

# **Final Environmental Assessment**

for the

## **Confluence Park Land Disposal**

Involving Lands Held in Conservation Easement by the  
Utah Division of Wildlife Resources

Washington County, Utah

Office of Conservation Investment, U.S. Fish and Wildlife Service  
Amendment Proposal Grant #E-8-L-NCLA

August 20, 2025

Prepared by:

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&

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## Chapter 1. Purpose and Need

### 1.1. Introduction

The Confluence Park conservation easement (Project) was established in 2000 with the intent to acquire and protect approximately 500-acres of an ecosystem complex of riparian and upland habitats associated with the Virgin River and its confluence with Ash Creek and La Verkin Creek. The location and current extents of the Project are shown on Map 1 in Appendix A.

Approximately 125-acres in the valley bottom were initially included in the Project. In 2002, the Utah Division of Wildlife Resources (UDWR) acquired a conservation easement of approximately 149.4-acres of upland and river habitats within land owned by Washington County to add to the Project. The stated purpose of the easement was to: "protect and enhance water quality and water supplies; protect wildlife habitat and maintain habitat connectivity and related values to ensure biodiversity; protect riparian areas; maintain and restore natural ecosystem functions; protect prehistoric and historic cultural sites; protect and enhance non-motorized, outdoor recreational opportunities; protect scenic vistas; protect historic values, and; encourage the public awareness and appreciation of the Conservation Values of the Property." The Deed of Conservation Easement (Entry Number 00791481) is attached in Appendix B.

The 2002 purchase used Cooperative Endangered Species Conservation funds (Section 6 of the Endangered Species Act) under Grant #E-8-L, issued by U.S. Fish and Wildlife Service (USFWS). The funding required UDWR to satisfy a number of conditions in order to secure USFWS approval for funding.

In 2007, another 52.65-acres of conservation easement were added to the Project, for a total area of approximately 327-acres.

Washington County proposes to dispose of 1.457-acres of land from the legal description of the 2002 Deed of Conservation Easement (Entry Number 00791481) that "no longer holds conservation easement values." Residential development directly abuts the south and east sides of the parcel, and the west side abuts private property that shows evidence of motorized use and could be developed in the future. An access road was cut through the parcel during development of the eastern subdivision between 2004 and 2006. As a result of the surrounding land uses, the parcel has been modified from natural conditions that existed when the property was purchased in 2002 and is now largely isolated from the remainder of the conservation easement.

Following approval of the disposal, UDWR is expected to acquire approximately 20.702-acres in two parcels that are contiguous to the Project to compensate for the economic and conservation values that would be lost as a result of the disposal (see Map 2 in Appendix A). Hurricane City and La Verkin City have both executed resolutions of support for the proposed disposal and subsequent compensatory acquisition; the resolutions are attached as Appendix C.

The UDWR is seeking approval from the USFWS to dispose of 1.457-acres from the Confluence Park conservation easement that no longer meets the authorized purpose of the original federal grant.

USFWS approval of the proposed disposal of 1.457-acres constitutes a federal action subject to the requirements of the National Environmental Policy Act (NEPA)<sup>1</sup>. 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 UDWR to proceed with the disposal. If significant impacts appear likely to result from the proposed action, USFWS would prepare an Environmental Impact Statement (EIS) to more fully analyze the impacts of allowing UDWR to proceed with the proposed disposal.

## **1.2. Purpose and Need for Action**

The purpose of the proposed action is to maintain or increase the economic and conservation values of the Confluence Park conservation easement. The parcel for disposal has been disturbed by adjacent residential development and motorized use since at least 2006. For these reasons, the 1.457-acre parcel no longer meets the authorized purpose of the original federal grant. The need is to meet the requirements of the Section 6 Cooperative Endangered Species Conservation grant program in accordance with applicable federal regulations (2 CFR 200.311) while accommodating the request for disposal from Washington County.

## **Chapter 2. Alternatives**

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

### **2.1. No Action**

Under the No Action alternative, UDWR would retain a conservation easement for the 1.457-acre area that no longer meets the authorized purpose of the original federal grant.

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

## 2.2. Proposed Action

Under the proposed action, UDWR would dispose of a 1.457-acre parcel from the Confluence Park conservation easement.

Following approval of the disposal, UDWR would acquire 20.702-acres in two parcels that are contiguous to Confluence Park to compensate for the economic and conservation values that would be lost because of the disposal. The proposed parcels are shown in greater details in Map 2 in Appendix A.

UDWR has completed an appraisal and appraisal review that comply with the provisions of both the *Uniform Appraisal Standards for Federal Land Acquisitions* and the *Uniform Standards of Professional Appraisal Practice* for each of the parcels involved in the proposed disposal and expected compensatory acquisition.

## 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 disposal and subsequent acquisition occur on the eastern edge of the Great Basin section of the Basin and Range physiographic province (Fenneman and Johnson 1946). More specifically, the area is located where the Virgin River flows out of the Hurricane Cliffs and Ash Creek and La Verkin Creek converge with the river. The area is characterized by a steep, narrow canyon with rugged basalt cliffs and the Virgin River running through the bottom. Elevations range between 3,000-feet above sea level in the canyon bottom and 3,300-feet on the plateaus above. The climate is semi-arid, with an average total annual precipitation of only 11 inches. Temperatures range between winter lows of 27 °F and summer highs of 99 °F (Western Regional Climate Center 2024).

### 3.1. Parcel for Disposal

The parcel for disposal is approximately 1.457-acres in size and is located directly adjacent to a residential subdivision on the south plateau above the Virgin River. A trailhead with parking and restrooms occurs at the north end of the parcel in an area that would be retained in conservation easement by UDWR. A dirt road bisects the parcel. A representative photo of the parcel taken from the trailhead is provided in Figure 3-1.



**Figure 3-1. Photo of the parcel for disposal, looking uphill (south) at 190° (10-28-2024)**

### **3.1.1 Soils and Prime and Unique Farmland**

#### Affected Environment

The soil in the parcel for disposal is described as Winkel gravelly fine sandy loam, 1 to 8 percent slopes. It is classified as “not prime farmland” by the Natural Resources Conservation Service (NRCS) in the soil report for the parcel (attached as Appendix D). Important farmlands do not occur in the parcel. Soils have been disturbed by creation and use of the dirt road, but the area is very rocky and erosion is not apparent in the area.

#### Impacts of the No Action Alternative

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

#### Impacts of the Proposed Action

Up to 1.457-acres of soil would no longer be protected. There would be no impact to important farmlands.

### 3.1.2 Wildlife Resources

#### Affected Environment

Wildlife habitats were identified from publicly available UDWR data (UDWR 2024) and the UDWR's Wildlife Habitat Analysis Tool on February 15, 2025; the report is provided in Appendix E. The parcel for disposal is wholly within mapped:

- Year-long crucial habitat for Gambel's quail (*Callipepla gambelii*)
- Year-long substantial habitat for mule deer (*Odocoileus hemionus*)
- Year-long substantial habitat for ring-necked pheasant (*Phasianus colchicus*)
- Year-long habitat for turkey (*Meleagris gallopavo*)
- Summer-fall substantial habitat for white-winged dove (*Zenaida asiatica*)

These habitats and the animals that may occupy them have been impacted by the adjacent residential development and human presence in the area. The development has fragmented habitat, and disturbance results in displacement of animals into less suitable habitats, behavioral disruption, and stress due to noise and human activity.

#### Impacts of the No Action Alternative

The No Action Alternative would have no impact on wildlife resources.

#### Impacts of the Proposed Action

Up to 1.457-acres of UDWR-mapped habitat for Gambel's quail, mule deer, ring-necked pheasant, turkey, and white-winged dove would no longer be protected.

### 3.1.3 Fish and Other Aquatic Species

#### Affected Environment

There are no aquatic habitats within the parcel for disposal.

#### Impacts of the No Action Alternative

The No Action Alternative would have no impact on fish or other aquatic species.

#### Impacts of the Proposed Action

The proposed action would have no impact on fish or other aquatic species.

### 3.1.4 Endangered, Threatened, Candidate, and State-sensitive Species

#### 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 February 15, 2025; the list is provided in the biological evaluation prepared for the project (see Appendix F). The following species federally listed as threatened or endangered under the Endangered Species Act (ESA) could occur within or near the parcel for disposal:

- California condor (*Gymnogyps californianus*) – Experimental Population, Non-essential: Suitable cliff nesting habitat (USFWS 1996) may occur within 1-mile of the parcel for

disposal; however, there are no known nests or roost sites within 1 mile. The parcel is within the scavenging range of condors from Zion National Park (National Park Service 2024), but carrion is unlikely to occur within the parcel for disposal, which is directly adjacent to a residential subdivision; any carcasses would likely be removed from the area to avoid impacts to homeowners. California condors are unlikely to occur in the parcel for disposal due to the proximity to human occupation.

- Mexican spotted owl (*Strix occidentalis lucida*) – Threatened: The nearest critical habitat occurs less than 3 miles to the northeast of the parcel for disposal. There is no suitable nesting or roosting habitat within the project area, but the project area is within the known dispersal/migratory range of the owls (USFWS 2012) from Zion National Park (National Park Service 2017), and owls could forage for small mammals in the parcel for disposal. According to the *Mexican Spotted Owl Utah Habitat Interactive Map* (USFWS 2024a), the northern end of the parcel for disposal is within modeled habitat for “medium to high probability of presence” for the species (Lewis 2014).
- Southwestern willow flycatcher (*Empidonax traillii extimus*) – Endangered: The nearest critical habitat occurs approximately 6 miles downstream of the parcel for disposal. Suitable habitat of lower elevation riparian areas has historically occurred in the Virgin River system (USFWS 2002). Riparian vegetation does not occur in the parcel for disposal and the nearest riparian area is over 1,000 feet away in the canyon bottom. Southwestern willow flycatchers are unlikely to occur within the parcel for disposal due to the lack of riparian vegetation and the proximity to human occupation.
- Yellow-billed cuckoo (*Coccyzus americanus*) – Threatened: The nearest critical habitat for this species occurs over 165 miles south of the project area. Suitable riparian woodlands with overstory and understory components (USFWS 2021) do not occur within 1,000 feet of the parcel for disposal. Yellow-billed cuckoo are unlikely to occur within the parcel for disposal due to the lack of riparian vegetation and the proximity to human occupation.
- Desert tortoise (*Gopherus agassizii*) – Threatened: The nearest critical habitat is less than 2,000 feet to the west of the project area. Suitable desert habitat (USFWS 2011) occurs within the parcel for disposal.
- Monarch butterfly (*Danaus plexippus*) – Proposed Threatened: Monarchs require milkweed (*Asclepias* spp.), overwintering habitat, and migration habitat. Overwintering occurs along the Pacific Coast, and migration habitat is typically associated with riparian corridors (USFWS 2024b). Milkweed does not occur within the parcel for disposal and the nearest riparian vegetation is over 1,000 feet away in the canyon bottom. Monarch butterflies are unlikely to occur within the parcel for disposal.
- Suckley’s cuckoo bumble bee (*Bombus suckleyi*) – Proposed Endangered: Suitable nectar and pollen sources (USFWS 2024c) likely occur within the parcel for disposal, which is within the range of the species.

