improve some of these springs to increase the water flow rate and to provide a water source for wildlife and livestock. Some of these springs would likely be beneficial in supplying water to stock water pipelines and troughs which will be discussed further in the range section.

Waterbodies:

Several man-made and natural ponds exist on the Property. They are either fed through springs or by streams. Some of the biggest ponds are located in Porcupine Creek, Wood Hollow and North Fork Big Bear Hollow.

During summer months, water levels drop and some ponds completely dry out. Therefore, these ponds do not provide habitat for fish.

Biological Diversity

Biological diversity is often understood at three levels, which are species, genetic and ecosystem diversity. The most relevant diversity for this Property is species diversity of plants and animals.

Among all of the coniferous and deciduous overstory trees that can be found within the geographic area, this Property experiences seven out of ten species. Those species are; quaking aspen, subalpine fir, white fir, Douglas-fir, juniper, Gambel oak, and bigtooth maple. Additional species which could be established are blue spruce, narrowleaf cottonwood, and ponderosa pine. Some of these species are more favorable than others. If you are interested in planting seedlings to increase plant diversity, please contact FFSL's Northeast Area Forester.

Understory plant diversity is determined by three different types, which are shrub, grasses and forbs. The shrub component seems well diverse. Chokecherry, elderberry, serviceberry, wild rose, mountain big sagebrush, rabbit brush, and snowberry, were all observed. Grasses and forbs seemed to be in good condition, especially in favorable years where precipitation is higher than normal. Grasses and forbs can be heavily influenced by cattle grazing and its timing, duration and number.

Animal diversity for this area is considered good. There are good populations of elk, deer, moose, coyote, mountain lion, badger, ground squirrels, turkeys, forest grouse, numerous types of raptors, various song birds, reptiles, and amphibians.

For any species, the suitability of a given habitat depends largely on the availability of adequate food, water and cover. However, each species is unique in the combination of habitat requirements necessary for its survival. Vegetation composition, stage and structure should be viewed in the context of the landscape, with considerations provided for processes, functions and relationships that exist.

Range

Drinking water for wildlife and livestock exist on the Property in the form of numerous ponds and streams shown on the Property detailed map. However, some of these water sources dry out over the summer months or are located in drainage bottoms. The Landowner has the opportunity to work with the Natural Resource Conservation Service (NRCS), an/or Grazing Improvement Program (GIP) to apply for cost-share programs to install a series of pipelines and water trough stations on the east and west ends of the Property. Creating water sources in drainages that have no too little water will distribute livestock range and better utilize range resources encouraging the cattle to venture into the steeper portions of the Property out of drainage bottoms where there are more forage opportunities. Currently, the Landowner utilizes anywhere from 100-250 pair cattle during the grazing season. Depending on the type of winter, and precipitation amounts received, the cattle numbers will vary yearly with forage production. A full-time cattle herder manages the cattle to ensure operations run smoothly and little to no overgrazing occurs.

Grazing within the Property boundary should be based on the following principles:

Time - Refers to the amount of time that animals are in the pasture (i.e. 3 days, 2 weeks, 6 months, etc.). In general, the shorter the amount of time a pasture is grazed, the more time the

plants have to recover from grazing which will result in an increase in forage quality and quantity.

Timing - Refers to the season of year the pasture is grazed. Different strategies are used during different stages in the plant's life cycle. For example, rest periods should be short during times of rapid growth (spring) and long during times of slower growth (late summer). On rangeland, plants usually do not require rest to recover from being grazed while the plants are dormant (fall) until the following growing season.

Amount - Refers to the amount of forage removed by the grazing animal, usually expressed as a percentage. A general rule of thumb is 50% with some exceptions. During periods of active growth, enough plant material must remain after grazing to continue to capture sunlight so that rapid growth and recovery can occur. During plant dormancy, enough residual must be left on the ground so that accelerated soil erosion will not occur and will provide forage values for wildlife.

Overgrazing - Can refer to either (a) too much forage removed, or (b) too much time spent on the pasture. The goal of a grazing management system should be to prevent grazed plants from being grazed again before they have recovered. Grazing plants again before they have recovered (too much time) is considered overgrazing.

Forage typically accounts for more than half the cost of producing livestock and provides most of the animal's nutrition. Thus, it has a major influence on a ranch' expenses and income. Forage is the crop; animals are the harvesters or consumers. Efficient forage production and utilization are essential to a profitable operation.

It is important to know forage options, animal nutritional needs, and establishment requirements. Forages vary as to adaptation, growth distribution, quality, yield, and potential use. Also, various types and classes of animals have different nutritional needs. The ability to make good grazing decisions depend on knowing forage options for the land resources and the nutritional needs of animals.

Forage quality has a direct relationship with high animal gain, milk production, and reproductive efficiency. Producing high-quality forage means knowing what affects forage quality and then using appropriate management. Matching forage quality to animal nutritional needs greatly increases efficiency. Forage quality varies greatly over the grazing season with the highest quality typically occurring from early spring to early summer (~2-month period).

Although it is not currently a problem on the 910 Ranch Property, pests and plant-related disorders should be prevented or minimized if they occur. Diseases, insects, nematodes, and weeds lower yields and reduce forage quality and palatability. These can also steal water, nutrients, light, and space from forage plants. Variety selection, cultural practices, scouting,

pesticides, and other management techniques can minimize problems with pests. Knowing what animal disorders plants cause can help avoid those problems.

Fencing was installed in the past, but currently the landowner is working to have all the old and non-operational fences removed. It's recommended the Landowner coordinate with GIP or NRCS to create a grazing management plan. As a result of the plan, some interior fences may be suggested to protect riparian, springs and other infrastructure that cattle could potentially harm or damage.

Some of the areas on the 910 Ranch consist of sagebrush ecological types that have an overabundance of sagebrush canopy cover. To promote diversity of grass, forb and shrub components, it is recommended that rangeland with sagebrush exceeding 30% cover be treated by means of chaining or mowing. Areas experiencing an overly dense area of old decadent sagebrush may be a result of lack of disturbance, such as fire suppression, removal of fine fuels by grazing, etc. This is a typical situation throughout the West.

Prescribed burning, or the implementation of mechanical treatments like chaining, mowing, or harrowing can help promote a healthier, more diverse rangeland. If prescribed burning is a preferred practice it would need to be implemented during the spring, using high elevation snow banks or control lines such as roads as firebreaks. The window of opportunity to do these types of burns is very short and may not occur every year. If the grazing management plan recommends rangeland projects like prescribed burning or mechanical treatments then these projects should be carefully planned and implemented. The expected benefits are:

- Increased forage quality and quantity for livestock and wildlife.
- Reduced grazing pressure on the riparian areas (animals will be attracted to the upland treatment areas, especially with new water sources).
- Reduced volatile sagebrush fuels that could result in wildland fires during the hot seasons.
- Restoration of the ecology of the sagebrush types that included a natural fire regime.

2023 Overlooking Structures and East Canyon Creek

Agroforestry

There are no agroforestry recommendations for this Property.

Aesthetic Quality and Desired Timber Species

Since 910 Ranch will be widely used as a recreational property, the aesthetic quality is one of the most important resources to manage. Variations between forest, open meadows, and riparian corridors, provide a diverse spatial quality, adding visual benefits.

The Property is aesthetically stunning. With a view of the Park City area to the east, across Parley's Canyon to the snow-covered peaks of Mt. Superior and O'Sullivan and to the west views of Little Dell, Emigration Canyon and the Salt Lake Valley on a clear day. This area reaps many spectacular and scenic vistas. Some of the management scenarios identified in this plan may alter the aesthetic value temporarily, and should be carefully considered.

In recent years, insects have taken their toll on Douglas-fir, white fire and subalpine fir, especially the upper portions of the property. Douglas-fir is a desired timber species in this area especially since there's not a lot of it. Aspen is one of the primary species found in the area and is also very desirable. Although abundant, the health varies between clones. Aspen and bigtooth maple provide wonderful fall time colors in all areas of the Property.

Long-term management of these species should focus on maintaining a balance of age-classes, as older trees are more susceptible to drought, insects and disease.

Recreation

The 910 Ranch offers numerous permitted recreational activities such as horseback riding, hiking, biking, snowshoeing, cross-country skiing, and wildlife viewing. Non-permitted activities include any type of motorized use unless otherwise approved or for use of managing the Property. Camping, campfires and fishing are activities still pending approval and are thus considered prohibited at this time. The Property's draft recreation management plan proposes 35 miles of new public trails for recreation and environmental education use. Trails and trails maps will become available for public use once these areas have been fully identified, inventoried, and repairs made to make this recreation opportunity safer and more enjoyable.

Wood and Fiber Production

Inventory of the forest resources located on 910 Ranch was conducted during the 2023 summer field season, by FFSL forestry technicians employed by the Division. Data taken from this inventory was analyzed for the purpose of developing a FSP, to meet the requirements of the Forest Legacy Program (FLP).

This section addresses the current condition and the growth of the trees on the property. There are currently 6 distinct forest stands on the property, each having characteristics separate from one another. The following identifies and describes stand types (refer to map for location), its condition of health and related management considerations.

Most forested areas that were within a motorized trail were at least observationally observed. Areas on the northern portion of the Property still need assessment, and are limited to types of management due to limited or no access as well as topographic constraints. In the event management is to occur within a particular stand it is recommended a more thorough evaluation take place. Woodland areas, such as Gambel oak, and pure maple stands are not included in this plan. Refer to the map on Page 22 for stand type, number and location.

Overlooking Aspen from the lower portion of the Property

Aspen

The majority of quaking aspen on the Property range from about 65-85 years old. When aspen starts to reach above 90-100 years old they begin to become less vigorous and more vulnerable to disease. Managing aspen suckering (growth of aspen starts from lateral roots of a clone) and recruitment (aspen taller than six to eight feet in height) are keys to providing sustainability within aspen clones. Aspen

greatly relies on a natural or man-made disturbance to produce vigorous suckering to aid in the expansion, and sustain health of a clone. While suckers are vulnerable to large ungulate browsing pressure, once they reach the recruitment stage the herbivore pressure decreases. According to *Guidelines for Aspen Restoration on the National Forests in Utah* aspen clones that have greater than 1,000 stems per acre are considered self-sustaining. For recommendations, please refer to the Practice Recommendations Table on page 29 & 30.

Aspen & Maple

Existing overstory aspen in areas east of the NE Canyon Road, are showing signs of stress as well as signs of increased disease and dieback. Maple (a more shade tolerant species than aspen) are competing with aspen and will eventually, over time, outcompete and overcome the once dominated aspen stands. This may be attributed to changing climate patterns with increases in temperatures and decrease in snowpack over the years, experiencing an ecosystem shift into more of a mountain brush dominated stand. Once an ecosystem type has crossed a threshold, typically it becomes very difficult to reverse the process unless drastic measures are taken. Historically, fire played an important role as a natural occurrence to create disturbance within the aspen ecosystems. Currently, given the society we live in today, natural fire especially within 910 Ranch would be suppressed immediately due to public safety and protection of the watershed.

If the landowner wishes to promote aspen within this area a more thorough stand evaluation should be considered, looking at different options for management. However, there are limitations that may prevent management due to topography and access constraints.

Overlooking Aspen with encroaching understory maple

Douglas-fir

Most of the conifer within the Property consist of mixed conifer. However, stand 5 located in Big Bear Hollow is predominately composed of overstory Douglas-fir.

The overall health of the Douglas-fir appears to be moderate. This stand is considered overstocked and is very dense due to lack of disturbance. Competition between species and resources is leading to decreased stand vigor, which will eventually lead to increased tree mortality from insects, drought and forest diseases including dwarf mistletoe.

Douglas-fir Bark Beetle

Overlooking Big Bear Hollow conifer towards East Canyon Creek

There are signs of past populations of Douglas-fir bark beetles, which have caused small pockets of tree mortality. Bark beetles are a native insect and small infestations are common and are considered a natural occurrence. Annual monitoring will be important because if bark beetles rise above normal populations, outbreaks will likely follow causing widespread Douglas-fir mortality. Decreasing the beetle threat can be accomplished by forest stand improvement projects by means of thinning from above, which will help reduce competition of resources like water, sunlight and nutrients from residual trees. Extent and timing of such thinning projects will need to be done during the months when beetle activities will not damage the residual trees. This is typically during the late summer to fall months. Topographic, access and riparian at the toe of the stand makes management very difficult. In the event management is to occur within this stand a more thorough evaluation is suggested.

Common understory resemblance in mixed conifer stands

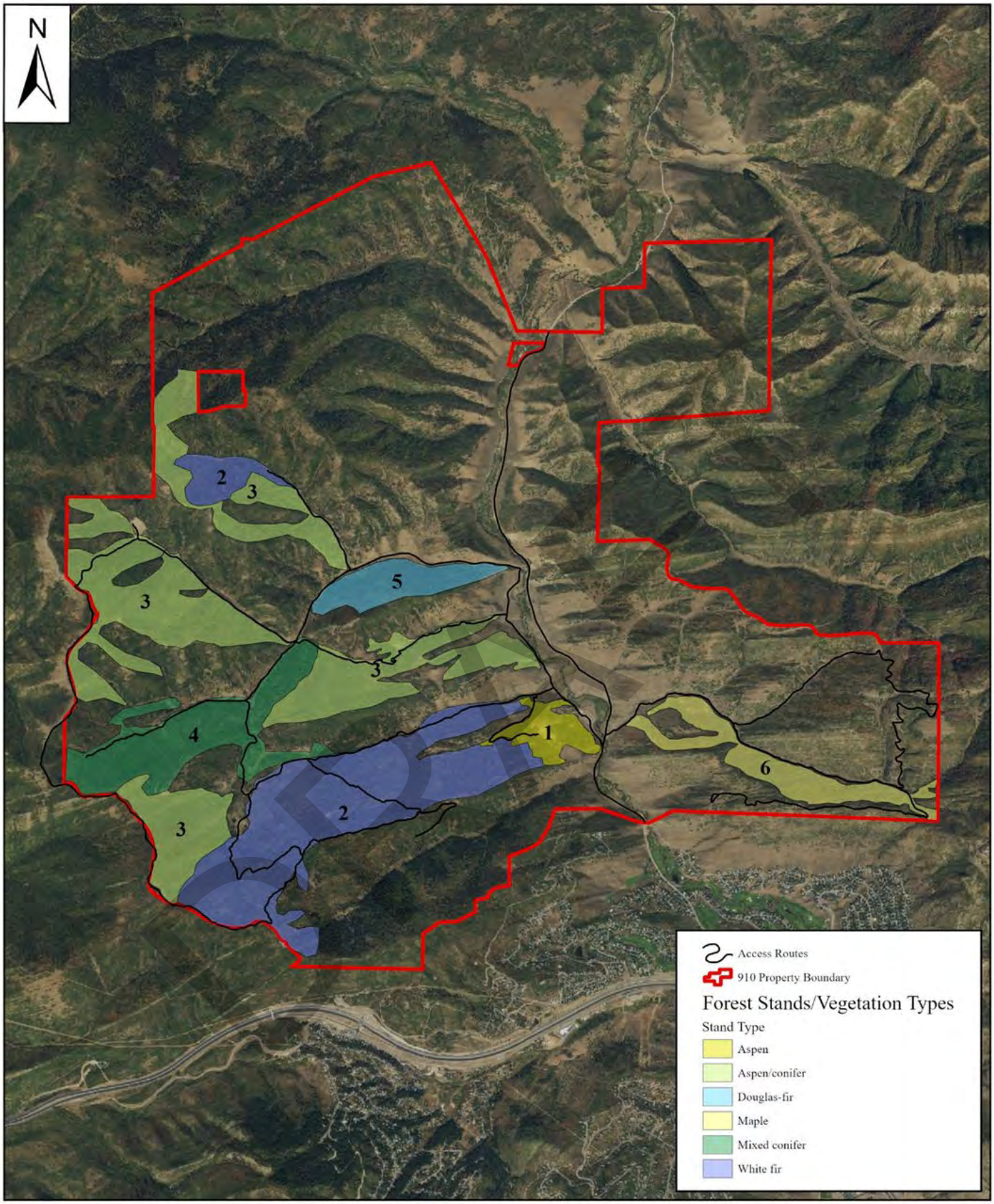
Aspen/Mixed Conifer & White Fir

Dominant overstory species within these stands are white fir, subalpine fir, aspen and Douglas-fir with pockets of thick understory maple. Currently, no signs of concerning diseases or bark beetle activity was observed, other

than past years attacks. Overstory density appears to be moderate to high. Thinning of some larger white fir, especially with dead tops, forks, multiple tops leaving the best-looking, and more desirable Douglas-fir should be considered. Thinning understory conifer especially all age classes of subalpine fir, white fir, maple and dead and down is suggested to promote increased forest health and stand vigor. Performing a thinning will help aid in future forest health, vigor, insect and disease concerns while reducing competition between species, fuel loading and wildfire risk.

