DRAFT ENVIRONMENTAL ASSESSMENT

ROUND VALLEY WMA LAND DISPOSAL

Involving Lands Owned by the
Utah Division of Wildlife Resources

Morgan County, Utah

U.S. Fish and Wildlife Service
Office of Conservation Investment
Wildlife Restoration

W-32-L-14

November 24, 2025

Prepared by:

Utah Division of Wildlife Resources
Salt Lake City, Utah
&

United States Fish and Wildlife Service
Office of Conservation Investment
Region 6 Denver, Colorado

BACKGROUND

In June 1942, the Utah Fish and Game Commission, now known as the Utah Division of Wildlife Resources (DWR), received 640 acres of privately owned land in Morgan County for the purpose of creating a Wildlife Management Area (WMA), specifically focusing on high-quality winter range habitat for big game. In December 1946, two private landowners deeded the DWR an additional 2,323 acres for the WMA, known as the Deep Creek portion. In August 1947, Morgan County deeded DWR an additional 640 acres known as the Morgan Round Valley portion of the WMA. In August 1954, DWR acquired an additional 114 acres in a land exchange. Collectively, these parcels together comprise the Round Valley WMA. These acquisitions, in part, utilized Pittman Robertson funding administered by the U.S. Fish and Wildlife Service (USFWS) Office of Conservation Investment. The DWR has never had legal access to this WMA. No management plan has ever been written as the DWR has never technically "managed" it due to lack of access. For years DWR has unsuccessfully tried to gain access to the WMA through neighboring private land.

Today, the Round Valley WMA comprises approximately 3,717 acres situated high above the Weber River and Interstate 84, with reports of big game descending the steep slopes at certain times of the year to get water across the road in the Weber River. Since the WMA is surrounded by private land on all sides, it has remained inaccessible to the public since 1942 (Appendix A). The adjacent private landowners include ranching operations, Geneva Rock, and the Reese's Round Valley mine where limestone is quarried.

Lack of access to the WMA has prohibited the public from utilizing the area for hunting opportunities since the first parcels were acquired in 1942. For decades, little was known about this WMA by the public. There is no written management plan that can be found at DWR, most likely due to inability to manage from the lack of legal access. In recent years, with the dawn of social media and phone apps, more and more people have found out about this WMA and have sought access by asking Geneva Rock or Reese's Round Valley Mine for permission to access their private properties. Illegal trespass through both Geneva Rock and Round Valley Mine is a safety hazard and nuisance for adjacent landowners. Private landowners report instances of illegal trespass through their property to access the WMA to hunt big game or sheds. People have also asked adjacent landowners for road access to get close to WMA boundaries. Near the southwest edge of the WMA, a corner nearly meets I-84, with a railroad right-of-way in between, which has been an issue with people parking on the interstate and hiking up. Such access is not appreciated by DWR or Utah Highway Patrol and signage now deters people from making such an entrance.

As a part of this disposal and acquisition, Geneva Rock will also provide DWR a perpetual public access easement through their current property adjacent to the southern portion of the WMA. This will open the WMA to public access for the first time and reduce the current safety hazard of illegal trespass on privately owned land and the railroad right-of-way. Geneva Rock plans to create a gravel parking lot on their land adjacent to the WMA and establish a foot and horseback trail for access to the WMA (see Appendix A).

Since, the parcel was acquired with a connection to federal funds DWR is seeking approval from USFWS, Office of Conservation Investment, to dispose of the DWR Parcel (104.333 acres) to Geneva Rock. If this disposal is approved, DWR would replace the lost value of that property by acquiring in fee title the Geneva Parcel (49.981 acres) adjacent to the current WMA and placing a federal deed restriction on it similar to that currently on the DWR Parcel.

Separately, DWR will also acquire a perpetual access easement (0.65 acres) and parking lot (0.751 acres) to connect to the Geneva Parcel (49.981 acres). Even though the parcels being disposed of and acquired are not the same in acreage, the habitat that would be permanently protected and the improved public access makes their conversation values commensurate, as further discussed below.

USFWS approval of the proposed disposal of 104.333-acres constitutes a federal action subject to the requirements of the National Environmental Policy Act (NEPA)[1]. Consequently, this Environmental Assessment (EA) has been written to document analysis of the proposed disposal action and the environmental effects which are likely to result along with a summary of the acquisition parcel and access easement. The EA and comments from the associated public review will provide the USFWS information needed to determine if the proposed action is likely to cause any significant impacts to the environment. If significant adverse effects are found to be unlikely, USFWS would issue a Finding of No Significant Impact (FONSI), allowing DWR to proceed with the disposal. If significant impacts appear likely to result from the proposed action, USFWS would prepare an Environmental Impact Statement (EIS) to more fully analyze the impacts before allowing DWR to proceed with the proposed disposal.

PURPOSE AND NEED FOR ACTION

The purpose of the proposed action is to dispose of a 104.333-acre parcel of land as part of a planned adjustment intended to ensure that the value of the acquired parcel for habitat and public access is commensurate, while maintaining conservation values and enhancing the overall public benefit of the Round Valley WMA. The parcel proposed for disposal provides limited quality big game winter range habitat due to its proximity to an existing mining operation and a highway. Additionally, Geneva Rock is unwilling to grant a public access easement to DWR on the parcel, which would continue to leave the WMA landlocked.

Through the proposed disposal and acquisition, DWR would acquire approximately 49.981 acres of sagebrush and pinyon-juniper upland winter range habitat currently adjacent to the WMA. DWR will also secure public access to the WMA for the first time, increasing its recreational and conservation value. This proposed disposal and acquisition would open access to the 3,717-acre WMA, expanding public hunting opportunities and the ability to manage valuable habitat in alignment with the original purpose of the property.

ALTERNATIVES

This EA focuses on the Proposed Action and No Action alternatives.

[1] Executive Order 14154, Unleashing American Energy (Jan. 20, 2025), and a Presidential Memorandum, Ending Illegal Discrimination and Restoring Merit-Based Opportunity (Jan. 21, 2025), require the Department to strictly adhere to the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq. Further, such Order and Memorandum repeal Executive Orders 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023). Because Executive Orders 12898 and 14096 have been repealed, complying with such Orders is a legal impossibility. The U.S. Fish and Wildlife Service verifies that it has complied with the requirements of NEPA, including the Department's regulations and procedures implementing NEPA at 43 C.F.R. Part 46 and Part 516 of the Departmental Manual, consistent with the President's January 2025 Order and Memorandum.

Proposed Action

The Proposed Action involves the disposal of the DWR Parcel (104.333 acres) of sagebrush and Pinyon Juniper upland habitat within the WMA. Geneva Rock may mine the 104.333-acre parcel in the future.

Simultaneously, DWR will acquire the Geneva Parcel (49.981 acres) of comparable habitat to incorporate into the WMA, as well as a separate perpetual public access and parking easement for the WMA to compensate for the economic and conservation values that would be lost because of the disposal (2 CFR 200.311(d)). The total number of acres of the WMA will be reduced by 56 acres; however, the resulting public access provides significant public and conservation benefits. The proposed parcels are shown in Appendix A.

DWR has completed an appraisal and appraisal review which comply with the provisions of both the *Uniform Appraisal Standards for Federal Land Acquisitions* and *Uniform Standards of Professional Appraisal Practice* for each of the parcels involved in the proposed disposal and expected compensatory acquisition. The Geneva Parcel (49.981 acres) appraised slightly higher than the DWR Parcel (104.333 acres), reflecting its greater overall value due to the inclusion of mineral rights. DWR considers this difference in value reasonable and beneficial, as the acquired parcel's mineral rights ensure it will continue to fulfill the original grant purpose by allowing DWR to better protect and preserve winter range big game habitat.

No Action

Under the No Action alternative, DWR would retain ownership of DWR Parcel (104.333 acres), and the WMA would remain landlocked with no legal access for habitat management or public use. Geneva Rock would not grant an access easement or create a parking area on its property beneath the WMA without the proposed disposal and acquisition. DWR would also not acquire the adjacent Geneva Parcel (49.981 acres), which contains similar sagebrush-pinyon-juniper upland habitat. As a result, DWR would lose the opportunity to establish legal access to the WMA for both habitat management and public use/hunting.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section describes the existing physical, biological, and social environment of the project area and evaluates the potential impacts of the proposed action, as well as the impacts of taking no action.

DWR Parcel (Disposal)

The DWR Parcel proposed for disposal encompasses approximately 104.333 acres and is situated just north of Highway 84, about one-quarter mile east of Morgan City, in Morgan County, Utah. The parcel lies adjacent to an active mining operation and is characterized by steep, mountainous terrain, with slopes ranging from 50% to 75%, based on USGS topographic maps. Located in a semi-rural area, the parcel is landlocked by private land, lacks frontage on a public road, and has no recorded access easement.

