

Environmental Assessment

for the

Roosevelt City Shooting Range Complex

Uintah County, Utah

U.S. Fish and Wildlife Service Wildlife and Sport Fish Restoration
Grant W-222-E-1

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Chapter 1. Purpose and Need

1.1. Introduction

Shooting sports and hunting are popular recreational pursuits for residents of Roosevelt City and the surrounding area in Duchesne and Uintah counties. There are currently no dedicated public shooting facilities within or near Roosevelt City, so shooters are using private and public lands that do not provide any safety infrastructure. The nearest dedicated public shooting facilities are located approximately 30 miles away, near Vernal, Utah (Utah Division of Wildlife Resources [UDWR] 2024a).

Roosevelt City owns several acres of land approximately 2 miles south and east of Roosevelt City in Uintah County, Utah (see Map 1 in Appendix A). A 200-yard rifle range has been partially constructed at the site, but is not yet open for use. A police training range and Strata Network range have also been constructed at the site, but these ranges are not open to the public. A majority of the project area was previously pivot-irrigated croplands; these areas are no longer irrigated. Existing access roads are developed in the area.

The Utah Division of Wildlife Resources (UDWR) has requested federal funds granted through the Federal Aid in Wildlife Restoration Act of 1937 (Pittman-Robertson Act, 16 U.S.C. § 669 et seq) administered by the U.S. Fish and Wildlife Service (USFWS) Office of Conservation Investment (CI). Funding through CI would constitute a federal action subject to the requirements of the National Environmental Policy Act (NEPA). Consequently, this Environmental Assessment (EA) has been prepared to document the analysis of the Proposed Action and the environmental effects that would be likely to result. The EA and comments from the public review will provide the USFWS information needed to determine if the Proposed Action would be 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) and allow Roosevelt City to proceed with construction of the project using federal funds. 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 of the project.

1.2. Purpose and Need for Action

The purpose of the project is to provide safe and controlled public shooting facilities in the Roosevelt City area. The project is needed because there are currently no designated public shooting facilities within 30 miles of Roosevelt City.

Chapter 2. Alternatives

This EA focuses on the No Action and Proposed Action alternatives. Other alternatives were not considered in detail because the issues identified during scoping did not indicate a need for additional alternatives or mitigation beyond those described in the Proposed Action. The

proposed location was selected because the site is already owned by Roosevelt City and is currently used for shooting; no suitable alternate sites were identified or considered.

2.1. No Action

The No Action alternative would be to not construct a public shooting range facility in this location and, therefore, shooters would need to continue to use private and public lands that do not provide any safety infrastructure.

2.2. Proposed Action

The Proposed Action is construction of a shooting range complex on land owned by Roosevelt City that consists of the following ranges:

- 1,000-yard rifle range
- 200-yard rifle range
- Cowboy Action shooting/4-H/hunter's education range
- Police training and Strata Network range (not open to the public)
- Skeet and trap range
- Archery/multipurpose range

The proposed complex is shown in Map 2 in Appendix A. The complex is designed to meet the needs for each range type and considers the National Rifle Association (NRA) guidelines as well as input from the UDWR, local shooting sports experts, and hunter education representatives. The design also optimizes earth-moving efforts to reduce costs.

All pistol and rifle ranges would be designed with 20-foot-tall backstop embankments with 10-foot-tall side embankments. Rifle ranges would have separating embankments between longer and shorter ranges to allow each range to operate with different target types and different frequencies of checking targets. The embankments would be constructed with dozers and track hoes that would push onsite soil materials from the interior of the ranges out to the edges. Where necessary, rocks would be separated from the soil to ensure that embankments are rock free. The existing berms at the police training and Strata Network ranges would also be improved.

Each range would include shooting benches and stations. Shooting benches would be concrete and steel and could be purchased as a unit or cast on-site. The shooting structures would be constructed using steel posts and structural elements, along with metal roofing and deflectors. A concrete house would be constructed to protect trap shooting throwers.

Approximately 1.0 mile of existing roadway from the intersection with 2000 South would be widened to 16 feet, shaped to maintain drainage, and surfaced with gravel. Depending on the final layout of the skeet and trap range, approximately 0.2 miles of existing roadway to the north or 0.3 miles to the south of the range would be surfaced with gravel at the road's current width. The gate at the entrance to the complex would be replaced with a coded access gate system to allow for free year-round public access to registered users. The gate would allow Roosevelt City to track facility utilization and reduce vandalism.

Upon completion, disturbed soil on the back and outside of the embankments would be seeded with a site-specific seed mix to reduce erosion and help prevent establishment of weedy species. The inside of the ranges would be regularly cleared of vegetation to reduce fire risk.

The Proposed Action would disturb up to 58.3 acres.

2.2.1 Project Design Features

Project design features are listed in Table 2-1. These features were developed to avoid or eliminate adverse impacts from project activities and are incorporated as an integrated part of the Proposed Action:

Table 2-1. Project Design Features

Resource Area	Project Design Feature
Air Quality	Disturbed soil within the project area would be sprayed with water. The quantity of water used for dust control will be minimized to prevent water from leaving the site.
Air Quality	Material stockpiles would be wetted to prevent wind-blown emissions.
Air Quality	Where appropriate, vegetative cover would be established on bare ground as soon as practicable after construction activities to reduce wind-blown dust.
Air Quality	Only properly operating, well-maintained construction equipment would be used.
Cultural	Any ground disturbance resulting from work performed by, or on behalf of the project owner or contractor that uncovers an apparent or suspected historical or archaeological artifact shall be immediately reported to USFWS. Work in the area of the discovery shall be immediately halted pending the notification process and further directions issued by USFWS after consultation with the Utah State Historic Preservation Office (SHPO).
Lead Management	Roosevelt City will develop a site-specific lead maintenance plan for the range to comply with relevant regulation and reduce potential lead exposure and contamination.
Noxious Weeds	Equipment will be washed and inspected prior to entering the project area to remove any soil and debris that may contribute to the spread of noxious weeds.
Reclamation	Vegetation removal will be minimized as much as practicable.
Reclamation	Disturbed soils on the back and outside of the embankments will be seeded with an appropriate seed mix.
Water Quality	A stormwater pollution prevention plan (SWPPP) will be prepared by the city or selected contractor prior to initiation of ground disturbance. The SWPPP will detail the best management practices and site-specific control features to prevent sediment and other pollutants from discharging off the site during construction.

Resource Area	Project Design Feature
Wildlife	Where practicable, vegetation will be removed during the fall and winter prior to construction to avoid impacts to nesting birds during the breeding bird season (March 1 – August 31). If construction activities occur between March 1 and August 31, clearance surveys for migratory birds within 10 days prior by a qualified biologist will be required. Appropriate spatial and temporal buffers will be applied if nesting birds are located.

2.2.2 Schedule

If approved, construction for the proposed project is anticipated to begin during the summer of 2025 if authorized and is anticipated to take approximately 6 months. Weather conditions, agency approvals, and contractor availability could delay the project.

2.2.3 Operation and Maintenance

Operation and maintenance of the shooting range property would be the responsibility of Roosevelt City according to the agreed upon Business Plan with the UDWR.

Chapter 3. Affected Environment and Environmental Consequences

This chapter describes the current physical, biological, and social environment for the project, and analyzes the potential meaningful effects of the proposal. The effects of taking no action are discussed to provide a baseline for comparison.

The proposed project occurs within the Uinta Basin section of the Colorado Plateau physiographic province (Fenneman and Johnson 1946). More specifically, the area is located near the confluence of Montes Creek with Dry Gulch Creek, approximately 4 miles west of the Uinta River. The area is characterized by a flat, open desert scrub with rocky outcroppings along the perimeter. Elevations range between 5,000 and 5,100 feet above sea level. The climate is arid, with an average total annual precipitation of only 6 inches. Temperatures range between winter lows of 28 °F and summer highs of 91 °F (Western Regional Climate Center 2024).

The proposed complex would be located on the east side of Roosevelt City's sewer lagoons. The Bonanza to Mona 345 kV power line runs immediately north of the project. A few irrigated fields and oil and gas well pads are located around the project area.

A representative photo of the site is provided in Figure 3-1.



Figure 3-1. Photo of terrain near the north end of the proposed complex (9-24-2024)

3.1. Air Quality

3.1.1 Affected Environment

The Environmental Protection Agency (EPA) designates areas in the U.S. for “attainment” or “non-attainment” of National Ambient Air Quality Standards (NAAQS). The criteria pollutants include nitrogen oxides, sulfur oxides, particulate matter (PM), ozone, carbon monoxide, and lead. The Uinta Basin is designated as a non-attainment area for the 2015 8-hour ozone standard (EPA 2024).

Exceedances of the NAAQS for ozone in the Uinta Basin have occurred in the winter (Utah Department of Environmental Quality 2020). The Environmental Protection Agency (EPA) estimates that “existing oil and natural gas operations account for approximately 98 percent of volatile organic compound emissions in the basin . . . Oil and natural gas activities emit volatile organic compounds and nitrogen oxides, which interact in the atmosphere to form ground-level ozone” (EPA 2019).

3.1.2 Impacts of the No Action Alternative

The No Action Alternative would have no impact on air quality because project activities would not occur.

3.1.3 Impacts of the Proposed Action

Implementation of the Proposed Action would require operation of heavy equipment for construction of the project components; such operations would result in mobile equipment emissions and particulate emissions resulting from ground-disturbing activities. Nonroad diesel equipment (such as track hoes and tractors) emit “high levels of nitrous oxides [NO_x] and volatile organic compounds (VOC) that react in the presence of heat and sunlight to form ground-level ozone” (Lewis et al. 2015:767). During construction, project activities could contribute to temporary wintertime exceedances of the 2015 8-hour ozone standard. Given

that the Proposed Action is not associated with oil and gas development, regulatory emission reduction measures (Utah Department of Environmental Quality 2024) do not apply.

Equipment operations emissions would be localized to the project area and would only occur during construction. Fugitive dust emissions would be minimized by implementation of project design features that would stabilize disturbed soils in the short and long term, which would reduce the suspension of dust particles. There would be no long-term emissions as a result of the Proposed Action. Based on the implementation of the design features and the temporary nature of construction, emissions from construction activities are not expected to result in permanent or long-term adverse impacts to air quality standards.

Operation of the complex would not affect air quality.

Maintenance activities would create the same type of emissions as construction activities. Such activities would occur on an as-needed basis; the associated increase in emissions would be temporary and localized to the immediate work area. Based on the anticipated short duration of equipment operation to complete the work, maintenance activities are not expected to impact air quality.

3.2. Water Resources

3.2.1 Affected Environment

Based on a review of aerial imagery and an onsite review on September 24, 2024, waters of the U.S. and wetlands do not occur within the project area.

Stormwater flows would drain to the west or southwest and eventually reach Dry Gulch Creek. The Clean Water Act Section 303(d) requires states to compile a list of threatened and impaired waters, and Section 305(b) requires states to report on the water quality of all water resources in the state. The state evaluates assessment units for EPA water quality criteria and beneficial uses; the project area is within the Dry Gulch Creek unit (UT14060003-009), which is impaired for *E. coli* and total dissolved solids (TDS). A total maximum daily load (TMDL) is needed for the *E. coli* impairment (Utah Division of Water Quality 2024), but a TMDL for the TDS was approved in 2002. The geology of saline soils and irrigation return flows are the main contributors to the impairment (Tetra Tech 2002).

3.2.2 Impacts of the No Action Alternative

The No Action Alternative would have no impact on waters of the U.S. or wetlands because project activities would not occur.

3.2.3 Impacts of the Proposed Action

The Proposed Action would have no direct impact on waters of the U.S. or wetlands. Impacts to water quality would be minimized by implementation of project design features; a SWPPP would be prepared prior to construction in compliance with Section 402 of the Clean Water Act that would describe measures to minimize erosion and prevent soils from leaving the site during construction activities. The measures outlined in the SWPPP would stabilize disturbed

areas during and after construction. With adherence to the design features, and because impacts would be short-term (during construction or maintenance and until vegetation established on disturbed soils), implementation of the Proposed Action would not adversely impact water quality or contribute to the impairment of Dry Gulch Creek.

3.3. Soils Resources

3.3.1 Affected Environment

Soil types were identified in the Natural Resources Conservation Service (NRCS) Web Soil Survey and are summarized in Table 3-1. The full soil report is provided in Appendix B.

Table 3-1. Soil Composition within the Project Area

Map Unit Name (Symbol)	Area (acres)	Important Farmland
Badland-Rock outcrop complex, 1 to 100 percent slopes (12)	5.4	Not prime farmland
Blackston loam, 0 to 2 percent slopes (23)	2	Prime farmland if irrigated
Braf-Rock outcrop complex, 2 to 15 percent slopes (28)	4.1	Not prime farmland
Greybull-Utaline-Badland complex, 8 to 50 percent slopes (94)	10.8	Not prime farmland
Shotnick loamy sand, 0 to 4 percent slopes (205)	34.7	Prime farmland if irrigated
Shotnick sandy loam, 2 to 4 percent slopes (206)	1.3	Prime farmland if irrigated

Most surface soil has been disturbed by existing uses in the area. Although approximately 38 acres of the project area are classified as “prime farmland if irrigated,” none of the soils in the project area are currently irrigated. Based on a Land Evaluation and Site Assessment, the project area is not subject to provisions of the Farmland Policy Protection Act; the AD-1006 Farmland Conversion Impact Rating form is also attached in Appendix B.

3.3.2 Impacts of the No Action Alternative

There would be no impact to soils under the No Action Alternative because project activities would not occur.

3.3.3 Impacts of the Proposed Action

Construction of the Proposed Action would result in total ground disturbance of up to 58.3 acres. Direct impacts to soil would include exposure due to vegetation removal, mixing of soil horizons, loss of topsoil productivity, soil compaction, and increased susceptibility to erosion.

The SWPPP would describe measures to minimize erosion and prevent soils from leaving the site during construction activities. The measures outlined in this plan would stabilize disturbed

areas during and after construction. Where practicable, disturbed areas would be seeded to stabilize soils and reduce erosion. Impacts to soil resources on the seeded areas would be short-term (during construction and up to 2 years after) and would diminish as plants established in these areas. Gravel surfacing of the roadways would reduce erosion from vehicle use.

Lead from the bullets may contaminate soil. Exposure to air oxidizes lead, and exposure to acidic water or soil dissolves lead. Dissolved lead may also be transported by surface and ground water flows. These processes are affected by factors such as precipitation rate, water and soil properties, and topography (EPA 2005). The site-specific lead maintenance plan committed to in the project design features (Table 2-1) would consider these factors and identify best management practices to reduce potential lead exposure and contamination.

Maintenance activities would create the same type of disturbance as construction activities. Such activities would occur on an as-needed basis; the associated disturbance to soils would be temporary and localized to the immediate work area. Based on the anticipated short duration of ground disturbance to complete the work, maintenance activities are not expected to adversely affect soil resources. There would be no long-term or permanent impacts to soils as a result of maintenance or operations.

With adherence to the design features and because impacts would be short-term (during construction or maintenance and until vegetation established on disturbed soils), implementation of the Proposed Action would not adversely impact soil resources.