There are no critical habitats within the parcel for disposal.

A list of federally listed species and state species of greatest conservation need (SGCN) that have been recorded within one-half (0.5) mile of the parcel for disposal was obtained from the UDWR's Wildlife Habitat Analysis Tool on February 15, 2025; the report is provided in Appendix E:

- Arizona toad (*Anaxyrus microscaphus*) – SGCN: The Arizona toad only occurs in lowland riparian habitats within the Virgin River Basin in Utah (UDWR 2015). The species was most recently recorded within 0.5 miles of the parcel for disposal in 2019, likely within the riparian area associated with the Virgin River. There are no riparian habitats within the parcel for disposal and Arizona toad is unlikely to occur within the area.
- Flannelmouth sucker (*Catostomus latipinnis*) – SGCN: The flannelmouth sucker is a fish that is endemic to the Colorado River Basin. There are no aquatic habitats or fish within the parcel for disposal.
- Gila monster (*Heloderma suspectum*) – SGCN: The Gila monster occupies desert scrub habitats (NatureServe 2024), which occur within the parcel for disposal. The species was most recently recorded within 0.5 miles of the parcel for disposal in 2023.
- Mojave Desert tortoise (*Gopherus agassizii*) – SGCN and Federally Threatened: The species was most recently recorded within 0.5 miles of the parcel for disposal in 2020.
- Smith's black-headed snake (*Tantilla hobartsmithi*) – SGCN: The Smith's black-headed snake is rare in the state, but typically found near stream corridors (UDWR 2019). The species was most recently recorded within 0.5 miles of the parcel for disposal in 2020, likely within the riparian area associated with the Virgin River. There are no riparian habitats within the parcel for disposal and Smith's black-headed snake is unlikely to occur within the area.
- Virgin River chub (*Gila seminuda*) – SGCN and Federally Endangered: The fish is endemic to the Virgin River and the Muddy River in Nevada (USFWS 2020). There are no aquatic habitats or fish within the parcel for disposal.
- Virgin spinedace (*Lepidomeda mollispinis*) – SGCN: The Virgin spinedace is also a fish species that is endemic to the Virgin River (USFWS 2020). There are no aquatic habitats or fish within the parcel for disposal.
- Western red bat (*Lasiorus blossevillii*) – SGCN: The western bat typically roosts in deciduous trees, predominantly in riparian areas (UDWR 2015). Riparian habitat does not occur within the parcel for disposal and western red bat is unlikely to occur in the area.
- Woundfin (*Plagopterus argentissimus*) – SGCN and Federally Endangered: The fish is currently only known to occur in the upper Virgin River (USFWS 2020). There are no aquatic habitats or fish within the parcel for disposal.

#### Impacts of the No Action Alternative

There would be no effect to federally listed species, critical habitats, or state SGCN under the No Action Alternative.

### Impacts of the Proposed Action

Approximately 1.457-acres that could provide habitat for Mexican spotted owl, desert tortoise, Suckley's cuckoo bumble bee, and Gila monster would be disposed of from the conservation easement. A biological evaluation was prepared to conduct informal consultation under Section 7 of the ESA for impacts to federally listed species. Based on the biological evaluation, USFWS is expected to concur with the effects determinations below:

- **May affect, but is not likely to adversely affect** the Mexican spotted owl, southwestern willow flycatcher, yellow-billed cuckoo, desert tortoise, Virgin River chub, or woundfin.
- **Would not likely jeopardize the continued existence** of the California condor, monarch butterfly, or Suckley's cuckoo bumble bee.
- **Would have no effect** on critical habitats.

### **3.1.5 Vegetation**

#### Affected Environment

The parcel for disposal is primarily vegetated by low-growing desert shrubs and grasses. Broom snakeweed (*Gutierrezia sarothrae*), Mormon tea (*Ephedra viridis*), and cheatgrass (*Bromus tectorum*) were the predominant species observed in October of 2024.

#### Impacts of the No Action Alternative

There would be no impacts to vegetation under the No Action Alternative.

#### Impacts of the Proposed Action

Up to 1.457 acres of desert shrub vegetation would no longer be protected.

### **3.1.6 Water and Wetland Resources**

#### Affected Environment

Based on an onsite review by Jones & DeMille Engineering environmental staff on October 28, 2024, waters and wetlands do not occur within the parcel for disposal.

#### Impacts of the No Action Alternative

The No Action Alternative would have no impact on waters or wetlands.

#### Impacts of the Proposed Action

The proposed action would have no impact on waters or wetlands.

### **3.1.7 Cultural Resources**

#### 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)). Per

the 2001 Programmatic Agreement between the Utah State Historic Preservation Office (SHPO), the USFWS, the Advisory Council on Historic Preservation, and UDWR, the UDWR shall consult with the SHPO pursuant to 36 CFR Part 800 for implementing Section 106 of the NHPA.

The UDWR defined the area of potential effect (APE) as the 1.46 acres that compose the parcel for disposal. 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)).

The APE was surveyed for cultural resources in 2014 by personnel from the UDWR that met the Secretary of the Interior's qualifications in archaeology. The survey did not identify any cultural resources within the parcel for disposal. A file search in October of 2024 did not identify any new cultural resources, but did identify that a portion of the parcel has been previously disturbed through neighboring land development and recreation infrastructure. An informal intensive survey was also conducted in October of 2024 and did not identify any cultural resources or historic properties. The UDWR's consultation request letter documenting these findings is attached as Appendix F.

#### Impacts of the No Action Alternative

The No Action Alternative would have no effect on cultural resources or historic properties.

#### Impacts of the Proposed Action

Due to the lack of cultural resources or historic properties within the parcel for disposal, there would be no effect historic properties from implementation of the proposed action. The SHPO concurred with a determination of "no historic properties affected" on October 31, 2024; the concurrence letter is attached in Appendix G.

### **3.1.8 Recreation and Public Use**

#### Affected Environment

The parcel is largely unused for recreation or public purposes, though the very north end overlaps the parking area for the Virgin River Trailhead, which provides recreational access to Confluence Park.

#### Impacts of the No Action Alternative

The No Action Alternative would have no impact on recreation or public use.

#### Impacts of the Proposed Action

The trailhead facilities would remain within the conservation easement, though some of the parking area would be in the parcel for disposal. Washington County would likely retain the parking area as part of the recreational facility.

### **3.1.9 Conservation Values**

The conservation values of the original easement that includes the parcel for disposal were listed as:

- Water quality and water supplies

- Wildlife habitat and habitat connectivity and related values to ensure biodiversity
- Riparian areas
- Natural ecosystem functions
- Prehistoric and historic cultural sites
- Non-motorized outdoor recreational opportunities
- Scenic vistas
- Historic values

Based on the analysis, the parcel for disposal provides limited wildlife habitat, natural ecosystem functions, and non-motorized outdoor recreational opportunities. As a result, the affected parcel no longer meets the original authorized purpose of the federal award.

### **3.2. Reasonably Foreseeable Effects**

The terminology “reasonably foreseeable effects” is used throughout this section and refers to effects that are sufficiently likely to occur and that encompass both the direct and indirect effects of the actions as well as effects of the actions when combined with other potential past, present, and future effects.

The purpose of this section is to describe the interaction among the effects of the alternatives and relevant past, present, and reasonably foreseeable actions. This interaction may be:

- Additive: the effects of the actions add together to make up a 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. Known past, present, and reasonably foreseeable future actions in the geographic area of the project are summarized below:

- Residential, commercial, and municipal development: The population of Washington County is projected to increase by 229 percent (with an associated increase in 150,000 households) by 2065 (Kem C. Gardner Policy Institute 2017). Additional residential development within the county would be necessary to accommodate the projected population increase, and commercial and municipal development would be expected to increase in proportion to the population. Municipal development includes water and sewer systems, power lines, local roads, and other infrastructure. The same type of infrastructure development is anticipated in the future to meet demand associated with population growth. Based on the adjacent development, we expect that the parcel would be developed at an unknown time after disposal.
- Conservation: Approximately 20.702 acres in two parcels that are contiguous to the Project would be added to the Project under conservation easement.

### 3.2.1 Washington County Acquisition Parcels

The two parcels to be acquired by UDWR are contiguous with the southern edge of the existing Project. Parcel 1 is approximately 1.364 acres and is located less than 500 feet east of the parcel for disposal. It is located on the steep slope just below the plateau. A photo of the site is provided in Figure 3-2.



**Figure 3-2. Photo of Parcel 1 for Acquisition, looking northwest at 300° (10-28-2024)**

Parcel 2 is approximately 18.338 acres and is located upstream of the Project, nearly to the SR-9 bridge over the Virgin River. Parcel 2 contains approximately 0.4 miles of the Virgin River and steep slopes on the south side of the canyon. A representative photo of the parcel is provided in Figure 3-3.



**Figure 3-3. Photo of Parcel 2 for Acquisition, looking west at 270° (10-28-2024)**

The parcels for acquisition are expected to protect:

- Water quality and water supplies
- Wildlife habitat and habitat connectivity and related values to ensure biodiversity
- Riparian areas
- Natural ecosystem functions
- Prehistoric and historic cultural sites
- Non-motorized outdoor recreational opportunities
- Scenic vistas
- Historic values

The addition of these parcels to the Project are intended to have a countervailing effect on the limited loss of wildlife habitat, natural ecosystem functions, and non-motorized outdoor recreational opportunities from the parcel for disposal. Both parcels are within mapped habitat for Gambel's quail, mule deer, ring-necked pheasant, and white-winged dove. Parcel 1 is also within mapped habitat for turkey, while Parcel 2 provides aquatic and riparian habitats. Both parcels would provide habitat for various federally listed species and state species of greatest conservation need (SGCN). Acquisition of the addition parcels would maintain or increase the economic and conservation values of the Confluence Park conservation easement.