Soils and Prime and Unique Farmland

Affected Environment: The parcel mainly consists of Agassisz-Rock outcrop complex (AaG) and Agassiz-Rock outcrop complex shallow (AbG), which are not considered prime farmland (Appendix F). Canburn silt loam (Cb) is considered farmland of statewide importance; however, it comprises less than one percent of the affected area (Appendix F).

Impacts of the No Action Alternative: There would be no impact to soils under the No Action Alternative.

Impacts of the Proposed Action: Up to 104.333 acres of soil would no longer be protected. There would be minor impact to soil important for farmlands.

Wildlife Resources

Affected Environment: The main purpose of the WMA is to provide big game winter range habitat. The parcel is known to support winter habitat for big game such as mule deer, elk, and moose and upland birds such as chukar (Appendix D).

Impacts of the No Action Alternative: There would be no impact to wildlife under the No Action Alternative.

Impacts of the Proposed Action: Up to 104.333 acres of wildlife habitat on the WMA would no longer be protected.

Fish and Other Aquatic Species

Affected Environment: The DWR Parcel consists of dry, upland habitat and offers no aquatic habitat value. The property is perched high above the Weber River and is not known to have any perennial streams.

Impacts of the No Action Alternative: There would be no impact to fish or other aquatic species under the No Action Alternative.

Impacts of the Proposed Action: There would be no impact to fish or other aquatic species under the Proposed Action

Endangered, Threatened or Candidate Species / Wildlife Action Plan Species of Greatest Conservation Need

Affected Environment: The parcel lies within the general range of several federally listed Threatened species, the Canada Lynx, North American Wolverine, Yellow-billed Cuckoo and Ute Ladies'-tresses (see Appendix E). As well as, the proposed threatened Monarch Butterfly, and the proposed endangered Suckley's Cuckoo Bumble Bee. There are no critical habitats for listed species in the project area. A query of the Utah National Heritage Program Database also yielded a few Species of Greatest Conservation Need such as the Bald Eagle, Desert Mountain Snail, Lyrate Mountain Snail, and Northern Leopard Frog, and Bluehead Sucker within a two-mile radius (see Appendix D).

Impacts of the No Action Alternative: There would be no impact to federally listed species or state Species of Greatest Conservation Need under the No Action Alternative.

Impacts of the Proposed Action: Under the proposed action, up to 104.333 acres of the WMA would no longer be protected for federally Threatened species or Species of Greatest Conservation Need (Appendices D and E). Based on the evaluation of the species presence and habitat conditions, the USWFS is expected to concur with the following effect determinations:

- The proposed action may affect, but is not likely to adversely affect the Canada Lynx and North American Wolverine. Although the parcel lies within the general range of these species, suitable high-elevation snowpack habitat is absent, and proximity to active mining and Highway 84 further reduces the likelihood of occurrence. The Monarch Butterfly range overlaps the project area; however, its migration habitat is typically associated with riparian corridors, which are not present within the parcel. Therefore, Monarch Butterflies are unlikely to occur in the disposal area. Potential suitable habitat exists for the Suckley's Cuckoo Bumble Bee, but the Species Status Assessment[1] indicates no recent observations in Utah (since 2018), with recent occurrences primarily in northern latitudes in Canada. Based on these factors, the proposed disposal may affect, but is not likely to adversely affect the Monarch Butterfly and Suckley's Cuckoo Bumble Bee.
- No effect on the Yellow-billed Cuckoo and Ute Ladies'-tresses as suitable habitat is absent and the species are not known to occur within this parcel.

Vegetation

Affected Environment: The DWR Parcel to be disposed supports mainly sagebrush, bunchgrass, pinyon pine, juniper, and a few common invasive species such as cheatgrass and thistle.

Impacts of the No Action Alternative: There would be no impact to vegetation under the No Action Alternative.

Impacts of the Proposed Action: Up to 104.333 acres of the WMA would no longer be protected for vegetation under the Proposed Action.

Water and Wetland Resources

Affected Environment: DWR does not own any water rights on the WMA and the upland habitat does not contain any water or wetland resources.

Impacts of the No Action Alternative: There would be no impact to water or wetland resources under the No Action Alternative.

Impacts of the Proposed Action: There would be no impact to water or wetland resources under the Proposed Action.

Cultural Resources

Affected Environment: There are no known cultural resources on the DWR Parcel.

Impacts of the No Action Alternative: There would be no impact to cultural resources under the No Action Alternative.

Impacts of the Proposed Action: Due to the lack of cultural resources or historic properties within the parcel for disposal the Utah State Historic Preservation Office concurs with DWR on the determination of "No Historic Properties Affected" for this undertaking (Appendix B).

[1]Species status assessment report for the Suckley's Cuckoo Bumble Bee (*Bombus suckleyi)*, Version 1.0. August 2024. Alaska Region.

Recreation and Public Use

Affected Environment: The WMA is currently landlocked, with no legal public access by foot or vehicle due to the absence of an easement from the surrounding private landowners. Adjacent landowners commonly report illegal trespass, especially during big game and shed hunting seasons. With the increasing availability of digital tools that display land ownership boundaries, public interest in accessing the WMA has grown.

Impacts of the No Action Alternative: Under the No Action Alternative, the WMA would remain landlocked with no legal public access. Unauthorized access and associated conflicts with adjacent landowners would likely continue.

Impacts of the Proposed Action: Under the Proposed Action, the disposal of the DWR Parcel would allow for the opportunity to establish public access to the WMA (see below Genva Parcel Acquisition). This would support managed public use and reduce unauthorized entry.

Reasonably Foreseeable Impacts

Although the disposed DWR Parcel may be subject to future mining activity, it is located on the periphery of the WMA and adjacent to Highway 84, so any such activity it is not expected to significantly affect the original purpose of the WMA (see Appendix A). Additionally, establishing a public access easement would not be feasible without the disposal of this parcel.

The proposed acquisition of the Geneva Parcel would add contiguous acreage to the WMA and provide habitat similar in type and function, supporting the original purpose of the WMA under the federal grant to provide big game winter range habitat and public access for hunting. Although, the total acreage of the WMA will be reduced, acquiring the Geneva Parcel represents a net biological and conservation benefit. Because the Geneva Parcel includes mineral rights, its habitat is protected from future mineral extraction; unlike the disposed DWR Parcel, which does not include mineral rights and could be potentially subject to future mining. Securing mineral rights with the acquired parcel allows DWR to better safeguard the winter range habitat, maintain conservation values, and more effectively fulfill the purpose of the federal award, thereby increasing the public benefit of the Round Valley WMA.

Geneva Parcel (Acquisition)

Disposal of the DWR Parcel enables the acquisition of the adjacent Geneva Parcel (49.981 acres), along with a public access easement and a public parking lot (Appendix A). The parking lot will be connected to the Geneva Parcel by a 30-foot-wide trail/access easement across Geneva Rock-owned property, providing the first legal public access to the WMA. The Geneva Parcel will also have a federal interest, ensuring it continues to serve the purpose for which it was acquired.

DWR will obtain the perpetual public access easement separately from the disposal and acquisition. Geneva Rock will construct the trail and parking lot easement, while DWR will be responsible for fencing, gates, and ongoing maintenance. The 30-foot-wide trail will be for public access by foot or horse, with DWR retaining a maintenance easement for equipment. Although the total WMA acreage will be reduced, the acquired parcel and easement will provide new public access and enable active habitat management, maintaining a commensurate conservation value and supporting the WMA's intended use as big game winter range habitat.

PUBLIC PARTICIPATION

DWR published a legal notice of the proposed disposal and acquisition in The Ogden Standard Examiner, a newspaper of general circulation in the affected area, with notice published on December 9th and 16th of 2022. No comments were received.

The proposed disposal and acquisition was also presented to the Morgan County Commission on December 20th, 2022. The project received a letter of support from the Morgan County Commission (Appendix C).

A notice describing the proposed disposal and acquisition will be sent to the Utah State Senator and Utah State Representative for the project area.

Regarding the proposed action, USFWS provided letters to eight tribal nations with the intent to initiate consultation in accordance with Section 106 of the NHPA. Tribal nations are provided six weeks from the time of receipt to respond to USFWS' letter. Any comments requiring response will be addressed by USFWS and described in the final EA.

Any interested public correspondents will be able to supply comments to the USFWS, who will accept all input related to this proposed action for thirty (30) days from the date the assessment is published on the USFWS website. The draft EA will be available at: https://www.fws.gov/library/collections/office-conservation-investment-nepa-documents.