3.4. Wildlife Resources

3.4.1 Affected Environment

Wildlife habitats were identified from publicly available UDWR data (UDWR 2024b). The project area is wholly within mapped year-long crucial habitat for ring-necked pheasant (*Phasianus colchicus*) and year-long substantial habitat for mule deer (*Odocoileus hemionus*). Ring-necked pheasant are associated with agricultural and grassland habitats in Utah (Parrish et al. 2002); pheasants from the surrounding fields could forage within the project area. Mule could also forage within the desert shrub habitat in and around the project area. These habitats and animals that may occupy them have been impacted by the existing land uses and associated human presence in the area, including use of the existing ranges. As a result of the existing uses, suitable habitats are limited in the area.

3.4.2 Impacts of the No Action Alternative

The No Action Alternative would have no impact on wildlife resources because project activities would not occur.

3.4.3 Impacts of the Proposed Action

Approximately 58.3 acres of desert shrub habitat would be impacted by the project. Impacts to wildlife that forage in the project area could include direct mortality and displacement during project construction and maintenance activities and use of the complex; however, wildlife

would likely avoid the localized daytime disturbance associated with construction, maintenance, and use of the facility.

Due to the existing uses and limited habitat suitability, implementation of the Proposed Action may impact individual wildlife, but would not adversely affect populations within the larger area.

3.5. Fish and Other Aquatic Species

3.5.1 Affected Environment

There are no aquatic habitats within 2,000 feet of the project area.

3.5.2 Impacts of the No Action Alternative

The No Action Alternative would have no impact on fish or other aquatic species because they do not occur within 2,000 feet of the project area.

3.5.3 Impacts of the Proposed Action

The Proposed Action would have no impact on fish or other aquatic species because they do not occur within 2,000 feet of the project area.

3.6. Threatened and Endangered Species

3.6.1 Affected Environment

A list of federally listed species and critical habitats that may occur in the project area was obtained from the Information for Planning and Consultation (IPaC) system on December 14, 2024; the list is provided in Appendix C. The following species federally listed as threatened or endangered under the Endangered Species Act could occur within or near the project area:

- Yellow-billed cuckoo (*Coccyzus americanus*) - Threatened: The yellow-billed cuckoo was listed as threatened under the ESA in 2014. The cuckoo is a migratory bird that breeds in riparian areas with overstory and understory components (USFWS 2021). The nearest critical habitat occurs over 4 miles south of the project area, in association with the Duchesne River. Suitable riparian woodlands do not occur within or near the project area and yellow-billed cuckoos are unlikely to occur in the area. The species will not be considered further.
- Bonytail (*Gila elegans*) – Endangered: The bonytail is a fish species listed as endangered throughout its range in the Colorado River Basin (USFWS 1990a). Suitable aquatic habitat does not occur within the project area and there would be no water depletions within the Basin as a result of the project. The species will not be considered further.
- Colorado pikeminnow (*Ptychocheilus lucius*) – Endangered: The Colorado pikeminnow is a fish species listed as endangered throughout its range in the Colorado River Basin (USFWS 1991). Suitable aquatic habitat does not occur within the project area and there

would be no water depletions within the Basin as a result of the project. The species will not be considered further.

- Razorback sucker (*Xyrauchen texanus*) – Endangered: The razorback sucker is a fish species listed as endangered throughout its range in the Colorado River Basin (USFWS 1998). Suitable aquatic habitat does not occur within the project area and there would be no water depletions within the Basin as a result of the project. The species will not be considered further.
- Humpback chub (*Gila cypha*) – Threatened: The humpback chub is a fish species listed as threatened throughout its range in the Colorado River Basin (USFWS 1990b). Suitable aquatic habitat does not occur within the project area and there would be no water depletions within the Basin as a result of the project. The species will not be considered further.
- Monarch butterfly (*Danaus plexippus*) – Proposed Threatened: The monarch butterfly is an insect that is proposed for listing as threatened under the ESA. The species is found mainly in North America, in separate populations east and west of the Rocky Mountains. Monarchs require milkweed (*Asclepias* spp.), overwintering habitat, and migration habitat. Overwintering for the western population occurs along the Pacific Coast, and migration habitat is typically associated with riparian corridors (USFWS 2024). Milkweed and riparian habitats do not occur within the project area. The species will not be considered further.

There are no critical habitats within the project area.

3.6.2 Impacts of the No Action Alternative

There would be no effect to federally listed species or critical habitat under the No Action Alternative because project activities would not occur.

3.6.3 Impacts of the Proposed Action

Due to a lack of suitable habitats, there would be no effect to federally listed species or critical habitat under the Proposed Action.

3.7. State-sensitive Species

3.7.1 Affected Environment

A list of state species of greatest conservation need (SGCN) that have been recorded within 2 miles of the project area was obtained from the UDWR's Wildlife Habitat Analysis Tool on December 3, 2024; the report is provided in Appendix D.

- White-tailed prairie dog (*Cynomys leucurus*) – SGCN: The white-tailed prairie dog occurs in grassland and shrubland habitats (UDWR 2015), which occur throughout the project area. The species was most recently recorded within 0.5 miles of the project in 2002 and could occur within the project area.

- Northern leopard frog (*Lithobates pipiens*) – SGCN: Northern leopard frog occurs in aquatic habitats and adjacent meadows (UDWR 2015), which do not occur within the project area. The species was most recently recorded within 2 miles of the project in 2019. The species is unlikely to occur within the arid project area.
- Golden eagle (*Aquila chrysaetos*) – SGCN: Golden eagles are associated with cliffs and open country that provides foraging and scavenging opportunities (UDWR 2015). The species was most recently recorded within 2 miles of the project in 2007. There are no apparent suitable nesting cliffs near the project area, but golden eagles could forage within the project area.

3.7.2 Impacts of the No Action Alternative

There would be no effect to state SGCN under the No Action Alternative because project activities would not occur.

3.7.3 Impacts of the Proposed Action

Up to 58.3 acres would be disturbed as a result of the Proposed Action. White-tailed prairie dogs that occupy the area could be affected by ground-disturbing activities, particularly grading and excavation to construct and maintain berms. Potential impacts to prairie dogs include mortality or displacement during construction and maintenance activities. Prairie dog populations may be affected in direct proportion to the amount of habitat disturbed. Use of the facility would likely preclude occupancy of the project area by prairie dogs.

Because project activities would be localized to the project area, eagles could avoid the immediate area of project disturbance and continue to hunt and scavenge nearby during construction and maintenance activities. Noise associated with use of the site may deter eagles from hunting within the vicinity of the range; however, noise would be localized to the range and would dissipate with distance and topography. Alternate foraging habitat is abundant in the area; therefore, there would be no noticeable effect to golden eagles from implementation of the Proposed Action.

3.8. Historic and Cultural Resources

3.8.1 Affected Environment

Section 106 of the National Historic Preservation Act (NHPA) of 1966 (54 U.S.C. 300101), as amended, mandates that federal agencies consider the potential effects of a proposed federal undertaking on historic properties. Historic properties are defined as any prehistoric or historic district, site, building, structure, or object greater than 50 years of age that are included in, or eligible for, inclusion in the National Register of Historic Places (NRHP; 36 CFR 800.16(l)).

The USFWS defined the area of potential effect (APE) as 74.2 acres, which includes the gun range and all associated infrastructure. The APE is the geographic area within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist (36 CFR 800.16(d)).

Approximately 26.7 acres were surveyed for cultural resources in August of 2023 by personnel from the UDWR that meet the Secretary of the Interior's qualifications in archaeology; another 41.8 acres were previously disturbed ground in the form of existing gun range infrastructure, modern access roads, and two modern agricultural pivots. Given the extensive ground disturbance in these areas, they were not archaeologically surveyed but were included in the literature review. A single historic archaeological site (dispersed artifact scatter) and a single historic isolated find (dismantled fence) were identified during the survey. In accordance with Utah Code § 9-8-404, the UDWR received concurrence from the Utah SHPO on September 11, 2023, for the recommendation that neither resource is eligible for listing to the NRHP.

Additional project features were identified in 2024; another 5.7 acres were considered as subject to the undertaking. These areas consist of the 200-yard rifle range and existing dirt road. Given the existing ground disturbance in these areas, they were not archaeologically surveyed. Consultation was re-initiated with the Utah SHPO to include the additional area in the APE. The UDWR received concurrence from the Utah SHPO on July 15, 2024, for a determination of No Historic Properties Affected.

Based on the UDWR survey and associated consultation with the Utah SHPO and Tribes, both sites were officially determined not eligible for listing to the NRHP.

The Utah Code § 9-8-404 consultation request letters are attached in Appendix E.

3.8.2 Impacts of the No Action Alternative

The No Action Alternative would have no effect on cultural resources because project activities would not occur.

3.8.3 Impacts of the Proposed Action

Due to the lack of NRHP-eligible cultural resources (historic properties) within the APE, there would be no effect to historic properties from implementation of the Proposed Action. The Utah SHPO concurred with a recommendation of "*no historic properties affected*" on September 11, 2023, July 15, 2024, and June 22, 2025; the concurrence letters are attached in Appendix E. As stated above, based on the UDWR survey and Utah SHPO concurrence with the findings and recommendations of UDWR, USFWS made the determination that the implementation of the Proposed Action would have a finding of "*no historic properties affected*," pursuant to 36 CFR 800.4(d)(1).

3.9. Recreation and Public Use

3.9.1 Affected Environment

The site is currently used for limited private shooting at the existing ranges and is not open to the public. The gate is locked and access to the facility is controlled by the city.

3.9.2 Impacts of the No Action Alternative

The No Action Alternative would not meet the purpose and need to provide safe and controlled shooting facilities in the Roosevelt City area. Shooters would continue to use private and public lands that do not provide safety infrastructure.

3.9.3 Impacts of the Proposed Action

The Proposed Action would increase recreation and public use of the site. The proposed complex would provide opportunities for experienced and new hunters to practice safe handling of firearms and archery equipment, as well as to participate in live firing exercises. Hunter education classes would be one of the primary uses of the facility. Based on use at other public ranges, users are expected to be infrequent during the week, but might see up to 20 users on the weekends.

3.10. Noise

3.10.1 Affected Environment

The proposed shooting range complex is in a relatively isolated area. Receptors (land uses that are sensitive to noise impacts) in the area are mainly residences. Data is limited, but suggests that “noise complaints are likely when inhabited dwellings exist less than [one-half (0.5) mile] from the facility” (Smillie 2016). According to aerial imagery, the nearest residence is approximately 0.7 miles (3,860 feet) east of the project. Receptors in the area are subject to noise from use of the existing ranges, as well as agricultural equipment operation and oil and gas development in the area.

3.10.2 Impacts of the No Action Alternative

The No Action Alternative would have no effect on existing noise levels because project activities would not occur.

3.10.3 Impacts of the Proposed Action

Daytime noise level increases would be temporary during construction due to equipment operation, and operation of the facility would increase daytime noise levels at the site on an ongoing basis. Topography of the site would provide some noise screening during construction and shooting. Although occasional shots may be audible to receptors, increased noise levels are not expected to pose a threat or disturbance to the residents living nearby.

Increased noise from vehicular traffic travelling to and through the site is expected to be infrequent. There are also several local roads that may be used to access the facility, so not all traffic would pass the same receptors when travelling to the site. Considering the existing traffic associated with accessing residences, agriculture operations, and oil and gas development on the various local roads in the area, the increased traffic to the shooting range would likely not be noticeable.

3.11. Reasonably Foreseeable Impacts

The purpose of the reasonably foreseeable impacts section is to describe the interaction among the effects of the alternatives and relevant past, present, and reasonably foreseeable actions.

This cumulative interaction may be:

- Additive: the effects of the actions add together to make up the cumulative effect.
- Countervailing: the effects of some actions balance or mitigate the effects of other actions.
- Synergistic: the effects of the actions together are greater than the sum of their individual effects.

The analysis area represents a landscape surrounding the project area where past, present, and reasonably foreseeable future management actions have occurred or will occur. The analysis area varies by resource, and specific geographical boundaries are detailed for each resource.

Known past, present, and reasonably foreseeable future actions in the geographic area of the project are summarized below:

- Agricultural development: Based on aerial imagery, approximately 25 acres within the project was previously in two pivot-irrigated fields; these fields do not appear to have been irrigated since at least 2021. Surrounding fields are still irrigated. Agricultural land use is anticipated to remain the same or decrease due to site capabilities.
- Oil and gas development: Based on aerial imagery, there are four well pads within one-quarter (0.25) mile of the project area. There are no known plans for future oil and gas development in the area.
- Infrastructure development: Existing infrastructure in the larger area includes the existing shooting ranges, the Roosevelt City sewer lagoons, the Bonanza to Mona 345 kV power line, and local access roads throughout the area. The same type of infrastructure development is anticipated in the future to meet demand associated with population growth.

3.11.1 Air Quality

The analysis area for air quality is the Uinta Basin Nonattainment Area (see Map 3 in Appendix A).

No Action Alternative

There would be no cumulative effects to air quality with implementation of the No Action Alternative because there would be no direct or indirect effects.

Proposed Action

Impacts to air quality within the Uinta Basin would be temporarily additive during construction as emissions would increase. Based on the anticipated short duration of equipment operation to complete the work, construction and maintenance activities are not expected to violate air quality standards in the short or long term; therefore, the Proposed Action would not result in significant cumulative adverse impacts to air quality.

3.11.2 Water Resources

The analysis area for water resources is the Hydrologic Unit Code (HUC) 12 Cobble Hollow-Dry Gulch Creek Subwatershed (140600031407) that contains the project area (see Map 4 in Appendix A); the subwatershed is approximately 28,708 acres in size. Cumulative effects are unlikely to spread beyond the topographical boundaries of the subwatershed that contains the project. The majority of impacts to water quality in the area are due to surface-disturbing activities associated with development.

No Action Alternative

There would be no cumulative effects to water quality with implementation of the No Action Alternative because there would be no direct or indirect effects.

Proposed Action

Ground disturbance from implementation of the Proposed Action could add cumulatively to water quality impacts within the subwatershed area; however, implementation of the design features would reduce potential impacts to water quality. Due to the limited area of the subwatershed that would be disturbed by the project (less than 0.3 percent) and the soil stabilization measures that would be applied, implementation of the Proposed Action would not result in cumulative impacts to water quality.

3.11.3 Soil Resources

The analysis area for soils is the area of affected soil map units; the total area is approximately 1,567 acres (see Map 5 in Appendix A). Most impacts to soils in the area are due to surface-disturbing activities associated with agricultural and infrastructure development.

No Action Alternative

There would be no cumulative effects to soil resources with implementation of the No Action Alternative because there would be no direct or indirect effects.

Proposed Action

Disturbance from implementation of the Proposed Action could add cumulatively to soil impacts, such as erosion, within the larger area; however, the Proposed Action would disturb less than 4 percent of the analysis area. Lead exposure from use of the range could add cumulatively to contamination of soil and water resources, including resources downstream of the site; however, implementation of the design features (particularly application of a site-specific lead maintenance plan) would reduce the risk of contamination on and downstream of the site. With implementation of the design features and because of the limited geographic scope relative to the analysis area, there would be no noticeable cumulative adverse effects to soil resources with implementation of the Proposed Action.

3.11.4 Wildlife Resources

The analysis area for ring-necked pheasant is the 531,423-acre unit of mapped year-long crucial habitat that contains the project area; the analysis area for mule deer is the 207,578-acre unit

of mapped year-long substantial habitat that contains the project area (see Map 6 in Appendix A). The analysis areas contains similar habitats as the project area.