## **Chapter 4. Public Involvement, Consultation, and Coordination**

### **4.1. Public Involvement**

The USFWS did not hold any public meeting for this proposed action, but the draft EA was available for public comment on their website from July 21, 2025 to August 20, 2025 (<https://www.fws.gov/media/confluence-park-land-disposal-draft-ea>).

The proposed disposal was presented to the Hurricane and La Verkin city councils at their meetings on April 4, 2024, and March 6, 2024, respectively. Both cities executed resolutions of support for the proposed disposal and subsequent compensatory acquisition (see Appendix C).

## 4.2. Consultation and Coordination

### 4.2.1 National Historic Preservation Act

The UDWR consulted with the Utah SHPO under the provisions of the 2001 Programmatic Agreement between the USFWS, the Advisory Council on Historic Preservation, the UDWR, and the Utah SHPO on October 30, 2024, to comply with 36 CFR 800.4 through 800.6. The Utah SHPO responded on October 31, 2024, stating that they concurred with the determinations of eligibility and effect for the undertaking.

USFWS is the lead agency responsible for compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA; 54 U.S.C. § 306108), and its implementing regulations, 36 CFR 800. Regarding the proposed action, USFWS provided letters to 25 tribal nations with the intent to initiate consultation in accordance with Section 106 of the NHPA. Tribal nations are provided six weeks from the time of receipt to respond to USFWS' letter. Any comments requiring response will be addressed by USFWS and described in the final EA.

### 4.2.2 Endangered Species Act

The parcel proposed for disposal was acquired with federal funds (Grant #E-8-L ) that were authorized under Section 6 of the ESA. The proposed disposal represents a federal action that requires Section 7 ESA consultation. ESA consultation is pending with USFWS, but it is anticipated that an effects determination of “may affect, but is not likely to adversely affect” the Mexican spotted owl and desert tortoise, and “would not likely jeopardize the continued existence of” the Suckley’s cuckoo bumble bee will be issued. The final Section 7 ESA consultation effects determinations will be described in the final EA.

## 4.3. List of Preparers

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

Name/Organization	Organization / Title	Responsibilities
Jenna Jorgensen/	Jones & DeMille Engineering / Environmental Coordinator	Document preparation, project analysis
Arie Leeflang	UDWR / Archaeologist	Cultural compliance
Jolene Rose	UDWR / Wildlife Lands Specialist	Project oversight
Jay Ogawa	USFWS / Fish and Wildlife Biologist	Grant management, regulatory compliance

## Chapter 5. References

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.

Kem C. Gardner Policy Institute. 2017. Utah's Long-Term Demographic and Economic Projections Summary. Research Brief, July 2017. University of Utah. Available at: <http://gardner.utah.edu/wp-content/uploads/Projections-Brief-Final-Updated-Feb2019.pdf> (accessed 11-20-2024).

Lewis, L. R. 2014. Habitat Characteristics of Mexican Spotted Owls (*Strix occidentalis lucida*) in the Canyonlands of Southern Utah. All Graduate Theses and Dissertations. 3335. <https://digitalcommons.usu.edu/etd/3335>.

National Park Service. 2017. Mexican Spotted Owl. <https://www.nps.gov/zion/learn/nature/mexicanspottedowl.htm>. Accessed 10-9-2024.

—. 2024. California Condors. <https://www.nps.gov/zion/learn/nature/condors.htm>. Accessed 10-9-2024.

NatureServe. 2024. NatureServe Network Biodiversity Location Data accessed through NatureServe Explorer [web application]. NatureServe, Arlington, Virginia. Available <https://explorer.natureserve.org/>. (Accessed 10-29-2024).

U.S. Fish and Wildlife Service (USFWS). 1996. California Condor Recovery Plan, Third Revision. U.S. Fish and Wildlife Service.

—. 2002. Southwestern Willow Flycatcher Recovery Plan. Albuquerque, New Mexico. i-ix + 210 pp., Appendices A-O.

—. 2011. Revised recovery plan for the Mojave population of the desert tortoise (*Gopherus agassizii*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. 222 pp.

—. 2012. Final Recovery Plan for the Mexican Spotted Owl (*Strix occidentalis lucida*), First Revision. Albuquerque, New Mexico, USA.

—. 2020. The Virgin River Fishes: Woundfin (*Plagopterus argentissimus*)/Virgin River chub (*Gila seminuda*); 5-Year Review: Summary and Evaluation. U.S. Fish and Wildlife Service, Utah Field Office, West Valley City, Utah.

—. 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.

—. 2024a. Utah Mexican Spotted Owl Habitat Suitability Interactive Map. <https://fws.maps.arcgis.com/apps/webappviewer/index.html?id=cbcdb478068843d28785e6d6b25040d7>. Accessed 10-11-2024.

—. 2024b. Monarch Butterfly (*Danaus plexippus*) Species Status Assessment Report. Version 2.3. Midwest Regional Office.

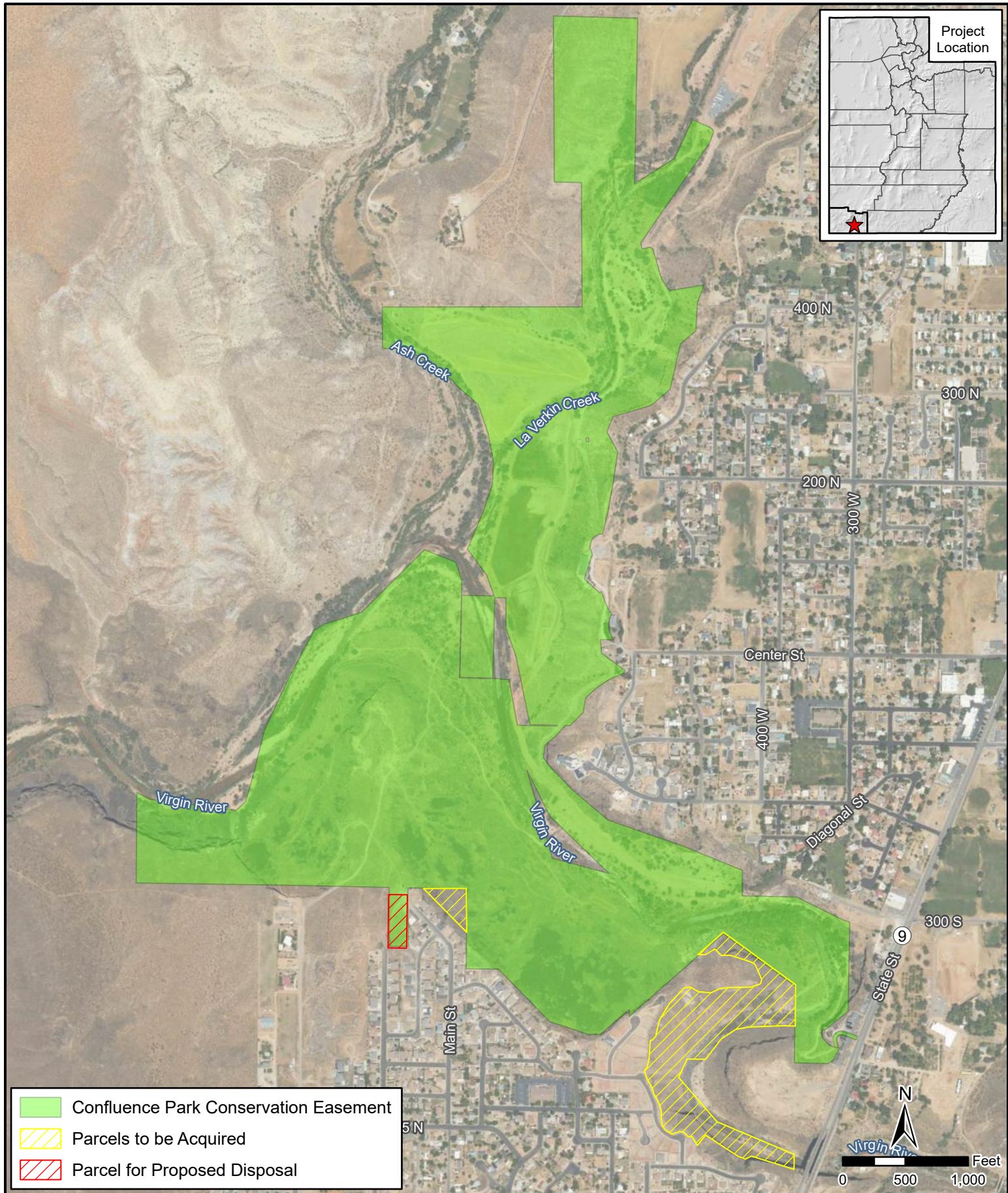
—. 2024c. Species status assessment report for the Suckley's Cuckoo Bumble Bee (*Bombus suckleyi*), Version 1.0. August 2024. Alaska Region. 131 pp.