Stand #	Species	Acres	Aspect	Slope (%)	Stocking	Successional Stage	Regeneration	Age Class Distribution
1	AS	74	N	29	S	Seral	Adequate	Even-aged
2	WF	689	N	36	OS	Climax	Adequate	Uneven-aged
3	WF,SAF, AS,DF	883	N/E	32-42	OS	Climax	Adequate	Uneven-aged
4	WF,SAF, DF	300	N	45	OS	Climax	Adequate	Uneven-aged
5	DF	112	N	60	OS	Climax	Adequate	Uneven-aged
6	AS & Maple	160	N	39	US	Climax	Inadequate	Even-aged

SAF=subalpine fir; AS=aspen; DF= Douglas-fir; WF=white fir.
Stocked (S) stands are ideal and are found where trees in the stand have adequate room for growth.
Overstocked (OS) stands consist of trees which are in heavy competition with one another for available resources.
Understocked (US) can support more trees per acre.
Climax: the culminating stage of plant succession for a given environment; the vegetation conceived as having reached a highly stable condition.
Seral: a temporal and intermediate stage in the process of succession.
Even-aged: a stand of trees composed of a single age class in which the range of tree ages is usually +/- 20 percent of rotation.
Uneven-aged: a stand with trees of three or more distinct age classes, either intimately mixed or in small groups.
Source: The Dictionary of Forestry; John A. Helms, editor



910 Ranch Property Forest Stands

Scale: 1:47,000

0 0.5 1 2 3 4 Miles

UTAH DNR FORESTRY

Fish and Wildlife

Long- and short-term goals for wildlife management should be considered carefully. A change in the forest can bring about other changes, both desired and unforeseen since wildlife and the habitat they occupy are connected either directly or indirectly to each other. For example, chemical control of insects may result in loss of food for birds. This in turn may cause decreased populations of prey for raptors. Raptor populations may decrease causing increases in rodents or rabbits that may harm other resources on the Property.

Opportunities for wildlife habitat modifications include: planting/erosion control in riparian zones, beaver dam analogs, thinning forest cover promoting aspen regeneration and decreasing wildfire risk, conifer seedling plantings of unique species (like ponderosa) in specific areas creating diversity of tree species and habitat, and fuel breaks to protect wildlife habitat from uncharacteristic wildfires.

Many large mammals including elk, mule deer, moose, bear, and mountain lions, occupy the Property. Utah's only wildlife overpass bridge is located just a ½ mile from the Property, providing safe passage over I-80 and connecting to a high-use migration corridor. It has designated critical year-round habitat for moose and black bear, and critical summer habitat for mule deer and an elk herd with an estimated population of 500.

In order to maintain and promote aspen, some harvesting of conifer where access and topography allow should be further assessed. Other stands can be thinned, as long as hiding and thermal cover is maintained. Hiding cover guidelines suggest 90% of an elk or deer should be hidden at 200 feet or less, and patches should be at least 600 feet wide and at least three acres in size. Thermal cover should leave stands at least 40 feet tall with 70% canopy cover, and be at least 12 acres in size. Some areas may be thinning more aggressively where fuel loading is high to mitigate fire risk.

Moose, like mule deer, are browsers. Shrubs, twigs, and buds provide excellent food sources. They do eat some of the same species of plants as deer and elk, but they will more often eat willows and other vegetation consistent with riparian areas. Any habitat manipulations done for elk or deer can also benefit moose.

Snags (dead trees) can be left after forest treatments to help cavity nesting birds find homes and foraging sites. Songbirds are also important to the ecosystem because they are prey species to other animals, including raptors and some mammals. As a general management guideline, keep as much vegetative diversity as possible for the greatest number of species as possible.

The Property supports critical migration stopover and nesting spots for 140 species of migratory birds including Yellow-Rumped Warblers, Caspian Terns, Belted Kingfishers, Yellow Flycatchers, Snowy Egret, Song Sparrows, Townsend's Solitaire, and rare Catbirds (local Audubon).

Both blue and ruffed grouse inhabit the Property. These are often lumped together in Utah as forest grouse. Although they can co-exist in the same area and share many similarities, habitat differences do exist. For both species, keep fallen logs left over from stand treatments. These serve as drumming sites and foraging sites for young birds.

Raptors, specifically hawks, prey and consume rabbits, squirrels, grouse, other game animals and rodents like mice, voles and gophers, which if left unchecked can potentially damage forest lands, reforestation efforts and range/meadow areas. Management of raptors is driven by management of prey population size and habitat. By helping to keep prey populations in check, raptors are usually desired.

Currently, the water quality and quantity for East Canyon Creek are both very poor. Bonneville Cutthroat Trout used to occupy this creek but no recent observations have been observed. A goal of the Utah Division of Wildlife Resources (UDWR or DWR) is to bring this native species back within the creek corridor as it serves as a Utah species of conservation. Other fish species that have been observed are brown trout, speckled dace, redside shiner, mottled sculpin and both mountain and Utah sucker.

Overlooking East Canyon Creek

Riparian habitat is critical to fish and other aquatic wildlife. 910 Ranch has many riparian zones, which includes streams, seeps, springs, and beaver ponds, which are important for fish and other aquatic wildlife.

Riparian vegetation provides cover and shade for streams and creeks. East Canyon Creek is severely lacking riparian vegetation which helps keep water temperatures down. This is important even though the streams need some sunlight for production. Keeping riparian zones healthy is of primary concern for the health of the overall ecosystem and most of the associated wildlife. Riparian areas should be left undisturbed as much as possible, but mitigation should occur where needed for improvements.

For a more detailed description of the fish and wildlife on the Property, please consult with the Utah UDWR's Ogden Region Office at (801) 476-2740.

Endangered Plant and Animal Species

The DWR does not list any occurrences of threatened or endangered species in the general area of the Property. Threatened or endangered species are a concern of the federal government and federal protection laws are associated with the plant and animal species recognized in the listing. If threatened or endangered species are found during the course of implementing this plan, management activities should be revised to ensure they do not harm the species, or destroy the habitat they occupy. The Landowner is advised to contact the UDWR if questions arise as to specific species management and habitat values. Assistance may be gained by contacting the UDWR Northern Regional Office at (801) 476-2740.

According to the DWR Utah Natural Heritage Program (Appendix C), the State of Utah does recognize one species of greatest conservation need listed in the Utah Wildlife Action Plan documented in the past ten years within a ½ mile radius of the Property; that of the Green River pebblesnail *(Fluminicola coloradoensis)*. Species documented within a two-mile radius over the past ten years include Bonneville Cutthroat Trout *(Oncorhynchus clarkkii Utah)*, and the Western bumble bee *(Bombus occidentalis)*.

Forest Health and Invasive Species

Forest Health:

Aspen is one of the most significant forest species on the Property in terms of ecological diversity, and is present throughout the entire Property. Tree age and disease appear to be the most significant agents affecting the health of these stands. Physical defects such as sweeps and crooks are also present, and are common for aspen. Other factors affecting the health of the aspen component are limited regeneration, and the encroachment of subalpine fir and maple in the understory. Browsing by elk, and/or cattle may be a problem in some areas, especially in areas where water can be found.

Mechanical logging and other such disturbances can lead to unnecessary damage and death to residual trees. However, these circumstances can be mitigated through careful felling of trees (minimizing top and stem breakage to residual trees), and limiting skidding distances. In general, forested areas with slopes greater than 35% should not be logged by traditional tractor/skidding yarding systems because of potential increases in erosion, soil compaction and site disturbance.

Any harvesting should be accomplished through careful consideration of the effects of removals on water quality, soil stability and wildlife/fisheries habitat. Generally, observing a 75-foot streamside management zone, for riparian zones where logging activity such as skid trails, landings, roads and timber harvesting takes place is recommended.

The recommended practices, scheduled to be implemented for the stands discussed in this FSP, are geared toward achieving several desirable future targets. One of those targets is mitigating the problems associated with forest insects and diseases, before they expand to epidemic

proportions. However, the long-term management of the timber resource will undoubtedly encounter forest insect and disease problems over time. Thus, it is important these issues be addressed, so that potential outbreaks or infestations can be prevented or at least held to a minimum.

It is likely that Balsam Woolly Adelgid (BWA) is present in subalpine fir. This tiny sucking insect transported by wind and animals and confirmed in the Park City area will kill all age classes of subalpine fir as a primary host. There's been occurrences in other similar geographic areas where the insect also attacks white fir. For now, there is no treatment for this insect to prevent attacks on new conifers. Refer to the link below for a fact sheet and management considerations.

Invasive Species

Many types of noxious and invasive species "weeds" have been documented on the Property. Identified species are: houndstongue, Canada, Scotch and musk thistles, garlic mustard, hoary cress (white top) and common burdock. Other species not currently observed on the Property but in close proximity are Yellow star thistle (creeping over the ridge from SLC) and Phragmites found further upstream on East Canyon Creek. Summit County is currently working on mapping these species so mitigation efforts are successful.

Controlling noxious and invasive species should be a top priority. Identification, monitoring and annual spraying is recommended throughout the Property. The following website provides a list with pictures and descriptions. If any additional weeds that are not already identified are found on the Property it is recommended to contact Summit County Weeds Department at (435) 336-3992.

https://summitcounty.org/1221/Noxious-Weed-ID

Conservation-based Estate Planning/Legacy Planning Information

In response to rapid regional growth, escalating development pressures, and the increasing fragmentation of adjacent landscapes, Summit County has formally committed to honoring the intentions of the previous landowner by securing a conservation easement on the Property. This decision was also driven by a desire to safeguard the ecological integrity of the land while maintaining traditional land uses.

The Property serves as a critical linkage within a broader conservation corridor encompassing approximately 52,000 acres of protected lands. This corridor includes Forest Legacy projects, privately held conservation easements, state parks, and National Forest lands. The protected status of the property will also ensure year-round public access for recreational use.

The purpose of the Forest Legacy Program is to protect forestlands at risk of being converted to non-forest uses. Summit County's population is 43,488, projected to soar by 250% to 107,000 by 2060. Most growth is expected in the Jeremy Ranch and Kimball Junction area, directly adjacent to the Property (UT Governor's Office of Management & Budget).

Archaeological, Cultural and Historic Sites

The property is rich in Utah history. Homesteaded in 1860, the original stone cabin still stands and was used by the Jeremy Family each summer while grazing sheep. The Property contains portions of the Mormon Flats state historical site, the 1841 Pony Express Trail, CA National Historic Trail and Mormon Pioneer National Historic Trail.

Any steps to protect archaeological resources that may be found on the 910 Ranch are highly encouraged. If evidence of sites is discovered during the course of implementing this plan, the Landowner must notify the Division of State History; as required under Utah Code Title 9-8-307 & 9-8-3-2. Definitions of the Utah Code Title can be found in the glossary. If, upon completion of a survey by the Division of State History, archaeological resources are found to be present, mitigating measures may have to be addressed for protection. The Landowner should consider any of all viable management alternatives, if such sites are discovered on or near areas designated for management. This information is provided to assist in identifying historic properties, per §36CFR800 for Section 106 consultation procedures.

Wetlands

Water and wetland resources are primarily concentrated in riparian zones, forested wetlands and other low-lying areas on the Property. Management activities should be avoided in these areas because of their value to water quality, sediment filtering, livestock and wildlife. It is recommended that **Utah's Forest Water Quality Guidelines** (FWQGs) be employed if management is considered in these locations. These guidelines can be found in the Appendix D.

Fire

County and State personnel are required to take suppression actions on all uncontrolled wildland fires within their boundaries, and can enter into cooperative agreements in taking suppression actions on wildland fires (Utah Code Unannotated, Title 65A, Chapter 8, Part 2, Section 202 and 203). During the normal wildland fire season, which runs from June 1 to October 31, or when fire restrictions deemed necessary by the Utah State Forester, a burning permit is required to ignite any open fires. To obtain further information on conducting a control burn, please contact FFSL's Summit County Fire Warden or by visiting Summit County website (https://www.summitcounty.org/561/Fire-Warden) or FFSL website (https://www.ffsl.utah.gov/fire/).

The majority of the Property can be described as Fuel Models 2, 6 and 10 which are defined in the glossary. To mitigate or reduce the significance of these problems requires implementation of management actions such as thinning, selective sanitation harvest, salvage, and slash disposal.

Wildland fires continue to be a major concern throughout the Intermountain West. The hazard of wildfire can be significantly increased if management activities are not implemented correctly. Properly implemented, forest management activities can decrease the risk of uncharacteristic fire and fire hazards. While no fire management plan or policy is required to be implemented on private lands, it would be advantageous for the Landowner to address the issues of fire and fuels management.

Excessive slash accumulation, ground fuels (duff, leaf/needle litter, brush, and regeneration), snags and their continuity contribute to potential fire hazards. Thus, reducing hazardous fuels will likely reduce the potential for fire occurring as well. Fuel breaks and fuel reduction practices are effective fire control precautions. Refer to the Recommended Treatments map for suggestions to implement fuel breaks. In addition, proper treatment of slash and fuels modification are an important component in the overall health and productivity of the forest.

More information can be found utilizing the Utah Wildland Risk Assessment Portal https://wildfirerisk.utah.gov/ as well as accessing the 910 Cattle Ranch Risk Summary Report

Carbon Sequestration and Climate Resilience

Interest in terrestrial carbon sequestration has increased in an effort to explore opportunities for reducing atmospheric carbon. Carbon sequestration is the process by which atmospheric carbon dioxide is taken up by trees, grasses, and other plants through photosynthesis, and stored as carbon in biomass (trunks, branches, foliage, and roots) and soils. The sink of carbon sequestration in forests and wood products helps to offset sources of carbon dioxide to the atmosphere, such as deforestation, forest fires, and fossil fuel emissions.

Sustainable forestry practices can increase the ability of forests to sequester atmospheric carbon while enhancing other ecosystem services, such as improved soil and water quality. Planting

new trees and improving forest health, through thinning and prescribed burning, are some of the ways to increase forest carbon in the long run. Harvesting and regenerating forests can also result in net carbon sequestration in wood products and new forest growth. Through conservation the Landowner has expressed interest in planting unique tree seedlings throughout the Property. Refer to the Biological Diversity section above for suitable tree species.

Forests can best adapt to environmental conditions when they are actively managed to increase resistance to catastrophic disturbances (wildfire, insects) and by ensuring forest species biodiversity. Maintaining diverse forest stands will ensure that with different long-term weather conditions (either warmer or colder and wetter or drier) there will be some species that can remain and thrive in the new conditions, while allowing other species to move either geographically or altitudinally over time.

Recommendations and Implementation Schedule

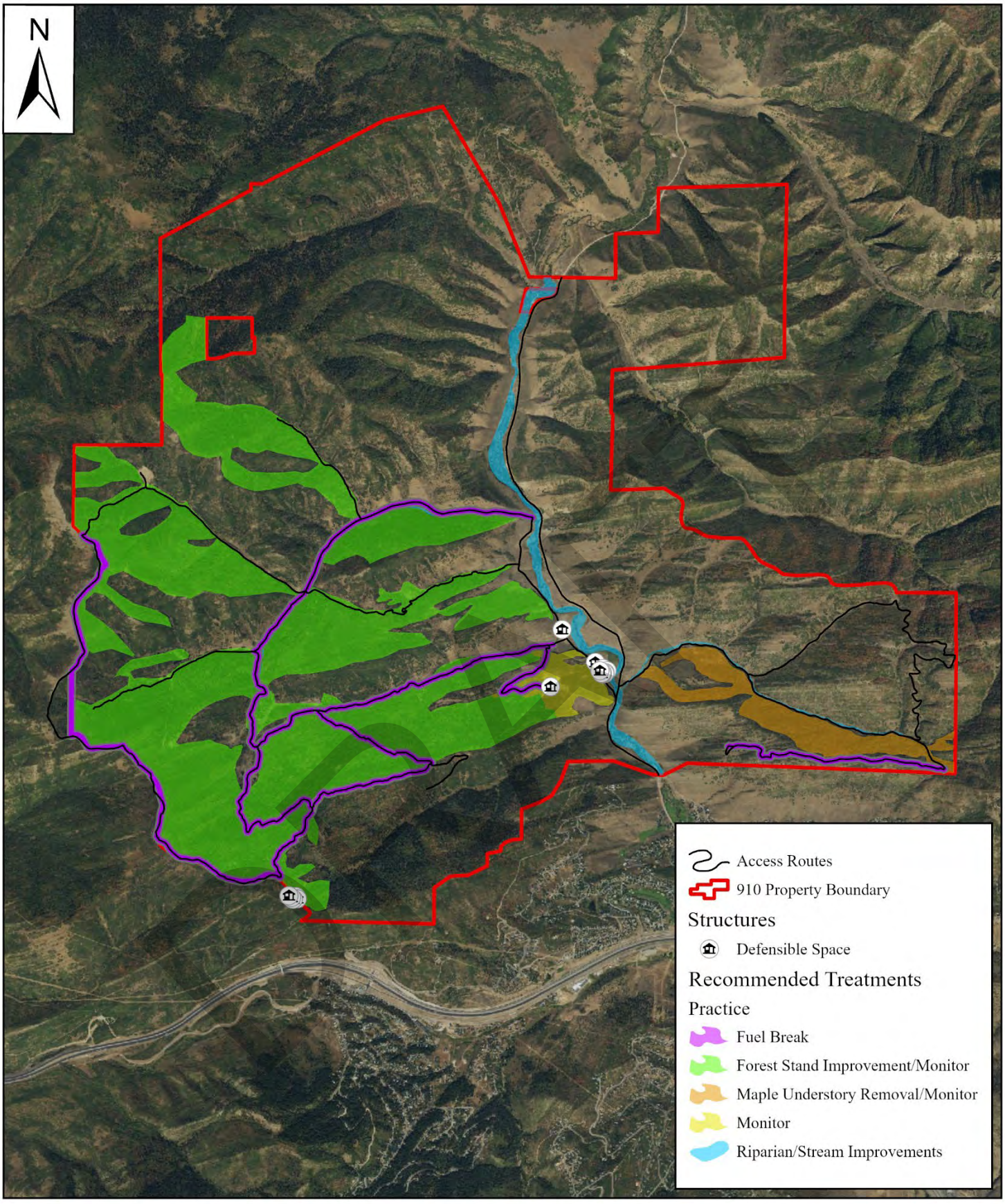
This section of the plan contains the strategy for meeting the Landowner's objectives, by prescribing appropriate management recommendations. Recommendations are based on past resource conditions, identified in the Wood and Fiber Production section.