No Action Alternative

There would be no cumulative effects to wildlife resources with implementation of the No Action Alternative because there would be no direct or indirect effects.

Proposed Action

Habitat within the analysis area has been and will be impacted by infrastructure, residential, and agricultural development, as well as energy development and production and recreational use. Possible effects of these actions include displacement of animals into less suitable habitats, behavioral disruption, and stress due to noise and human activity. The Proposed Action would impact less than 0.1 percent of the analysis area for each species; similar habitat would remain well-distributed throughout the areas. Due to the limited geographic scope of the project relative to contiguous similar habitat, implementation of the Proposed Action would not result in significant cumulative adverse impacts to ring-necked pheasant, mule deer, or their habitats.

3.11.5 Fish and Other Aquatic Species

There would be no cumulative effects to fish or other aquatic species with implementation of either alternative because there would be no direct or indirect effects.

3.11.6 Threatened and Endangered Species

There would be no cumulative effects to federally listed species or critical habitat with implementation of either alternative because there would be no direct or indirect effects.

3.11.7 State-sensitive Species

The analysis area for white-tailed prairie dogs is the project area plus a 4.8-mile buffer based on the maximum recorded dispersal distance (Lupis et al. 2007); the total area is approximately 54,944 acres (see Map 7 in Appendix A).

There would be no cumulative impact to golden eagles because there would be no direct or indirect impacts.

No Action Alternative

There would be no cumulative effects to white-tailed prairie dogs with implementation of the No Action Alternative because there would be no direct or indirect effects.

Proposed Action

White-tailed prairie dogs within the analysis area have been impacted by municipal, residential, industrial, and agricultural development. Possible effects of these actions include displacement into less suitable habitats, behavioral disruption, and stress due to noise and human activity. The impacts of habitat disturbance due to the Proposed Action could add cumulatively to the disturbance impacts from past, present, and future actions; however, the Proposed Action would impact less than 0.2 percent of the analysis area for white-tailed prairie dog and suitable

habitat would remain well-distributed throughout the area. Due to the limited geographic scope of the project relative to contiguous similar habitat, implementation of the Proposed Action would not result in significant cumulative adverse impacts to white-tailed prairie dog.

3.11.8 Historic and Cultural Resources

The analysis area for cultural resources is a 0.5-mile buffer surrounding the APE. Development has resulted in considerable surface disturbance within the analysis area. These impacts include agricultural farming, drainage efforts, road work, and general natural erosion. Impacts to cultural resources are not necessarily additive across a landscape because the sites are typically discrete.

No Action Alternative

There would be no cumulative effects to historic or cultural resources with implementation of the No Action Alternative because there would be no direct or indirect effects.

Proposed Action

During the UDWR survey, a pre-field search was conducted to document previously completed cultural resource inventories and identify previously recorded cultural resources within a 0.5-mile radius of the APE. There were two previously documented sites within this buffered area; both are NRHP-eligible. In addition, there have been six previously completed cultural resource inventories within the 0.5-mile buffer and overlapping the APE. Impacts to the two cultural resources could include visual, atmospheric, and auditory effects; however, as there is existing infrastructure related to the extant shooting range with roads, parking spaces, and shooting lanes, visual and atmospheric impacts would be negligible. Also, modern pivot agricultural and drainage canals have heavily impacted the landscape, which has already altered the visual and atmospheric nature of the area. While there would be auditory effects during construction, those effects would be temporary and would not have a cumulative impact. As a shooting range currently exists in the location, sound from additional shooting following the completion of construction would not have significant impacts to the cultural resources within the buffered area.

3.11.9 Recreation and Public Use

The analysis area for recreation and public use is Duchesne and Uintah counties, as the majority of the proposed facility users are anticipated to be residents of these counties. There are only two designated shooting facilities, both located approximately 30 miles away near Vernal (Utah Division of Wildlife Resources [UDWR] 2024a).

No Action Alternative

Safe and controlled shooting facilities would continue to be limited in Duchesne and Uintah counties. Shooters would continue to use private and public lands, and user conflicts could increase as residential and industrial developments expands in the counties.

Proposed Action

The Proposed Action would add cumulatively to the designated recreational shooting opportunities available in the local area; however, since some shooters would be expected to continue to use public and private lands without infrastructure, this addition would not be significant.

3.11.10 Noise

The analysis area for noise is based on a 3-kilometer (1.9-mile) buffer around the range; noise levels are affected by several environmental factors such as distance, topography, surface type, temperature, and humidity. The 3-kilometer buffer is a conservative estimate of the distance in which receptors may be affected by outdoor ranges (Swallow et al. 1999). There are approximately 696 people in 177 households residing within 3 kilometers of the complex (EPA 2025).

No Action Alternative

There would be no cumulative effects to noise levels with implementation of the No Action Alternative because there would be no direct or indirect effects.

Proposed Action

Noise from implementation of the Proposed Action would add to existing noise levels from other producers such as vehicular traffic, agricultural equipment operation, and oil and gas development. Given the relatively isolated nature of the area, existing noise levels are likely low. Use of the range is not expected occur all day or every day, and would likely only occur during daylight hours. Given the lack of residences within 0.5 miles of the facility and based on the intermittent nature of use at the range, there would be no cumulative impact to noise levels.

Chapter 4. Consultation and Coordination

4.1. National Historic Preservation Act

The USFWS consulted with the Utah SHPO on June 18, 2025, to comply with 36 CFR 800.4 through 800.6. The Utah SHPO responded on June 22, 2025, stating that they concurred with the recommendations of eligibility and effect for the undertaking. Based on the UDWR survey and the Utah SHPO's concurrence with the findings and recommendations of said survey, the USFWS made the finding of "*no historic properties affected*," pursuant to 36 CFR 800.4(d)(1).

Tribes who hold ancestral land, traditional use, and/or traditional cultural property claims in and near the project area were identified using as a baseline the former National Park Service's NAGPRA Native American Consultation Database (NACD), through which any federally recognized tribe could identify those counties in Utah where they had consultation interests. A reasonable, good-faith effort (per 36 CFR pt. 800.3(f)(2)) was made to consult with these Tribes.

Tribal consultation was formally initiated with letters to the Eastern Shoshone Tribe of the Wind River Reservation, the Shoshone-Bannock Tribes of the Fort Hall Reservation, the

Southern Ute Indian Tribe of the Southern Ute Reservation, the Ute Indian Tribe of the Uintah & Ouray Reservation, and the Ute Mountain Ute Tribe on July 1, 2024; an example letter is attached in Appendix E. No response was received from any Tribe.

4.2. Endangered Species Act

Funding for this project includes federal funds from grant W-222-E-1 that are authorized under Section 6 of the Endangered Species Act.

An official species list was acquired from the USFWS on December 14, 2024. Based on an analysis of the species and habitat that may occur within the area, there would be “No Effect” to listed species or critical habitats; therefore, consultation under Section 7 of the Endangered Species Act is not required.

Chapter 5. List of Preparers

This planning process used a third-party NEPA consultant and an interdisciplinary team:

Name	Organization	Title	Responsibilities
Jenna Jorgensen	Jones & DeMille Engineering	Environmental Coordinator	Document preparation, project analysis
Arie Leeftang	UDWR	Archaeologist	Cultural survey
Amanda Horvath	USFWS	Supervisory Biologist	EA Review
Grace Bello	USFWS	Archaeologist	EA Review and Section 106 compliance

Chapter 6. References

Environmental Protection Agency (EPA). 2019. News Releases from Region 08: EPA proposes air quality plan for oil and gas emissions on the Uintah and Ouray Indian Reservation. <https://www.epa.gov/newsreleases/epa-proposes-air-quality-plan-oil-and-gas-emissions-uintah-and-ouray-indian-reservation> (Accessed 12-2-2024).

———. 2024. Interactive map of air quality monitors. <https://www.epa.gov/outdoor-air-quality-data/interactive-map-air-quality-monitors>. Accessed 12-2-2024.

———. 2025. EJScreen; EPA’s Environmental Justice Screening and Mapping Tool (Version 2.3). <https://ejscreen.epa.gov/mapper/>. Accessed 1-25-2025. (This source was only used to identify receptors within a specified distance for the noise analysis)

Fenneman, N. M., and D. W. Johnson. 1946. Physiographic divisions of the conterminous U.S.: U.S. Geological Survey data release. <https://doi.org/10.5066/P9B1S3K8>. Accessed 7-23-2024.


Lewis, P., Y. Shan, and E. Hazzard. 2015. Sustainability Planning Framework for Reducing Ground-level Ozone Formation in Construction Activities. *Procedia Engineering* (118):766-773.

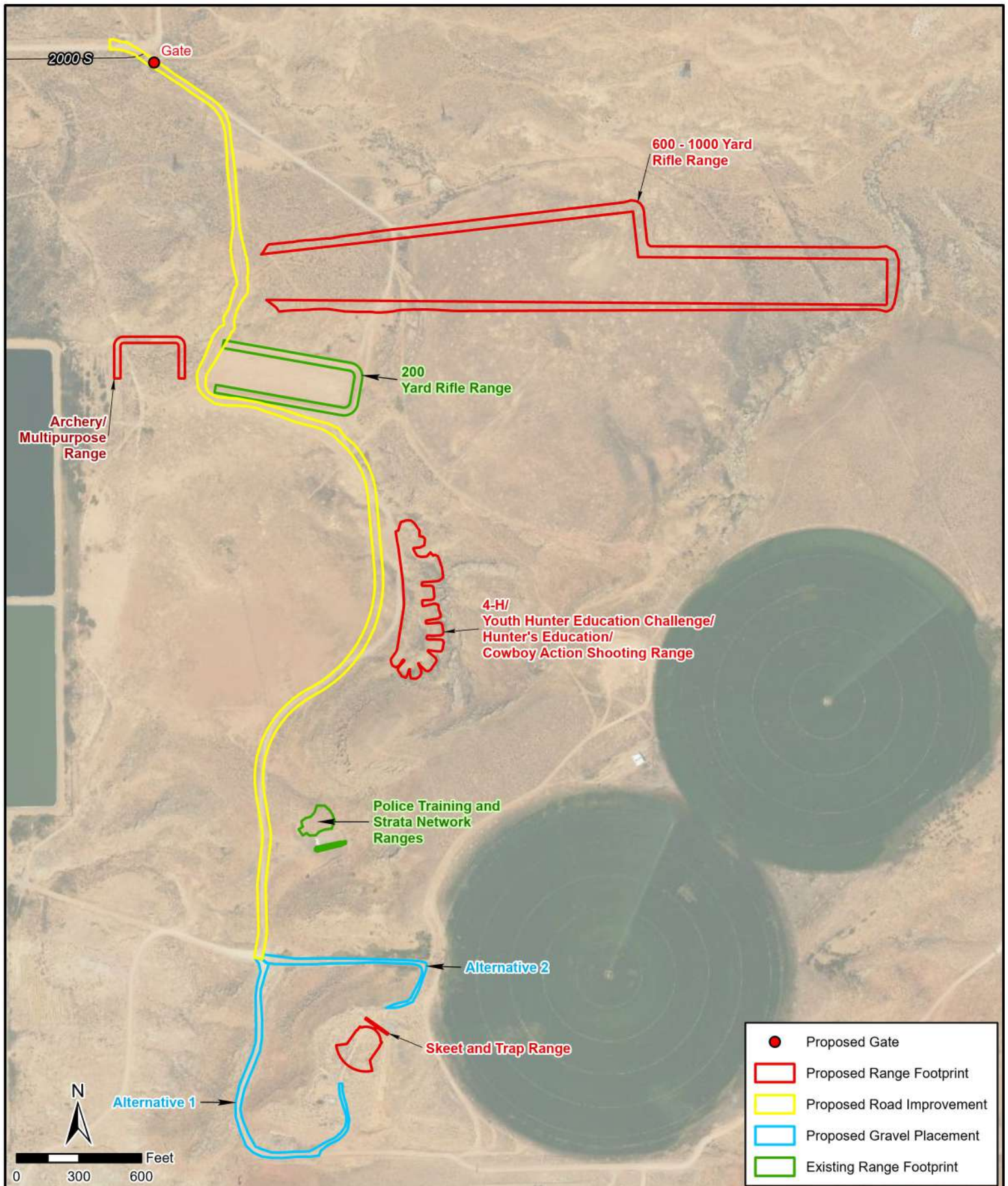
Lupis, S. G., K. D. Bunnell, T. A. Black, and T. A. Messmer. 2007. Utah Gunnison’s prairie dog and white-tailed prairie dog conservation plan: Draft #5. Utah Division of Wildlife Resources, Salt Lake City, Utah.

- Parrish, J. R., F. P. Howe, R. E. Norvell. 2002. Utah Partners in Flight Avian Conservation Strategy Version 2.0. Utah Partners in Flight Program, Utah Division of Wildlife Resources, 1594 West North Temple, Salt Lake City, UT 84116, UDWR Publication Number 02-27. i–xiv + 302 pp.
- Smillie, M. 2016. BC Wildlife Federation: Noise Management for Outdoor Shooting Ranges; Implementation Manual. Version 1.0.
- Swallow, J. C., J. Hemingway, and P. Yung. 1999. Shooting Ranges and Sound. Royal Canadian Mounted Police, Ottawa, Ontario, Canada.
- Tetra Tech, Inc. 2002. Uinta River, Deep Creek and Dry Gulch Creek TMDLs for Total Dissolved Solids; Uinta River Watershed, Utah.
- U.S. Fish and Wildlife Service (USFWS). 1990a. Bonytail Chub Recovery Plan. Denver, Colorado. 35 pp.
- . 1990b. Humpback Chub Recovery Plan. U.S. Fish and Wildlife Service, Denver, Colorado. 43 pp.
- . 1991. Colorado Squawfish Revised Recovery Plan. Denver, Colorado. 37 pp.
- . 1998. Razorback sucker (*Xyrauchen texanus*) Recovery Plan. Denver, Colorado. 81 pp.
- . 2021. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Western Distinct Population Segment of the Yellow-Billed Cuckoo. Federal Register 86(75):20798-21005. April 21, 2021.
- . 2024. Monarch Butterfly (*Danaus plexippus*) Species Status Assessment Report. Version 2.3. Midwest Regional Office.
- Utah Department of Environmental Quality. 2020. Uinta Basin Ozone Studies (UBOS). <https://deq.utah.gov/air-quality/uinta-basin-ozone-studies-ubos>. Accessed 12-02-2024.
- . 2024. Ozone in the Uinta Basin. <https://deq.utah.gov/air-quality/ozone-in-the-uinta-basin>. Accessed 1-20-2025.
- Utah Division of Water Quality. 2024. 2024 Integrated Report on Water Quality. Utah Department of Environmental Quality.
- Utah Division of Wildlife Resources (UDWR). 2015. Utah Wildlife Action Plan. DWR publication 15-14. Utah Division of Wildlife Resources, Department of Natural Resources.
- . 2024a. Utah Division of Wildlife Resources Statewide shooting range locations. <https://wildlife.utah.gov/shooting-ranges.html>. Accessed 12-02-2024.
- . 2024. Utah Division of Wildlife Resources ArcGIS Online Gallery. <https://dwr-data-utahdnr.hub.arcgis.com/>. Accessed 2-9-2024.
- Western Regional Climate Center. 2024. Ft Duchesne, Utah (422996); Period of Record Monthly Climate Summary. <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ut2996>. Accessed 12-02-2024.