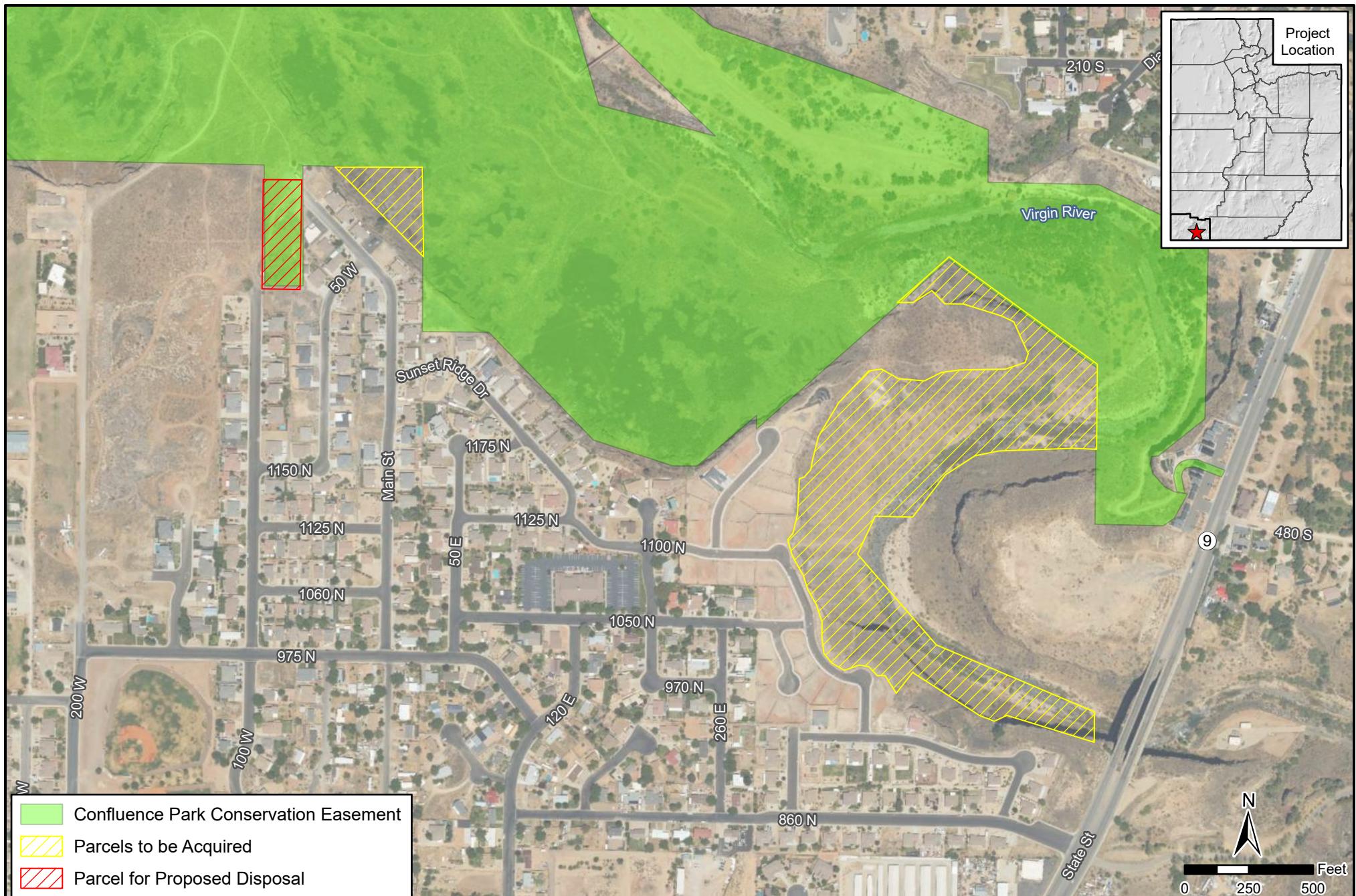
Utah Division of Wildlife Resources (UDWR). 2015. Utah Wildlife Action Plan. DWR publication 15-14. Utah Division of Wildlife Resources, Department of Natural Resources.

- . 2019. Utah Species: Smith's Black-headed Snake – *Tantilla hobartsmithi*. <https://fieldguide.wildlife.utah.gov/?species=tantilla%20hobartsmithi>. Accessed 2-15-2025.
- . 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. La Verkin, Utah (424968); Period of Record Monthly Climate Summary. <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ut4968>. Accessed 10-28-2024.

## **Appendix A. Maps**





**Jones & DeMille  
Engineering**

**Utah Division of Wildlife Resources**

**Confluence Park Conservation Easement  
Proposed Disposal**

**Washington County,  
Utah**

Scale: 1" = 500'

**2**

Map Name: H:\UD\Proj\2409-006\GIS\Projects\2409-006\_Env\2409-006\_Env.aprx - Confluence Park Proposed Land Exchange

Project Number: 2409-006

Drawn by: ALP 10-24

Last Edit: 06/10/2025

## **Appendix B. Deed of Conservation Easement**

3

EXHIBIT E TEMPLATE DEED  
OF CONSERVATION EASEMENT

00791481 BK 1503 Pg 2247  
RUSSELL SHIRTS \* WASHINGTON CO RECORDER  
2002 NOV 25 15:56 PM FEE \$36.00 BY LP  
FOR: DIXIE TITLE CO

DEED OF CONSERVATION EASEMENT

THIS GRANT DEED OF CONSERVATION EASEMENT is made this 25 day of November, 2002, by WASHINGTON COUNTY, a political subdivision of the State of Utah, having an address at 197 East Tabernacle, St. George, Utah 84770 (the "Grantor"), in favor of the State of Utah DIVISION OF WILDLIFE RESOURCES, having an address at 1594 West North Temple, Suite 2110, P.O. Box 146301, Salt Lake City, Utah 84114-6301 ("Grantee"), Grantor and Grantee hereinafter jointly referred to as the "Parties."

WITNESSETH

WHEREAS, Grantor is the sole owner in fee simple of certain real property consisting of approximately 149.4 acres, more or less, located in Washington County, Utah, and more particularly described in Exhibit "A" attached hereto and incorporated by this reference (the "Property"); and

WHEREAS, the property possesses natural, wildlife, recreational, scenic, cultural, historical, and open space values (collectively the "Conservation Values") of great importance to Grantor, the people of Washington County, and the people of the State of Utah; and

WHEREAS, the preservation of the Conservation Values of the Property are consistent with the goals of Grantee and the Virgin River Management Plan (VRMP) and the Virgin River Resource Management and Recovery Program (VRMRP), and the establishment of this conservation easement will provide public benefits by: protecting and enhancing water quality and water supplies; protecting wildlife habitat and maintaining habitat connectivity and related values to ensure biodiversity; protecting riparian areas; maintaining and restoring natural ecosystem functions; and, maintaining cultural, recreational, scenic, agricultural and historic values.

WHEREAS, a significant portion of the property lies within the flood plain of the Virgin River and restoration and protection of the 100-year flood plain is consistent with the commitment to protect and maintain critical habitat for native fish populations; and

WHEREAS, the specific Conservation Values of the Property are documented in an inventory of relevant features of the Property, dated November 24, 2002, attached hereto as Exhibit "B" and incorporated by this reference ("Baseline Documentation"), which consists of reports, maps, photographs, and other documentation that the parties agree to provide, collectively, as an accurate representation of the property at the time of this grant and which is intended to serve as an objective information baseline for monitoring compliance with the terms of this grant; and

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

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

WHEREAS, In June of 1999, the Virgin River Management Plan ("VRMP") was finalized and approved by numerous entities, including Washington County, the municipalities of Hurricane and LaVerkin, the Utah Department of Natural Resources and the Washington County Water Conservancy District, with the joint goals of conserving, enhancing, protecting and recovering native species and their habitat; and

WHEREAS, protection of the Conservation Values of the Property will significantly contribute to the realization of the goals of the VRMP;

NOW THEREFORE, in consideration of TWO MILLION ONE HUNDRED THOUSAND DOLLARS (\$2,100,000.00) and other good and valuable consideration, receipt of which is hereby acknowledged, including the mutual covenants, terms, conditions, and restrictions contained herein, and pursuant to Section 170(h) of the Internal Revenue Code, and the laws of the State of Utah and in particular the Utah Land Conservation Easement Act, Utah Code Ann. § 57-18-1 et. seq., the Grantor does hereby voluntarily grant and convey to Grantee a conservation easement in perpetuity over the Property of the nature and character and to the extent hereinafter set forth ("Easement").

1. Purpose. The purposes of this Easement are to assure that the Property will be retained predominantly in its natural, open space condition and to prevent any use of the Property that will significantly impair or interfere with the Conservation Values of the Property, which are described and documented in Baseline Documentation attached as Exhibit B, except as otherwise provided in this Easement. This Easement intends to: protect and enhance water quality and water supplies; protect wildlife habitat and maintain habitat connectivity and related values to ensure biodiversity; protect riparian areas; maintain and restore natural ecosystem functions; protect prehistoric and historic cultural sites; protect and enhance non-motorized, outdoor recreational opportunities; protect scenic vistas; protect historic values, and; encourage the public awareness and appreciation of the Conservation Values of the Property. Grantor intends that this Easement will confine the use of the Property to such activities as are consistent with this Easement and the provisions of this Easement.

2. Authority. This Easement acquisition is authorized by Chapter 18, title 57 of the Utah Code.

3. Rights of Grantee. To accomplish the purpose of this Easement the following rights are conveyed to Grantee by this Easement:

- (a) To preserve and protect the Conservation Values of the Property;
- (b) To enter upon the Property in order to monitor Grantor's compliance with and otherwise enforce the terms of this Easement, provided that Grantee shall not unreasonably interfere with Grantors' use and quiet enjoyment of the Property;
- (c) To prevent any activity on or use of the Property that is inconsistent with this Easement and to remedy any areas or features of the Property that may be damaged by any inconsistent activity or use by Grantor, in accordance with Paragraph 12.

4. Prohibited Uses. Any activity on or use of the Property inconsistent with this Easement is prohibited. Except as set forth elsewhere in this Easement, the following activities and uses are expressly prohibited:

- (a) **Subdivision.** The Property shall not be subdivided into smaller parcels for any purpose.
- (b) **No Structures and Improvements.** Except for existing structures on the Property and structures consistent with Paragraphs 5 and 8(c), no building, structure, or other improvements of any kind, temporary or permanent, shall be constructed or maintained on the property including, but not limited to, houses, towers, commercial satellite dishes, sheds, tanks, mobile homes, dams, impoundments, and communication equipment.
- (c) **Mineral Development.** No surface or subsurface mining shall be permitted, except for the development of existing, valid rights or to enhance the Conservation Values with mutual agreement of the parties.
- (d) **Easements Across the Property.** Grantor shall not grant any easements to Third Parties on or across the Property, except for purposes of the Reserved Rights set forth in Paragraph 5 below or to enhance the Conservation Values.
- (e) **Topography Modification.** Changes in the existing general topography of the landscape or land surface of the Property are prohibited unless such changes: 1) were caused by the forces of nature; or 2) may be permitted by Paragraph 5 below, Reserved Rights.
- (f) **Waste Disposal and Hazardous Materials.** No portion of the Property shall be used for dumps, landfills, or the storage or deposit of waste materials, except for the temporary storage or treatment of waste materials as may be generated in the normal use of the property by activities expressly permitted in Paragraph 5 below, Reserved Rights and which are in accordance with applicable state laws.
- (g) **Industrial, Commercial and Residential Activities.** Except for uses permitted in Paragraph 5 below, the Property shall not be used for industrial, commercial or residential activities.
- (h) **Signs and Billboards.** No sign or billboard shall be placed on the Property, except to: 1) state the name of the Property, or any portion thereof, and the purpose for which the property is being preserved; 2) state that the protection of the Property is being managed to meet the goals of the VRMP and the VRMRP; 3) state that the protection provided to the Property was through a transaction in which The Conservation Fund, Washington County, the Virgin River Land Preservation Association and other partners participated; 4) control unauthorized entry or use of the Property; 5) provide directions or other information as to the location of trails or places of interest; 6) provide factual information concerning places or matters of interest and/or significance to the Property, and; 7) provide information regarding regulations governing the use of the Property. Individual signs shall be no larger than twenty five (25) square feet in area. This paragraph shall not prohibit Grantee from displaying such

signs as it may customarily use to identify lands under conservation easement and the terms of such conservation easement; provided however, that the location of any such signs placed by Grantee shall be subject to receipt of Grantor's prior approval for same.