Recommended Practice(s)	Practice Objective	Practice Description	Desired Future Condition
Consult with private forestry consultant	Forge a long-term serve agreement with a private forestry consultant	Forestry consultant who possess experience in Intermountain and Rock Mountain biophysical setting that can perform silvicultural prescriptions based on landowner objectives and FSP plan recommendations	Forestry management treatments are continually being identified and implemented according to annual surveys, detected forest threats and acceptable risks. Adaptive management is being employed to refine outcomes of treatments.
Forest Stand Improvement	Encourage regeneration of aspen by means of fuels reduction of conifer	Thinning by means of hand and/or mechanical treatments within high priority areas	Promoting early successional stands along with multiple age classes, increasing ecosystem diversity, stand vigor and health
Implement Tree Risk Detection & Mitigation	Perform annual or as needed minimum level 1 tree hazard risk ratings	Areas containing current and future developed infrastructure and where soil displacement work occurs; travel	People and property are protected against potential tree

Recommended Practice(s)	Practice Objective	Practice Description	Desired Future Condition
		routes and fee-access visitor gathering areas	failure and the harm it could cause
Rangeland Improvement	Perform management strategies to encourage desirable vegetation for wildlife	Coordinate with NRCS, DWR or GIP and follow rangeland assessment recommendations	Reduce shrub component to create more diversity for grasses and forbs benefiting wildlife habitat
Riparian Improvement	Increase water quantity/quality within riparian corridors and reduce impacts of erosion and sediment transport downstream	Coordinate with DWR, Trout Unlimited and other State, Federal and NGO stakeholders to identify resource concerns	Increase shrubs, trees, water nutrients, and wildlife/fish habitat to functioning conditions
Slash Reduction	Reduce slash debris accumulated from aspen and conifer treatments	Slash piling and burning or creating biochar	Burning to reduce forest slash tons per acre and/or biochar to sequester carbon and provide soil nutrients and water retention
Fire Mitigation/Fuel Breaks	Create and maintain fuel breaks in strategically located areas	Fuels reduction by means of hand and/or mechanical treatments within high priority areas	Reduction of understory brush, litter and overstory cover resulting in decreasing fire severity/intensity allowing for increased options in firefighting efforts
Noxious Weed Control	Control noxious weeds from meadows, forested areas, and roadways; thereby; improving forage quality and productivity	Spray necessary areas throughout the entire Property with appropriate herbicides when needed. Introduce perennial grasses and forbs to offer weed competition and soil stability	Decrease noxious weeds while increasing productivity of desired vegetation

Recommended Practice(s)	Practice Objective	Practice Description	Desired Future Condition
Forest & Ecosystem Monitoring	FWQG, forest health, forest insects, regeneration, noxious weeds	Observe, record and evaluate condition, trend, and outcome related to surface resources. Determine if practices are effective and if resources are at risk or benefit of occurrences	Exercise resource management direction and timing as deemed necessary
Monitoring of wildlife impacts to forest health and sustainability	Monitor wildlife use of forested areas	Determine any negative impact to forest and ecosystem health by wildlife	Sustaining and enhancing healthy forest resources; ensuring aspen regeneration is protected from overbrowsing; preventing habitat degradation, especially in forested riparian areas.

Date	Practice	Location	Measure	Priority
Forest & Fire Management				
2025-2035	Forest Stand Improvement	Priority areas identified within the polygons on the Recommended Treatments Map	850 Ac	4
2025-2035	Create and maintain fuel breaks	Refer to Recommended Treatments Map	153 Ac	3
2025-2035	Slash treatment pile burning	Where needed	-	6
Range & Riparian Management				
2025-2035	Rangeland Improvement	As directed by NRCS/GIP/DWR or Landowner request	TBD	5
2025-2035	Noxious Weed Control	Roads, trails, bottoms of drainages where needed	Entire Property	1



910 Ranch Property Recommended Treatments

Scale: 1:47,000

0 0.5 1 2 3 4 Miles

UTAH DNR

APPENDIX A:

Glossary of Terms and Definitions

Basal Area

The area of the cross section of a tree stem, including the bark, generally at breast height (4.5 feet above the ground).

Burning, Prescribed

The application of fire, usually under existing stands and under specified conditions of weather and fuel moisture, in order to attain silvicultural or other management objectives.

Canopy

The foliar cover in a forest stand consists of one or several layers.

Condition Class

Condition class is assigned one of three rankings to all of the land comprising the 48 conterminous states. The condition classes are:

Condition Class I: Lands where fire regimes are within an historical range, and the risk of losing key ecosystem components is low.

Condition Class II: Land where fire regimes have been moderately altered from their historical range. The risk of losing key ecosystem components is moderate; fire frequencies have departed from historical frequencies by one or more fire return intervals. The altered fire regime results in moderate changes to one or more of the following: fire size, intensity, severity, and landscape patterns.

Condition Class III: Lands where fire regimes have been significantly altered from their historical range. The risk of losing key ecosystem components is high. Fire frequencies have departed from historical frequencies by multiple return intervals. The altered fire regime results in dramatic changes to one or more of the following: fire size, intensity, severity, and landscape patterns. Vegetation attributes have been significantly altered from their historical range.

Coppice/Clear-fell

A method of regenerating a stand in which all trees in the previous stand are cut and the majority of regeneration is from sprouts or root suckers.

Coppice with Reserves

A coppice method in which reserve trees are retained to attain goals other than regeneration. The method normally creates a two aged stand.

Class I Stream

Streams or other bodies of water used for domestic water supply and/other spawning, rearing, migration of fish, including impacted streams with recovery potential for a fishery. Also included are perennial streams that contribute significant flow to downstream fisheries.

Class II Stream

All streams that do not meet the Class I definition and are identifiable in the field as having a defined channel of bed rock, sand, gravel, or rocky material, definite banks, generally having and ordinary high-water mark and confines and conducts continuously or intermittently flowing water. Also included are reservoirs, lakes and ponds greater than 1/10 acre that do not support fish or provide domestic water supply.

Crown Class

A class of tree based on crown position relative to the crowns of adjacent trees.

Dominant trees with crowns extending above the general level of the main canopy of even-aged stands or, in uneven-aged stands, above the crowns of the tree's immediate neighbors, and receiving full light from above and partly from the sides.

Co-dominant trees with crowns forming the general level of the main canopy in even-aged stands or, in uneven-aged stands, the main canopy of the tree's immediate neighbors, receiving full light from above and comparatively little from the sides.

Even-aged

A stand of trees composed of a single age class in which the range of tree ages is usually +/- 20 percent of rotation.

Fuel Models descriptions are taken from Aids to Determining Fuel Models for Estimation Fire Behavior. Anderson (1982).

> **Fire Behavior Fuel Model 2 -** Fire spread is primarily through the fine herbaceous fuels, either curing or dead. These are surface fires where the herbaceous material, in addition to litter and dead down stem wood from the open shrub or timber overstory, contributes to the fire intensity. Open shrub lands and pine stands or scrub oak stands that cover one-third to two-thirds of the area may generally fit this model; such stands may include clumps of fuels that generate higher intensities and that may produce firebrands. Some pinyon-juniper may be in this model.

Fire Behavior Fuel Model 6 - Fires carry through the shrub layer where the foliage is more flammable than Fuel Model 5, but this requires moderate winds, greater than 8 mi/h (13 km/h) at mid- flame height. Fire will drop to the ground at low wind speeds or at openings in the stand. The shrubs are older, but not as tall as shrub types of Fuel Model 4, nor do they contain as much Fuel as Model 4. A broad range of shrub conditions is covered by this model. Fuel situations to be considered include intermediate stands of chaparral, and oak brush. Even a hardwood slash that has cured can be considered. Pinyon-juniper shrublands may be represented but may over predict the rate of spread except at high winds, like 20 mi/h (32 km/h) at the 20-foot level.

Fire Behavior Fuel Model 10: The fires burn in the surface and ground fuels with greater fire intensity than the other timber litter models. Dead-down fuels include greater quantities of 3-inch or larger Limbwood resulting from over maturity or natural events that create a large load of dead material on the forest floor. Crowning out, spotting, and torching of individual trees are more frequent in this fuel situation, leading to potential fire control difficulties. Any forest type may be considered if heavy down material is present; examples are insect- or disease-ridden stands, windthrown stands, overmature situations with deadfall, and aged light thinning or partial-cut slash.

Harvesting Method

A cutting method with which a stand is logged. Emphasis is on meeting logging requirements while concurrently attaining silvicultural objectives.

Natural Regeneration

An age class created from natural seeding, sprouting, suckering, or layering.

Salvage Cutting

The removal of dead trees or trees being damaged or dying due to injurious agents, other than competition, to recover value that would otherwise be lost.

Silviculture

The art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands to meet the diverse needs and values of landowners and society on a sustainable basis.

Stand Density

A quantitative, absolute measure of tree occupancy per unit of land area in such terms as numbers of tree, basal area, or volume.

Successional Stage

Climax: the culminating stage of plant succession for a given environment; the vegetation conceived as having reached a highly stable condition.

Seral: a temporal and intermediate stage in the process of succession.

Thin from below

The removal of trees from the lower crown classes to favor those in the upper crown classes.

TPA

Trees per acre

Uneven-aged

A stand with trees of three or more distinct age classes, either intimately mixed or in small groups.

Utah Code Title for Archeological, Cultural and Historic Sites

Utah Code Section 9-8-302, Definitions, states:

> *(2) "Archaeological resources" means all material remains and their associations, recoverable or discoverable through excavation or survey, that provide information pertaining to the historic or prehistoric peoples of the state.*
> *(6) "Excavate" means the recovery of archaeological resources.*
> *(12) "Site" means any petroglyphs, pictographs, structural remains, location of archaeological deposits, or other location, which is the source of specimens.*
> *(13) "Specimen" means all man-made artifacts and remains of an archaeological or anthropological nature found on or below the surface of the earth, excluding structural remains.*

Utah Code Section 9-8-307, Report of discovery on state or private lands, states:

> *(2) Any person who discovers any archaeological resources on privately owned lands shall promptly report the discovery to the division [of State History].*
> *(4) Nothing in this section may be construed to authorize any person to survey or excavate for archaeological resources.*

APPENDIX B:

Soil Descriptions

APPENDIX C:

Utah Division of Wildlife Resources
Utah Natural Heritage Program
1594 W. North Temple
PO Box 146301
Salt Lake City, UT 84116

Report Number: 15136
January 29, 2024

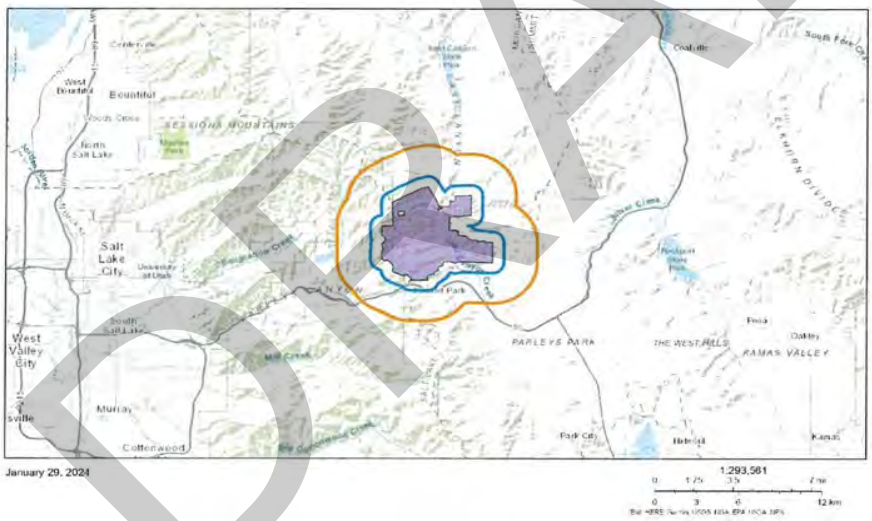
Utah Natural Heritage Program Online Species Search Report

Project Information

Project Name
910 Ranch

Project Description
Development of a FSP

Location Description
East Canyon Creek



Animals within a ½ mile radius

Common Name	Scientific Name	State Status	U.S. ESA Status	Last Observation Year
Bear Lake Springsnail	Pyrgulopsis pilsbryana	SGCN		1990
Bonneville Cutthroat Trout	Oncorhynchus clarkii utah	SGCN		1981
Greater Sage-grouse	Centrocercus urophasianus	SGCN		2008
Green River Pebblesnail	Fluminicola coloradoensis	SGCN		2019
Lewis's Woodpecker	Melanerpes lewis	SGCN		1913
Mountain Marshsnail	Stagnicola montanensis	SGCN		1929
Northern Leopard Frog	Lithobates pipiens	SGCN		1997
Western Pearlshell	Margaritifera falcata	SGCN		1929

Plants within a ½ mile radius

Common Name	Scientific Name	State Status	U.S. ESA Status	Last Observation Year
No Species Found				

Animals within a 2 mile radius

Common Name	Scientific Name	State Status	U.S. ESA Status	Last Observation Year
Bear Lake Springsnail	Pyrgulopsis pilsbryana	SGCN		1990
Bonneville Cutthroat Trout	Oncorhynchus clarkii utah	SGCN		2018
Greater Sage-grouse	Centrocercus urophasianus	SGCN		2008
Green River Pebblesnail	Fluminicola coloradoensis	SGCN		2019
Lewis's Woodpecker	Melanerpes lewis	SGCN		1913
Mountain Marshsnail	Stagnicola montanensis	SGCN		1929
Northern Leopard Frog	Lithobates pipiens	SGCN		1997
Western Pearlshell	Margaritifera falcata	SGCN		1929
Western bumble bee	Bombus occidentalis	SGCN		2022

Plants within a 2 mile radius

Common Name	Scientific Name	State Status	U.S. ESA Status	Last Observation Year
No Species Found				

Definitions

State Status

SGCN	Species of greatest conservation need listed in the Utah Wildlife Action Plan

U.S. Endangered Species Act

LE	A taxon that is listed by the U.S. Fish and Wildlife Service as "endangered" with the probability of worldwide extinction
LT	A taxon that is listed by the U.S. Fish and Wildlife Service as "threatened" with becoming endangered
LE;XN	An "endangered" taxon that is considered by the U.S. Fish and Wildlife Service to be "experimental and nonessential" in its designated use areas in Utah
C	A taxon for which the U.S. Fish and Wildlife Service has on file sufficient information on biological vulnerability and threats to justify it being a "candidate" for listing as endangered or threatened
PT/PE	A taxon "proposed" to be listed as "endangered" or "threatened" by the U.S. Fish and Wildlife Service

Disclaimer

The information provided in this report is based on data existing in the Utah Division of Wildlife Resources' central database at the time of the request. It should not be regarded as a final statement on the occurrence of any species on or near the designated site, nor should it be considered a substitute for on-the-ground biological surveys. Moreover, because the Utah Division of Wildlife Resources' central database is continually updated, any given response is only appropriate for its respective request.

The UDWR provides no warranty, nor accepts any liability, occurring from any incorrect, incomplete, or misleading data, or from any incorrect, incomplete, or misleading use of these data.

The results are a query of species tracked by the Utah Natural Heritage Program, which includes all species listed under the U.S. Endangered Species Act and species on the Utah Wildlife Action Plan. Other significant wildlife values might also be present on the designated site. Please contact UDWR's regional habitat manager if you have any questions.

For additional information about species listed under the Endangered Species Act and their Critical Habitats that may be affected by activities in this area or for information about Section 7 consultation under the Endangered Species Act, please visit https://ecos.fws.gov/ipac/ or contact the U.S. Fish and Wildlife Service Utah Ecological Services Field Office at (801) 975-3330 or utahfieldoffice_esa@fws.gov.