Written comments can be mailed to the address below:

U.S. Fish and Wildlife Service,
Office of Conservation Investment
ATTN: Draft EA – Round Valley WMA Land Disposal
P.O. Box 25486, Denver Federal Center Denver, CO 80225

EA PREPARATION

Hailey Blair
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1594 W. North Temple, Ste 2110
Salt Lake City, Utah 84116

List of Contributors

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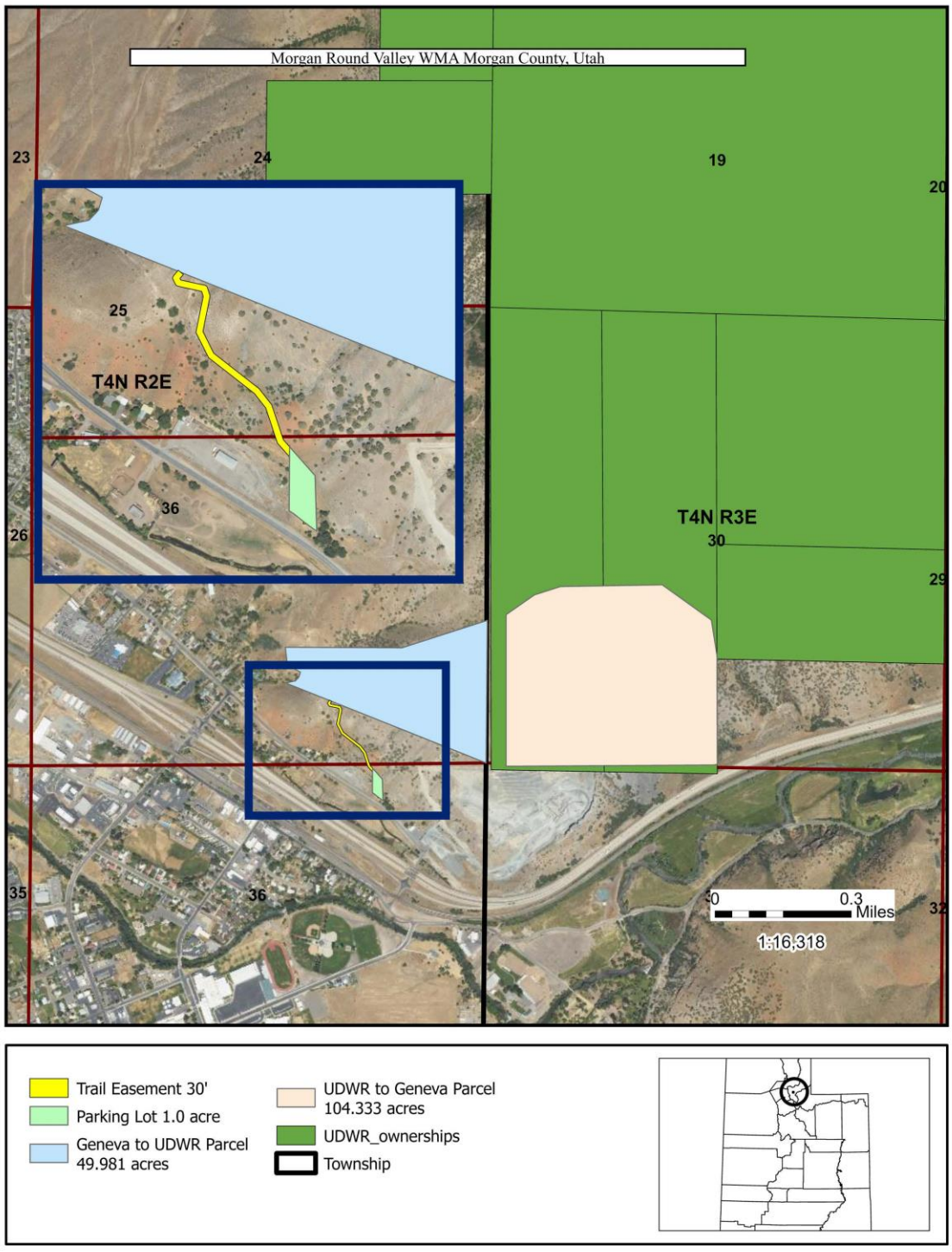
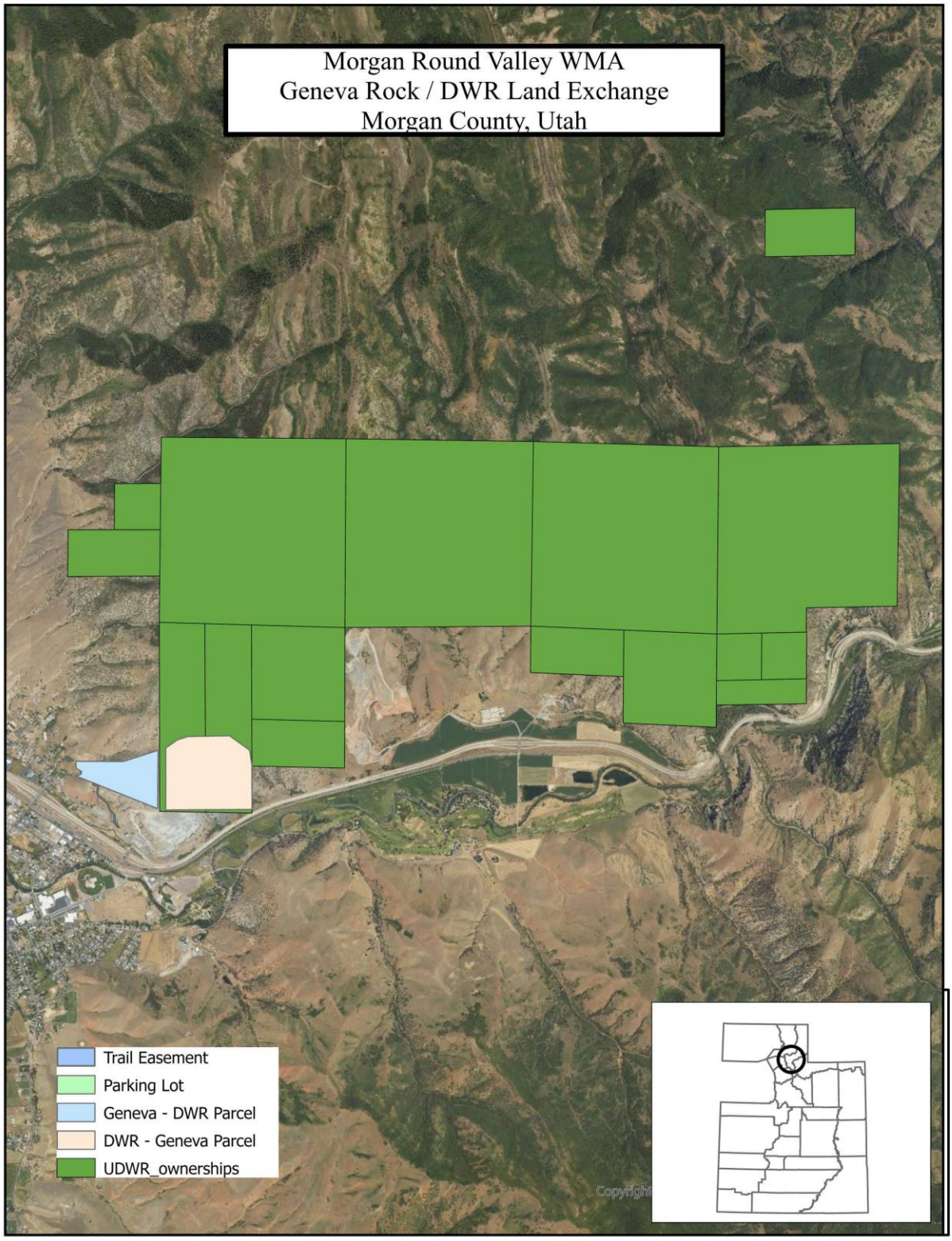
Arie Leeflang, Archaeologist, DWR
Daniel Olson, Wildlife Impact Analysis Coordinator, DWR

Appendix A

Maps of Morgan/Round Valley WMA Area Proposed Disposal and Acquisition




Morgan Round Valley WMA
Geneva Rock / DWR Land Exchange
Morgan County, Utah
Trail Easement
Parking Lot
Geneva - DWR Parcel
DWR - Geneva Parcel
UDWR_ownerships

Appendix B

Cultural Resource Summary Report

Spencer J. Cox
Governor

Deidre M. Henderson
Lieutenant Governor

Jill Remington Love
Executive Director
Utah Department of Cultural and Community Engagement

Utah SHPO

Christopher Merritt
State Historic Preservation Officer
Utah State Historic Preservation Office

October 4, 2022

Eric Edgley
Habitat Section Chief
Utah Division of Wildlife Resources
1594 West North Temple, Suite 2110
Salt Lake City, Utah 84114-6301

RE: An Archaeological Survey of the Proposed Round Valley WMA Land Disposal, Morgan County, Utah (U22UQ0673)

For future correspondence, please reference Case No. 22-1999

Dear Habitat Section Chief Edgley,

The Utah State Historic Preservation Office received your request for our comment on the above-referenced undertaking on October 04, 2022.