Appendix A. Maps



<p>— County Boundary</p> <p>Project Area</p>	 <p>Jones & DeMille Engineering</p>	<p>Roosevelt City</p>	<p>Uintah County, Utah</p>
		<p>Rough Rider Shooting Complex Project Vicinity Overview</p>	<p>Scale: 1" = 4 miles</p>
		<p>Map Name: H:\D\Proj\2101-058\Design\GIS\Projects\2101-058_ENV\2101-058_ENV.aprx - Roosevelt City - Rough Rider Shooting Complex - Project Vicinity Overview 8.5x11L</p> <p>Project Number: 2101-058 Drawn by: JEM 12-24 Last Edit: 12/31/2024</p>	<p>1</p>



**Jones & DeMille
Engineering**

Roosevelt City

**Uintah County,
Utah**

**Rough Rider Shooting Complex
Project Overview**

Scale: 1" = 600'

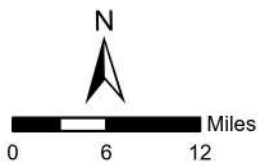
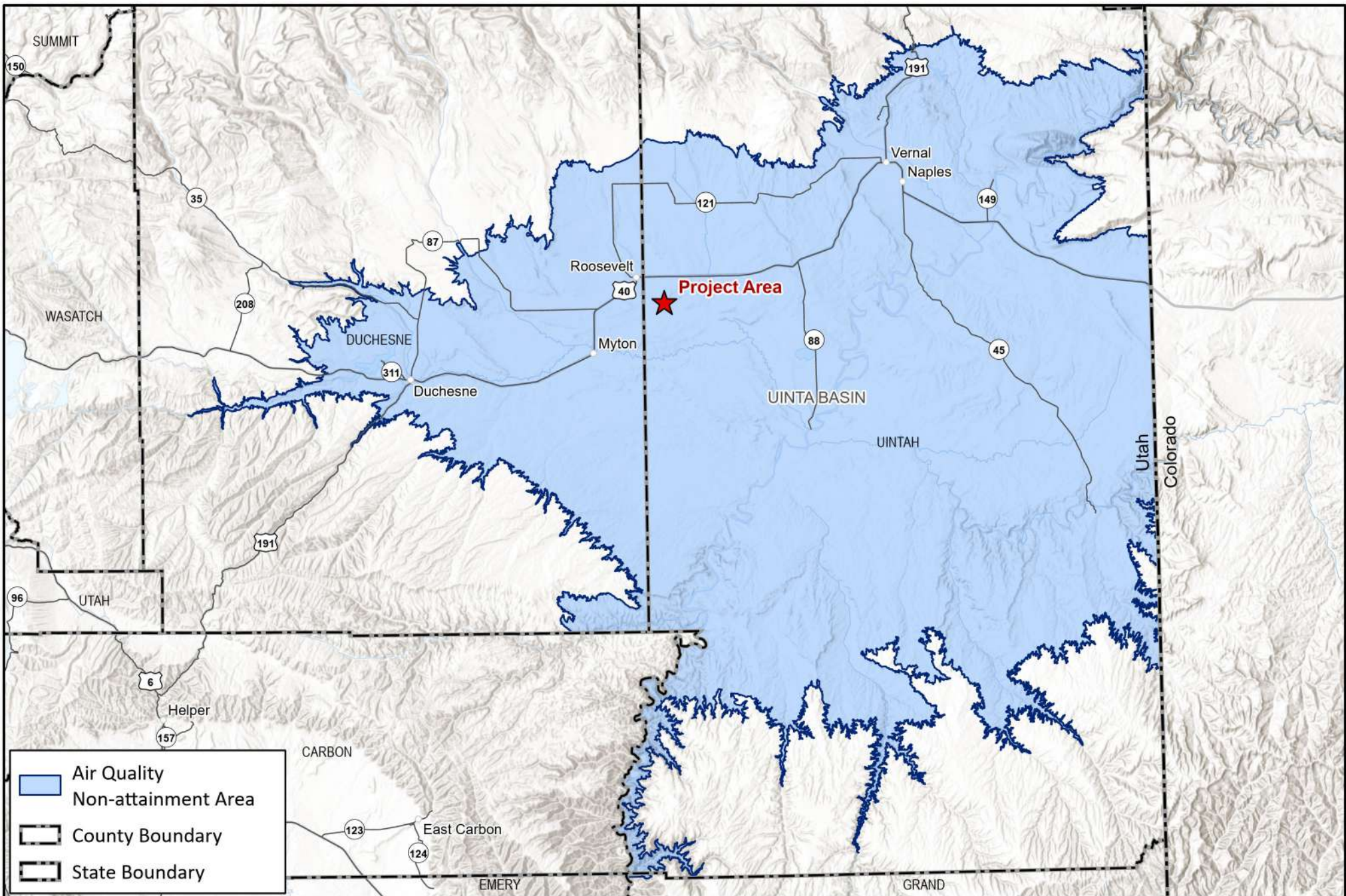
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Drawn by: JEM 12-24

Last Edit: 12/31/2024

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**Jones & DeMille
Engineering**

Roosevelt City

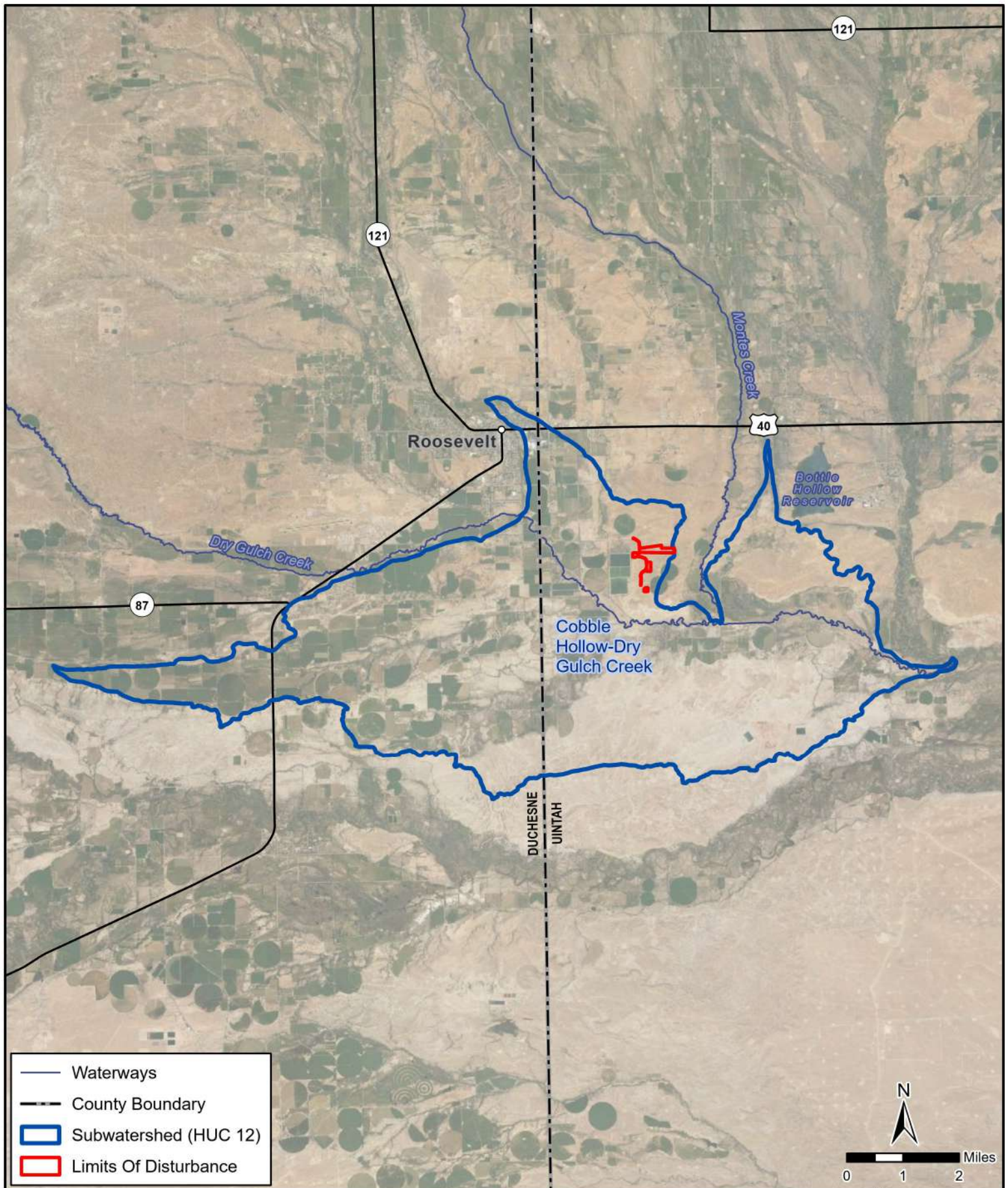
**Rough Rider Shooting Complex
Air Quality Overview**

**Uintah County,
Utah**

Scale: 1" = 12 miles

3

Map Name: H:\UD\Proj\2101-058\Design\GIS\Projects\2101-058_ENV\2101-058_ENV.aprx - 3. Roosevelt City - Rough Rider Shooting Complex - Air Quality Overview 8.5x11L
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**Jones & DeMille
Engineering**

Roosevelt City

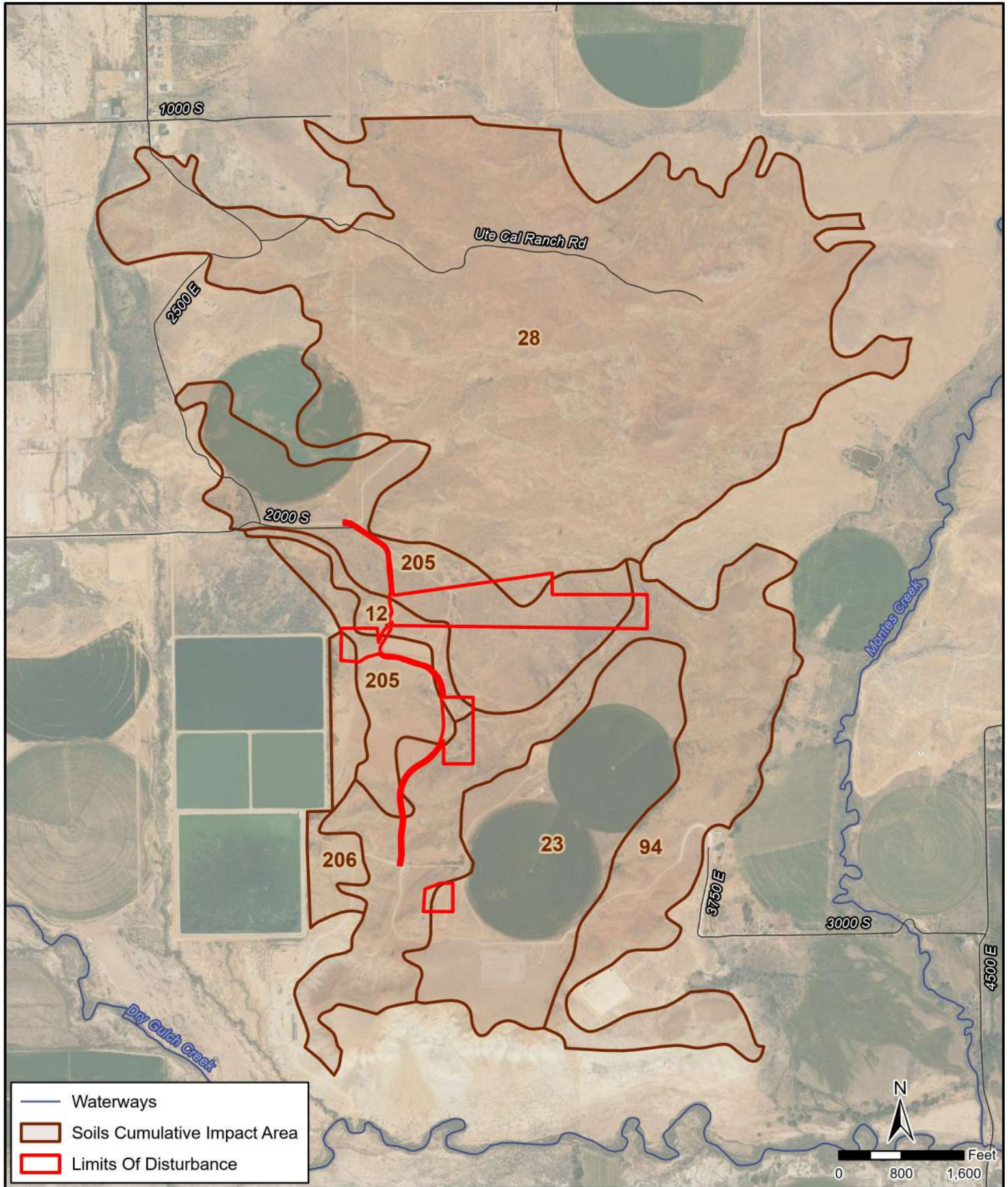
**Uintah County,
Utah**

**Rough Rider Shooting Complex
Water Resources Overview**

Scale: 1" = 2 miles

Map Name: H:\JD\Proj\2101-058\Design\GIS\Projects\2101-058_ENH\2101-058_ENH.aprx - 4. Roosevelt City - Rough Rider Shooting Complex - Water Resources Overview 8.5x11P
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**Jones & DeMille
Engineering**