Please contact our office at (801) 538-4759 or habitat@utah.gov if you require further assistance.

Your project is located in the following UDWR region(s): Central region , Northern region

Report generated for:
Pj Abraham
Forestry, Fire & State Lands
2210 S Hwy. 40
Heber City, UT 84032
(435) 671-9088
pjabraham@utah.gov

APPENDIX D:

Forest Water Quality Guidelines

EXHIBIT F

DESIGNATED IMPROVEMENT AREA (DIA) DESCRIPTION OF USE AND MAPS

DESIGNATED IMPROVEMENT AREA #1

Approved Use: Mormon Flat Campground

Designated Improvement Area Acreage: 1.00 ac
Building Envelope: 1 Building Envelope, 1.00 ac total

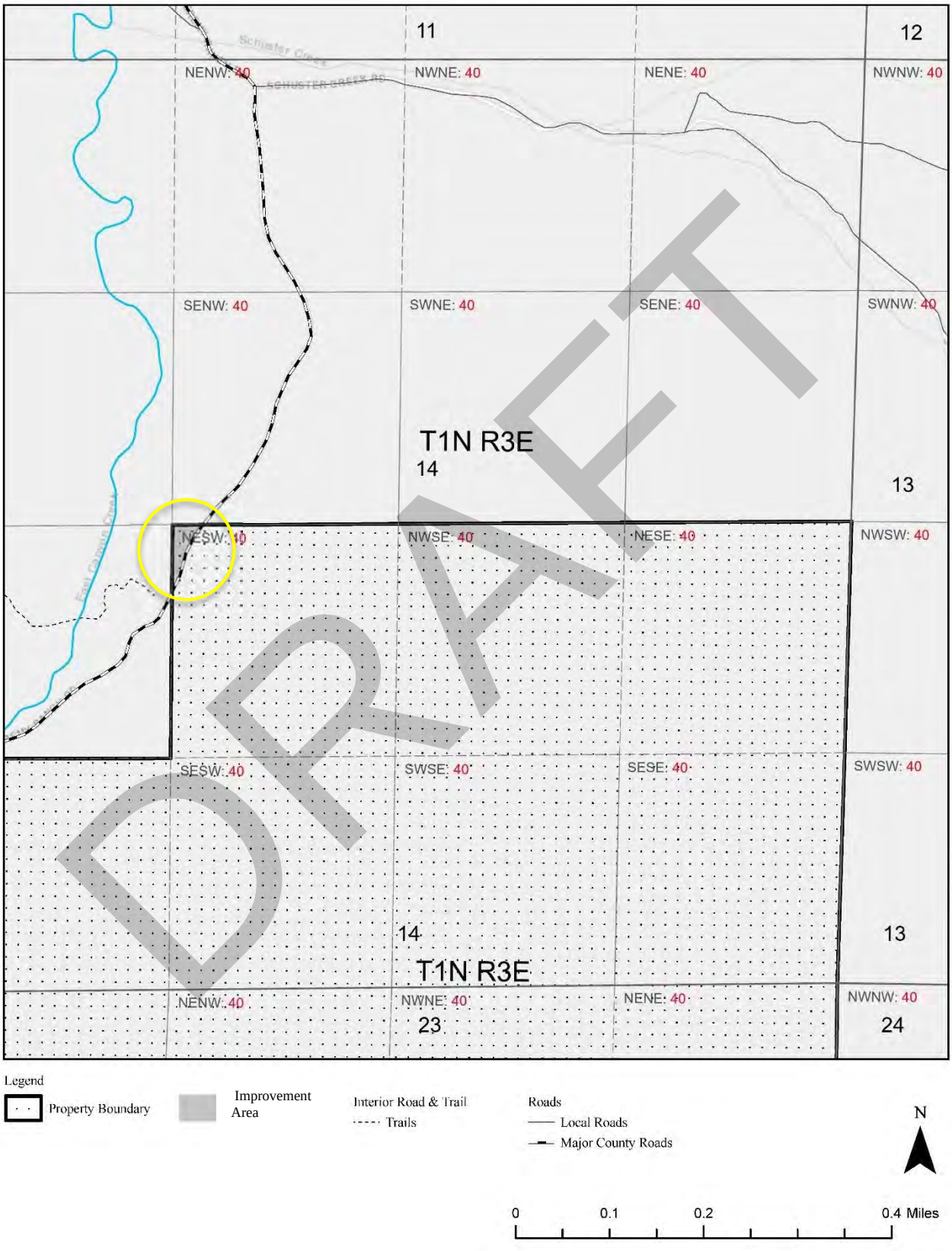
Legal Description: Part of NESW4SW4, T1N, R3E, Sec. 14, SLB&M, less any portion lying east the established Morgan County dirt road (A.K.A. Jeremy Ranch Road or N. East Canyon Road). Specifically, the portion of land that is west of the established Morgan County dirt road.

FOR INFORMATIONAL PURPOSES:
Part of Morgan County Tax Parcel No.00-0000-0362

Purpose: Grantor may design, construct, install, maintain, and expand the parking, camping, staging, and/or maintenance area(s) in coordination, or allow for such use under the control of an Interlocal Agreement (ILA) with Utah State Parks, to support the use of the Utah State Parks-Morman Flat Campground. Uses are restricted to the public's use as a trailhead, parking, camping, mutually approved events, staging, and/or maintenance and other needs that will support such uses and needs foreseen by the Utah State Parks.

[DEDICATED IMPROVEMENT AREA MAP TO FOLLOW ON NEXT PAGE]

MAP: DESIGNATED IMPROVEMENT AREA #1



DESIGNATED IMPROVEMENT AREA #2

Approved Use: Front-Country Picnic Area and Nature Amphitheater
Type: New construction

Designated Improvement Area: 52 acres
Building Envelopes: 2 Building Envelopes, 6.0 acres total to include: (1) 4.5 acres for Picnic Area, and (2) 1.5 acres for a Nature Amphitheater.

Legal Description: W2SWSE4SE4 and Part of E2SESW4SW4 less any portion lying West of the established Summit County dirt road (A.K.A. Jeremy Ranch Road or N. East Canyon Road), T1N, R3E, Sec. 22, SLB&M, and E2NWNE4NE4 less any portion lying West of the established Summit County dirt road (A.K.A. Jeremy Ranch Road or N. East Canyon Road) and part of L1, less any portion lying West of the established Summit County dirt road (A.K.A. Jeremy Ranch Road or N. East Canyon Road), T1N, R3E, Sec. 27, SLB&M. FOR INFORMATIONAL PURPOSES:
Part of Summit County Tax Parcel No. SS-BDY-6 and Part of Summit County Tax Parcel No. SS-BDY-13

Purpose: Designated Improvement Area is reserved for the right to design, construction, use, improve, and maintain a picnic area, nature amphitheater, restrooms, or similar recreational use.

Picnic Area (4.5 Acres): A day use picnic area may be designed, constructed, and maintained for public use. Limited access roads and parking may also be constructed, or at the sole discretion of the Grantor, the site may also be walk-in only. Reservations and/or fees may be implemented for this area. Picnic areas are authorized to be closed seasonally with limited operating hours.

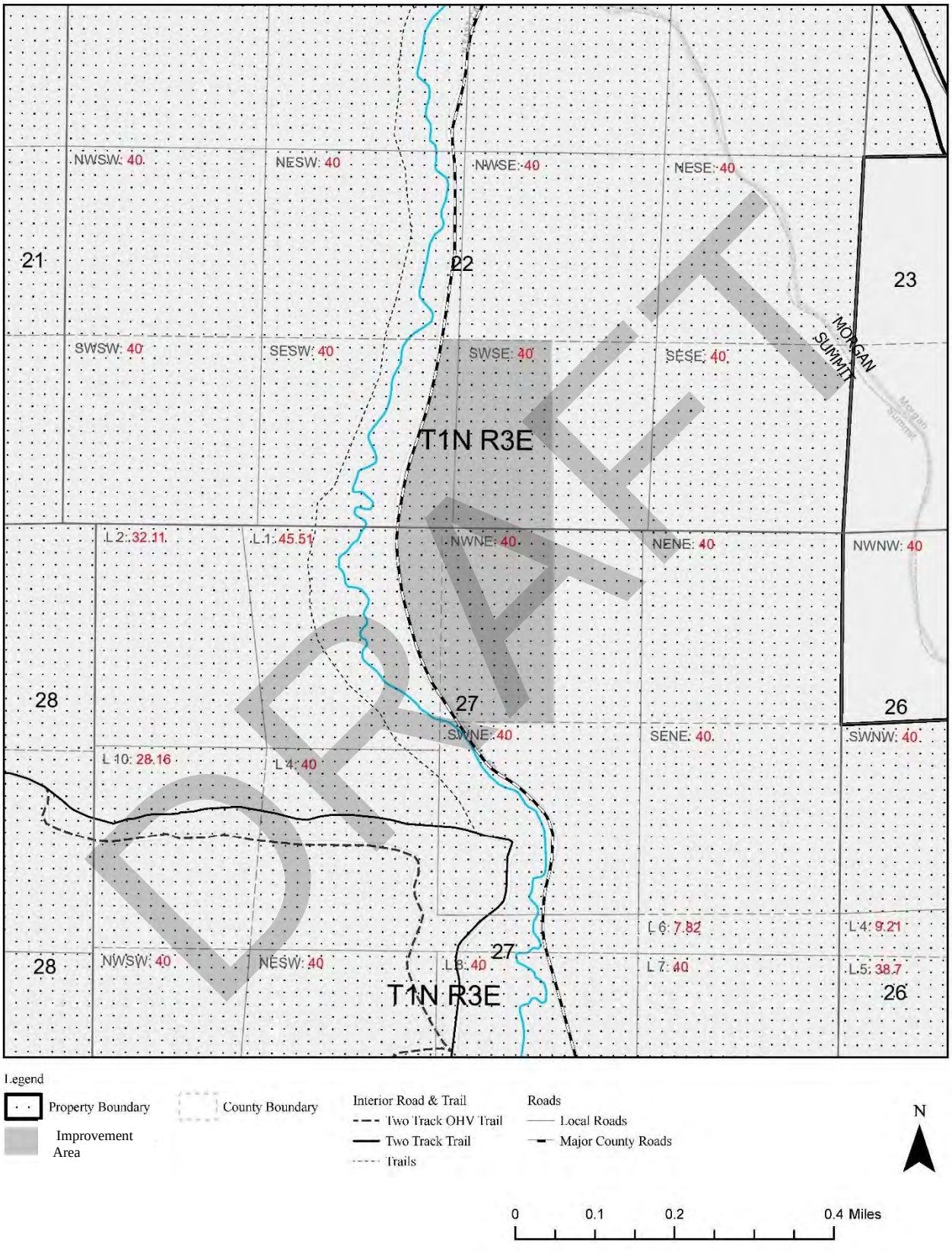
Nature Amphitheater (1.5 Acres): A nature-based amphitheater may be designed, constructed, improved, and maintained for small group, public use and/or private use. Use of the amphitheater is intended for interpretive, educational, events, and small personal gatherings. Seating capacity should not exceed one hundred (100) individuals. The amphitheater shall be designed and constructed to blend into the surrounding environment using earth tones and natural materials whenever possible. A small stage can be incorporated and may be covered but shall remain un-enclosed. The seating area shall not be permanently enclosed or covered but may be temporarily covered as defined below. The intent of this structure is open- air and natural. Reservations and/or use fees may be implemented for this area. Nature Amphitheater is authorized to be closed seasonally with limited operating hours.

Permitted Uses of Nature Amphitheater: Nature-based slideshows, small personal gatherings or celebrations, local education events, scouting/outdoor education events, outdoor classroom events, small acoustic music performances, educational research presentations, similar events or gatherings, and other uses as mutually agreed upon by the Grantor and Grantee. The use of temporary shade sails or tents and the use of temporary string lights or otherwise is permitted.

Restrooms: When a sewer system is unavailable for connection, restroom facilities are permitted to be installed as vaulted pit toilets or septic systems in compliance with all Federal, State, and County codes.

[DESIGNATED IMPROVEMENT AREA MAP TO FOLLOW ON NEXT PAGE]

MAP: DESIGNATED IMPROVEMENT AREA #2



DESIGNATED IMPROVEMENT AREA #3

Approved Use: Compound, Base Operations, Visitor Center, and alternative site for Research Station
Type: Use and repurpose of existing structure and existing impacted areas and/or new construction

Designated Improvement Area: 10 acres
Building Envelope: 1 Building Envelope, 5.0 acres total

Legal Description: Part of Lot 8 T1N, R3E, Sec. 34, SLB&M. and for reference part of Summit County Parcel No. SS-131 (see map for approximate XY coordinates DMS)

Purpose: Designated Improvement Area is reserved for enhancement, expansion, use, and maintenance of the existing residential home site, "ranch-hand" home sites, sheds/accessory buildings, a barn, horse and cattle corrals, water pumphouse, storage area, historic stone cabin, red roof cabin, and the installation and enhancement of a trailhead/parking area with supporting restroom and other amenities to support Permitted Uses herein. The area may be used for, but not limited to, seasonal housing, a nature center, for storing equipment, and/or as a parking area or trailhead. The area may also be an alternative location for the Education and Research Station, described in Designated Improvement Area #6. The Research Station, as new construction, shall not exceed a Footprint of 35,000 square feet (this is in addition to the existing structures listed in the table below) for a total estimated Footprint of 55,000 square feet within DIA #3.

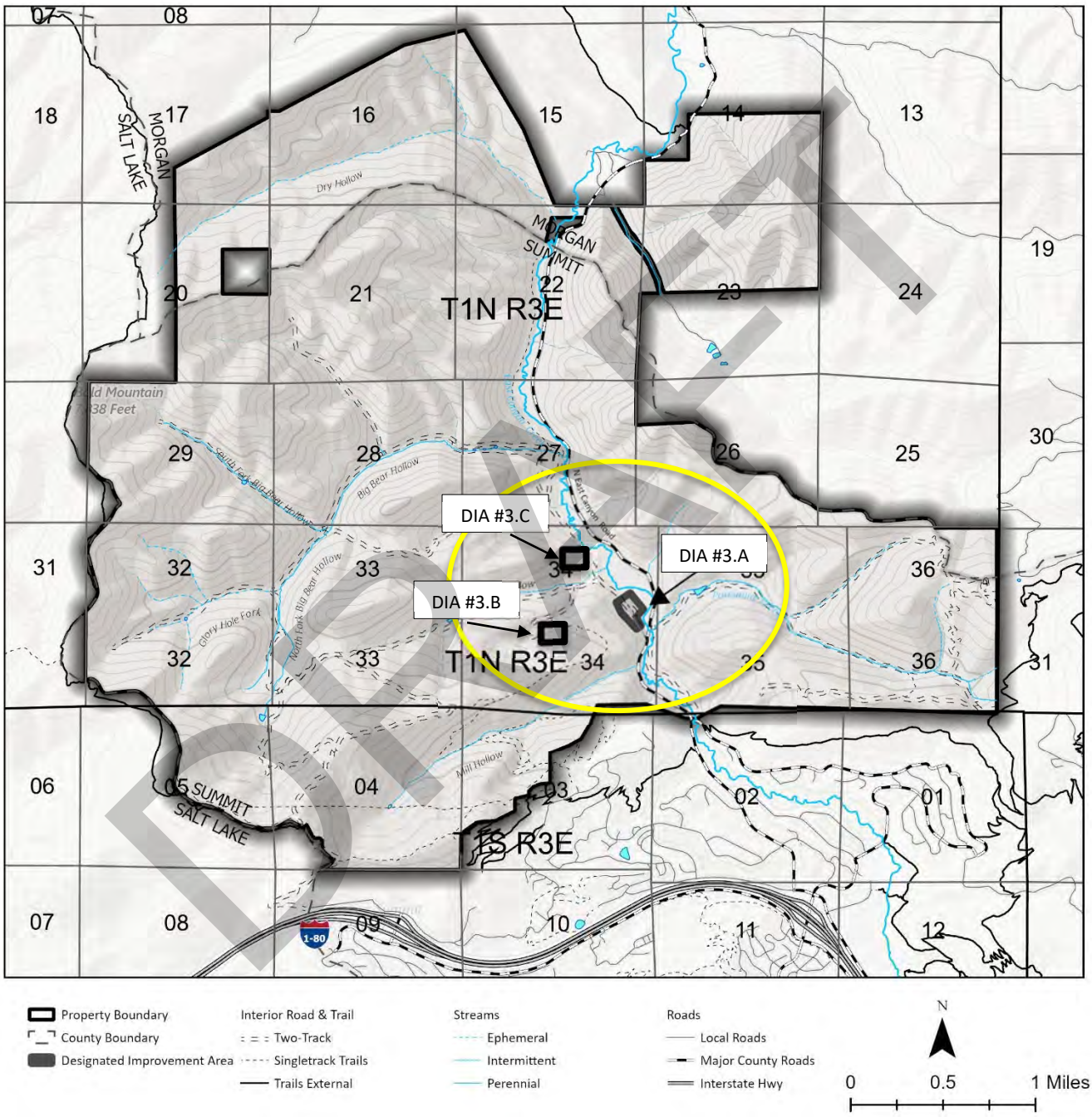
Existing Structure Inventory within SS-131 (see Baseline for full detail)