We concur with your determination "No Historic Properties Affected" for this undertaking.

Utah Code 9-8-404(1)(a) denotes that your agency is responsible for all final decisions regarding cultural resources for this undertaking. Our comments here are provided as specified in U.C.A. 9-8-404(3)(a)(i). If you have questions, please contact me at 801-245-7246 or by email at sagardy@utah.gov.

Sincerely,

Savanna Agardy
Compliance Archaeologist

Appendix C

Letter of Support from Morgan County Commission

MORGAN COUNTY

January 3, 2023

Governor Spencer Cox
Utah State Capitol Complex
350 North State Street, Suite 200
P.O. Box 142220
Salt Lake City, Utah 84114-2220

Dear Governor Cox

On December 20, 2022, the Morgan County Commissioners, Jared Andersen, Matt Wilson, Robert McConnell, Mike Newton, and Blaine Fackrell, met with Eric Anderson from the Utah Division of Wildlife Resources (UDWR) to discuss a land exchange involving 104.333 acres of UDWR property and 104.333 acres of privately owned property, located in Morgan County. UDWR presented information and maps of the properties and explained the benefits of the property exchange for wildlife conservation and wildlife recreation.

The Morgan County Commissioners voted in favor of UDWR proceeding with the land exchange.

Respectfully,

Michael L. Newton
Morgan County Commission

Appendix D

Wildlife Habitat Analysis Tool - Area of Interest

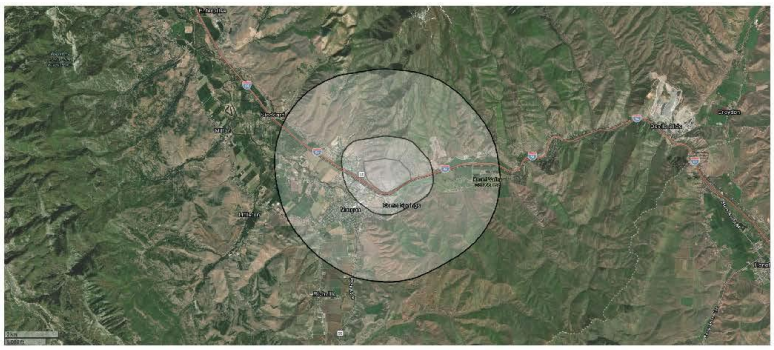
Utah Division of Wildlife Resources
1594 W. North Temple
Salt Lake City, UT 84116
(801) 538-4700, wildlife.utah.gov

Report Number: mea_17328

Report Date: 2025-05-30 14:53:27

Round Valley WMA

Location: Morgan, UT
Description: WMA



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 bumble bee	*Bombus occidentalis*	SGCN	None	2008-07-28	
Ash Gyro	*Gyraulus parvus*	None	None	1924	

NOT FOR CONSULTATION

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Green River Pebblesnail	*Fluminicola coloradoensis*	SGCN	None	1994-06-07	
Deseret Mountainsnail	*Oreohelix peripherica*	None	None	2020-04-13	
Northwest Bonneville Pyrg	*Pyrgulopsis variegata*	SGCN	None	1990-04-20	
Green Sucker	*Catostomus virescens*	None	None	2018-10-18	
Utah Sucker	*Catostomus ardens*	None	None	2013-05-22	
Northern Leopard Frog	*Lithobates pipiens*	SGCN	None	2006-10-24	
Bonneville Cutthroat Trout	*Oncorhynchus clarkii utah*	None	None	2000	

Two-Mile Radius

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Western bumble bee	*Bombus occidentalis*	SGCN	None	2008-07-28	
Ash Gyro	*Gyraulus parvus*	None	None	1924	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Tadpole Physa	*Physa gyrina*	None	None	1935-PRE	
Western Glass-snail	*Vitrina pellucida*	None	None	1942-PRE	
Ubiquitous Peaclam	*Pisidium casertanum*	None	None	1917	
Rock Fossaria	*Galba modicella*	None	None	1917	
Suboval Ambersnail	*Catinella vermeta*	None	None	1935-PRE	
Green River Pebblesnail	*Fluminicola coloradoensis*	SGCN	None	1994-06-07	
Deseret Mountainsnail	*Oreohelix peripherica*	None	None	2020-04-13	
Lyrate Mountainsnail	*Oreohelix haydeni*	SGIN	None	1992-06-01	
Northwest Bonneville Pyrg	*Pyrgulopsis variegata*	SGCN	None	1990-04-20	
Awnless Brome	*Bromus inermis*	None	None	2020-07-06 20:47:24	
Utah Juniper	*Juniperus osteosperma*	None	None	2020-07-06 20:47:24	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Gambel Oak	*Quercus gambelii*	None	None	2020-07-06 20:45:18	
Arrowleaf Balsamroot	*Balsamorhiza sagittata*	None	None	2020-07-06 20:47:24	
Green Sucker	*Catostomus virescens*	None	None	2018-10-18	
Utah Sucker	*Catostomus ardens*	None	None	2013-05-22	
Mountain Whitefish	*Prosopium williamsoni*	None	None	2018-10-18	
Bobolink	*Dolichonyx oryzivorus*	None	None	2002-06-03	
Mountain Sucker	*Catostomus platyrhynchus*	None	None	2021-08-06	
Lark Bunting	*Calamospiza melanocorys*	None	None	1996-05-23	
Northern Leopard Frog	*Lithobates pipiens*	SGCN	None	2021-08-06	
Band-tailed Pigeon	*Patagioenas fasciata*	SGIN	None	2009-08-26	
Bonneville Cutthroat Trout	*Oncorhynchus clarkii utah*	None	None	2000	

Definitions

State Status	
SGCN, SGIN	Species of greatest conservation need (SGCN) or the special subcategory, species of greatest information need (SGIN), are 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 winter habitats Dec. 1 - Apr. 15. Avoid, minimize or mitigate impacts from large-scale development that occur within crucial elk habitats. Voluntary mitigation is recommended at a 4:1

Common Name	Strategy
	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. Consider voluntary mitigation if avoidance is not possible or there is permanent habitat loss.
mule deer	Avoid disturbance in crucial winter habitats Dec. 1 - Apr. 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
Northern Region	801-476-2740	Sarah Kapel	skapel@utah.gov	801-476-2740

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.

The "Not For Consultation" watermark is meant to inform users that this tool is not a substitute for the U.S. Fish and Wildlife Service (USFWS) environmental review process. While this tool provides courtesy information on ESA species for context, the U.S. Fish and Wildlife Service is the authority on Information for Planning and Consultation Endangered

Species Act Reviews. Additionally, the Wildlife Habitat Analysis Tool provides information to assist in analysis but does not replace coordination and consultation with Utah Division of Wildlife Resource biologists who can often serve as an expert resource for site-specific information.

Supplemental Data

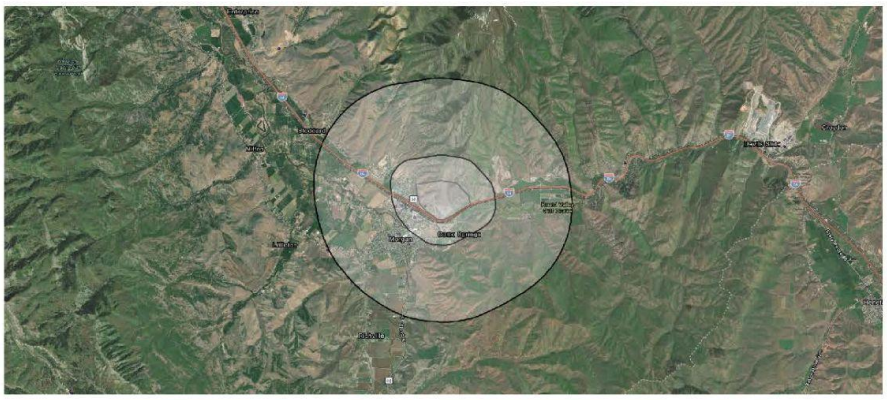
Unmapped Corridors

Unmodeled Corridors:	Absent

Wildlife Habitat Information

Species	Season	Value	Comments
California Quail	year-long	crucial	
Chukar	year-long	crucial	
Elk	winter	crucial	
Moose	winter	crucial	
Mule Deer	winter	crucial	
Ring-Necked Pheasant	year-long	substantial	
Ruffed Grouse	year-long	substantial	