Roosevelt City

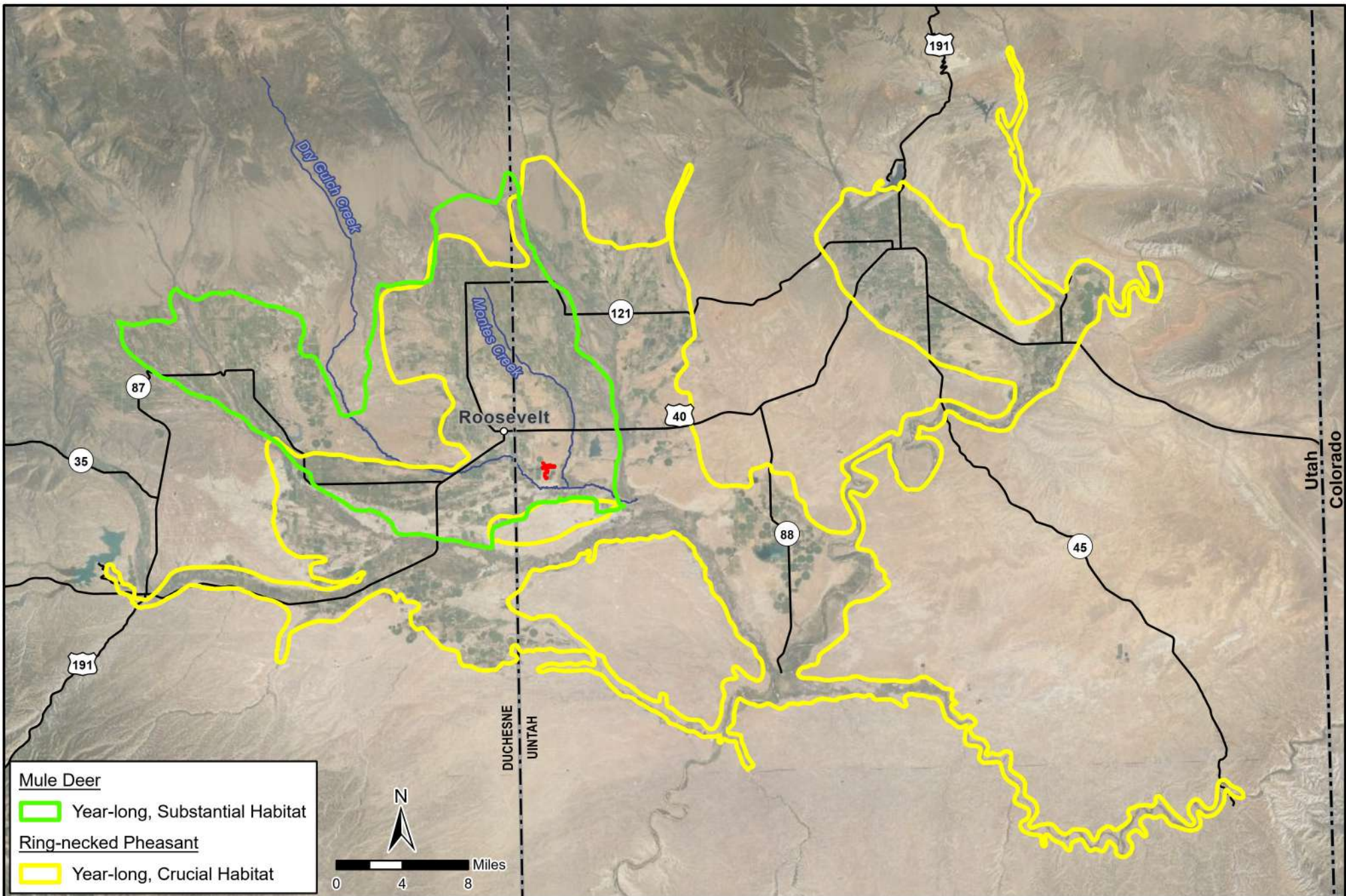
**Uintah County,
Utah**

**Rough Rider Shooting Complex
Soil Resources Overview**

Scale: 1" = 1,600'

Map Name: H:\JD\Proj\2101-058\Design\GIS\Projects\2101-058_EHV.aprx - 5. Roosevelt City - Rough Rider Shooting Complex - Soil Resources Overview 8.5x11P
Project Number: 2101-058 Drawn by: JEM 01-25 Last Edit: 01/29/2025

5



Mule Deer

Year-long, Substantial Habitat

Ring-necked Pheasant


Year-long, Crucial Habitat

— Waterways

County Boundary

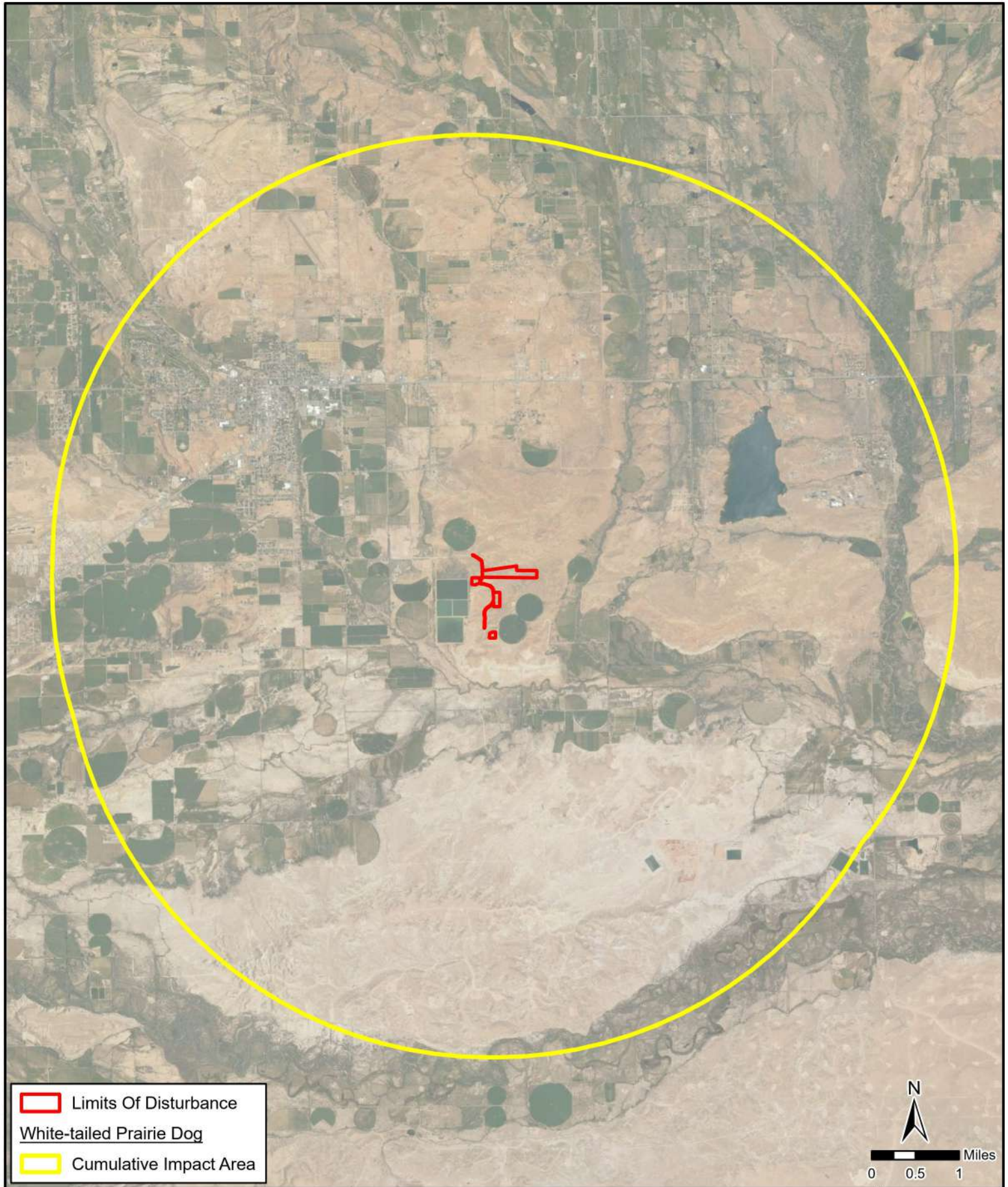
State Boundary

Limits Of Disturbance




**Jones & DeMille
Engineering**

Roosevelt City			Uintah County, Utah
<i>Rough Rider Shooting Complex Wildlife Resources Overview</i>			Scale: 1" = 8 miles
<small>Map Name: H:\UD\Proj\2101-058\Design\GIS\Projects\2101-058_EIN\2101-058_EIN.aprx - 6. Roosevelt City - Rough Rider Shooting Complex - Wildlife Resources Overview 8.5x11L</small> <small>Project Number: 2101-058</small>			6
<small>Drawn by: JEM 01-25</small>			<small>Last Edit: 01/25/2025</small>



- Limits Of Disturbance
- White-tailed Prairie Dog
- Cumulative Impact Area



 Jones & DeMille Engineering	Roosevelt City		Uintah County, Utah
	<i>Rough Rider Shooting Complex White-tailed Prairie Dog - Cumulative Impact Area Overview</i>		Scale: 1" = 1 mile
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	Project Number: 2101-058	Drawn by: JEM 01-25	Last Edit: 01/29/2025

Appendix B. Soil Report and AD-1006 Form



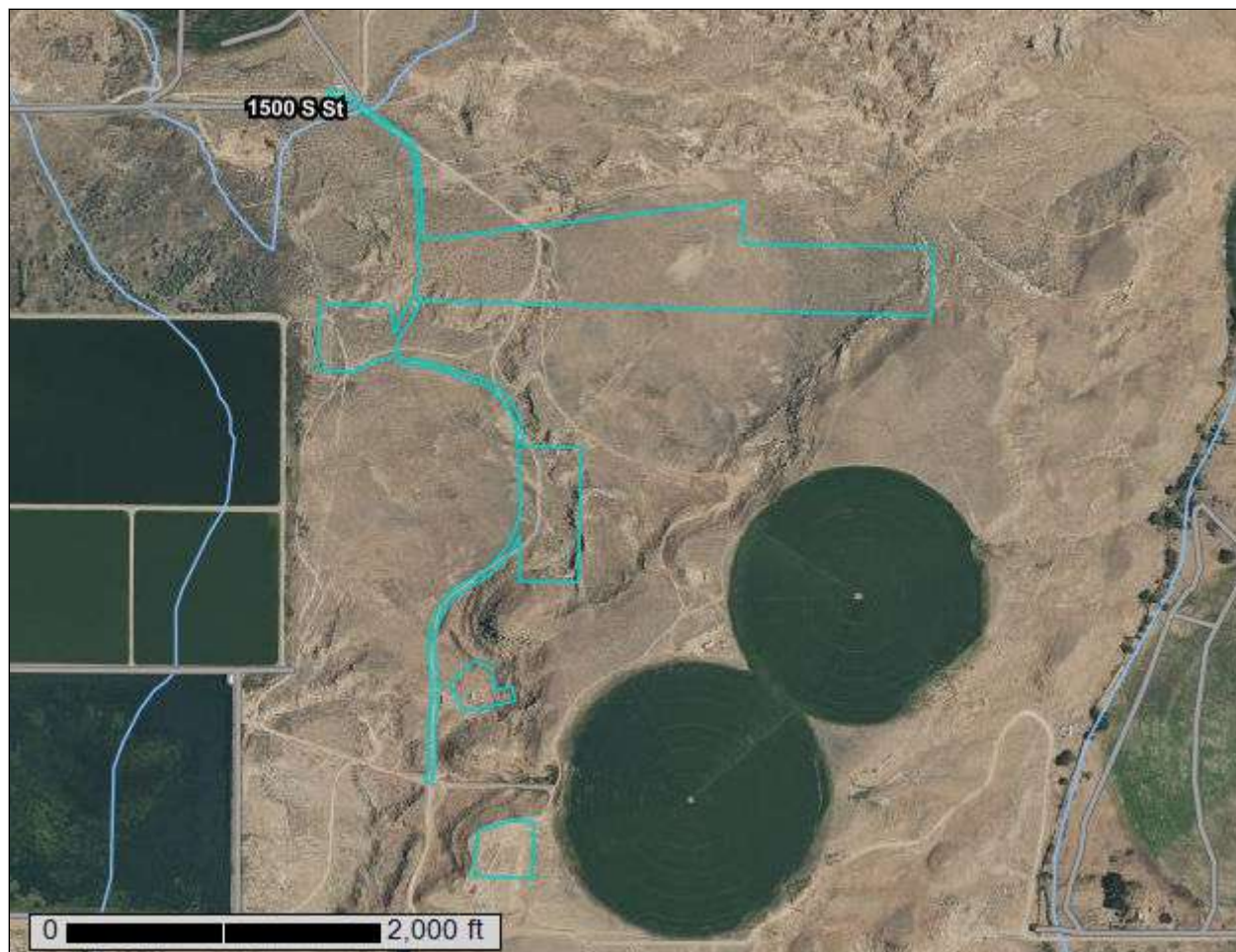
United States
Department of
Agriculture

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 Uintah Area, Utah - Parts of Daggett, Grand and Uintah Counties



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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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

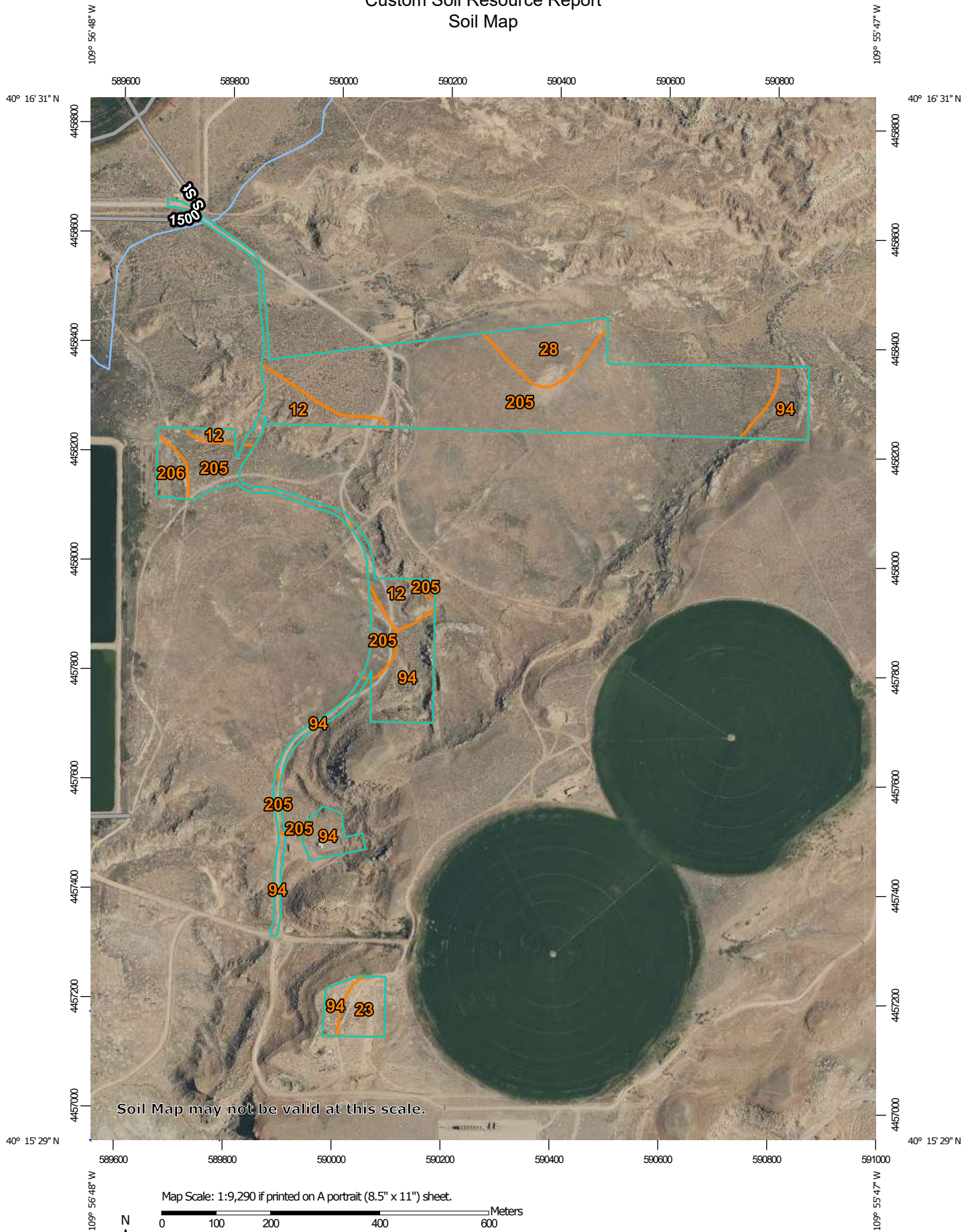
Custom Soil Resource Report

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: 1:9,290 if printed on A portrait (8.5" x 11") sheet.