DIA #	Site Name	Footprint (Square Feet)	Structure Height (Feet)	Feet of Fence
3.A	Residential home site	4,300	19	530
	Ranch-hand home site #1	700	15	0
	Ranch-hand home site #2	700	15	0
	Sheds/out buildings #1	350	12	0
	Sheds/out buildings #2	350	12	0
	Sheds/out buildings #3	400	12	0
	Barn	2,500	19	0
	Water pump house	200	9	370
3.B	Historic Cabin	600	15	300
3.C	Red Roof Cabin and shed	1,360 & 80	25 & 12	0
	Totals	**11,540**		**1,200**

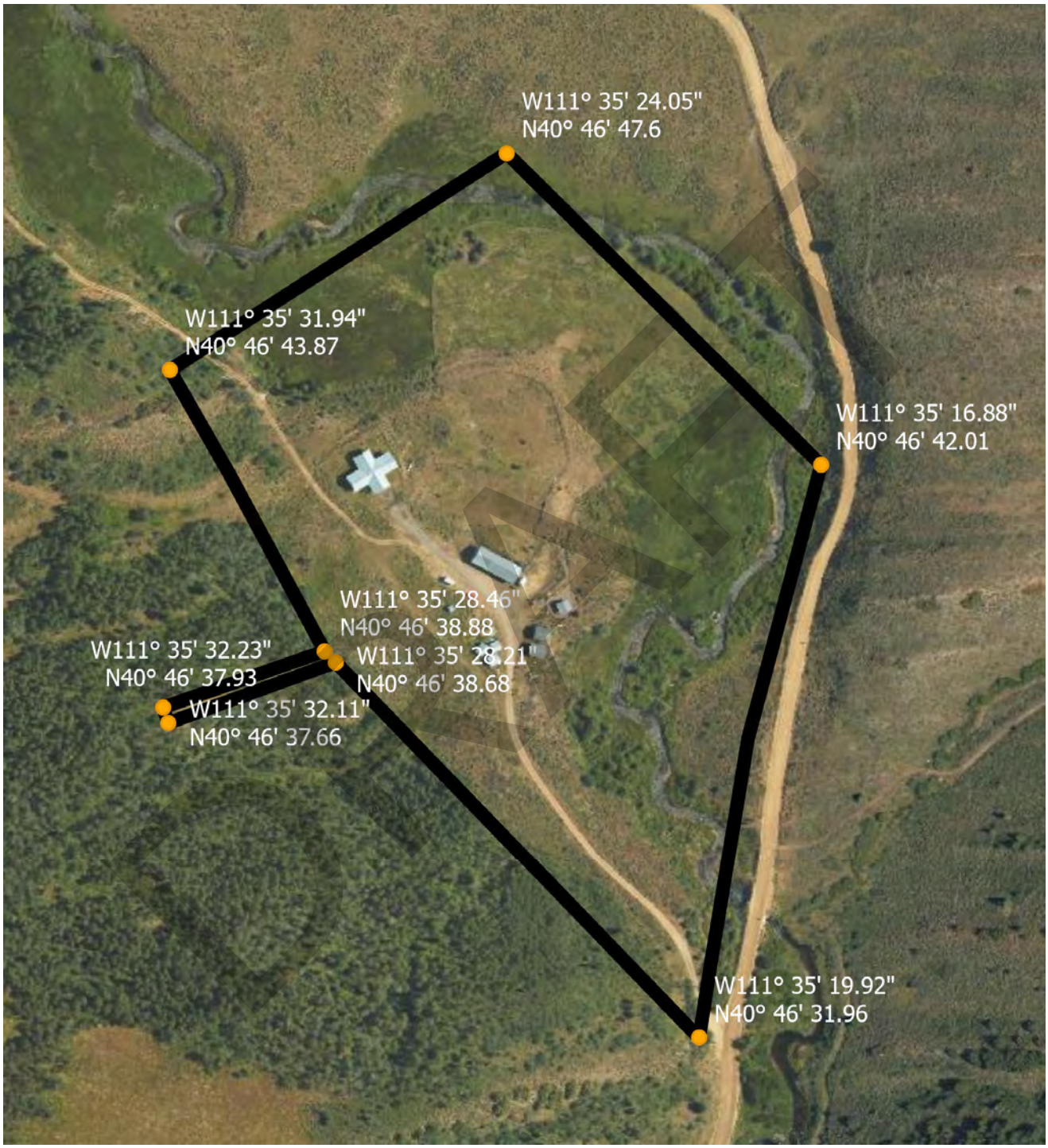
[DESIGNATED IMPROVEMENT AREA MAPS FOLLOW ON NEXT PAGE]

MAP: DESIGNATED IMPROVEMENT AREA #3

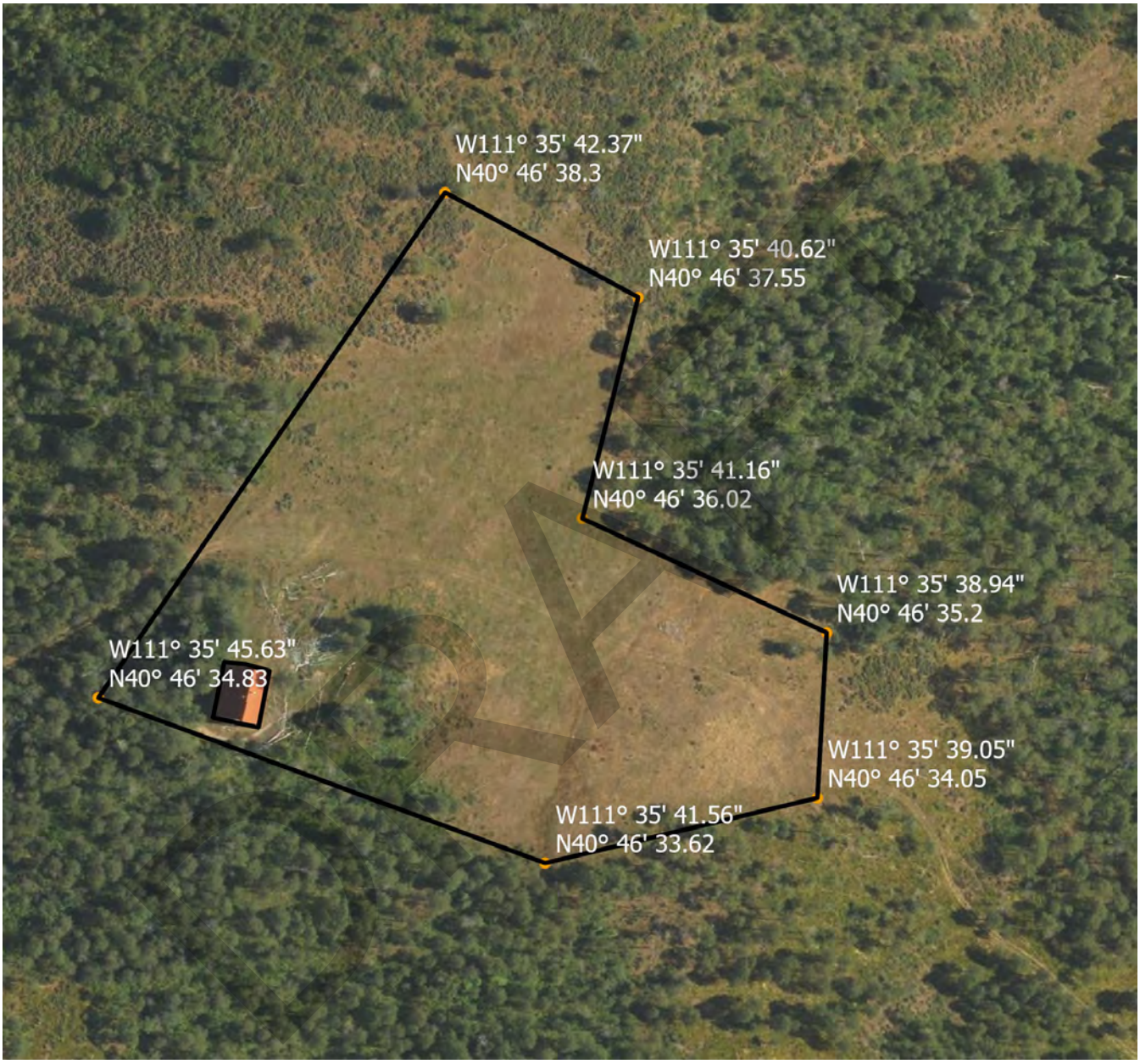
Overview Map DIA #3



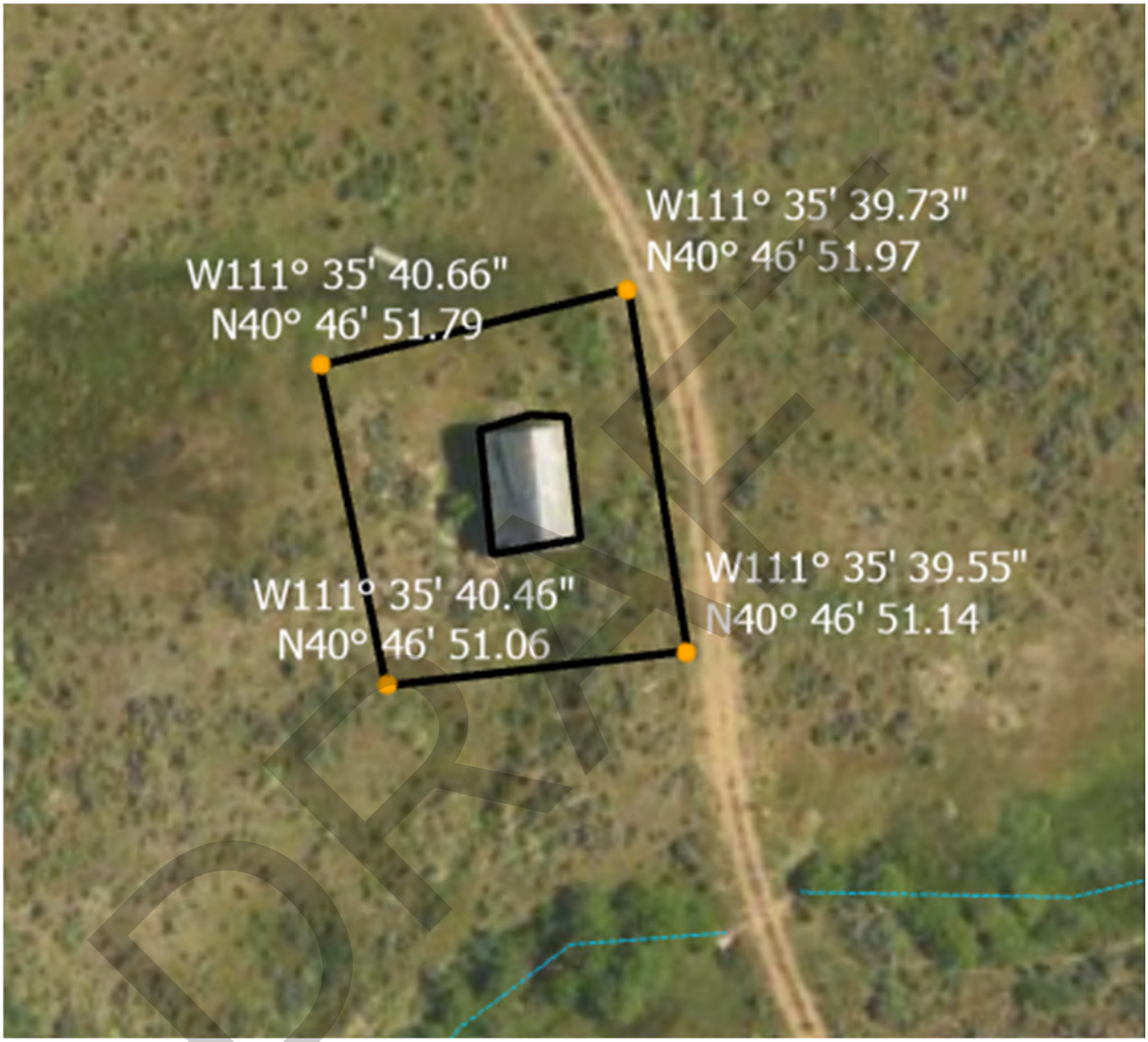
Approximate GPS Location – DIA #3.A



Approximate GPS Location – DIA #3.B



Approximate GPS Location – DIA #3.C



DESIGNATED IMPROVEMENT AREA #4

Approved Use: Trailhead and Parking Areas
Type: New construction and improvements to existing impacted areas

Designated Improvement Area: 235 acres
Building Envelopes: 12 Building Envelopes, 13 acres in total, as estimated in the table below.

Legal Description: 200-ft either side along the County Class B Road, otherwise known as N. East Canyon Creek or Jeremy Ranch Road. Building envelopes within DIA #4 shall not be located within 100-feet of any riparian area, stream corridor, or sensitive hydrologic habitat Estimated Building Envelopes to be located as follows:

Number	Type	Estimated Acres	Estimate # Vehicles	Status
4a	Minor Trailhead	0.5	10	Existing
4b	Minor Trailhead	0.5	10	Existing
4c	Off-street parking	0.2	5	Existing
4d	Off-street parking	0.2	5	Existing
4e	Major Trailhead	3.5	30-80	New
4f	Off-street parking	0.2	5	Existing
4g	Minor Trailhead	2.0	10-30	Existing
4h	Minor Trailhead	2.0	10-30	New
4i	Off-street parking	0.2	5	Existing
4j	Minor Trailhead	0.5	10	Existing
4k	Off-street parking	0.2	5	Existing
4l	Minor Trailhead	2.0	10-30	New
4m	Off-street parking	0.5	5	Existing
4n	Minor Trailhead and public regional water pumphouse	0.5	10	Existing
	Total	13.0	130-240	

Purpose: Building Envelopes are reserved for the right to design, construction, improve, use, and maintain public recreational major and minor trailheads, and off-street parking areas.

Major Trailhead: Major trailhead(s) may be designed, constructed, improved, and maintained. Restroom(s) and a limited number of picnic tables/benches are also permitted. If desired, a nature trail may connect the picnic areas to the trailhead. Major trailheads are intended to be the largest of the parking areas. While thirty (30) to eighty (80) vehicles are estimated, Grantor may adjust the number of spaces to accommodate appropriate parking capacity needs.

Minor Trailhead: Additional minor trailhead(s) accommodating an estimate of ten (10) to thirty (30) vehicles, a limited number of picnic tables/benches are also permitted. Grantor may adjust the number of spaces to accommodate appropriate parking capacity needs.

Off-street Parking: Off-street parking, or turn-outs, with an estimate maximum of ten (10) vehicles spaces, each may be located along the County Class B Road, otherwise known as N. East Canyon Creek or Jeremy Ranch Road, in locations as advised by County engineering staff or other authorized representatives. Limited picnic tables/ benches are permitted at each off-street parking location. Grantor may adjust the number of spaces to accommodate appropriate parking capacity needs.