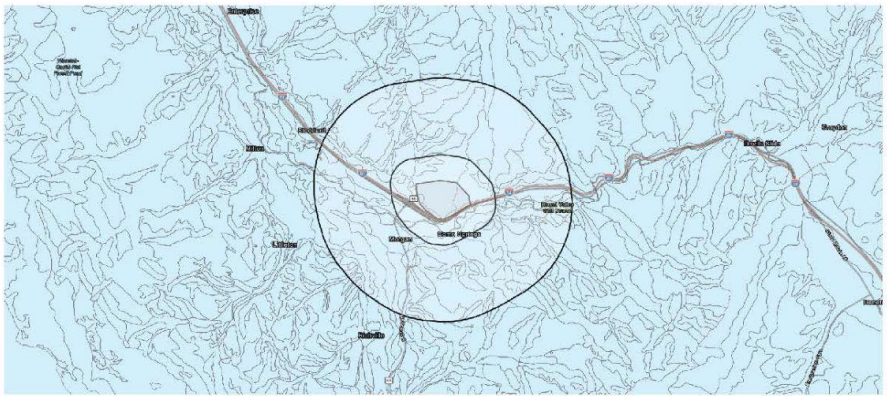
DEQ DERR Utah Petroleum Storage Tank Facilities



Description: This dataset is updated nightly via forklift from the DERR database which is continually updated.This data layer contains coordinates of Facility PST sites. There can be multiple tanks for each facility. Each storage tank is associated with a facility via the FacilityID (the number that uniquely identifies a facility). The coordinate data have been created and utilized by the Utah Division of Environmental Response and Remediation (DERR) for the plotting of Facility PST sites on maps depicting the state and several counties. The data used to produce these maps have been reviewed by DERR staff and found to be adequate for DERR's purposes which require the depiction of general site locations. The accuracy of these locations may not be sufficient for other purposes. Persons relaying upon these maps do so at their own risk. The DERR assumes no responsibility or liability oft he accuracy of these points. Additional tank information can be found in these related tables: CompliancePST, TankPST, and DEQMAP_LUST.More information can be found on the UGRC data page for this layer:https://gis.utah.gov/data/environment/deq-land-related-contaminant-cleanup-sites/

Locname
UDOT STA. # 1426

USDA NRCS Utah Soils

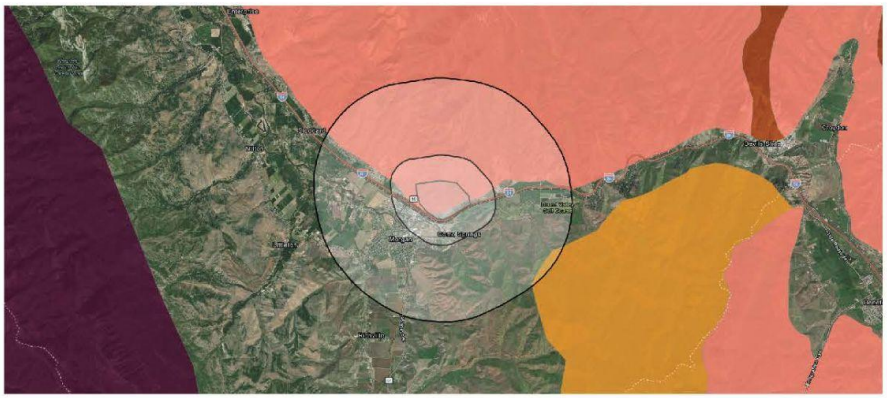


Description: Utah Soils is a subset of the more comprehensive Natural Resources Conservation Service (NRCS) SSURGO database. The SSURGO database is a collection of 6 feature classes, one raster, 76 tables, and 69 relationship classes that represent over a century's worth of soil data collected by the National Cooperative Soil Survey. Utah Soils is a collection of the more widely used SSURGO soil attributes and SSURGO MUPOLYGON geometry to provide users an overview of Utah soils data without the complexity of the SSURGO database itself.

Area Name	Area Symbol	Farm Class	Hydric Classification - Presence	Hydrologic Group - Dominant Conditions	Map Unit Name	Map Unit Key	Water Table Depth - Annual - Minimum	Water Table Depth - April - June - Minimum
Morgan Area, Utah - Morgan County and Part of Weber County	UT609	Not prime farmland	0	C	Morgala loam, 30 to 60 percent slopes	506588	None	None
Morgan Area, Utah - Morgan County and Part of Weber County	UT609	Farmland of statewide importance	94	C/D	Canburn silt loam	506520	30	30
Morgan Area, Utah - Morgan County and Part of Weber County	UT609	Prime farmland if irrigated	0	C	Eastcan variant loam, 6 to 10 percent slopes	506538	None	None
Morgan Area, Utah - Morgan County and Part of Weber County	UT609	Not prime farmland	0	B	Stoda loam, 10 to 25 percent slopes	506631	None	None
Morgan Area, Utah - Morgan County and Part of Weber County	UT609	Prime farmland if irrigated	0	B	Steed loam, 0 to 1 percent slopes	506625	122	122

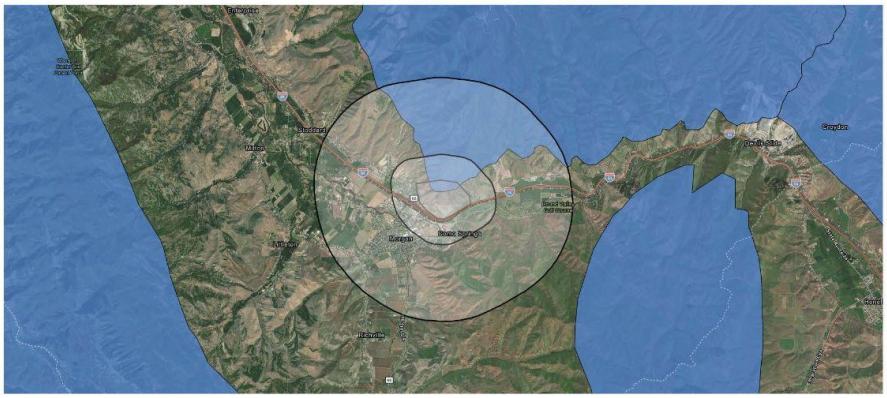
Area Name	Area Symbol	Farm Class	Hydric Classification - Presence	Hydrologic Group - Dominant Conditions	Map Unit Name	Map Unit Key	Water Table Depth - Annual - Minimum	Water Table Depth - April - June - Minimum
Morgan Area, Utah - Morgan County and Part of Weber County	UT609	Not prime farmland	0	D	Agassiz-Rock outcrop complex, 40 to 70 percent slopes	506504	None	None
Morgan Area, Utah - Morgan County and Part of Weber County	UT609	Not prime farmland	0	D	Agassiz-Rock outcrop complex, shallow, 40 to 70 percent slopes	506505	None	None

Elk Habitat



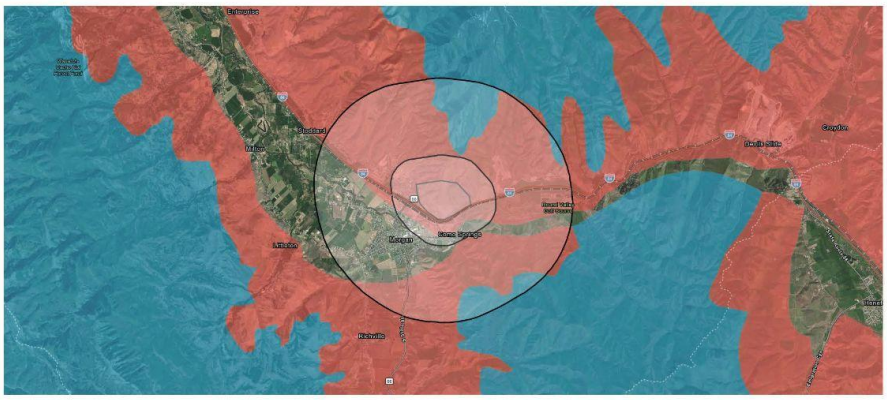
Season	Species	Value	Comments
winter	Elk	crucial	