(l) Utility Rights-of-way. Except for currently existing utility rights-of-way, no new utility rights-of-way shall be granted within the Property after the date of this instrument except as may be imposed pursuant to a valid power of condemnation or other process of law or as may be used by Grantor in connection with use of allowed structures and improvements on the Property. Nothing in this document shall prohibit the lawful maintenance, replacement or installation of utility infrastructure within existing utility rights-of-way so long as such maintenance, replacement or installation is coordinated with the Grantor. Existing utility rights-of-way may be relocated within the boundaries of the property if such relocation is consistent with the purposes of this Easement and if it is necessary to: 1) accommodate stream restoration work; 2) replace utilities damaged by forces of nature; or 3) achieve the purposes of this Easement.

(l) Non-Native Species. No non-native species shall be introduced onto the property, except for livestock and agricultural crops allowed under Paragraph 5 (b).

(k) Organized Sports Facilities. No soccer, football, baseball, golf, tennis, swimming or other highly developed recreational facility shall be permitted.

(l) Grazing in Fenced Pastures. To protect areas of critical habitat, no grazing of livestock shall be permitted outside of fenced pastures, nor within the riparian corridor, which is defined as the channel that contains the watercourse of the Virgin River and the area located within the stream's banks.

(m) Construction of New Roads. The construction of new roads on the property shall be prohibited, except to accommodate naturally-caused or human-engineered stream relocation or to provide access to improvements as permitted in Paragraph 5 of this Easement and consistent with Paragraph 8(a).

(n) Use of Motorized Recreational Vehicles. The use of motorized recreational vehicles, including three-wheelers, four-wheelers, dirt bikes, and all-terrain vehicles that because of their noise, exhaust, or other offensive characteristics impair conservation values or disturb wildlife or the public's quiet enjoyment of the Property shall be prohibited, except for transportation and maintenance uses performed by property managers and grantee's agents.

5. Reserved Rights. It is the Grantor's intent to preserve and to maintain the Property in its predominantly natural, open space condition. Grantor reserves to itself, and to its representatives, heirs, successors, and assigns, all rights accruing from its ownership of the Property, including the right to engage in or permit or invite others to engage in all uses of the Property that are not expressly prohibited herein. Without limiting the generality of the foregoing, the following rights are expressly reserved:

(a) Vegetation Management. Except as prohibited in this Easement, vegetation management activities are permitted on the Property, including revegetation of native trees and plants, and the cutting and removal of vegetation, including non-indigenous plant life, to abate disease or infestation or to perpetuate a healthy environment in accordance with the provisions of an approved management plan and all Federal and State laws and regulations.

(b) Agricultural Uses and Activities. Agricultural uses, including growing, raising, harvesting, production and storage of crops, grazing and keeping of livestock, tilling soil, burning fields, removal of noxious weeds, irrigation and irrigation structures, livestock watering structures, construction and maintenance of necessary agricultural structures, and commercial agricultural uses such as the sale of crops, small scale livestock operations, including stabling, boarding, lessons, guided excursions, but excluding confined animal feeding operations provided such uses and activities are not detrimental to the goals of the VRMP and the VRMRP.

(c) Recreational Uses. Hiking, bicycling and equestrian trails and uses, picnicking, wildlife viewing and sanitary facilities.

(d) Bridges. Construction and maintenance of bridges over watercourses as approved by governing agencies and as consistent with an approved management plan.

(e) Natural Science Research. Biological, geological and archeological research activities shall be permitted on the Property.

(f) Parking. Parking is permitted to accommodate the uses to which the Property may be made, consistent with Paragraph 8(a) and the intent to maintain the Property in a natural, scenic, open space condition.

(g) Educational/Cultural/Species Enhancement and Preservation and Maintenance Facilities. Consistent with Paragraph 8(c), noncommercial educational structures, e.g., small scale nature center and outdoor amphitheater, are permitted, as are structures necessary to the management and maintenance of the Property, e.g., equipment storage sheds, residential and nonresidential caretaker facilities, fencing, sewage treatment facility (if consistent with habitat and species objectives), and structures for the benefit of native species.

(h) Public Access. Grantor may allow public access to the Property to engage in any permitted activities, consistent with the Property Management Plan.

(i) Trails. To construct a reasonable number of trails on the Property for purposes of foot, horse, bicycle and handicapped travel across the Property, consistent with Paragraph 8(b).

(j) Species Recovery and Enhancement. To recover and/or enhance populations of native species including native fish, birds, mammals, and reptiles.

(k) Property Management. To manage the Property, pursuant to the provisions of an approved Property Management Plan, as it may be amended from time to time.

(l) Habitat Enhancement. To enhance habitat values of the Property, including by way of example and not limitation, to realign and naturalize the stream channel and to increase meander for the purposes of improving conditions for native fish.

6. Property Management Plan. Grantor will develop, approve and implement a Management Plan for the property, in consultation with Grantee, which more specifically designates special management areas and sets forth management prescriptions for uses that protect the Conservation Values of the property in a manner consistent with the terms of this Easement while allowing for and locating uses reserved by Grantor in Paragraph 5, Reserved Rights. The Management Plan shall incorporate dispersed recreation, necessary recreation facilities, and environmental education opportunities that complement and do not significantly detract from critical habitat values. The Plan shall also outline architectural guidelines which ensure that the construction and maintenance of structures on the Property will be designed to, and made of materials that, blend aesthetically with the natural environment. The Management Plan may be amended, from time to time, in consultation with Grantee as necessary to effectively manage the Property and to respond to changing conditions and information.

7. Notice. Before undertaking to construct or build any fences, roads, improvements or structures pursuant to any reserved right under paragraph 5 above. Grantor shall provide a minimum of 30 days notice to Grantee in writing prior to taking action, including a written plan describing the undertaking. In the event that emergency actions are required to mitigate a situation which threatens public health, safety, or welfare, Grantor shall notify Grantee within 48 hours following any emergency action taken.

8. General Agreed Parameters for Certain Types of Improvements and Uses. The parties agree to the following matters with regard to particular types of possible improvements or uses of the Property:

(a) Roads and Parking Areas. Consistent with applicable safety standards, construction, improvement and maintenance of any road will be performed in a fashion and manner so as to:

- i. minimize the width, length and overall size of the road or parking area;
- ii. maximize the ability of the road or parking area to be reclaimed and returned to a natural state if and when it is no longer required or needed;
- iii. maximize the road or parking area's aesthetic appearance, consistent with the Conservation Values of the Property, in a manner that emphasizes a natural, rustic appearance.

(b) Trails. Consistent with applicable safety standards, construction, improvement and maintenance of any trail will be performed in a fashion and manner so as to:

- I. minimize the width of the trail;
- II. maximize the trail's aesthetic appearance, consistent with the Conservation Values of the Property, in a manner that retains a more natural, rustic appearance, including surfacing using cinders, gravel, wood chips, or other natural materials, rather than paving with asphalt or concrete except as required to meet applicable ADA standards;

(c) Structures. Grantor intends that any new Structures on the Property will be constructed in harmony with the Conservation Values and consistent with maintaining the Property in its predominantly natural, scenic, open space condition. Architectural guidelines, which ensure that the construction and maintenance of structures on the Property will be designed to, and made of materials that, blend aesthetically with the natural environment, shall be incorporated into the Management Plan for the Property.

(d) Flood plain Avoidance Area. To achieve the restoration and protection of riparian habitat, Grantor will locate uses and activities that significantly alter the natural function of the flood plain outside of the 100-year flood plain when reasonably possible.

9. Amendment. If circumstances arise under which an amendment to or modification of this Easement would be appropriate, Grantor and Grantee are free to jointly amend this Easement; provided that no amendment shall be allowed that will affect the qualification of this Easement or the status of the Grantee under any applicable laws, including Sections 57-18-1, et seq. Utah Code Annotated, or Section 170 (h) of the Internal Revenue Code of 1954, as amended, and any amendment shall be consistent with the purposes of this Easement, and shall not affect its perpetual duration. Any such amendment shall be in writing and recorded in the official records of Washington County, Utah.

10. General Provisions.

(a) Duration of Easement. This easement shall continue in perpetuity.

(b) Successors. The covenants, terms, conditions, and restrictions of this Easement shall be binding upon, and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successors, and assigns and shall continue as a servitude running in perpetuity with the Property.

(c) Taxes. Grantor shall pay, before delinquency, all taxes, assessments, fees and charges of whatever description levied on or assessed against the Property by competent authority (collectively "taxes"), excluding any taxes directly imposed upon, or incurred as a result of, this Easement, and shall furnish Grantee with satisfactory evidence of payment upon request. Any taxes directly imposed upon, or incurred as a result of, this Easement shall become the responsibility of Grantee.

(d) Maintenance. Each party shall bear sole responsibility for any cost or expense reasonably required for the maintenance of any road, fence or other improvement or enhancement made to or existing on the Property by that party.

11. Violations and Remedies. Grantee may enforce any term or condition of this Easement as follows:

a. Remedies. If Grantee believes that Grantor is in violation of the terms of this easement or that a violation is threatened, Grantee shall give written notice to Grantor of the alleged violation and request corrective action. Grantor and Grantee agree to endeavor in good faith to resolve any dispute regarding any alleged violation of the easement. If Grantor and Grantee are unable to resolve a dispute regarding an alleged violation within 45 days from Grantor's receipt of written notice despite the parties' best efforts to do so, either party may file suit in a Utah State Court of appropriate jurisdiction to obtain any legal or equitable remedy permitted by law. However, in no event will Grantor be liable for damages or subject to any other remedy, including mandatory or prohibitive injunctive relief, for any harm to the Property or violation of the Easement caused by any third-party activity which is unauthorized by Grantor.

b. Costs of Enforcement. The parties shall bear their own costs, including attorney's fees, in any action brought with respect to this easement.

c. Waiver. The waiver by any party to this Agreement of a breach of any provision of this Agreement shall not be deemed to be a continuing waiver or a waiver of any subsequent breach, whether of the same or any other provision of this Agreement.

d. Condemnation. If all or any part of this Property is taken by exercise of the power of eminent domain or acquired by purchase in lieu of condemnation, whether by public, corporate, or other authority, so as to terminate this Easement, in whole or in part, Grantor and Grantee shall act jointly to recover the full value of the interests in the Property subject to the taking or in lieu of purchase and all direct or incidental damages resulting therefrom. All expenses reasonably incurred by Grantor or Grantee in connection with the taking or in lieu purchase shall be paid out of the amount recovered. Any remaining amount shall be paid out to the parties in accordance with the value of their interest in the remaining Property. In the event the amount of damages recovered does not cover the costs incurred by the Parties, Grantor and Grantee shall each bear their own costs in excess of the amount recovered.