0 100 200 400 600 Meters
0 450 900 1800 2700 Feet

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: Uintah Area, Utah - Parts of Daggett, Grand and Uintah Counties

Survey Area Data: Version 19, 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, 2021—Sep 4, 2021

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
12	Badland-Rock outcrop complex, 1 to 100 percent slopes	5.4	9.3%
23	Blackston loam, 0 to 2 percent slopes	2.0	3.5%
28	Braf-Rock outcrop complex, 2 to 15 percent slopes	4.1	7.0%
94	Greybull-Utaline-Badland complex, 8 to 50 percent slopes	10.8	18.6%
205	Shotnick loamy sand, 0 to 4 percent slopes	34.7	59.5%
206	Shotnick sandy loam, 2 to 4 percent slopes	1.3	2.2%
Totals for Area of Interest		58.3	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.

Uintah Area, Utah - Parts of Daggett, Grand and Uintah Counties

12—Badland-Rock outcrop complex, 1 to 100 percent slopes

Map Unit Composition

Badland: 50 percent

Rock outcrop: 35 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Badland

Setting

Landform: Erosion remnants, hills, ridges

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Typical profile

C - 0 to 2 inches: clay

Cr - 2 to 12 inches: bedrock

Properties and qualities

Slope: 1 to 75 percent

Depth to restrictive feature: 0 to 6 inches to paralithic bedrock

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)

Calcium carbonate, maximum content: 15 percent

Gypsum, maximum content: 10 percent

Maximum salinity: Slightly saline to strongly saline (4.0 to 20.0 mmhos/cm)

Sodium adsorption ratio, maximum: 30.0

Available water supply, 0 to 60 inches: Very low (about 0.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D

Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Cliffs, erosion remnants, escarpments, ledges

Down-slope shape: Convex

Across-slope shape: Convex

Typical profile

H1 - 0 to 60 inches: bedrock

Properties and qualities

Slope: 1 to 100 percent

Depth to restrictive feature: 0 to 4 inches to lithic bedrock

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)

Available water supply, 0 to 60 inches: Very low (about 0.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components

Cadrina, extremely channery loam

Percent of map unit: 5 percent

Ecological site: R034BY121UT - Desert Shallow Loam (Shadscale)

Hydric soil rating: No

Montwel

Percent of map unit: 5 percent

Hydric soil rating: No

Walknolls, very channery sandy loam

Percent of map unit: 5 percent

Ecological site: R034BY227UT - Semidesert Shallow Loam (Black Sagebrush)

Hydric soil rating: No

23—Blackston loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: jz0n

Elevation: 4,900 to 5,700 feet

Mean annual precipitation: 5 to 8 inches

Mean annual air temperature: 45 to 47 degrees F

Frost-free period: 110 to 125 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Blackston and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blackston

Setting

Landform: Fan remnants

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Alluvium and slope alluvium derived from sandstone, limestone, shale, and quartzite

Typical profile

Ap - 0 to 8 inches: loam

Bk1 - 8 to 19 inches: loam

Bk2 - 19 to 28 inches: gravelly loam

2Bk3 - 28 to 36 inches: extremely cobbly loam

Custom Soil Resource Report

3Bk4 - 36 to 44 inches: extremely cobbly sandy loam

3C - 44 to 60 inches: extremely cobbly loamy sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 2.00 in/hr)*

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 40 percent

Gypsum, maximum content: 1 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 10.0

Available water supply, 0 to 60 inches: Low (about 5.2 inches)

Interpretive groups

Land capability classification (irrigated): 2s

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: B

Ecological site: R034BY106UT - Desert Loam (Shadscale)

Hydric soil rating: No

Minor Components

Nolava

Percent of map unit: 8 percent

Ecological site: R034BY106UT - Desert Loam (Shadscale)

Hydric soil rating: No

Turzo, clay loam

Percent of map unit: 7 percent

Ecological site: R034BY106UT - Desert Loam (Shadscale)

Hydric soil rating: No

28—Braf-Rock outcrop complex, 2 to 15 percent slopes

Map Unit Setting

National map unit symbol: jz2f

Elevation: 4,900 to 5,300 feet

Mean annual precipitation: 5 to 8 inches

Mean annual air temperature: 45 to 47 degrees F

Frost-free period: 110 to 125 days

Farmland classification: Not prime farmland

Map Unit Composition

Braf and similar soils: 60 percent

Rock outcrop: 25 percent

Custom Soil Resource Report

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Braf

Setting

Landform: Structural benches on structural benches

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Eolian deposits and slope alluvium derived from sandstone

Typical profile

A - 0 to 3 inches: sandy loam

C - 3 to 8 inches: sandy loam

R - 8 to 60 inches: bedrock

Properties and qualities

Slope: 2 to 15 percent

Depth to restrictive feature: 5 to 20 inches to lithic bedrock

Drainage class: Somewhat excessively drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 20 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: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Ecological site: R034BY118UT - Desert Shallow Loam (Black Sagebrush)

Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Cliffs, erosion remnants, escarpments, ledges

Down-slope shape: Convex

Across-slope shape: Convex

Typical profile

H1 - 0 to 60 inches: bedrock

Properties and qualities

Slope: 2 to 15 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Available water supply, 0 to 60 inches: Very low (about 0.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components

Tipperary

Percent of map unit: 5 percent

Hydric soil rating: No

Badland

Percent of map unit: 5 percent

Hydric soil rating: No

Shotnick

Percent of map unit: 5 percent

Hydric soil rating: No

94—Greybull-Utaline-Badland complex, 8 to 50 percent slopes

Map Unit Setting

National map unit symbol: jz4z

Elevation: 4,700 to 5,500 feet

Mean annual precipitation: 5 to 8 inches

Mean annual air temperature: 45 to 47 degrees F

Frost-free period: 110 to 125 days

Farmland classification: Not prime farmland

Map Unit Composition

Greybull and similar soils: 40 percent

Utaline and similar soils: 35 percent

Badland: 10 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Greybull

Setting

Landform: Hills

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Slope alluvium and colluvium over residuum derived from shale

Typical profile

A - 0 to 2 inches: very cobbly sandy loam

C - 2 to 35 inches: clay loam

Cr - 35 to 60 inches: bedrock

Properties and qualities

Slope: 20 to 50 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Gypsum, maximum content: 5 percent
Maximum salinity: Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 13.0
Available water supply, 0 to 60 inches: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: R034BY121UT - Desert Shallow Loam (Shadscale)
Hydric soil rating: No

Description of Utlaine

Setting

Landform: Fan remnants
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Slope alluvium derived from sandstone, limestone, shale, and quartzite

Typical profile

A - 0 to 3 inches: very gravelly sandy loam
Bw - 3 to 7 inches: very gravelly loam
Bk - 7 to 60 inches: very gravelly loam

Properties and qualities

Slope: 8 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Gypsum, maximum content: 1 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: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e

Custom Soil Resource Report

Hydrologic Soil Group: B

Ecological site: R034BY106UT - Desert Loam (Shadscale)

Hydric soil rating: No

Description of Badland

Setting

Landform: Erosion remnants, hills, ridges

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Typical profile

C - 0 to 2 inches: clay

Cr - 2 to 12 inches: bedrock

Properties and qualities

Slope: 8 to 50 percent

Depth to restrictive feature: 0 to 2 inches to paralithic bedrock

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)

Calcium carbonate, maximum content: 15 percent

Gypsum, maximum content: 10 percent

Maximum salinity: Slightly saline to strongly saline (4.0 to 20.0 mmhos/cm)

Sodium adsorption ratio, maximum: 30.0

Available water supply, 0 to 60 inches: Very low (about 0.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components

Motto

Percent of map unit: 4 percent

Hydric soil rating: No

Muff

Percent of map unit: 4 percent

Hydric soil rating: No

Leebench

Percent of map unit: 4 percent

Hydric soil rating: No

Endoaquolls

Percent of map unit: 3 percent

Landform: Scarps

Down-slope shape: Concave

Across-slope shape: Linear

Ecological site: R034BY021UT - Wet Fresh Streambank (Willow)

Hydric soil rating: Yes

205—Shotnick loamy sand, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: jyzs
Elevation: 4,700 to 5,100 feet
Mean annual precipitation: 5 to 8 inches
Mean annual air temperature: 45 to 47 degrees F
Frost-free period: 110 to 125 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Shotnick and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Shotnick

Setting

Landform: Alluvial flats
Landform position (three-dimensional): Rise, talf
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Eolian deposits and alluvium derived from sandstone, limestone, and shale

Typical profile

A - 0 to 8 inches: loamy sand
C - 8 to 60 inches: fine sandy loam

Properties and qualities

Slope: 0 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Gypsum, maximum content: 1 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: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Custom Soil Resource Report

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

Ecological site: R034BY115UT - Desert Sandy Loam (Indian Ricegrass)

Hydric soil rating: No

Minor Components

Tipperary

Percent of map unit: 4 percent

Hydric soil rating: No

Nolava

Percent of map unit: 4 percent

Hydric soil rating: No

Ohtog

Percent of map unit: 4 percent

Hydric soil rating: No

Hiko springs

Percent of map unit: 3 percent

Hydric soil rating: No

206—Shotnick sandy loam, 2 to 4 percent slopes

Map Unit Setting

National map unit symbol: jyzt

Elevation: 4,700 to 5,500 feet

Mean annual precipitation: 5 to 8 inches

Mean annual air temperature: 45 to 47 degrees F

Frost-free period: 110 to 125 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Shotnick and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Shotnick

Setting

Landform: Alluvial flats

Landform position (three-dimensional): Rise, talf

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Eolian deposits and alluvium derived from sandstone, limestone, and shale

Typical profile

A - 0 to 8 inches: sandy loam

C - 8 to 60 inches: fine sandy loam

Custom Soil Resource Report

Properties and qualities

Slope: 2 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Gypsum, maximum content: 1 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: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R034BY115UT - Desert Sandy Loam (Indian Ricegrass)
Hydric soil rating: No

Minor Components

Cakehill

Percent of map unit: 3 percent
Hydric soil rating: No

Uffens, loam

Percent of map unit: 3 percent
Landform: Alluvial flats
Ecological site: R034BY101UT - Desert Alkali Bench (Castlevale saltbush)
Other vegetative classification: Desert Alkali Sand (Fourwing Saltbush)
(034XY102UT_1)
Hydric soil rating: No

Nakoy

Percent of map unit: 2 percent
Hydric soil rating: No

Umbo silty clay loam, silty clay loam

Percent of map unit: 2 percent
Ecological site: R034BY024UT - Wet Saline Meadow (Inland saltgrass)
Hydric soil rating: No

Tipperary

Percent of map unit: 2 percent
Hydric soil rating: No

Jenrid

Percent of map unit: 2 percent
Hydric soil rating: No

Badland

Percent of map unit: 1 percent
Hydric soil rating: No

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelpdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request			
Name of Project		Federal Agency Involved			
Proposed Land Use		County and State			
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form:	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)		YES <input type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %		Amount of Farmland As Defined in FPPA Acres: %		
Name of Land Evaluation System Used	Name of State or Local Site Assessment System		Date Land Evaluation Returned by NRCS		
PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly					
B. Total Acres To Be Converted Indirectly					
C. Total Acres In Site					
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide Important or Local Important Farmland					
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value					
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)					
PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)		Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use		(15)			
2. Perimeter In Non-urban Use		(10)			
3. Percent Of Site Being Farmed		(20)			
4. Protection Provided By State and Local Government		(20)			
5. Distance From Urban Built-up Area		(15)			
6. Distance To Urban Support Services		(15)			
7. Size Of Present Farm Unit Compared To Average		(10)			
8. Creation Of Non-farmable Farmland		(10)			
9. Availability Of Farm Support Services		(5)			
10. On-Farm Investments		(20)			
11. Effects Of Conversion On Farm Support Services		(10)			
12. Compatibility With Existing Agricultural Use		(10)			
TOTAL SITE ASSESSMENT POINTS		160			
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100			
Total Site Assessment (From Part VI above or local site assessment)		160			
TOTAL POINTS (Total of above 2 lines)		260			
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>			
Reason For Selection:					
Name of Federal agency representative completing this form:					Date:

(See Instructions on reverse side)

Form AD-1006 (03-02)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

Appendix C. Official Species List



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:

12/14/2024 17:01:16 UTC

Project Code: 2025-0026995

Project Name: Roosevelt City Shooting Range Complex

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, intentional or unintentional, 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>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. 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

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:

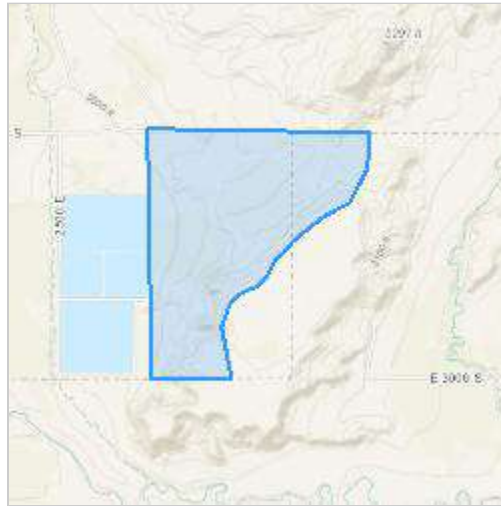
Utah Ecological Services Field Office

2369 West Orton Circle, Suite 50
West Valley City, UT 84119-7603
(801) 975-3330

PROJECT SUMMARY

Project Code: 2025-0026995
Project Name: Roosevelt City Shooting Range Complex
Project Type: Recreation - New Construction
Project Description: Construction of a shooting range facility
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.26607425,-109.94096666546993,14z>



Counties: Uintah 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 4 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 Fisheries¹, 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.

-
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.

BIRDS

NAME	STATUS
Yellow-billed Cuckoo <i>Coccyzus americanus</i> 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

FISHES

NAME	STATUS
Bonytail <i>Gila elegans</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> Water depletions in the upper Colorado River basin adversely affect this species and its critical habitat. Effects of water depletions must be considered even outside of occupied range. Species profile: https://ecos.fws.gov/ecp/species/1377	Endangered
Colorado Pikeminnow <i>Ptychocheilus lucius</i> Population: Wherever found, except where listed as an experimental population There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> Water depletions in the upper Colorado River basin adversely affect this species and its critical habitat. Effects of water depletions must be considered even outside of occupied range. Species profile: https://ecos.fws.gov/ecp/species/3531	Endangered
Humpback Chub <i>Gila cypha</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> Water depletions in the upper Colorado River basin adversely affect this species and its critical habitat. Effects of water depletions must be considered even outside of occupied range. Species profile: https://ecos.fws.gov/ecp/species/3930	Threatened
Razorback Sucker <i>Xyrauchen texanus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> Water depletions in the upper Colorado River basin adversely affect this species and its critical habitat. Effects of water depletions must be considered even outside of occupied range. Species profile: https://ecos.fws.gov/ecp/species/530	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed 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.