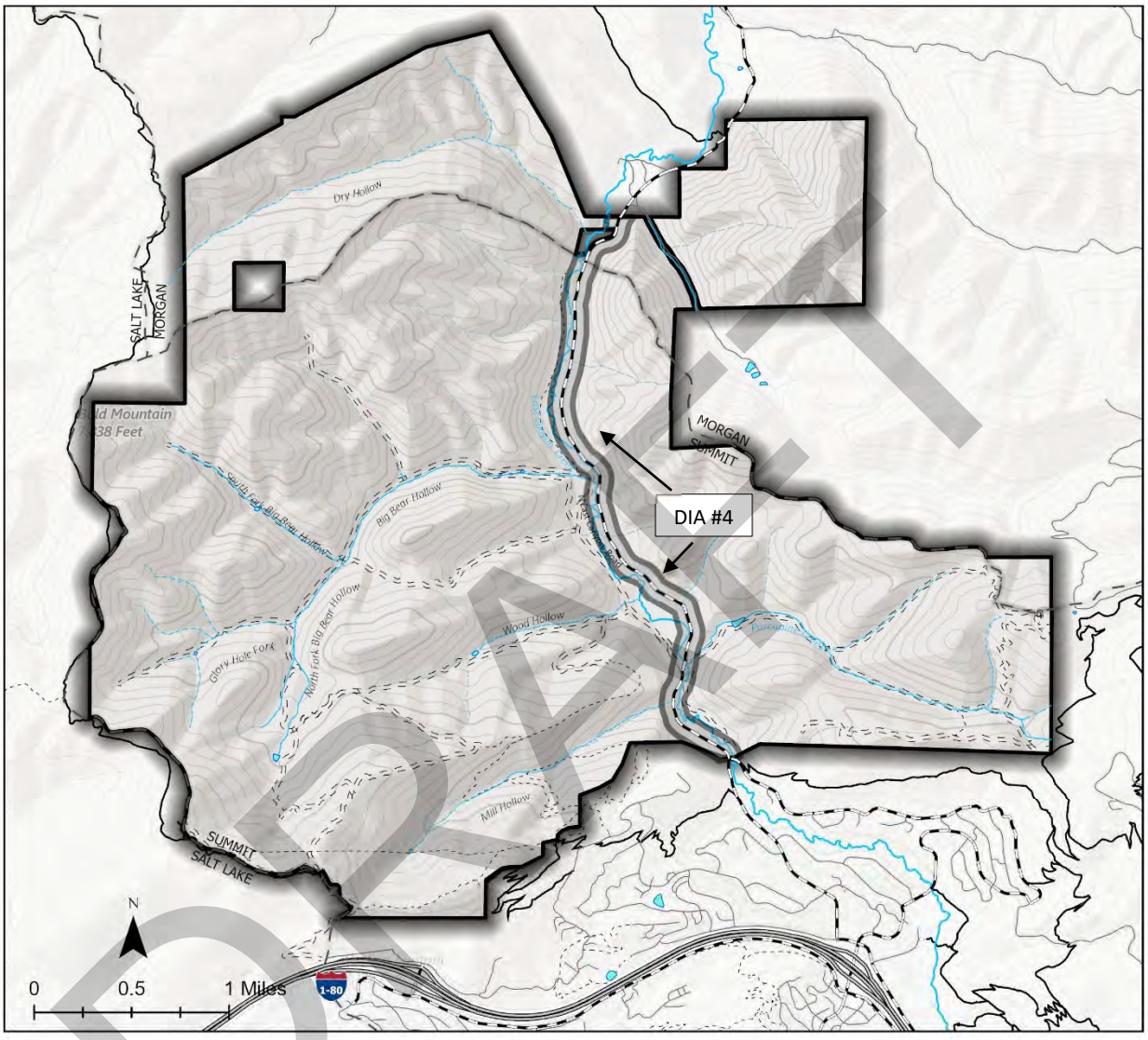
A pumphouse station is permitted to be constructed, maintained, repaired, and leased for the sole purpose of directly supporting the Weber Basin Water Conservancy District, or its authorized representatives, public water supply to Summit County. The structure must be constructed in such a manner that is consistent with the natural feel of the Property, the terms of this Easement, and the Conservation Purpose. The design of the structure is subject to Grantor and Grantee approval.

Also permitted within DIA #4 is the design, construction, use, and maintenance of up to four (4) bridges crossing East Canyon Creek to accommodate maintenance and trail access and minimize recreation impacts to sensitive riparian areas. Additional bridges may be authorized by mutual agreement of the Grantee and Grantor.

A user fee may be charged for trailhead, parking, and use of picnic facilities. Trailhead(s), parking, and picnic areas are authorized to be closed seasonally with limited operating hours.

[DESIGNATED IMPROVEMENT AREA MAP FOLLOW ON NEXT PAGE]

MAP: DESIGNATED IMPROVEMENT AREA #4



DESIGNATED IMPROVEMENT AREA #5

Approved Use: Backcountry Camping/ Yurt / Hut-to-Hut System
Type: New construction, installation, or repurposed of existing cabin or other buildings

Dedicated Improvement Area: 8,587.70 acres
Building Envelopes: 8 Building Envelopes, taken together, not to exceed a total of 5.0 acres

Legal Description: Property Boundary, See Exhibit A

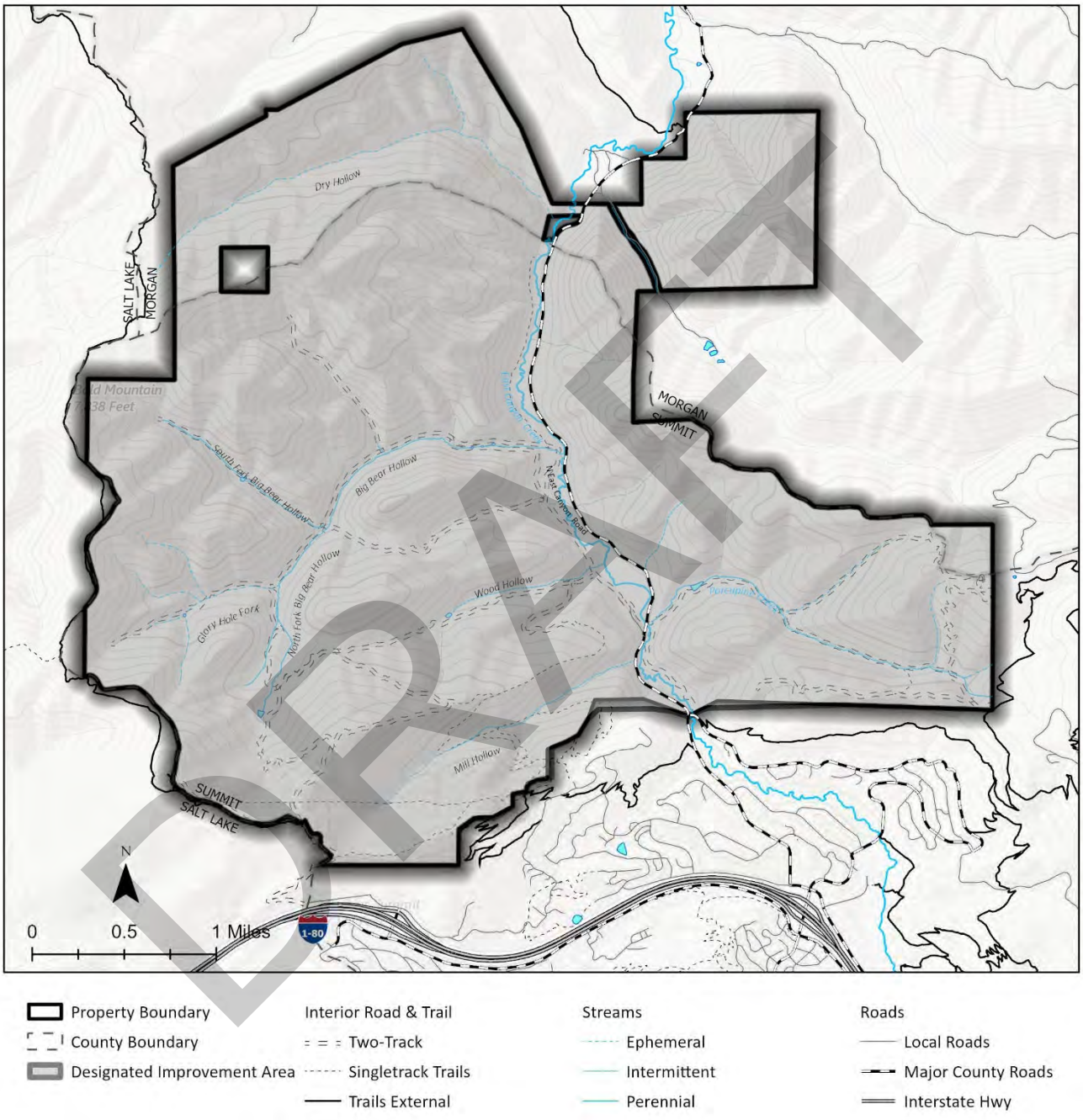
Purpose: Designated Improvement Area #5 is reserved for the right to design, construct, use, and maintain a public year-round recreational backcountry camping, yurt and/or hut-to-hut system. Up to four (4) yurts/huts, and up to four (4) designated backcountry campsites, may be placed in the Designated Improvement Area. A fee may be charged for the use of this facility.

Yurts/Huts (4 Acres): Up to four (4) Yurt(s)/Hut(s) may be designated, constructed, used, and maintained. Yurts are portable structures made of canvas, approximately thirty (30) feet in diameter (or approximately 750 square feet, each). Yurts are permitted for year-round or seasonal use and reside on a frame or wood platform that is affixed to the ground. Huts are permanent structures, similar to a one room cabin, approximatly1,000 square feet each. Each Yurt or Hut may occupy up to a one (1) acre Building Envelope. Supporting structures such as backcountry restroom(s) (either vaulted pit toilet or compost toilet, or other), a small storage shed may also be located near the Yurts/Huts. When possible, Yurts/Huts should be located near existing Roads or Trails, but in the case where they cannot be, additional limited access Road(s) may also be constructed for the sole purpose to support the yurts/huts with Grantee approval.

Backcountry Camping (1 Acre Total; ¼ Acre Each): Up to four (4) Backcountry Camping areas may be designated, constructed, used, and maintained. Sites are to be connected by trail. No roads will be constructed to support these sites. Impact is minimal and each Backcountry Camping area should occupy no more than one-quarter (1/4) acre Building Envelope.

[DESIGNATED IMPROVEMENT AREA MAP FOLLOW ON NEXT PAGE]

MAP: DESIGNATED IMPROVEMENT AREA #5



DESIGNATED IMPROVEMENT AREA #6

Approved Use: Education and Research Station, or alternative Yurt/Hut site
Type: New construction to be located on an existing impacted area

Designated Improvement Area: 3.5 acres
Building Envelope: 1 Building Envelope, 2.0 acres total

Legal Description: A portion of Lot 3 of T1N, R3E, Sec. 29, for reference part of Summit County Parcel No. SS-BDY-14 (see map for approximate XY coordinates DMS).

Purpose: Designated Improvement Area is reserved for the right to design, construct, use, and maintain an educational facility to support research, outdoor education, and outreach related to natural resource, environmental, outdoor education, and related fields of work. The Education and Research Station can be used for, but not limited to, research lab, resident hall, seasonal workforce housing, day use or extended stay youth and adult camps, outreach or event center, and related studies. At the Grantor's sole discretion, the Research Station may be leased or rented, for purposes that support the Conservation Purpose related to research, public access, education, and/or County supported conservation or outdoor education needs.

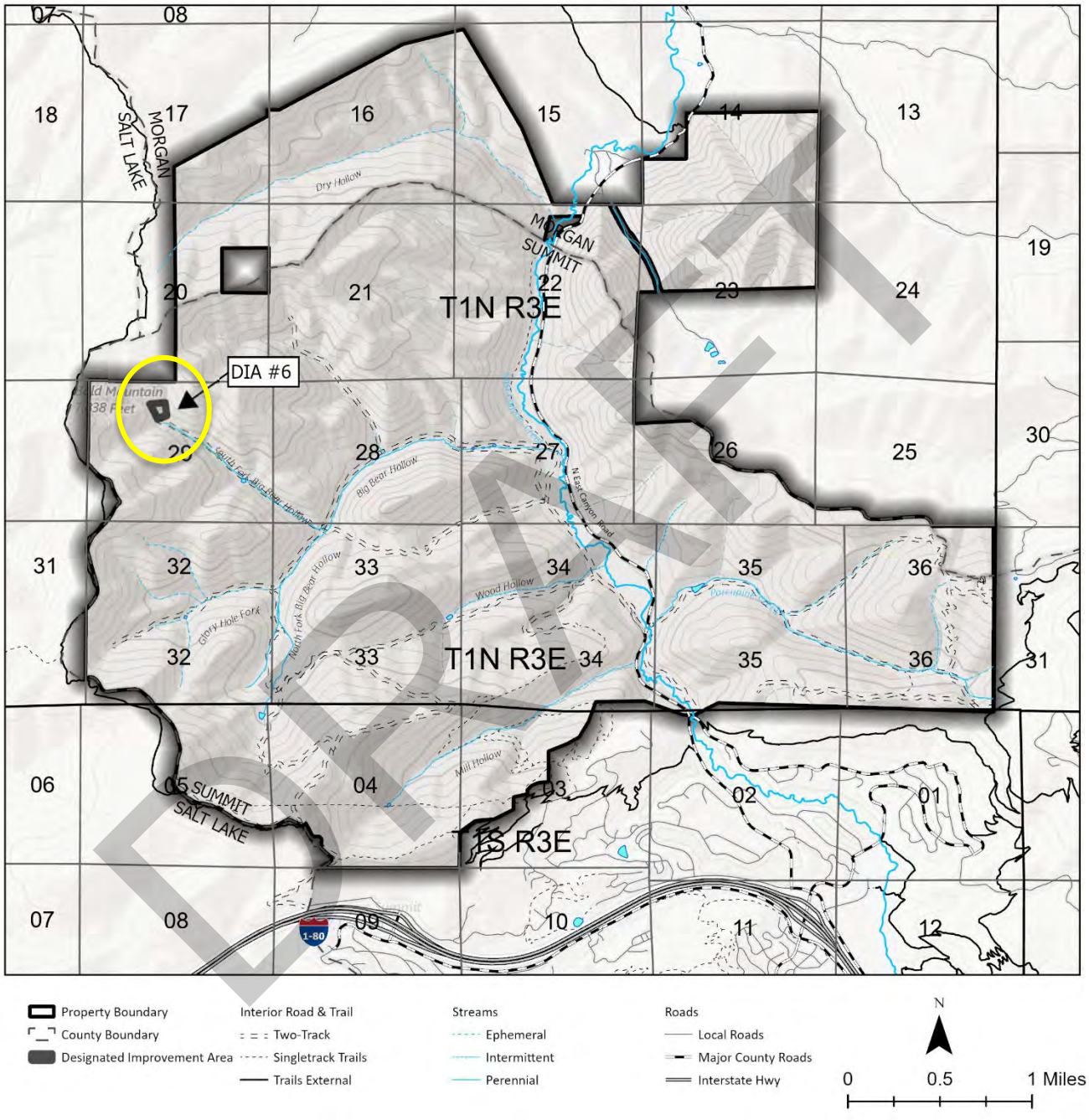
Location and Size: The Education and Research Station shall be located in the existing disturbed area, remnants of a past unsuccessful mineral exploration pad and shall not exceed a Footprint of 35,000 square feet.

Access: Limited and controlled motorized access is permitted. Maintenance of the existing Two-Track Road up Bear Hollow to the site, commonly referred to as the North Fork of Big Bear Hollow, shall be permitted, to include any need to widen the Road to comply with Federal, State and County codes, but in no circumstance shall the Road be Hard Surfaced, unless required by County Code or to support the protection of the Conservation Purpose. Currently the North Fork of Big Bear Hollow Road, which runs the length for Big Bear Hollow from this site location to N. East Canyon Road (approximately 2.5 miles), is a Soft Surfaced improved and Maintained Road with an average Tread width of 12-feet and Corridor width of 16 to 18-ft.

Note: *DIA #6 is the preferred site for the Education and Research Station. If circumstances affect (such as, but not limited to, compliance issues with Summit County Development Code, availability to an appropriate and reliable water source, prohibitive costs) the County's ability to utilize this site, the County may utilize DIA #3 as an alternative site. In no event shall both site #6 and site #3 be used for the approved use as an Education and Research Station, only one (1) site shall be approved by the Grantee. If the Education and Research Station is built within DIA #6 the limited building right for associated with DIA #3 will be extinguished.*

MAP: DESIGNATED IMPROVEMENT AREA #6

Overview Map – DIA #6



Approximate GPS Location – DIA #6

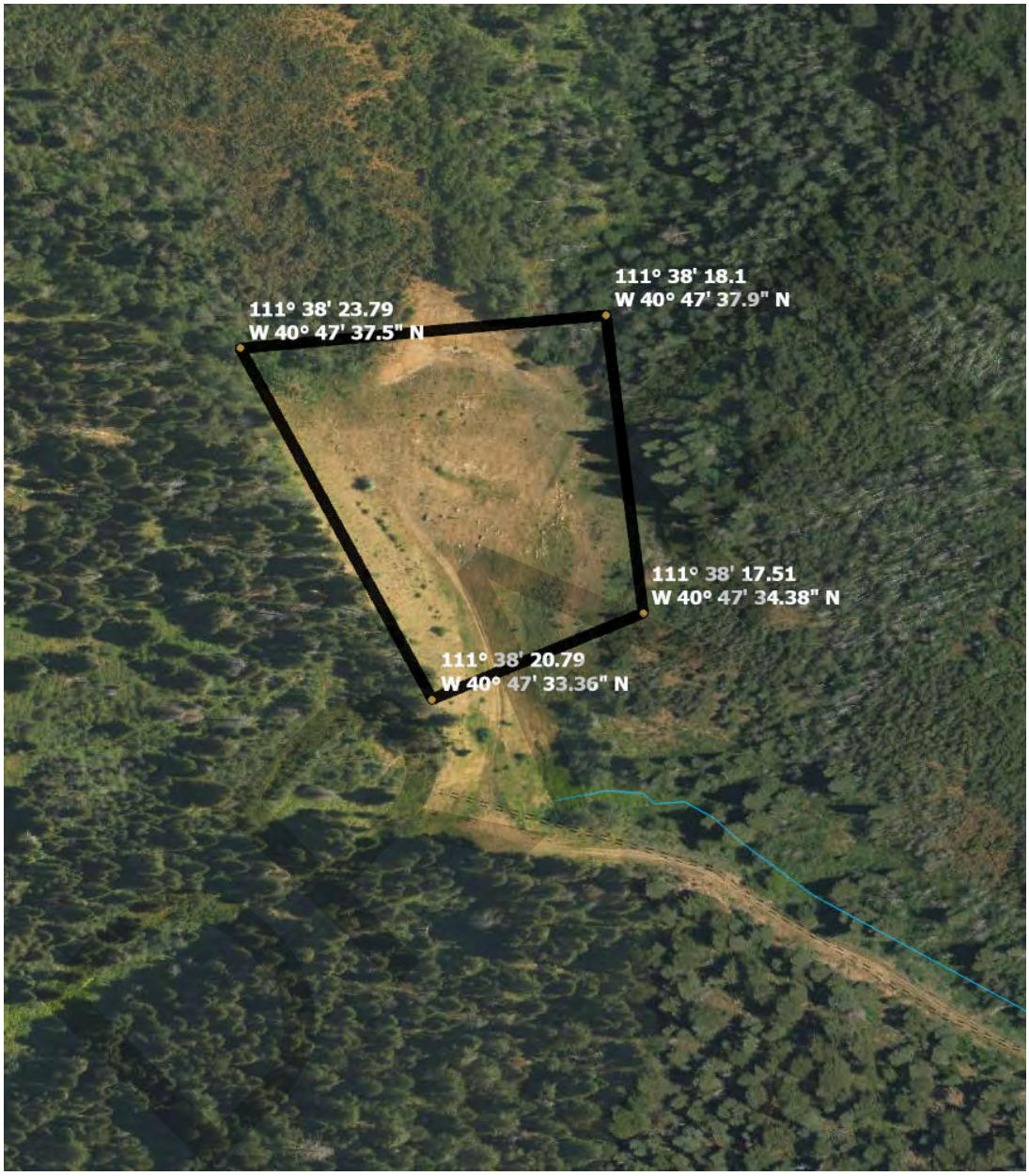


EXHIBIT G
DEFINITIONS

For the purposes of this Easement the following terms are defined.