TO HAVE AND TO HOLD unto Grantee, its successors, and assigns forever.

IN WITNESS WHEREOF Grantor and Grantee have set their hands on the day and year first above written.

GRANTOR

WASHINGTON COUNTY

By: Calvin R. Robison

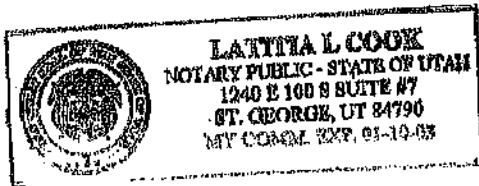
Name: Calvin R. Robison

Title: Washington County  
Clerk/Auditor

Date: 11/25/02

Appeared before me this Nov.  
25, 2002 Calvin R. Robison the  
Washington County Clerk/Auditor

Notary: Lathia L. Cook



GRANTEE

DIVISION OF WILDLIFE  
RESOURCES

By: Kevin K. Conway

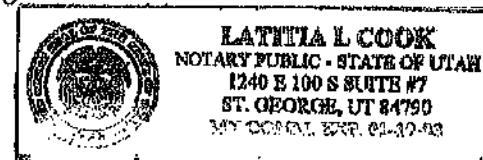
Name: Kevin Conway

Title: Director

Date: 11-21-02

Appeared before me this 21st day of Nov.  
2002 Kevin K. Conway, Director of the  
Division of Wildlife Resources

Notary: Lathia L. Cook



# PROPOSED CONFLUENCE REGIONAL PARK ADDITION

SOUTH SIDE OF VIRGIN RIVER - 149 ACRES PLUS OR MINUS  
KENNETH ANDERSON PROPERTY

JULY 16, 2001

## KEN ANDERSON PROPERTY DESCRIPTION - SOUTH OF VIRGIN RIVER

Beginning at a point N0°33'20"W, along the Section Line, 1322.62 feet from the East 1/4 Corner of Section 27, Township 41 South, Range 13 West, Salt Lake Base and Meridian, said point being the Southeast Corner of the NE1/4NE1/4 of said Section 27; thence S89°58'50"W, along the 1/16 Section Line, 1324.93 feet to the Southwest Corner of said NE1/4NE1/4; thence N0°24'50"W 752.95 feet to a point in the thread of stream of the Virgin River; thence, along said thread thru the following 12 courses: S64°39'35"E 129.57 feet; thence S82°08'24"E 696.22 feet; thence N47°05'17"E 103.70 feet; thence N16°23'58"E 246.55 feet; thence N14°10'27"E 334.96 feet; thence N25°10'23"E 488.82 feet; thence N28°36'12"E 409.46 feet; thence N58°45'18"E 93.48 feet; thence N72°27'33"E 313.38 feet; thence N45°20'20"E 707.11 feet; thence S67°51'35"E 269.26 feet; thence S20°54'42"E 177.47 feet to a point on the East boundary line of the SW1/4SW1/4 of Section 23, said Township and Range; thence S0°00'00"E, along the 1/16 Section Line, 734.51 feet to the Southeast Corner of said SW1/4SW1/4; thence S89°39'40"E, along the 1/16 Section Line, 281.33 feet to a point in the thread of river; thence along said thread thru the following 3 courses: S15°49'20"E 1521.66 feet; thence S74°52'17"E 554.66 feet; thence S28°29'21"E 200.00 feet to a point on the East boundary line of the SE1/4NW1/4 of Section 26, said Township and Range; thence S0°16'34"E, along the 1/16 Section Line, 869.30 feet; thence S50°03'10"W 338.96 feet; thence N89°33'54"W 94.59 feet; thence N71°32'41"W 324.66 feet; thence N43°54'08"W 585.74 feet; thence N89°33'58"W 245.72 feet to a point on the West boundary line of said SE1/4NW1/4; thence N0°24'48"W, along said boundary line, 863.69 feet to a point on the 1/4 Section Line; thence N89°40'24"W, along the 1/4 Section Line, 469.71 feet; thence S0°05'07"W 484.27 feet; thence N89°46'54"W 149.67 feet; thence N0°00'00"W 484.56 feet to a point on the 1/4 Section Line; thence N89°40'24"W, along the 1/4 Section Line, 694.45 feet to the point of beginning.

Containing 149.40 Acres.

00791481 BK 1503 Pg 256

Exhibit A

## VIRGIN RIVER LAND



PRESERVATION ASSOCIATION, INC.

P.O. Box 1804  
 St. George, Utah 84771-1804  
 801 674 1074

00791481 Bk 1503 Pg 2257

BASELINE INVENTORY WORKSHEET  
 FOR LAND AND EASEMENT ACQUISITIONS

ABSTRACT: Confluence Project  
 Anderson Parcel  
 Southside Virgin River

Completed by: Lori Rose

## POTENTIAL:

Pre-Acquisition  
 Land Transfer  
 Permanent Ownership  
 Conservation Easement

Date: November 20, 2002

## Part 1. PROPERTY NAME:

Town/City: Hurricane

Acres: 14.94 Determined by  Survey  
 Deed  
 Tax Info

County:

Estimate  
 Other:

Landowner(s): Kenneth R. Anderson

Landowner(s):

Owner's Address: 825 N. 800 E. 35-4 Phone: 435-635-2879  
Hurricane, Utah 84737 Fax: 435-635-2353

Owner's Agent: n/a Phone: \_\_\_\_\_

Agent's Address: \_\_\_\_\_  
 Fax: \_\_\_\_\_

Deed: \_\_\_\_\_ Book #: \_\_\_\_\_ Page #: \_\_\_\_\_

Well-defined description  
 Title Work Necessary  
 Known encumbrances:

See title report

00791481 Blk 1503 Pg 2250

Part 2. DONOR OBJECTIVES:

Motivation, timing, compensation desired, desired outcomes, will donor permit public use?

Sell for conservation and public access at fair market value. Bound by contract to close no later than 1/25/02

Part 3. ATTACHMENTS:

Topo Map       Survey Map  
 Type Map (soils map)       Other Maps  
 Photographs       Other

Part 4. GENERAL PROPERTY INFORMATION:

A. Existing Land Use/History (past disturbances — storms, fire infestation; land uses — farming, grazing, mining, etc.); property primarily in natural condition; native vegetation, basalt cliffs, functioning flood plain. Some grazing on rangeland. A road descends from the rim to the river, but condition is poor due to erosion. Historic travel corridor for native Americans, Spanish and pioneers. Escalante expedition passed through here. Also Andazal cultural sites.

B. Existing Improvements (type, size, condition): Roads (primitive); irrigation ditch; historic walls of stone; unfinished building foundation; temporary care facility for threatened desert tortoise.

C. Tenants (if any): County has leased 5 acres for tortoise care facility for approximately 6 years, since 1996.

D. Adjacent Land Use, Compatibility:

Adjacent lands north and east part of preserved open space known as the Confluence. Residential development on rim above canyon to south. Property contiguous with portion of Red Cliffs Desert Reserve.

E. Access/Road Frontage:

Rough access road from 200 W. in Hurricane — need some improvement to reduce erosion and allow/maintain vehicle access to canyon floor.

F. Visible Easements (roads, transmission lines, etc.):

Irrigation ditch; water & natural gas lines; road

G. Boundaries:

well-defined       surveyed  
 able to be located       need improvement  
 not defined       Other

H. Safety Hazards (structural, natural):

old foundation; steep cliffs; river floodplain

I. Environmental Hazards (toxic wastes, dumping):

property abuts old Hurricane City Dump. Phase I ESA indicates minimal risk of legal liability. Removal debris to be cleaned up w/in 5 years.

Part 5. RESOURCE INFORMATION:

A. Agriculture (current crops, last year/acreage in production, soil classification, significance)

None.

B. River System/Floodplain/Other Water Resources (type and significance)

Virgin River and associated floodplain & riparian vegetation comprise a substantial portion of the property.

C. Scenic Vistas

Property is highly scenic, basalt cliff-lined canyon. Adjoining properties also protected for open space & habitat values.

D. Travel Corridors

Historic native american, Spanish Explorers (Escalante expedition & others), and Pioneer travel corridor.

E. Recreational Corridors (types, estimated intensity of existing use, potential for future use)

Property is part of larger "Confluence project" that both protects habitat values while allowing for limited improvements to accommodate public access.

F. Adjacency to Significant Public Lands

Property borders Red Cliffs Desert Reserve (BLM ownership, Washington County ITP for Mojave Desert tortoise) on West

G. Significant Habitat (species — animals & plants as appropriate)

See Exhibit C of Easement. Property contains significant habitat for T&E and special status native fish species, potential habitat for Southwestern Willowfly catcher, low-density desert tortoise, raptors, and other riparian and associated upland species.

H. Community or Neighborhood Park Potential/Interpretive Site

Only public access to Virgin River from the ~~the~~ City of Hurricane which sits on the cliff above the canyon. Great educational opportunities for biology, geology, and cultural history

Part 6. TITLE INFORMATION:

A. Legal Name of Owner(s)

*Kenneth R. Anderson*

00791481 Bk 1503 Pg 2260

B. Legal Status of Owner(s) (single, married partnership, corporation)

C. State How Title is Vested? (sole property, joint tenants, tenants in common)

*Sole Property*

D. When & How Acquired? (Include purchase price if available)

E. Clear or Encumbered? (If mortgaged, provide loan amount, terms and name of holder.)

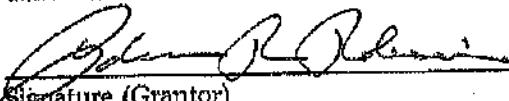
Attach recorded easements, rights, encumbrances other than mortgage)

*Encumbrances to be cleared at closing*

Part 7. ACKNOWLEDGMENT OF INVENTORY ACCURACY

A. Grantor

I Calvin R. Anderson have reviewed the above "Baseline Inventory" and hereby acknowledge that the information contained herein accurately represents the current conditions, use, ownership, and past history of the subject property at the time of its transfer.