IPAC USER CONTACT INFORMATION

Agency: Roosevelt city
Name: Jenna Jorgensen
Address: 1535 S. 100 W.
City: Richfield
State: UT
Zip: 84701
Email: jenna.j@jonesanddemille.com
Phone: 4358935203








LEAD AGENCY CONTACT INFORMATION

Lead Agency: U.S. Fish and Wildlife Service

Appendix D. Wildlife Habitat Analysis Tool Report

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Flowers Penstemon	<i>Penstemon flowersii</i>	None	None	2018-01-01 00:00:00	
White-tailed Prairie Dog	<i>Cynomys leucurus</i>	SGCN	None	2002-SUM	

Two-Mile Radius

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Monarch butterfly	<i>Danaus plexippus</i>	None	None	2022-06-28	 Full View
	<i>Bombus griseocollis</i>	None	None	2022-05-27	
Flowers Penstemon	<i>Penstemon flowersii</i>	None	None	2018-01-01 00:00:00	
Northern Leopard Frog	<i>Lithobates pipiens</i>	SGCN	None	2019-06-29	
Golden Eagle	<i>Aquila chrysaetos</i>	SGCN	None	2007-05-01	
White-tailed Prairie Dog	<i>Cynomys leucurus</i>	SGCN	None	2002-SUM	
Red-tailed Hawk	<i>Buteo jamaicensis</i>	None	None	2013-03-27	

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
Golden Eagle	Avoid disturbance within 0.5 miles from nest Feb. 1 - Aug. 15

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
Northeastern Region	435-781-9453	Tom Platero	tdplatero@utah.gov	435-219-3557

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
Mule Deer	year-long	substantial	
Ring-Necked Pheasant	year-long	crucial	

Mule Deer Habitat



Comments	Season	Species	Value
	year-long	Mule Deer	substantial

Unmapped Mule Deer Migration Corridors



Species
Mule Deer

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
Lowland Sagebrush
Salt Desert Shrub
Salt Desert Shrub
Lowland Sagebrush
Salt Desert Shrub
Lowland Sagebrush
Desert Shrub

Report Generated For

Name: Jenna Jorgensen

Organization: Jones & DeMille Engineering

Email: jenna.j@jonesanddemille.com

Phone: (435)-893-5203

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. National Historic Preservation Act (NHPA) Section 106 Consultation Letters



State of Utah

SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

Department of Natural Resources

JOEL FERRY
Executive Director

Division of Wildlife Resources

J. SHIRLEY
Division Director

September 11, 2023

Dr. Christopher Merritt
State Historic Preservation Officer
Utah State Historic Preservation Office
3760 S Highland Drive, Millcreek, UT 84106

RE: An Archaeological Survey of the Proposed Roosevelt City Gun Range Improvements,
Uintah County, Utah (U23UQ0554)

Dear Dr. Merritt:

Enclosed for your review and comment is our report titled *An Archaeological Survey of the Proposed Roosevelt City Gun Range Improvements, Uintah County, Utah*. The action driving this 9-8-404 compliance survey is the intent to upgrade and significantly expand existing gun range infrastructure owned by Roosevelt City in Uintah County. Work on the proposed gun range is being completed in a partnership between Roosevelt City and the Utah Division of Wildlife Resources (DWR). The goal of the project is to fill a public shooting range gap in the Uintah Basin. The proposed work will take place on Roosevelt City land with funds from the State of Utah. Given the use of state funds, DWR has identified this project as an undertaking per Utah Code § 9-8-404 which requires our agency to consider the effect of the undertaking on any historic property.

The area of potential effect (APE) measures 68.5 acres and consists of a variety of proposed shooting range venues, roads, and associated infrastructure. Approximately 41.8 acres of the APE is previously disturbed ground in the form of existing gun range infrastructure, modern access roads, and two modern agricultural pivots. Given the extensive ground disturbance in these areas, they were not archaeologically surveyed but are included and reviewed in our attached archaeological findings report. The remaining 26.7 acres were intensively archaeologically surveyed by qualified DWR staff.

A single archaeological site (42Un9570) and a single isolated find were identified through the archaeological survey. The archaeological site is a dispersed historic artifact scatter and dismantled fence line that does not carry significance under any of the National Register of Historic Places (NRHP) criteria. The isolated find is a dismantled historic fence line that lacks any characteristics that would suggest eligibility under any of the NRHP criteria. A



further discussion of the site and isolated find is included in the attached findings report. We are determining both resources are *not eligible* for the NRHP.

Given the lack of significant findings within the APE and survey area DWR has made a determination of *no historic properties affected* for the proposed Roosevelt City gun range project. We respectfully ask for your concurrence with our site determination and overall project determination.

Sincerely,



Mr. Eric Edgley
Utah Division of Wildlife Resource
Habitat Section Chief

EE/AWL

Enclosure

cc: Gary Cook, DWR Hunter Education, Shooting Ranges, & Shooting Sports Programs
Coordinator





State of Utah

SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

Department of Natural Resources

JOEL FERRY
Executive Director

Division of Wildlife Resources

J. SHIRLEY
Division Director

June 28th, 2024

Dr. Christopher Merritt
State Historic Preservation Officer
Utah State Historic Preservation Office
3760 S Highland Drive, Millcreek, UT 84106

RE: Case 23-1972. Revised APE for the Proposed Roosevelt City Gun Range Improvements, Uintah County, Utah (U23UQ0554)

Dear Dr. Merritt:

In September 2023 we consulted with your office regarding the intent to upgrade and expand an existing gun range owned by Roosevelt City in Uintah County. As the proposed gun range improvements included the use of state funds, the Utah Division of Wildlife Resources (DWR) identified this project as an undertaking per Utah Code § 9-8-404. Such an undertaking requires our agency to consider the effects of the undertaking on any historic property. Consultation with your office regarding this project was completed under case 23-1972.

The original area of potential effect (APE) measures 68.5 acres and consists of proposed shooting range venues, roads, and associated infrastructure. Please see a map of the original APE in Figure 1. Approximately 41.8 acres of the APE was identified as previously disturbed in the form of existing infrastructure, modern roads, and modern agricultural pivots. Areas identified as previously disturbed were not archaeologically surveyed but were assessed in our cultural resource report titled "An Archaeological Survey of the Proposed Roosevelt City Gun Range Improvements, Uintah County, Utah" (SHPO report number U23UQ0554). The remaining undisturbed areas of the APE (26.7 acres) were intensively archaeologically surveyed and reported in the same report and submission packet.

The archaeological survey and APE literature review identified a single archeological site (42Un9570) and a single isolated find. These resources were determined not eligible for the National Register of Historic Places by DWR. An overall project determination of *no historic properties affected* was made by DWR for the proposed gun range project. We received concurrence from your office regarding our determinations of eligibility and effect for this undertaking on September 11th, 2023. Thank you for your review of our findings and determinations.



Further work on the proposed gun range project identified two new development areas that were not originally included in the original APE. Please see Figure 2 for a map of these new areas. These two areas are described as:

- 200 Yard Rifle Range found in township 2 south, range 1 west, section 36, northeast quarter, Uintah Meridian. The area measures 5.2 acres and is found on private land. The entire area was previously disturbed with privately funded heavy machinery prior to the inception of this undertaking. The proposed rifle range developments will take place within this previously disturbed area.
- 130 meters (0.5 acres) of existing dirt road that will be improved in township 2 south, range 1 west, section 36, southeast quarter, Uintah Meridian. This road is also found on private land. Based on historical aerial imagery, the road is modern, dating to the late 1970s and its corridor measures approximately ten meters wide. All newly proposed road improvements will take place within the modern road corridor. A short portion of the proposed road improvements was archaeologically surveyed by Western Archaeological Services in 2016 (U16W60856) with no findings.

Given the 200 Yard Rifle Range has seen significant previous disturbance, and proposed road improvements will be contained within the modern road corridor, a new archaeological survey was not completed for these locations. Instead, both areas are being treated as previously disturbed. Historic properties are not expected in these areas, or, if historic properties were originally present, their integrity would be so compromised that no new adverse effect would be expected through the proposed project additions. A review of your Sego data system and other pertinent background data sources did not identify any previously recorded cultural resources or site leads for these two locations.

We are requesting these areas be added to this undertaking's APE and are requesting renewed consultation with your office regarding potential effects to historic properties for this revised undertaking. The APE additions total 5.7 acres, adjusting the total APE to 74.2 acres. Please see Figure 3 for a map of the revised APE. The undertaking's original archaeological survey effort and reporting remain the same, with these two areas falling within the usual half mile literature review area. This letter intends to supplement the previous APE assessment effort completed through the previously submitted report and SHPO case (U23UQ0554; 23-1972).

Given the previously disturbed state of the two added areas, and the lack of historic properties within the original and revised APES, we are making a renewed determination of *no historic properties affected* for the proposed Roosevelt City gun range project. We respectfully ask for your concurrence with our project determination which includes two new areas of the APE.



Sincerely,



Mr. Eric Edgley
Utah Division of Wildlife Resource
Habitat Section Chief

EE/AWL

Enclosure

cc: Gary Cook, DWR Hunter Education, Shooting Ranges, & Shooting Sports Programs
Coordinator



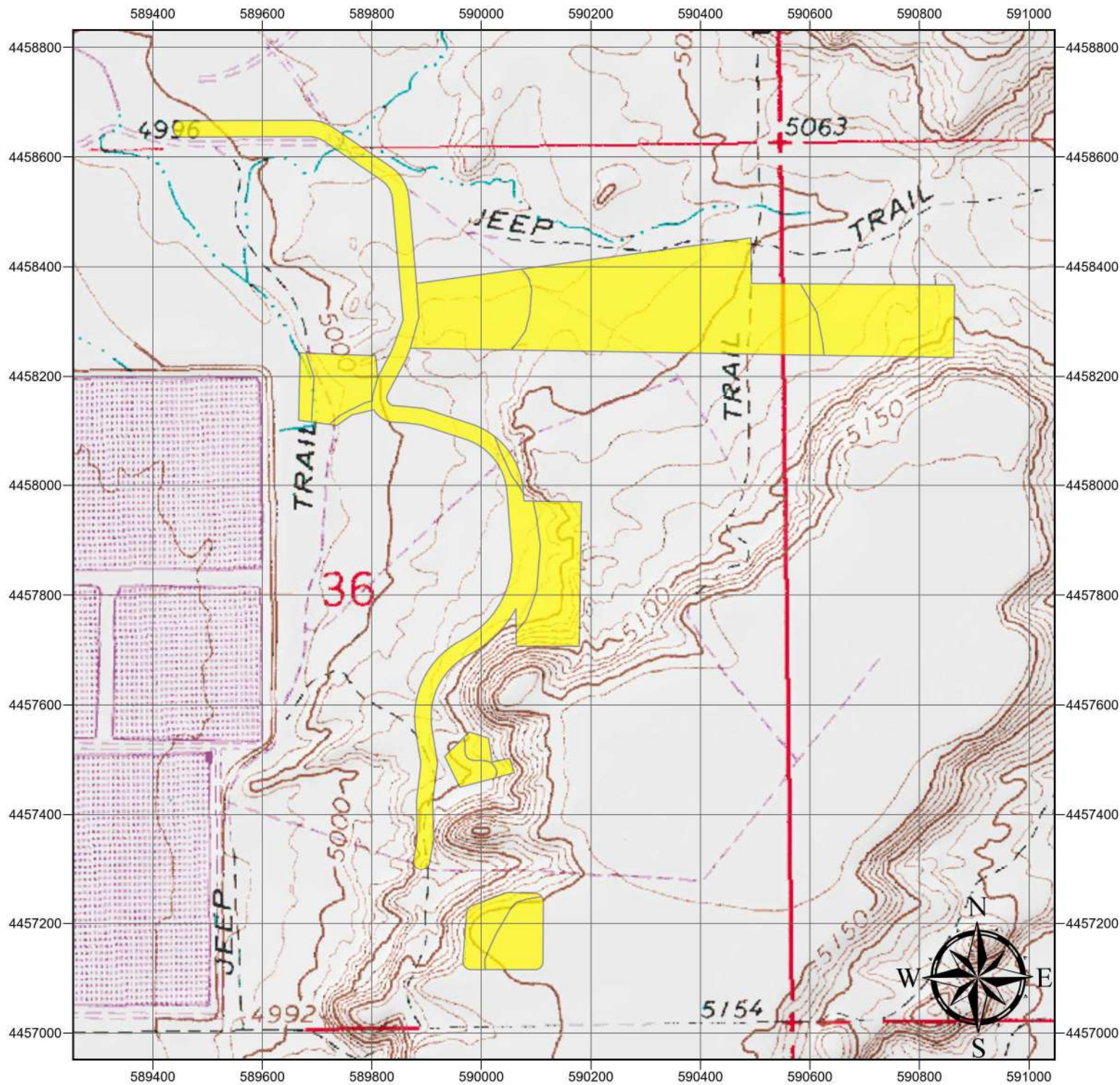


Figure 1: An Archaeological Survey of the Proposed Roosevelt City Gun Range Improvements, Uintah County, Utah - Original APE



Yellow shaded area: pU23UQ0554

130 65 0 130 260 390 520 Meters



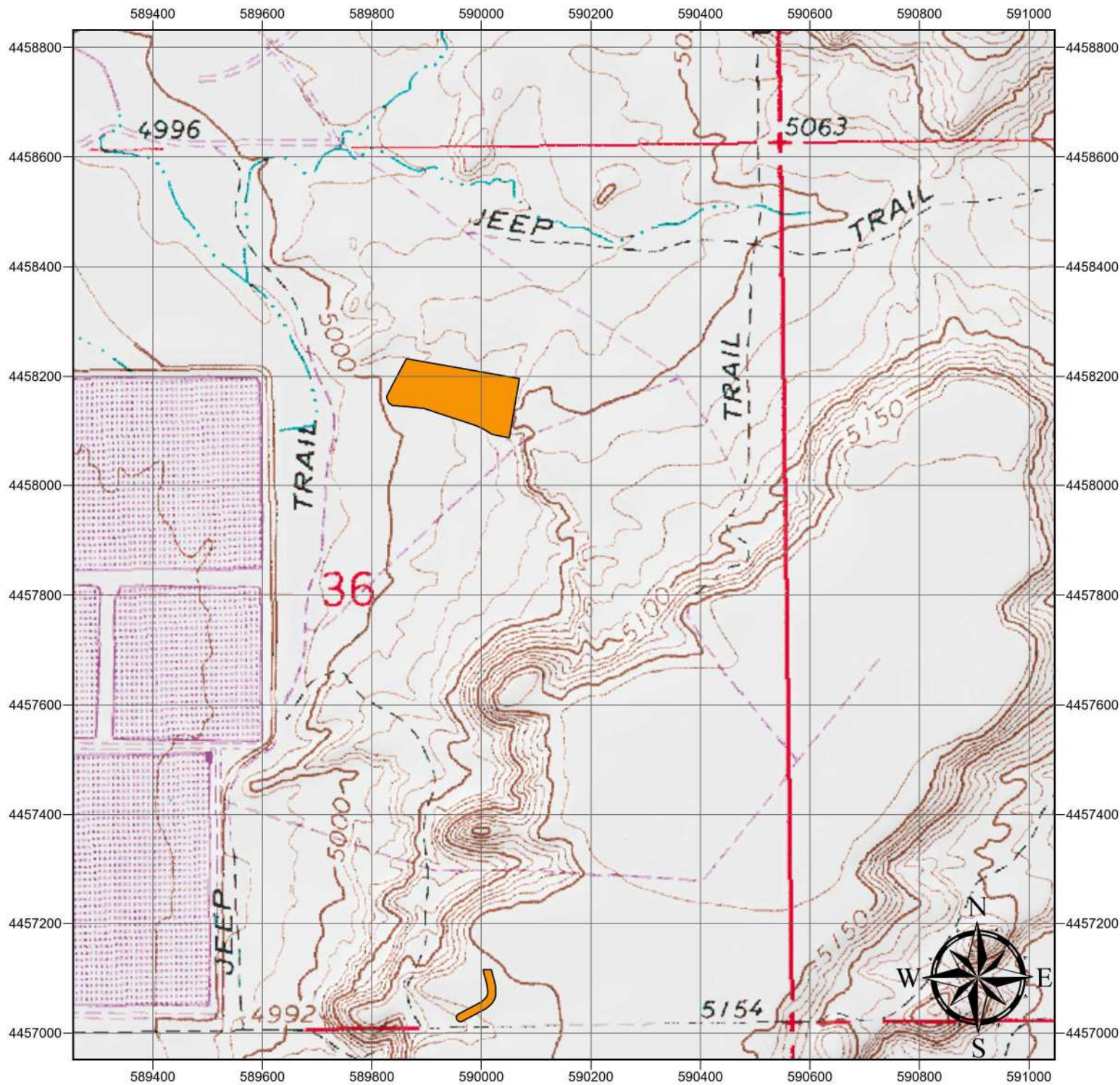



Figure 2: An Archaeological Survey of the Proposed Roosevelt City Gun Range Improvements, Uintah County, Utah - 2024 APE Additions