a) General Terms:

i. **Baseline Documentation Report:** means the report reflective of the signature acknowledgment attached as Exhibit D. Full report is on file with the Grantor and Grantee.
ii. **Conservation Purpose:** has the meaning defined in Article I(a) of the Conservation Easement.
iii. **Conservation Values:** has the meaning defined in Article I(b) of the Conservation Easement.
iv. **Easement:** has the meaning defined in the introductory paragraph of the Conservation Easement.
v. **Effective Date:** has the meaning defined in the introductory paragraph of the Conservation Easement.
vi. **Existing Structures:** has the meaning defined in Article VII(d) as identified in the Baseline Documentation Report.
vii. **Forest Legacy Program:** has the meaning defined in the recitals of the Conservation Easement.
viii. **Forest Stewardship Plan:** means the plan included as Exhibit G.
ix. **Grantee:** has the meaning defined in the introductory paragraph of the Conservation Easement.
x. **Grantor:** has the meaning defined in the introductory paragraph of the Conservation Easement.
xi. **Grantor et al.:** has the meaning defined in Article 18(e)**.**
xii. **Indemnified Parties:** has the meaning defined in Article 18(e)**.**
xiii. **Parking Areas:** has the meaning defined in Article VII(m)(v).
xiv. **Parties:** has the meaning defined in the introductory paragraph of the Conservation Easement.
xv. **Party:** has the meaning defined in the introductory paragraph of the Conservation Easement.
xvi. **Property:** has the meaning defined in Article I(c) of the Conservation Easement and includes, (1) Exhibit A - its Legal Description (2) Exhibit B the Easement boundary, and (3) Exhibit C its associated Water Rights.
xvii. **Traditional Livestock:** has the meaning defined in Article VII(i).
xviii. **Unmanned Aircraft:** has the meaning defined in Article VIII(d).

xix. **USFS:** means the United States Forest Service.
xx. **Water Rights:** means the water right identified in Exhibit C.

b) Structures, Improvements, and Building Terms:

i. **Transient Structure**. A non-permanent, removable structure erected for no more than 180 days within a twelve (12) month period in which a Permitted Use is engaged in.

ii. **Designated Improvement Areas**. The areas identified, by the Grantor and approved by the Grantee, described in **Exhibit F**, on the Property where the Grantor may place Building Envelopes (*defined below*).

iii. **Building Envelope**. The area selected by the Grantor with approval of Grantee within any Designated Improvement Area(s) that may be improved or developed for the purposes as described in **Exhibit F**.

iv. **Footprint**. The planned area of constructed impervious surfaces including the roof projected to ground level within each Building Envelope. The Footprint is intended to represent the ground coverage of impervious constructed surfaces, not just the enclosed total square footage of any structure.

v. **Nature Amphitheater**. An outdoor Nature Amphitheater is generally a semi-circular or fan-shaped, open-air venue with tiered seating that faces a stage or event space. It's designed to accommodate spectators for events like nature presentations, small group gatherings, acoustic concerts, plays, and other nature-based performances.

c) Environmental Terms:

i. **Watercourse**: Any natural or artificial channel through which water flows and includes rivers, streams, creeks, and other similar bodies of water that have a defined bed and banks.

d) Recreational Use Terms:

i. **Designated Use**: An area that is officially recognized and managed for a specific recreational activity or user group, such as for Single-Use or Multi-Use (*both defined below*).

ii. **Single Use**: Use is limited to a single recreation user type. For example, the Designated Use is for hiking only or equestrian riders only.

iii. **Multi-Use, Shared-Use, Mixed-Use**: These areas are for multiple recreation user types at one time. They are often designated for use by bicyclists, equestrians, and pedestrians (i.e. hikers, runners, and walkers). All users share this Designated Use area.

e) **Motorized Recreation Type Terms:**

i. **Non-Motorized Recreation**: A means of travel that does not use an engine, battery, or motor to propel movement. Areas designated for non-motorized recreation may allow for non-motorized travel, including by foot, ski, horse, or bicycle.

ii. **Motorized Recreation**: A means of travel that allows for an engine, or motor, to propel movement. Areas designated as motorized may allow for travel such as by vehicle, off-highway vehicle (OHV), motorcycle, electric bicycle, or scooter.

f) Recreation Corridor Terms:

i. **Corridor.** The area that includes the Tread of the Trail or Path and the area above and immediately adjacent to the Tread where vegetation is cleared and/or maintained. The Corridor's specific standards will be defined in the Grantor's RMP for each intended user group. Within the Corridor, vegetation is trimmed back and obstacles, such as boulders and fallen trees, are removed from the area to allow for the safe use of the Trail or Path. Width varies from 4 to 18-feet and height from 8 to 12-feet.

ii. **Singletrack**. A singletrack, usually associated with a Trail, is a narrow area, typically wide enough for only one user at a time.

iii. **Doubletrack**. A doubletrack, usually associated with a Trail, is normally double the width (or more) of a typical Singletrack Trail with enough room for two recreationalists to be side-by-side. Often Doubletrack Trails follow abandoned Two-Track (*defined below*) Roads, where the tires of vehicles created two tracks.

iv. **Two-Track**. This type of Corridor, usually associated with Roads, is an unpaved, rough Road characterized by two parallel tracks formed by vehicle tires. These Roads are often found in rural areas or as temporary access routes and are typically rough and unpassable by standard passenger vehicles, lending themselves to use by Off-Highway-Vehicle (OHV), such as ATV's and UTV's, and high clearance 4x4 trucks.

v. **Maintained Road**. A maintained road is a Road that receives ongoing care

and upkeep to ensure its functionality and safety for motorized vehicle use. This includes actions like grading, resurfacing, and maintaining Road markings and signage. The specific maintenance work depends on the type of Road and its use.

g) **Recreational Surface Type Terms:**

i. **Trail**. Located within a Corridor, a Trail is a narrow area, typically of a permeable Natural Surface (*defined below*). A standard Tread (*defined below*) width for a Trail varies from two (2) to eight (8) feet depending on the volume of use and anticipated speeds of user groups, with the Trail Corridor ranging from four (4) to twelve (12) feet wide and eight (8) to twelve (12) feet in height.

ii. **Path**. Located within a Corridor, a Path can be Natural Surface, Soft Surfaced, or Hard Surfaced (*all defined below*) or a combination. The standard Tread (*defined below*) width for a Path is eight (8) to fourteen (14) feet depending on the volume of use and anticipated speeds of user groups, with the Path Corridor ranging from twelve (12) to eighteen (18) feet wide and eight (8) to twelve (12) feet in height.

iii. **Road.** Located within a Corridor, a Road is suitable for standard two-lane, or wider, Motorized Recreation and vehicle travel with appropriate space for passing or one-lane of travel with modified turnouts to accommodate passing.

h) Recreational Tread Terms:

i. **Tread.** The actual surface that is traveled by the recreation user. These surfaces, either Natural, Soft, or Hard (*all defined below*) are constructed and maintained to support the intended user group (i.e. hiking, mountain biking, equestrian riding) of the Trail. Depending on user group, a Trail Tread width can vary from 2 to 14-feet.

ii. **Natural Surface**. Native material soil, free from surfacing materials like pavement, asphalt, or crushed aggregate.

iii. **Soft Surfaced**. Firmly packed crushed aggregate surface.

iv. **Hard Surfaced**. Pavement, asphalt, or concrete surface.

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STAFF REPORT

To:	Summit County Council
From:	Rachael Brard, Lands and Natural Resources Program & Project Administrator Jess Kirby, Lands and Natural Resources Director
Date of Meeting:	August 13, 2025
Type of Item:	Code Amendment – Public Hearing, Possible Action
Process:	Legislative Review
Subject:	Public hearing and possible approval of Ordinance No. 935-A, an amendment to the code for the Summit County Open Space Advisory Committee (OSAC) to stagger OSAC membership terms and dissolve OSAC Regional Advisory Groups.

BACKGROUND

The Summit County Open Space Advisory Committee (OSAC) was created and is governed by Summit County, Utah's ***Ordinance No. 935***[1], adopted on May 25, 2022. The Open Space Bond ***Resolution No. 2022-17***[2] was adopted on August 31, 2022.

OSAC was established to advise and make recommendations to the County Manager regarding the identification, preservation, and acquisition of open space, agricultural protection areas, and conservation easements using proceeds from the 2021 voter approved $50 Million General Obligation Bond for open space.

OSAC's responsibilities include reviewing and evaluating NOIs, providing input on criteria for bond expenditures, and advising the County Manager on potential projects for the acquisition and protection of open space.

Resolution 2022-17, adopted by the County Council, further clarifies the organization of OSAC and the intended uses of the bond funds, emphasizing the protection of natural landscapes, wildlife habitat, watershed health, recreational access, and working agricultural lands. The resolution also outlines the need for evaluation criteria, transparency requirements, and community engagement processes.

Under ***Ordinance 935***, OSAC, was structured to include three Regional Advisory Groups (North Summit, South Summit, and West Summit), each composed of seven members representing their respective geographic areas. The intent of the Regional Advisory Groups was to 1) establish regionally representative criteria for evaluating open space opportunities eligible for bond funding within their region, and 2) nominate three members each regional group to represent the Regional Advisory Group by serving on OSAC—consisting of nine-members, i.e. three from each region.

Following the appointment of the three regional representatives to OSAC, the remaining members of the

[1] https://www.summitcountyutah.gov/DocumentCenter/View/20171/OSAC-Ordinance-935-Final
[2] https://www.summitcountyutah.gov/DocumentCenter/View/20172/OSAC-Ordinance-Resolution-2022-17-Final

Regional Advisory Group were no longer necessary, inadvertently leaving these members "active" but with no formal duty.

Also, each member of the OSAC body serves a three-year term of service.

DISCUSSION

Due to the unnecessary need for the Regional Advisory Groups and the maturity of onboarding/offboarding members term limits, staff requests the consideration of changes to ***Ordinance 935*** to accomplish two points of clerical necessity;

1) To dissolve and disband, the three Regional Advisory Groups. Although the separate Regional Advisory Groups will be dissolved through this ordinance, OSAC continues to have regional representation by requiring three seats for each Region.
2) To ensure efficient use of volunteer and staff resources, staff recommends the approval of staggered OSAC membership terms in order to improve long-term continuity and ensure sustained institutional knowledge within OSAC. Currently, all members will expire at the same time, the suggested stagger approach allows for the adaptation of a way to maintain knowledge on the board while on/off boarding members.

RECOMMENDATIONS

Staff recommends that the Summit County Council review the proposed amendments to ***Ordinance No. 935***, conduct a public hearing, and approve the attached amended ordinance.

Staff recommends dissolving and disbanding the Regional Advisory Committees as they have fulfilled their initial purpose of establishing criteria for use of Open Space Bond funds in their respective Regions and nominating inaugural members.
Staff recommends staggering OSAC terms by extending one member from each Region's term by one year, and one member from each Region's term by two years. The remaining three members expired remains unchanged. Current members who wish to extend their terms will self-nominate by emailed poll and the nominations will be passed to the County Manager for appointment with the consent to County Council.

REQUESTED COUNCIL ACTION

Staff requests that Council hold a public hearing to discuss and determine changes to the ordinance and determine if they are warranted regarding;

a. To dissolve the OSAC Regional Advisory Groups, and
b. To stagger the existing structure of the OSAC terms.

SUMMIT COUNTY, UTAH
ORDINANCE NO. 935-A

AN ORDINANCE AMENDING ORDINANCE 935 CREATING THE SUMMIT COUNTY CODE, SUMMIT COUNTY OPEN SPACE ADVISORY COMMITTEE

PREAMBLE

WHEREAS, on May 25, 2022, the Summit County Council ("Council") adopted Ordinance 935 creating the Open Space Advisory Committee ("OSAC"), now set forth in the Summit County Code as Title 2, Chapter 42; and,

WHEREAS, the Council created OSAC as a nine-member committee with three regional advisory groups, whose members would each serve up to three consecutive three-year terms; and,

WHEREAS, the terms of all members began on the same date; as a result, all terms expire on the same date, unless extended; and,

WHEREAS, to ensure continuity of representation and institutional knowledge on OSAC, the Council now wishes to amend the terms of the original OSAC members so that future members will serve staggered terms, and at least one member from each Regional Advisory Group will remain on the committee during each term transition; and,

NOW, THEREFORE, the County Legislative Body of Summit County, State of Utah, hereby ordains as follows:

Section 1. **Enactment.** Summit County Code, Title 2, Chapter 42, Summit County Open Space Advisory Committee, which is published as a code in book form, is amended and adopted in accordance with Attachment "A" herein, copies of which have been filed for use and examination in the Office of the County Clerk (the "Amendment to the Summit County Open Space Advisory Committee Ordinance").

Section 2. **Savings Clause.** In the event one or more of the provisions of this Amendment to the Open Space Advisory Committee Ordinance shall, for any reason, be held to be unenforceable or invalid in any respect under any applicable laws, such unenforceability or invalidity shall not affect any other provision; and in such an event, this Amendment to the Open Space Advisory Committee Ordinance shall be construed as if such unenforceable or invalid provision had never been contained herein.

Section 3. **Effective Date.** This Amendment to the Summit County Open Space Advisory Committee Ordinance shall take effect 15 days after passage by the Council and subsequent publication in a newspaper of general circulation in Summit County, Utah.

APPROVED, ADOPTED, AND PASSED and ordered published by the County Council, this _____day of _____, 2025.

ATTEST:

_____
Evelyn Furse
Summit County Clerk

SUMMIT COUNTY COUNCIL

_____
Tonja Hanson, Chair

APPROVED AS TO FORM

_____
Lynda L. Viti
Deputy County Attorney

VOTING OF COUNTY COUNCIL:

Council Chair Hanson _____
Council Vice Chair Harte_____
Councilmember Armstrong _____
Councilmember McKenna _____
Councilmember Robinson _____

Attachment A

CHAPTER 42

SUMMIT COUNTY OPEN SPACE ADVISORY COMMITTEE

2-42-1: Definitions:

Bond: The 2021 Summit County voter-approved General Obligation Bond authorizing a principal amount not to exceed Fifty Million Dollars ($50,000,000) for the purpose of paying all or a portion of the costs of the acquisition of passive and active open space, conservation easements, and constructing recreational amenities and environmental and wildlife mitigation measures and related improvements.

County: Summit County, Utah.

County Council: The Summit County Council, which exercises legislative authority in the County.

County Manager: The chief executive officer of the County.

Evaluation Standards: The respective evaluation standards adopted by the respective Regional Advisory Groups and recommended to OSAC pursuant to Section 2-42-5 B.2.

Member: Respectively members of OSAC and members of a Regional Advisory Group, as context requires.

Notice of Interest or NOI: The formal process for Property Interests to be submitted for consideration of acquisition using Bond proceeds set forth in Section 2-42-6.

North Summit Region. The geographic area of Summit County graphically depicted on Exhibit "B" attached hereto, which consists of the following Utah Hydrologic Unit (HUC) Subwatershed areas within Summit County, namely Echo Creek, Yellow Creek, Main Canyon Creek-Upper Weber River, Chalk Creek, and the Subbasins of the Silver Creek- Upper Weber River Subwatershed, namely Crandall Canyon, Spring Canyon-Upper Weber River, and the portions of

the Silver Creek and Rockport Lake – Upper Weber River Subbasins within the North Summit School District boundary.