  
Signature (Grantor)

11/25/02  
Date

Calvin R. Anderson  
Name (please print)

B. Grantee

I Kevin K. Conway have reviewed the above "Baseline Inventory" and hereby acknowledge that the information contained herein accurately represents the current conditions, use, ownership, and past history of the subject property at the time of its transfer.

  
Signature

11-25-02  
Date

Kevin K. Conway  
Name (please print)

## **Appendix C. Resolutions of Support**

**A RESOLUTION SUPPORTING WASHINGTON COUNTY AND THE UTAH DIVISION OF WILDLIFE RESOURCES' GRANT AND PARTIAL RELEASE OF THE CONSERVATION EASEMENT IN CONFLUENCE PARK**

**WHEREAS**, Confluence Park is a 344-acre natural park owned and managed by Washington County, Utah, it is uniquely located within the boundaries of Hurricane and LaVerkin Cities where Ash Creek and LaVerkin Creek meet the Virgin River;

**WHEREAS**, Confluence Park sits at the bottom of large basaltic lava cliffs leaving it isolated from development;

**WHEREAS**, Confluence Park is home to a variety of plant, animal, and fish species and has a long and storied history;

**WHEREAS**, Confluence Park also provides a large variety of outstanding recreation that serves the citizens of Hurricane and LaVerkin;

**WHEREAS**, Confluence Park is restricted by a perpetual Conservation Easement ("Easement") as signed and executed on July 14, 2000, November 25, 2002, and the Deed recorded with the Recorder of Washington County Utah, on July 18, 2000, November 14, 2002, and April 27, 2007, respectively;

**WHEREAS**, the purpose of the Easement existing within Confluence Park is to protect and enhance the natural wildlife habitat, scenic, cultural, historical, and open space values (collectively the "Conservation Value") of Confluence Park and to provide recreation opportunities for members of the public;

**WHEREAS**, on February 1, 2022, the Washington County Board of Commissioners approved and executed a Land Trade Agreement Between Washington County, Utah, and JB Holding LLC ("Land Trade Agreement");

**WHEREAS**, Washington County is the Grantor and the State of Utah, Department of Natural Resources, Division of Wildlife Resources ("UDWR") is the Grantee of the Easement;

**WHEREAS**, in December of 2023, Washington County and UDWR entered into an agreement to release approximately 1.46 acres of land from the Easement that have little to no Conservation Value and to grant approximately 20.7 additional acres of land into the Easement that have high Conservation Value ("Easement Grant and Release Agreement"); and

**WHEREAS**, it is in the best interest of the citizens Hurricane City to support the Land Trade Agreement and the Easement Grant and Release Agreement;

NOW, THEREFORE, BE IT RESOLVED BY THE HURRICANE CITY COUNCIL that Hurricane City supports the Land Trade Agreement and the Easement Grant and Release Agreement.

VOTED UPON AND PASSED BY THE HURRICANE CITY COUNCIL AT A REGULAR MEETING OF HURRICANE CITY COUNCIL on April 4, 2024.

Attest:

Cindy Beteag, Hurricane City Recorder



*Nanette Billings*  
Nanette Billings, Mayor

The foregoing Resolution was presented at a regular meeting of the Hurricane City Council held at the Hurricane City Office Building on the 4<sup>th</sup> day of April 2024. Whereupon a motion to adopt and approve said Resolution was made by C.IWk fWulif and seconded by D{A11id -f11"-r1Crl'. A roll call vote was then taken with the following results:

	Yea	Nay	Abstain	Absent
David Hirschi	<input checked="" type="checkbox"/>			
Kevin Thomas	<input type="checkbox"/>			
Clark Fawcett	<input type="checkbox"/>			
Drew Ellerman	<input checked="" type="checkbox"/>			
Joseph Prete	<input type="checkbox"/>			

*Cindy Beteag*  
Cindy Beteag, Recorder

Resolution R-2024-05  
**DRAFT RESOLUTION OF SUPPORT**

**A RESOLUTION SUPPORTING WASHINGTON COUNTY AND THE UTAH  
DIVISION OF WILDLIFE RESOURCES' GRANT AND PARTIAL RELEASE OF THE  
CONSERVATION EASEMENT IN CONFLUENCE PARK**

WHEREAS, Confluence Park is a 344-acre natural park owned and managed by Washington County, Utah, it is uniquely located within the boundaries of Hurricane and La Verkin Cities where Ash Creek and La Verkin Creek meet the Virgin River;

WHEREAS, Confluence Park sits at the bottom of large basaltic lava cliffs leaving it isolated from development;

WHEREAS, Confluence Park is home to a variety of plant, animal, and fish species and has a long and storied history;

WHEREAS, Confluence Park also provides a large variety of outstanding recreation that not only serves the citizens of Hurricane and La Verkin;

WHEREAS, Confluence Park is restricted by a perpetual Conservation Easement ("Easement") as signed and executed on July 14, 2000, November 25, 2002, and the Deed recorded with the Recorder of Washington County Utah, on July 18, 2000, November 14, 2002, and April 27, 2007, respectively;

WHEREAS, the purpose of the Easement existing within Confluence Park is to protect and enhance the natural wildlife habitat, scenic, cultural, historical, and open space values (collectively the "Conservation Value") of Confluence Park and to provide recreation opportunities for members of the public;

WHEREAS, on February 1, 2022, the Washington County Board of Commissioners approved and executed a Land Trade Agreement Between Washington County, Utah, and JB Holding LLC. ("Land Trade Agreement");

WHEREAS, Washington County is the Grantor and the State of Utah, Department of Natural Resources, Division of Wildlife Resources ("UDWR") is the Grantee of the Easement;

WHEREAS, in December of 2023, Washington County and UDWR entered into an agreement to release approximately 1.46 acres of land from the Easement that have little to no Conservation Value and to grant approximately 20.7 additional acres of land into the Easement that have high Conservation Value ("Easement Grant and Release Agreement"); and

WHEREAS, it is in the best interests of the residents of LaVerkin, Utah to support this Land Trade Agreement and Easement Grant and Release Agreement;

NOW, THEREFORE, BE IT HEREBY RESOLVED by the City Council of LaVerkin, Utah that LaVerkin City hereby supports the Land Trade Agreement and Easement Grant and Release Agreement.

PASSED AND APPROVED at a regular meeting of the LaVerkin City Council on this 16 day of March, 2024.



Attest:

Christy Ballard  
Christy Ballard, City Recorder

## **Appendix D. Soil Report**



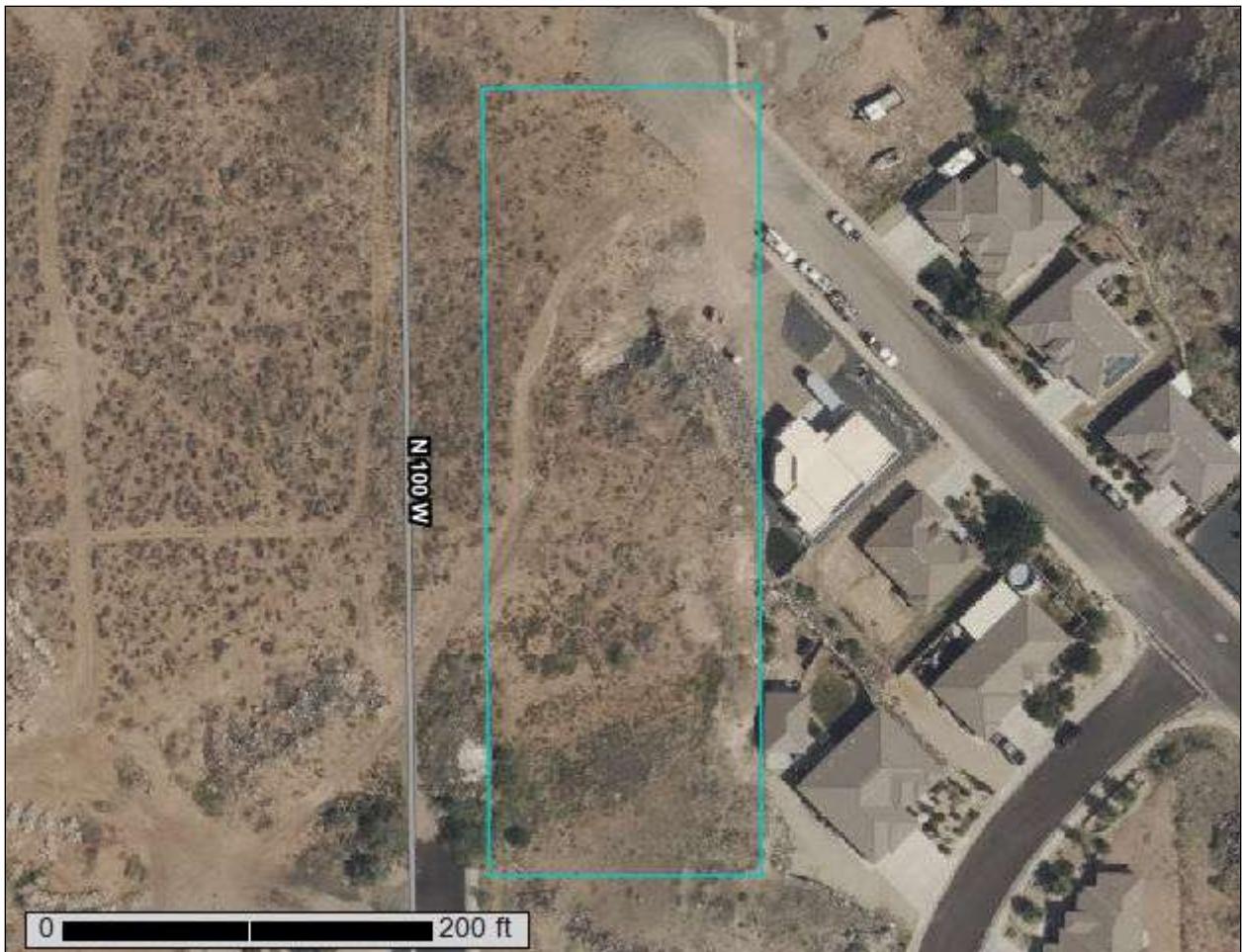
United States  
Department of  
Agriculture



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 Washington County Area, Utah



# Preface

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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](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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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# How Soil Surveys Are Made

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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.