Moose Habitat



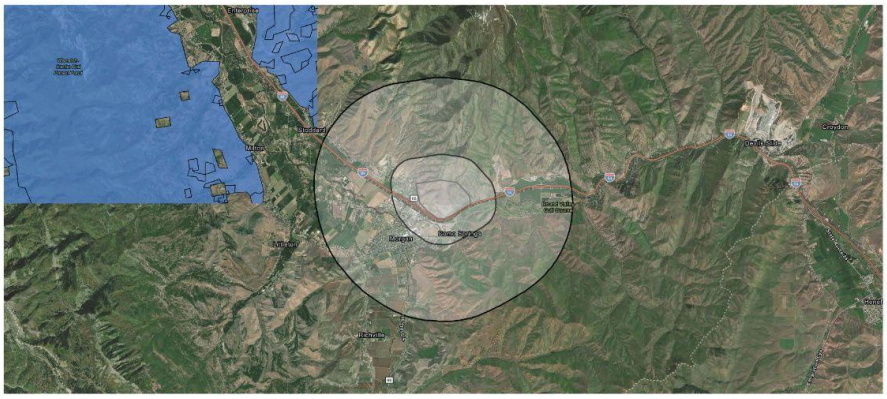
Species	Season	Comments	Value
Moose	winter		crucial

Mule Deer Habitat



Comments	Season	Species	Value
	winter	Mule Deer	crucial

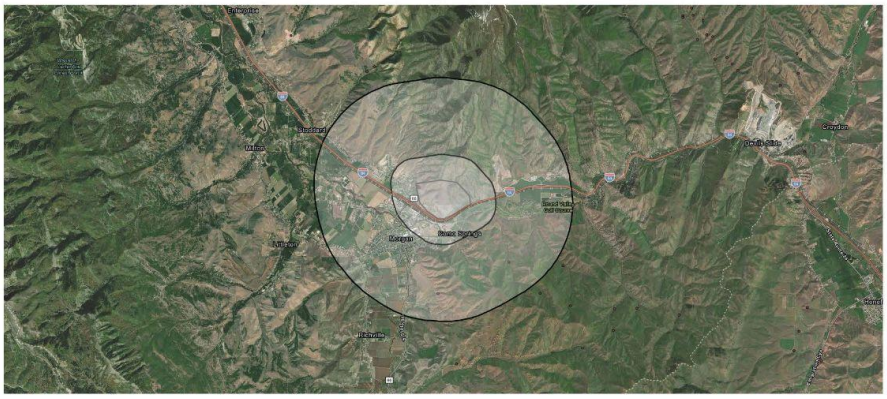
Terrestrial Key Habitat



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
Desert Shrub
Lower Montane Mixed Conifer
Lowland Sagebrush
Mountain Shrub
Salt Desert Shrub

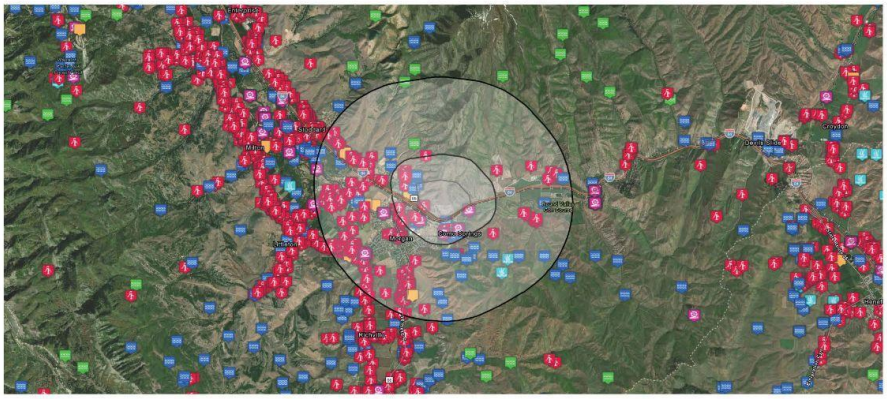
Springs



Description: This feature class contains a subset of springs extracted from the Springs Stewardship Institute Springs Online database (http://springsdata.org), exported at 12:07:06 hrs, Saturday, December 24, 2022 from Springs Online. Each record in the feature class has a unique SiteID assigned by the online database. This feature class is related to the primary table, tbl_Surveys, in a one to many relationship.

Site Name
60601206 NHD_ID
60601208 NHD_ID

DNR Water Rights Utah Points of Diversion



Description: Points generated daily from basic information in the tabular database from the Division of Water Rights database. The Points represents where water is diverted from a source.

Acft	Cfs	Type	Water Right Number	Weblink
0	0.363	Surface	35-8256	https://www.waterrights.utah.gov/search/?q=35-8256
0	0	Underground	9431013M00	https://www.waterrights.utah.gov/search/?q=9431013M00
0	0.052	Surface	35-8186	https://www.waterrights.utah.gov/search/?q=35-8186
0	0	Underground	9431013M00	https://www.waterrights.utah.gov/search/?q=9431013M00
0	0.062	Surface	35-8257	https://www.waterrights.utah.gov/search/?q=35-8257
0	0.425	Surface	35-8256	https://www.waterrights.utah.gov/search/?q=a12642
23	0	Surface	35-7446	https://www.waterrights.utah.gov/search/?q=E1649
136.75	1.07	Surface	35-8158	https://www.waterrights.utah.gov/search/?q=a51352
0	0.425	Surface	35-8256	https://www.waterrights.utah.gov/search/?q=a11161
0	0	Underground	9431013M00	https://www.waterrights.utah.gov/search/?q=9431013M00
0	0	Underground	9535005M00	https://www.waterrights.utah.gov/search/?q=9535005M00

Report Generated For

Name: Melissa Early
Organization: DWR
Email: mearly@utah.gov
Phone: (801)-386-4885

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 E

IPaC Data Report

ATTACHED

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Utah Ecological Services Field Office
2369 West Orton Circle, Suite 50
West Valley City, UT 84119-7603
Phone: (801) 975-3330 Fax: (801) 975-3331

In Reply Refer To: 09/18/2025 21:19:49 UTC
Project Code: 2025-0151824
Project Name: Geneva Exchange Disposal

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Utah Ecological Services Field Office
2369 West Orton Circle, Suite 50
West Valley City, UT 84119-7603
(801) 975-3330

PROJECT SUMMARY

Project Code: 2025-0151824
Project Name: Geneva Exchange Disposal
Project Type: Disposal / Transfer
Project Description: disposal portion of Geneva exchange on Round Valley WMA
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.048625099999995,-111.65674423211985,14z

Counties: Morgan County, Utah

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Canada Lynx *Lynx canadensis* Population: Wherever Found in Contiguous U.S. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3652	Threatened
North American Wolverine *Gulo gulo luscus* No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: ▪ Species may be present based on transient occurrence as it moves through or too suitable habitat. Effects should be considered to species and projects should consult with the Service, however, depending on the project, consultation may not be necessary. Species profile: https://ecos.fws.gov/ecp/species/5123	Threatened

BIRDS

NAME	STATUS
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Suckley's Cuckoo Bumble Bee *Bombus suckleyi* Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10885	Proposed Endangered

FLOWERING PLANTS

NAME	STATUS
Ute Ladies'-tresses *Spiranthes diluvialis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2159	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/ activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

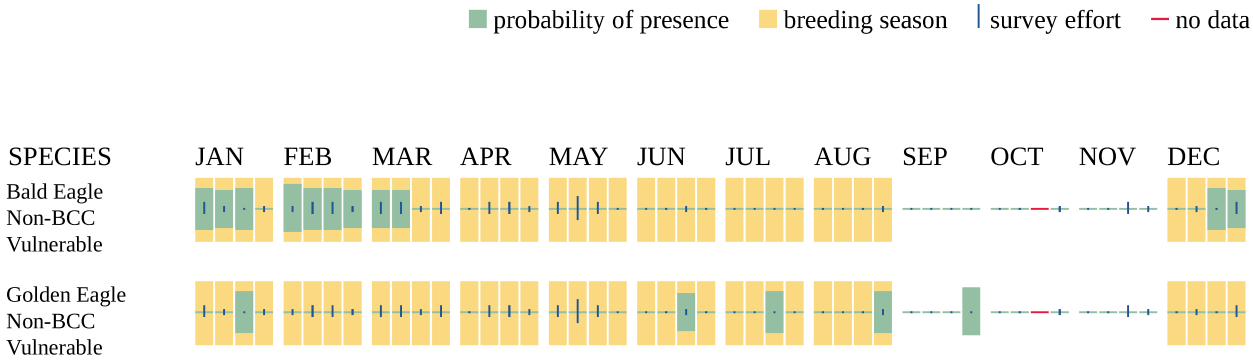
Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Broad-tailed Hummingbird *Selasphorus platycercus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/11935	Breeds May 25 to Aug 21
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10955	Breeds Mar 1 to Jul 31
Cassin's Finch *Haemorhous cassinii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15
Clark's Nutcracker *Nucifraga columbiana* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9421	Breeds Jan 15 to Jul 15
Evening Grosbeak *Coccothraustes vespertinus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9465	Breeds May 15 to Aug 10
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31
Lewis's Woodpecker *Melanerpes lewis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9408	Breeds Apr 20 to Sep 30
Pinyon Jay *Gymnorhinus cyanocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9420	Breeds Feb 15 to Jul 15
Virginia's Warbler *Leiothlypis virginiae* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9441	Breeds May 1 to Jul 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