OSAC: The Summit County Open Space Advisory Committee, which is comprised of three (3) Members of each of the Regional Advisory Groups. An organizational chart for OSAC is attached as Exhibit "A" hereto.

Property Interests: Any real property interest acquired, or proposed to be acquired, using Bond proceeds or a combination of Bond proceeds and other funding sources.

Public Interest: The responsibility of each Member to represent the common good, the general welfare, and the security and well-being of the respective communities represented by OSAC and those represented by the respective Regional Advisory Groups, as to matters concerning the evaluation and recommendations of the use of Bond proceeds for the purpose of acquiring or considering the acquisition of Property Interests.

Regional Advisory Groups: Collectively, the North Summit Advisory Group, South Summit Advisory Group, or West Summit Advisory Group, and each a "Regional Advisory Group."

Regions: The geographic areas of Summit County that define the boundaries of the North Summit, South Summit, and West Summit Regional Advisory Groups; individually "Region."

South Summit Region. The geographic area of Summit County graphically depicted on Exhibit "B" attached hereto, which consists of the following Utah Hydrologic Unit (HUC) Subwatershed areas within Summit County, namely Bear River-Stillwater Fork, Bear River-Sulphur Creek, Beaver Creek, Cottonwood Creek, Headwaters Weber River-Upper Weber River, Little South Fork Provo River-Provo River, Muddy Creek, Smiths Fork, Soapstone Creek-Provo River, Upper Blacks Fork and Upper Henrys Fork, and the Subbasins of the Silver Creek-Upper Weber River Subwatershed, namely Crandall Canyon and Rockport Lake-Upper Weber River within the South Summit School District boundary and the Subbasin of Browns Canyon-Upper Weber River.

West Summit Region: The geographic area of Summit County graphically depicted on Exhibit "B" attached hereto, which consists of the Snyderville Basin Special Recreation Service District and the Park City School District.

2-42-2 Name and Purpose:

The Summit County Open Space Advisory Committee ("OSAC") is created for the purpose of serving the Public Interest by evaluating the Evaluation Standards recommended by each of the Regional Advisory Groups and adopting final Evaluation Standards for each Region, advising and providing recommendations to the County Manager regarding the identification, evaluation (including the evaluation of NOIs), and possible acquisition of Property Interests based on the approved Evaluation Standards**.**

The Regional Advisory Groups are created for the purpose of creating, prioritizing, adopting, and recommending Evaluation Standards to OSAC, and, secondarily, may provide a prioritized list of Property Interests within such Region for OSAC's review and evaluation. The Regional Groups may elect to reexamine the Evaluation Standards and adopt and recommend to OSAC revised Evaluation Standards.

2-42-3: Authority:

OSAC is created as an advisory committee to the County Manager for the purposes set forth in Section 2-42-2. There shall be no actual or apparent authority vested in OSAC except the authority granted in this chapter. Neither OSAC, nor any Member thereof, is empowered to bind the County as to the purchase of any Property Interest.

2-42-4: Organization:

A. OSAC Organization.

1. OSAC shall be composed of nine (9) Members, consisting of three (3) Members appointed from each Regional Advisory Group. In its first meeting, and annually thereafter, OSAC shall select from among the Members a chair, vice chair, and secretary, and shall provide the County Manager with written notice of such selections.

2. The Regional Advisory Groups shall each recommend three (3) Members to the County Manager for appointment to serve on OSAC. The County Manager may reject any or all recommendations from the Regional Advisory Groups and, if rejected, shall request the Regional Advisory Group to resubmit a different recommendation for one or more rejected submissions. If the County Manager and Regional Advisory Group cannot agree on a particular appointment from such Regional Advisory Group, the County Manager may independently choose a candidate for appointment from among Regional Advisory Group Members for membership on OSAC.

3. The County Manager shall appoint Members of OSAC with the advice and consent of the County Council. To the extent that any proposed appointment is the result of the County Manager's selection against the request of any Regional Advisory Group's preferred recommendation, the County Manager shall disclose such conflict to the County Council as part of the advice and consent process.

4. OSAC Members may serve up to three (3) consecutive three (3) year terms, except that:
    a. in May 2025, at the conclusion of the original members' three year terms, one member from each Region may self-nominate for a one year extension to expire in May 2026, and one member from each Region may self-nominate for a two year extension to expire in May 2027; and
    b. The term of all other members shall expire in May 2025.
    c. The nominations shall be approved by the County manager with the advice and consent of the County Council. If insufficient nominations are received, the

County Council may assign term extension to existing members. Any open seats shall be filled as set forth in the section.

5. The County Manager may remove any Member at any time with or without cause.

6. Upon removal or withdrawal of any Member of OSAC, the County Manager shall request the respective Regional Advisory Group to recommend a replacement Member from among the members of such Regional Advisory Group. The County Manager may accept the nominated Member or request an alternate recommendation and, once approved by the County Manager, the County Manager will appoint the approved replacement to the OSAC Committee with the advice and consent of the County Council. The replacement Member shall complete the remainder of the term of the vacant seat.

7. In the event that any Regional Advisory Group is dissolved, the OSAC Members representing the Region associated with the dissolved Regional Advisory Group shall remain Members of OSAC for the remainder of their respective terms. Upon the expiration of their terms, the County Manager, with the advice and consent of the County Council, shall appoint a new OSAC Member from the respective Region that the retiring Member represented. Such selection shall be made pursuant to the advertising requirements for Regional Advisory Group membership pursuant to Section 2-42-4 B.4., and taking into consideration the qualifications for Regional Advisory Group membership in the selection process.

B. Regional Advisory Group Organization.

1. Each Regional Advisory Group shall be composed of seven (7) members. In their first respective meeting, and annually thereafter, each Regional Advisory Group shall select from among the Members a chair, vice chair, and secretary, and shall provide the County Manager with written notice of such selections.

2. All Members of each Regional Advisory Group shall reside within the geographical boundaries of the respective Regional Advisory Group's Region.

3. The Members of the Regional Advisory Groups shall be appointed by the County Manager taking into consideration the following respective criteria for each Region:

a. West Summit Regional Advisory Group: one (1) representative who resides within the incorporated boundaries of Park City; one (1) representative who resides within the boundaries of the unincorporated Snyderville Basin; and five (5) at-large community representatives who reside in West Summit, where preference may be giving to individuals with knowledge and experience related to agriculture, natural resources, or recreation.

b. North Summit Regional Advisory Group: one (1) representative who resides within the incorporated boundaries of Coalville City; one (1) representative who resides within the incorporated boundaries of the Town of Henefer; one (1)

representative who resides within the boundaries of the unincorporated area of North Summit; and four (4) at-large community representatives who reside in North Summit, where preference may be giving to individuals with knowledge and experience related to agriculture, natural resources, or recreation.

c. South Summit Regional Advisory Group: one (1) representative who resides within the incorporated boundaries of Kamas City; one (1) representative who resides within the incorporated boundaries of Oakley City; one (1) representative who resides within the incorporated boundaries of Francis City; one (1) representative who resides within the boundaries of the unincorporated area of South Summit; and three (3) at-large community representatives who reside in South Summit, where preference may be giving to individuals with knowledge and experience related to agriculture, natural resources, or recreation.

4. Membership openings for each Regional Advisory Group shall be advertised publicly. City Mayor(s) or director(s) of Summit County Special Service Districts may provide Membership recommendations to the County Manager.

5. The County Manager shall appoint Members of each Regional Advisory Group with the advice and consent of the County Council.

6. The Regional Advisory Group Members may serve until the Regional Advisory Group is dissolved by the County Manager with the advice and consent of the County Council, but in any event no longer than one (1) year, absent good cause.

7. The County Manager may remove any Member at any time with or without cause,

8. Upon removal or withdrawal of any Member of a Regional Advisory Group, the County Manager shall appoint a replacement Member with the advice and consent of the County Council. The replacement Member shall complete the remainder of the term of the vacant seat.

C. OSAC and each Regional Advisory Groups may enlist non-voting volunteer consultants to participate as needed or advised by the OSAC chair, the County Manager or County Council, including staff from the Office of the County Manager and one planning commission member from either the Eastern Summit County Planning Commission or the Snyderville Basin Planning Commission. Such non-voting volunteer consultants shall not be considered Members.

D. All Members shall serve without compensation, but their actual and necessary expenses incurred in the performance of their official duties may be paid or reimbursed by the County.

E. The County Attorney or a staff attorney shall be legal counsel to the OSAC and the Regional Advisory Groups.

F. OSAC and the Regional Advisory Groups may be dissolved at the discretion of the County Manager with the advise and consent of the County Council. In the event that any Regional Advisory Group is dissolved, the OSAC membership representing the Region associated with the dissolved Regional Advisory Group shall be governed by Section 2-42-4.A.7.

1. All Regional Advisory Groups shall be dissolved effective August 31, 2025, unless extended by formal action of the County Manager with the advice and consent of the County Council.

2-42-5: Powers and Duties

A. OSAC's powers and duties are limited to:

1. Nominating three (3) members of each respective Regional Advisory Group for appointment as Members of OSAC pursuant to Section 2-42-4 A.2.

2. Evaluating the Evaluation Standards recommended by each Regional Advisory Group and adopting final Evaluation Standards for each Region; and

3. Advising, providing recommendations to, and consulting with, the County Manager regarding the identification, evaluation (including the evaluations of NOIs), and possible acquisition of Property Interests based on the approved Evaluation Standards. Such advice may include recommendations concerning funding strategies, types of Property Interests to be acquired, and recommendations concerning consultation and collaboration with accredited land trusts.

4. Upon the request of the County Manager or County Council, OSAC shall make presentation to the County Manager and County Council concerning the Evaluation Standards, OSAC's goals, progress, and actions.

B. Each Regional Advisory Group's powers and duties are limited to:

1. Within thirty (30) days following the first meeting of each respective Regional Advisory Group, nominating three (3) Members of their respective Regional Advisory Group and forwarding such nominations to the County Manager for consideration for appointment as OSAC Members.

2. Within sixty (60) days of their respective first meetings, crafting, prioritizing, and adopting Evaluation Standards, and thereafter promptly referring such adopted Evaluation Standards to OSAC for the purposes set forth in Section 2-42-5-A.2. The Regional Advisory Groups are encouraged to hold public hearings as part of crafting Evaluation Standards.

3. After crafting and prioritizing the respective Evaluation Standards, having the option to compile a confidential list of properties to be submitted to OSAC within ninety (90) days.

2-42-6: Notification of Interest Process:

A. Notification of Interest (NOI) Submittal: Landowners who desire to propose to the County the acquisition of any such landowners' Property Interests using Bond proceeds for all or a portion of such proposed acquisition, may do so by filing a NOI with the County Manager on forms developed by the County Manager in consultation with the County Council, for that purpose. Landowners may be sponsored by accredited land trusts (e.g., Summit Lands Conservancy, Utah Open Lands, The Nature Conservancy, and the like) and the submittal forms shall contain a section for the land trusts to provide relevant information concerning matters such as funding sources other than Bond proceeds.

B. Upon receipt of a NOI, County staff will review the NOI and verify completeness of required information. If deemed complete, the County staff shall in turn transmit such NOI simultaneously to OSAC and the County Manager.

C. OSAC shall evaluate each NOI, which County staff has verified as complete and submitted to OSAC, using the approved Evaluation Standards. OSAC may conduct a site visit to review and verify the property for conformance with Evaluation Standards.

D. OSAC will score all NOIs as eligible or ineligible for Bond funding based upon the Evaluation Standards and will make a recommendation to the County Manager.

E. Each NOI, as deemed complete, will be scheduled on an agenda of OSAC for an initial presentation by the landowner, accredited land trust or equivalent legal entity or representative. Discussions, evaluations, and reports concerning of NOIs shall be considered property acquisition matters and shall be evaluated in closed session and kept confidential, subject to the Utah Open and Public Meetings Act (Utah Code Title 52, Chapter 4).

F. The County Manager, in collaboration with OSAC, shall develop a format for OSAC to provide a score and recommendations to the County Manager with respect to its recommendations as to whether a particular NOI should be considered for Bond funding, based upon the Evaluation Standards. Upon completion of its evaluation of a NOI, OSAC shall provide a final recommendation to the County Manager in the approved format.

G. The County Manager's determination of whether or not to acquire Property Interests pursuant to a NOI request shall be subject to Section 2-42-8.

2-42-7: Meetings:

A. Meetings of the Regional Advisory Groups shall be scheduled on an as-needed basis.

B. Meetings of OSAC shall be scheduled on an as-needed basis.

C. Meetings, special meetings, work sessions, and field trips, for any purpose, may be held at the call of the chair, the County Manager or the County Council. Work sessions and field trip meetings shall be for discussion and informational purposes only; no action shall be taken on any item.

D. OSAC shall conduct its business according to its bylaws.

E. OSAC and its Regional Advisory Groups are subject to, and shall be conducted in compliance with, the Utah Open and Public Meetings Act (Utah Code Title 52, Chapter 4). OSAC and its Regional Advisory Groups may go into closed session to discuss any matters concerning property acquisition as allowed by the Open and Public Meetings Act.

2-42-8: County Manager's Authority

The Regional Advisory Groups and OSAC serve in the capacity of advisory groups and are created for the purpose of providing the County Manager and the County Council with valuable insight and analysis concerning the potential uses of Bond proceeds in the Regions. The Regional Advisory Groups and OSAC do not have authority to take any action that is binding on the County Manager, County Council, or the County and shall not take any action that purports to do so. The County Manager retains final authority regarding any real property transactions and may take direct action on any acquisition of Property Interests, with or without the involvement of OSAC or the Regional Advisory Groups, subject to and consistent with Summit County Code, Title 1, Chapter 14, Optional Plan of Government.

2-42-9: Conduct of Members:

A. Ethical Principles: The following ethical principles shall guide the actions of OSAC, its Regional Advisory Groups, and their Members in carrying out the powers and duties described above:

1. Serve the Public Interest: The primary obligation of OSAC, its Regional Advisory Groups, and each Member is to serve the Public Interest as it relates to evaluation of Property Interests concerning the use of Bond proceeds.

2. Support Citizen Participation in Planning: OSAC and its Regional Advisory Groups shall ensure a forum for meaningful citizen participation and expression in the crafing of Evaluation Standards and in the clarification of community goals, objectives, and policies.

3. Recognize the Comprehensive and Long-Range Nature of Decisions: OSAC, its Regional Advisory Groups and their Members use reasonable diligence to gather and

consider relevant facts, alternatives and means of accomplishing them, and explicitly evaluate all consequences before making any recommendations or decisions.

4. Avoid Conflict of Interest: Members shall avoid conflicts of interest and even the appearance of impropriety. At the commencement of any matter before OSAC or any of its Regional Advisory Groups, Members shall disclose any past, present, or expected relationship with any party affiliated with such matter. A Member with a potential conflict of interest shall abstain from voting on the matter, not participate in any deliberations on the matter, and leave the committee table, but may remain in the chamber. The Member shall also not discuss the matter privately with any other Member voting on the matter.

5. Render Thorough and Diligent Service: If a Member has not sufficiently reviewed relevant facts and advice affecting a decision, that Member should not participate in that decision.

6. Not Seek or Offer Favors: A Member must not directly or indirectly solicit any gift or accept or receive any gift (whether in money, services, loans, travel, entertainment, hospitality, promises, or in some other form) under circumstances in which it could be reasonably inferred that the gift was intended or could reasonably be expected to influence them in the performance of their duties or was intended as a reward for any recommendation or decision on their part.

7. Not Disclose or Improperly Use Confidential Information For Financial Gain: A Member shall not disclose or improperly use confidential information for financial gain and must not disclose to others confidential information acquired in the course of their duties or use it to further a personal interest.

8. Maintain Public Confidence: A Member must conduct himself/herself publicly so as to maintain public confidence in the public body and the Member's performance of the public trust.

9. Respect for and Courtesy to Other Members, Public and Staff: Each Member has the same rights and privileges as any other Member. Any Member has the right to be heard and to hear what others have to say about items being considered by OSAC or its Regional Advisory Groups.

B. Representation of Applicants or Petitioners: No Member shall physically represent applicants or petitioners before OSAC or any of its Regional Advisory Groups on matters on which that OSAC or one of its Regional Advisory Groups is to make determinations or recommendations.

C. Ex Parte Communication: Prearranged private meetings between a Member and an individual(s), and their agents, or other interested parties with a matter pending before OSAC or any of its Regional Advisory Groups are prohibited. Partisan information on any application received by a Member whether by mail, telephone, or other

communication should be avoided. When such communication does occur, it must be disclosed and made part of the public record by the Member.

D. Attendance: Each Member shall be responsible for attending all scheduled meetings of their respective committee or group. Should circumstances arise where a Member is unable to attend a scheduled meeting, the Member shall be responsible for notifying the chair as soon as possible. Members who fail to attend three (3) regular meetings of their respective committee or group within any consecutive three (3) month period may, at the discretion of the County Manager, be removed from that respective committee.