 pU23UQ0514 2024 APE Additions

130 65 0 130 260 390 520
 Meters



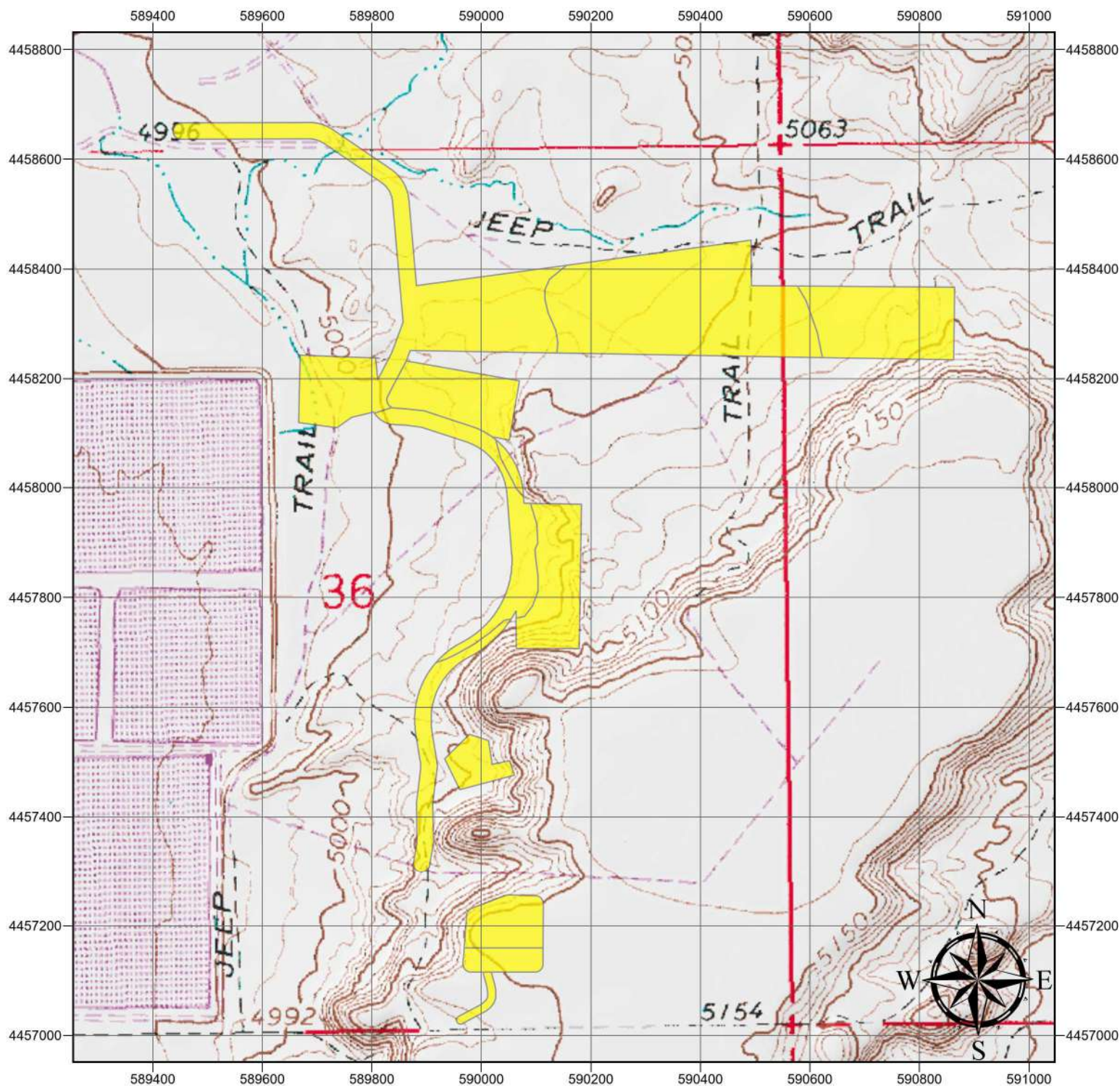


Figure 3 An Archaeological Survey of the Proposed Roosevelt City Gun Range Improvements, Uintah County, Utah - 2024 revised APE



Yellow pU23UQ0514 2024 Revised APE





Spencer J. Cox
Governor

Deidre M. Henderson
Lieutenant Governor

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



Christopher Merritt
State Historic Preservation Officer
Utah State Historic Preservation Office

September 11, 2023

Eric Edgley
Habitat Section Chief
Utah Division of Wildlife Resources
1594 West North Temple
Suite 2110
PO Box 146301
Salt Lake City, Utah 84114-6301

RE: Roosevelt City Gun Range

For future correspondence, please reference Case No. 23-1972

Dear Eric Edgley,

The Utah State Historic Preservation Office received your request for our comment on the above-referenced undertaking on September 11, 2023.

We concur with your determinations of eligibility and effect 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 by email at rmcgrath@utah.gov.

Sincerely,

Ryan McGrath
Archaeologist



Spencer J. Cox
Governor

Deidre M. Henderson
Lieutenant Governor

Donna Law
Interim Executive Director



Christopher Merritt
State Historic Preservation Officer
Utah State Historic Preservation Office

July 15, 2024

Eric Edgley
Habitat Section Chief
Utah Division of Wildlife Resources
1594 West North Temple
Suite 2110
PO Box 146301
Salt Lake City, Utah 84114-6301

RE: Roosevelt City Gun Range - APE Additions

For future correspondence, please reference Case No. 24-1596

Dear Eric,

The Utah State Historic Preservation Office received your request for our comment on the above-referenced undertaking on June 28, 2024.

We concur with your determination of effect for this undertaking on the new APE.

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 801-245-7263 or by email at cmerritt@utah.gov.

Sincerely,

Christopher W. Merritt
State Historic Preservation Officer



Spencer J. Cox
Governor

Deidre M. Henderson
Lieutenant Governor

Donna Law
Interim Executive Director



Christopher Merritt
State Historic Preservation Officer
Utah State Historic Preservation Office

June 22, 2025

Grace Bello
Archaeologist
U.S. Fish and Wildlife Service
134 Union Blvd.
Lakewood, Colorado 80228

RE: Proposed Roosevelt City Gun Range Improvements, Uintah County, Utah. Two previous Case No. 24-1596 and 23-1972.

For future correspondence, please reference Case No. 25-1175

Dear Ms Bello,

The Utah State Historic Preservation Office received your request for our comment on the above-referenced undertaking on June 18, 2025.

We concur with your determinations of eligibility and effect for this undertaking.

This letter serves as our comment on the determination you have made within the consultation process specified in §36CFR800.4. Additionally, 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) 535-2502 or by email at rmcgrath@utah.gov.

Sincerely,

Ryan McGrath
Compliance Archaeologist



United States Department of the Interior

FISH AND WILDLIFE SERVICE Mountain-Prairie Region Office of Conservation Investment



IN REPLY REFER TO:
FWS/R6/CI

MAILING ADDRESS:
Denver Federal Center
Post Office Box 25486
Mail Stop 60152
Denver, Colorado 80225

STREET LOCATION:
Denver Federal Center
1 Denver Federal Center
Building 25, Room W1911
Denver, Colorado 80225

July 1, 2024



Dear [REDACTED]:

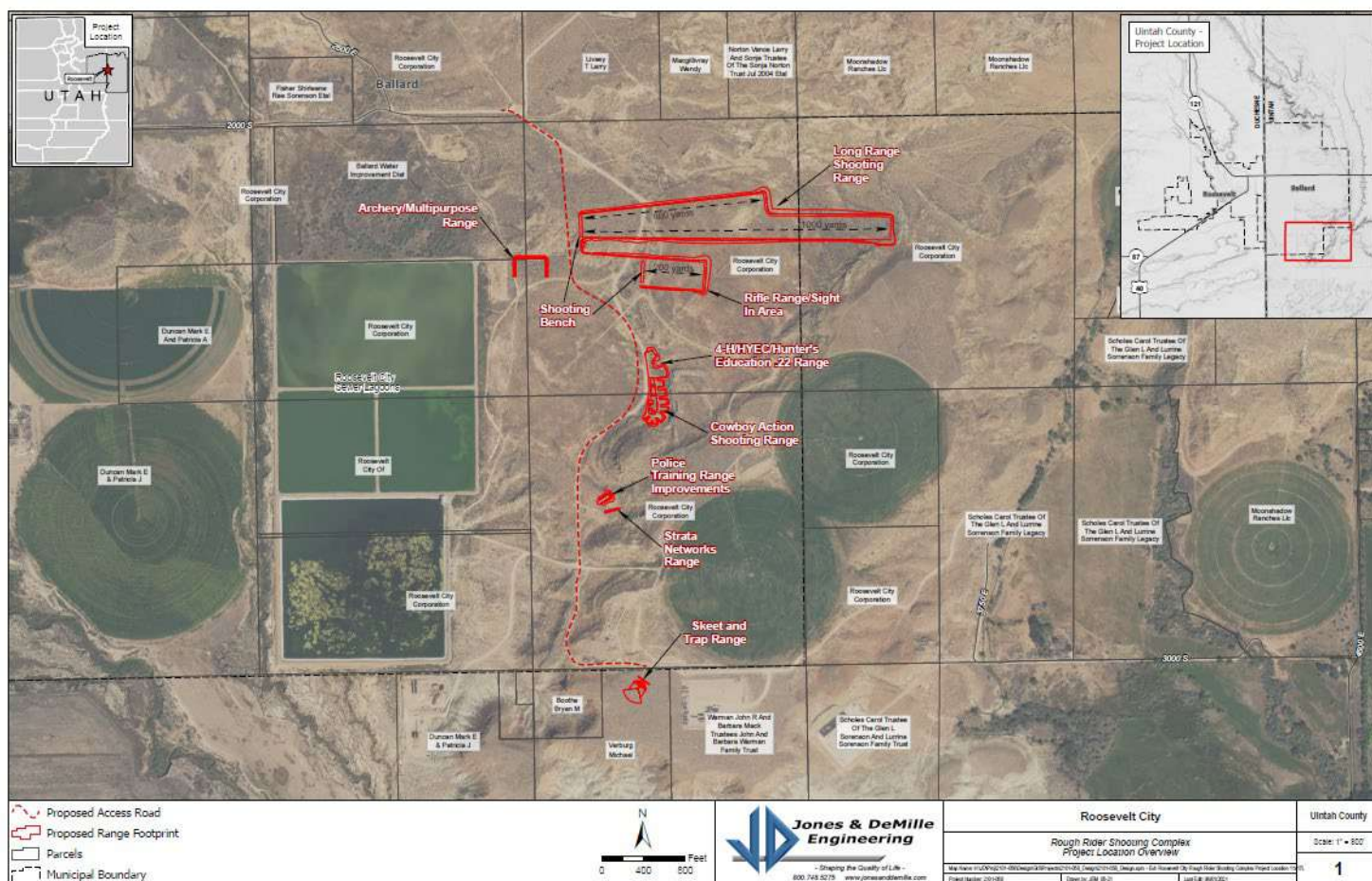
The intent of this letter is to initiate consultation in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108), and its implementing regulations at 36 CFR Part 800, for the construction, maintenance, and operation of a public shooting range complex in Uintah County, Utah.

The U.S. Fish and Wildlife Service (Service) received a grant proposal from the Utah Division of Wildlife Resources (UDWR) proposing a partnership between Roosevelt City and UDWR to improve already existing shooting structures on the property owned by Roosevelt City and develop new amenities on the property. The UDWR has requested to use federal funds from the Federal Aid in Wildlife Restoration Act of 1937, also known as the Pittman-Robertson Act (16 U.S.C. § 669 *et seq*) administered through the Service for the construction of the public shooting range complex. The proposed next phase of development associated with this project will improve access roads, add and improve parking areas, develop multiple shooting venues including a 100-yard multi-purpose range, 200/600/1000-yard rifle ranges, pistol ranges, a cowboy action range area, and shotgun trap and skeet fields. This project therefore constitutes as an Undertaking as it will be utilizing federal funds administered through the Service (36 CFR Part 800.16(y)). The Service will be the lead federal agency responsible for Section 106 review and consultation for this Undertaking.

Efforts to Identify Historic Properties

In a September 2023 letter to the Utah State Historic Preservation Office (UT SHPO), one archaeological site (42Un9570) and one isolated find were identified by an archaeological survey conducted by a UDWR Archeologist on August 2, 2023. The single archaeological site, 42Un9570, was identified as part of this archaeological survey. Please see site description and National Register discussion below. One other isolated find was identified. This isolated find was the remains of a dismantled fence with several fallen fence poles and a tangle of barbed wire.

Beyond these two findings, no other cultural resources were identified. This includes no additional isolated finds, cultural features, or potential site leads. The archaeological site is a dispersed historic artifact scatter with a dismantled fence line that is not considered eligible for listing to the National Register of Historic Places (NRHP). The isolated find is a dismantled historic fence line which is also NRHP ineligible.

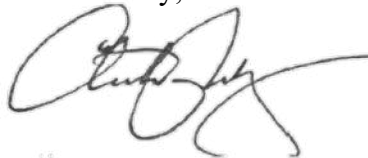


The UT SHPO concurred with the findings of the survey conducted by UDWR who concluded that given the lack of significant findings within the APE and survey area UDWR has made a determination of *no historic properties affected* for the proposed Roosevelt City gun range project.

This review has been provided to: Eastern Shoshone Tribe of the Wind River Reservation, Wyoming; Shoshone-Bannock Tribes of the Fort Hall Reservation; Southern Ute Indian Tribe of the Southern Ute Reservation, Colorado; Ute Indian Tribe of the Uintah & Ouray Reservation, Utah; Ute Mountain Ute Tribe

The Service recognizes that your Tribe may have a deep, spiritual, historic, and cultural connection to the land that is now encompassed by Uintah County, Utah, and appreciates any information you can provide. If you have any questions or comments related to this project, please contact Amanda Horvath at amanda_horvath@fws.gov or (720) 646-6299.

Sincerely,

A handwritten signature in black ink, appearing to read 'Clinton Riley', with a stylized flourish extending to the right.

Clinton Riley
Regional Manager
Office of Conservation Investment

cc:

[Redacted]