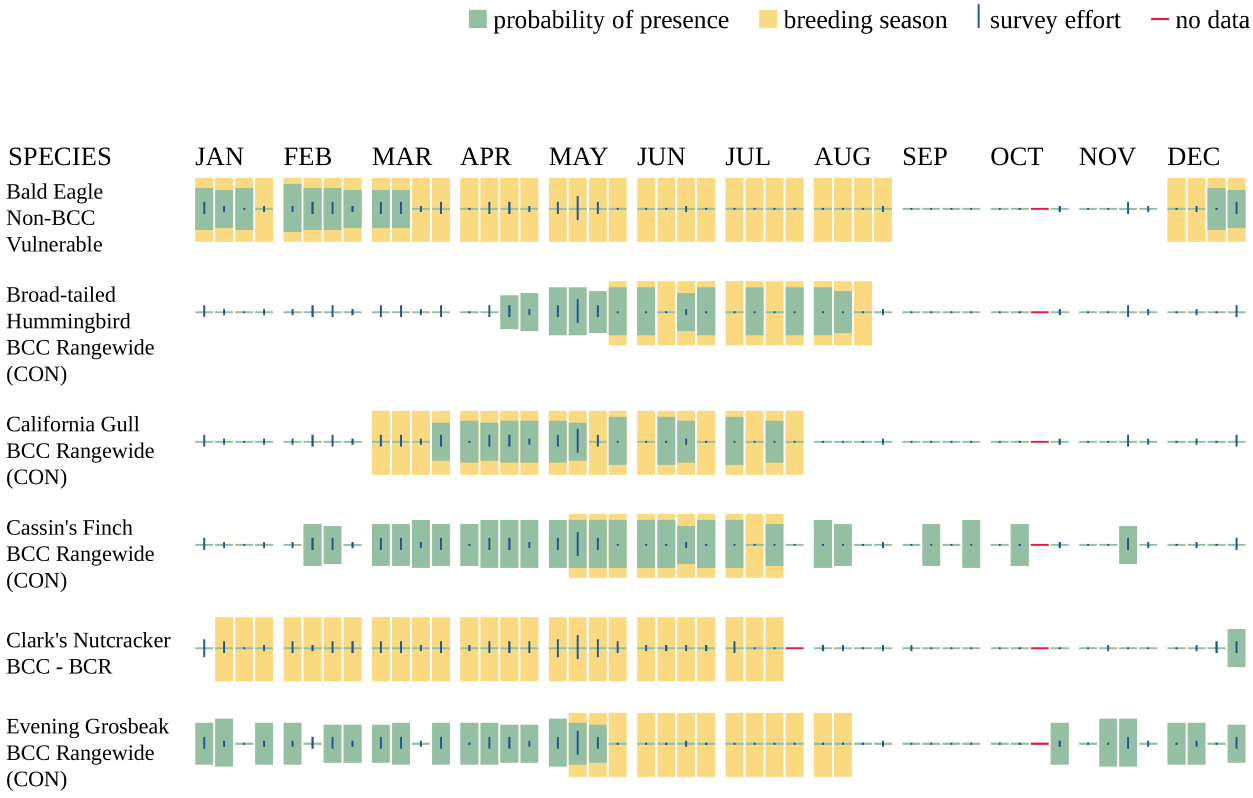
Probability of Presence (■)

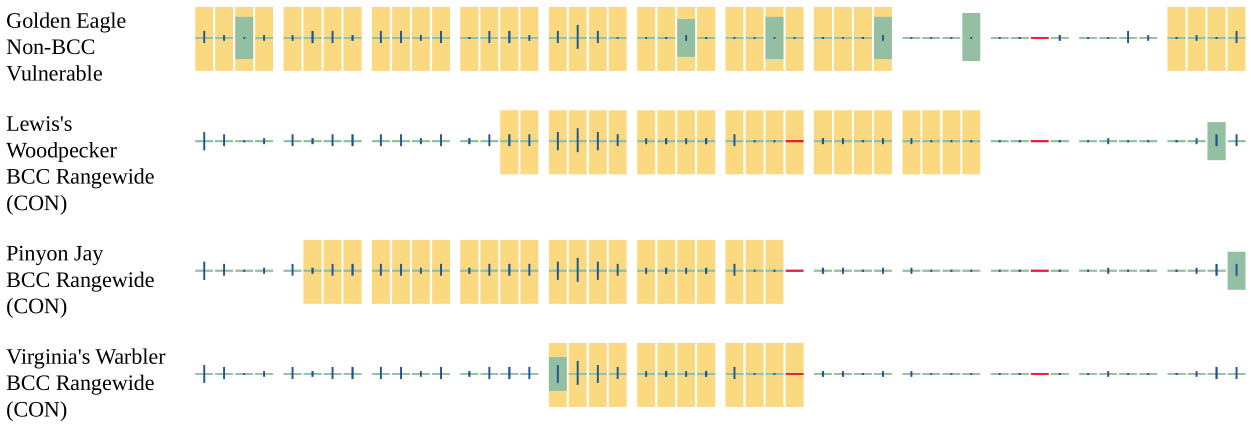
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

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Appendix F

Soil Composition Reports

ATTACHED

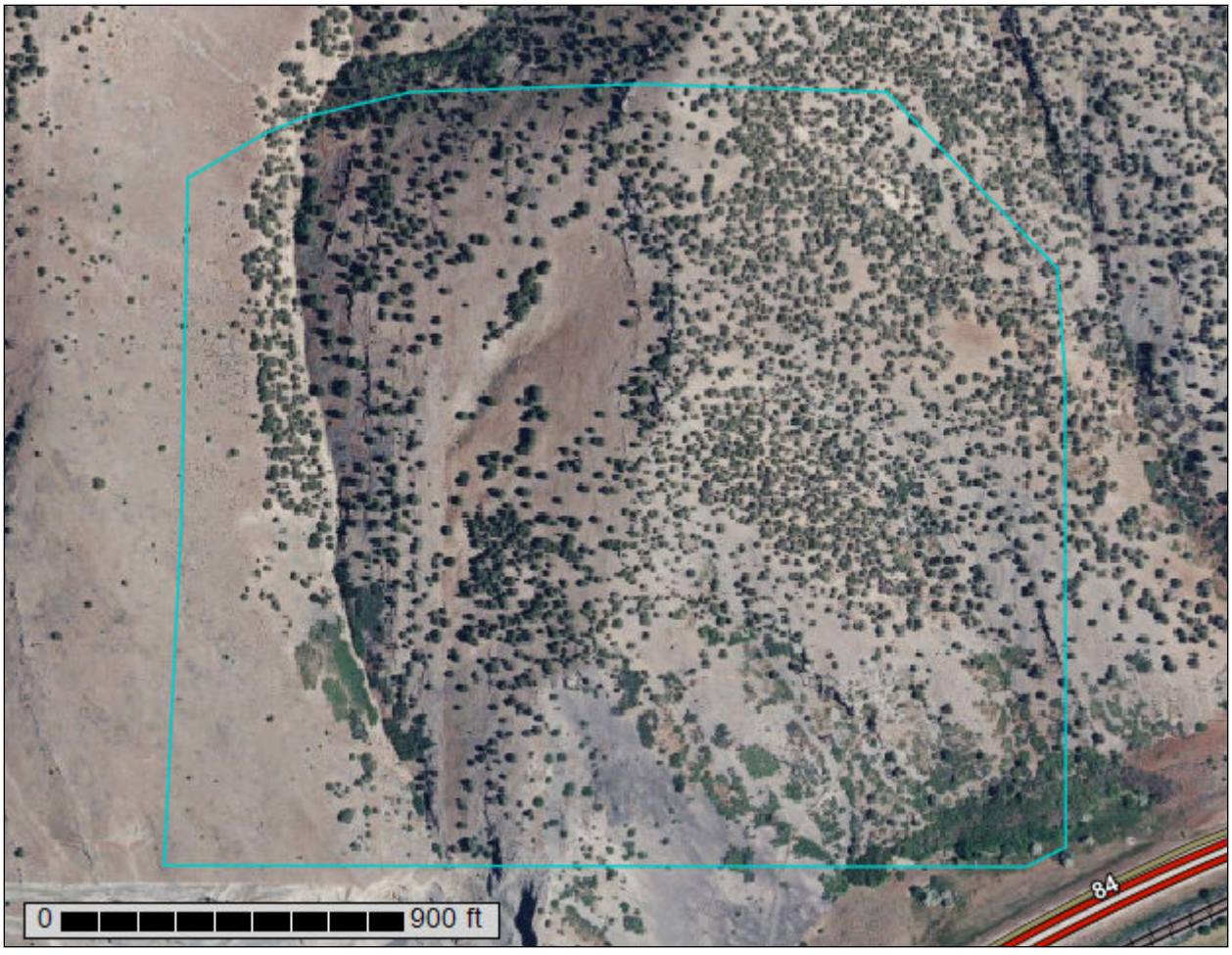
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Morgan Area, Utah - Morgan County and Part of Weber County



June 17, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

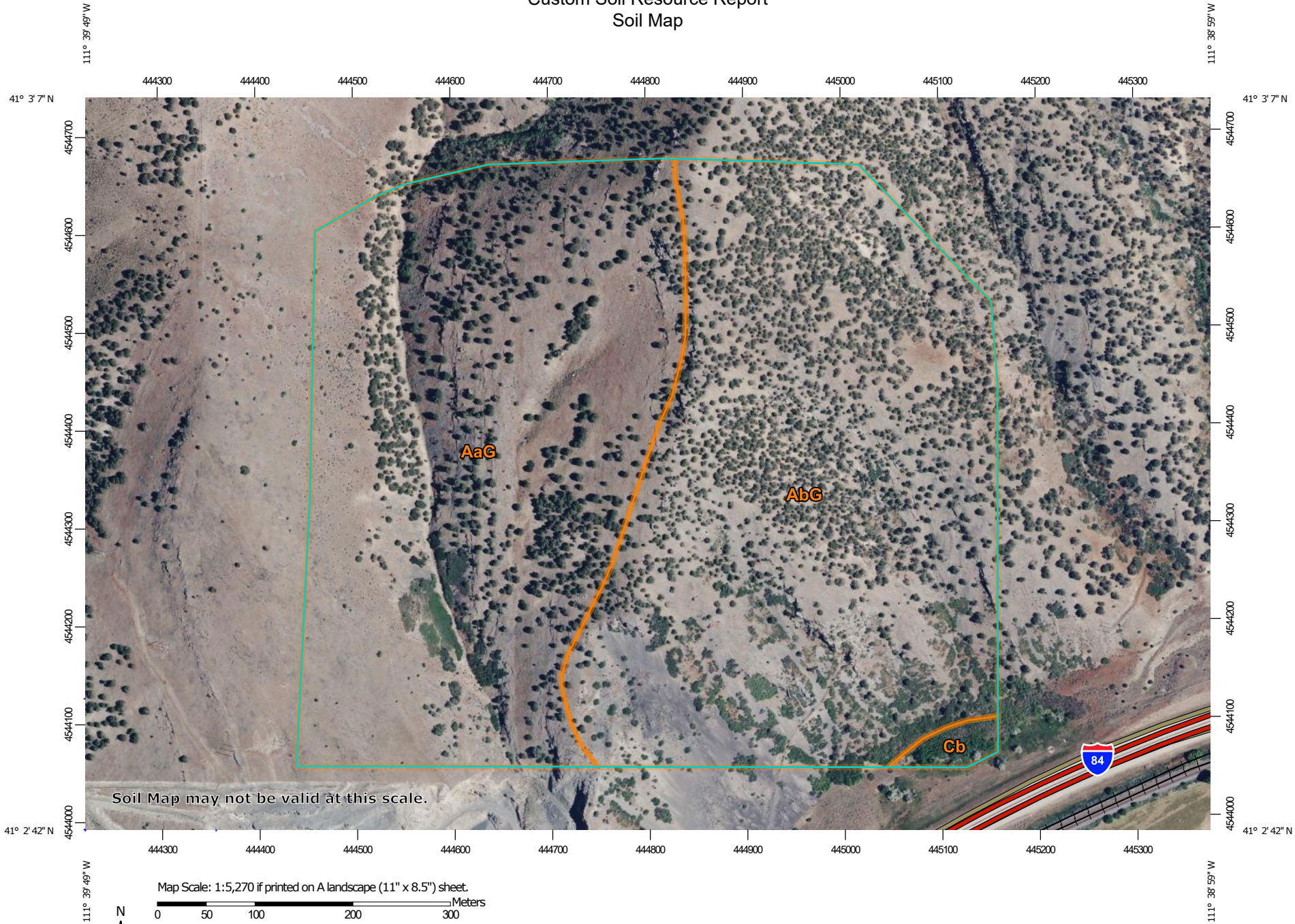
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:5,270 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 12N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Morgan Area, Utah - Morgan County and Part of Weber County
Survey Area Data: Version 17, Aug 26, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 22, 2022—Jul 11, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AaG	Agassiz-Rock outcrop complex, 40 to 70 percent slopes	50.2	48.2%
AbG	Agassiz-Rock outcrop complex, shallow, 40 to 70 percent slopes	53.1	51.0%
Cb	Canburn silt loam	0.9	0.9%
Totals for Area of Interest		**104.3**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Morgan Area, Utah - Morgan County and Part of Weber County

AaG—Agassiz-Rock outcrop complex, 40 to 70 percent slopes

Map Unit Setting

National map unit symbol: k01v
Elevation: 5,400 to 8,000 feet
Mean annual precipitation: 18 to 22 inches
Frost-free period: 50 to 90 days
Farmland classification: Not prime farmland

Map Unit Composition

Agassiz and similar soils: 70 percent
Rock outcrop: 20 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Agassiz

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Colluvium over residuum derived from limestone

Typical profile

A11, A12 - 0 to 8 inches: very cobbly silt loam
B2 - 8 to 14 inches: extremely cobbly silt loam
R - 14 to 18 inches: unweathered bedrock

Properties and qualities

Slope: 40 to 70 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R047XA446UT - Mountain Shallow Loam (mountain big sagebrush)
Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank

Down-slope shape: Convex
Across-slope shape: Convex

Minor Components

Geertsen
Percent of map unit: 4 percent

Horrocks
Percent of map unit: 3 percent

Burgi
Percent of map unit: 3 percent

AbG—Agassiz-Rock outcrop complex, shallow, 40 to 70 percent slopes

Map Unit Setting
National map unit symbol: k01w
Elevation: 5,200 to 7,810 feet
Mean annual precipitation: 18 to 22 inches
Frost-free period: 50 to 90 days
Farmland classification: Not prime farmland

Map Unit Composition
Agassiz and similar soils: 70 percent
Rock outcrop: 20 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Agassiz

Setting
Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Colluvium over residuum derived from limestone

Typical profile
A1 - 0 to 10 inches: very gravelly loam
R - 10 to 14 inches: unweathered bedrock

Properties and qualities
Slope: 40 to 70 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R047XA440UT - Mountain Shallow Loam (curl-leaf mountain mahogany)
Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex

Minor Components

Agassiz, stony loam, 40 to 70 percent slopes

Percent of map unit: 4 percent

Horrocks

Percent of map unit: 3 percent

Geertsen

Percent of map unit: 3 percent

Cb—Canburn silt loam

Map Unit Setting

National map unit symbol: k02c
Elevation: 4,820 to 6,200 feet
Mean annual precipitation: 18 to 22 inches
Frost-free period: 80 to 100 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Canburn and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Canburn

Setting

Landform: Flood plains, valley floors
Landform position (three-dimensional): Dip, talf
Down-slope shape: Linear
Across-slope shape: Concave

Parent material: Alluvium derived from limestone, sandstone and quartzite

Typical profile

A11 - 0 to 8 inches: silt loam
A12 - 8 to 21 inches: silt loam
C - 21 to 48 inches: silt loam
A1b - 48 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Gypsum, maximum content: 2 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 5.0
Available water supply, 0 to 60 inches: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): 4w
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Ecological site: R047XA008UT - Interzonal Wet Fresh Meadow (sedge)
Hydric soil rating: Yes

Minor Components

Eastcan

Percent of map unit: 2 percent

Pringle

Percent of map unit: 2 percent

Sunset

Percent of map unit: 2 percent

Crooked creek

Percent of map unit: 2 percent
Landform: Flood plains
Landform position (three-dimensional): Dip, talf
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

Cumulic haploborolls, wet

Percent of map unit: 2 percent
Landform: Flood plains
Landform position (three-dimensional): Dip, talf
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

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