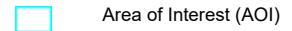
# Custom Soil Resource Report

## Soil Map



## MAP 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: Washington County Area, Utah

Survey Area Data: Version 18, Aug 28, 2024

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

Date(s) aerial images were photographed: Sep 8, 2022—Sep 29, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background 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
WBD	Winkel gravelly fine sandy loam, 1 to 8 percent slopes	1.5	100.0%
<b>Totals for Area of Interest</b>		<b>1.5</b>	<b>100.0%</b>

## 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.

## Washington County Area, Utah

### WBD—Winkel gravelly fine sandy loam, 1 to 8 percent slopes

#### Map Unit Setting

*National map unit symbol:* j8h9  
*Elevation:* 2,800 to 4,000 feet  
*Mean annual precipitation:* 8 to 11 inches  
*Mean annual air temperature:* 57 to 61 degrees F  
*Frost-free period:* 190 to 195 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

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

#### Description of Winkel

##### Setting

*Landform:* Mesas  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Calcareous material weathered from basalt, limestone, and wind-deposited sand.

##### Typical profile

*H1 - 0 to 1 inches:* gravelly fine sandy loam  
*H2 - 1 to 6 inches:* gravelly fine sandy loam  
*H3 - 6 to 12 inches:* very gravelly fine sandy loam  
*H4 - 12 to 16 inches:* extremely cobbly fine sandy loam  
*H5 - 16 to 20 inches:* indurated  
*H6 - 20 to 24 inches:* unweathered bedrock

##### Properties and qualities

*Slope:* 1 to 8 percent  
*Depth to restrictive feature:* 11 to 19 inches to petrocalcic; 14 to 24 inches to lithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.60 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 30 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 1.0 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* D  
*Ecological site:* R030XY134UT - Desert Shallow Loam (Creosotebush)

## Custom Soil Resource Report

*Hydric soil rating:* No

### Minor Components

#### **Lava flows**

*Percent of map unit:* 5 percent

#### **Bermesa**

*Percent of map unit:* 5 percent

#### **Harrisburg**

*Percent of map unit:* 5 percent

# **Soil Information for All Uses**

---

## **Suitabilities and Limitations for Use**

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

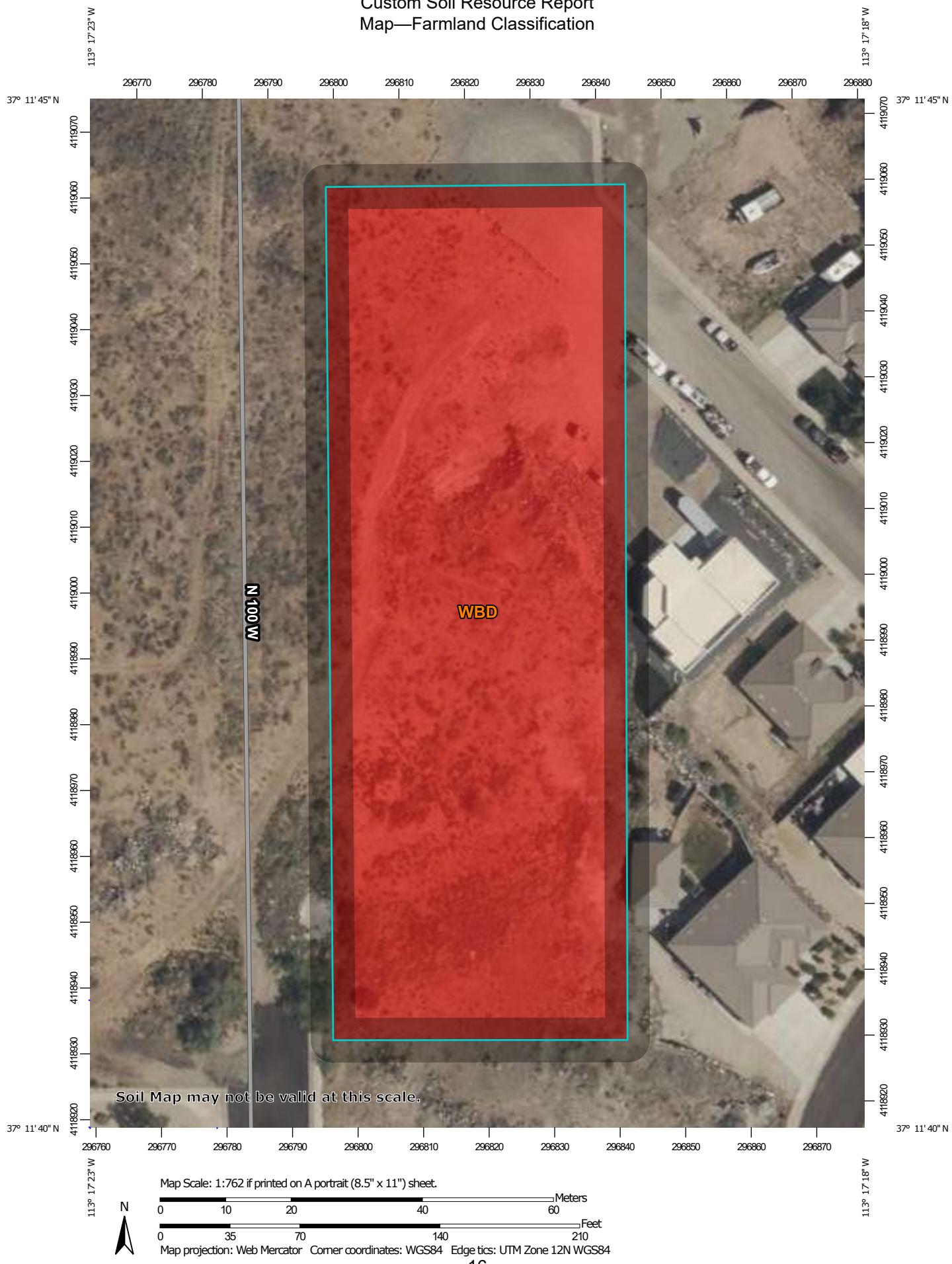
## **Land Classifications**

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

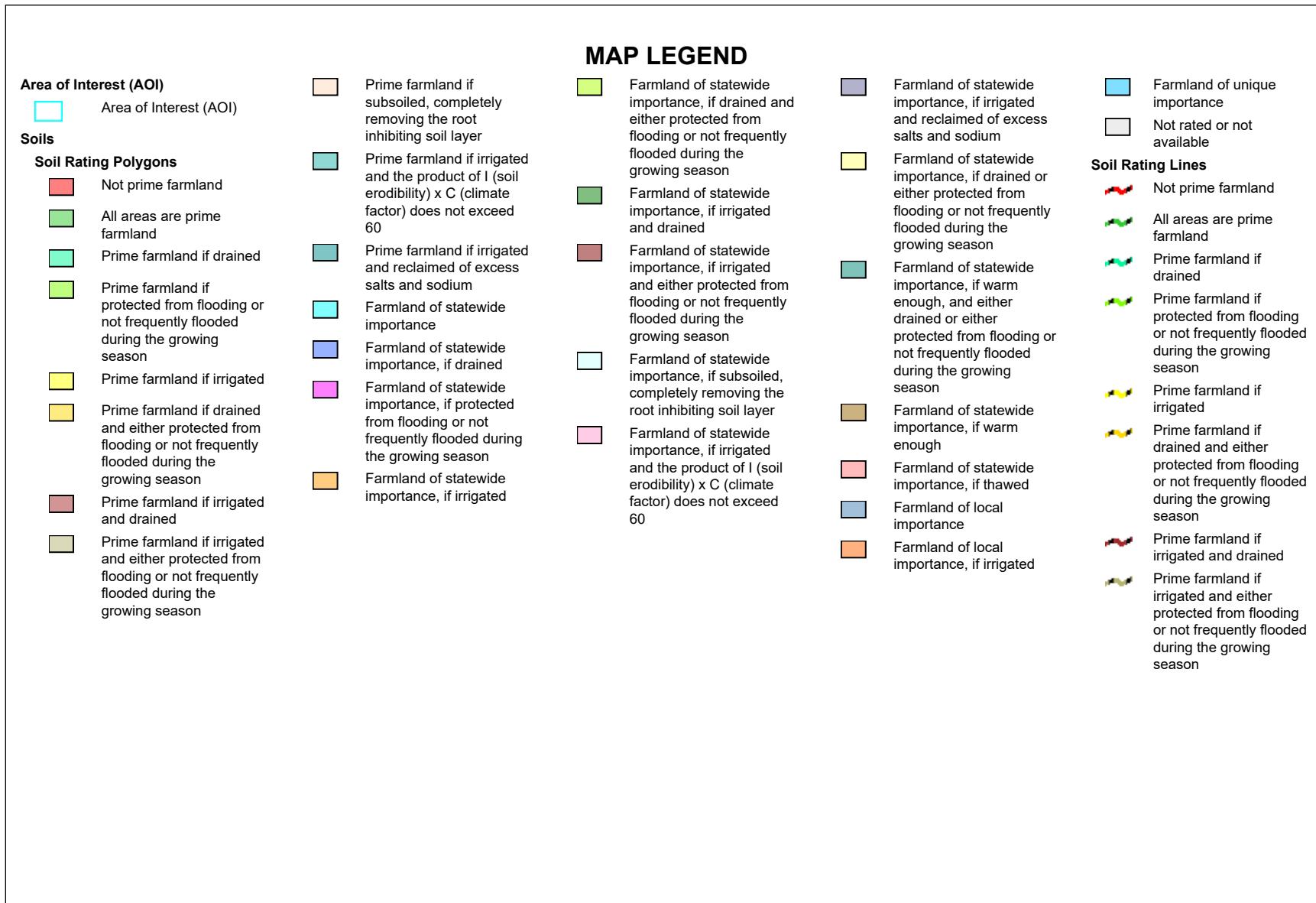
### **Farmland Classification**

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Custom Soil Resource Report  
Map—Farmland Classification



## Custom Soil Resource Report



## Custom Soil Resource Report

 Prime farmland if subsoiled, completely removing the root inhibiting soil layer	 Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season	 Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium	 Farmland of unique importance	 Prime farmland if subsoiled, completely removing the root inhibiting soil layer
 Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	 Farmland of statewide importance, if irrigated and drained	 Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season	 Not rated or not available	 Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
 Prime farmland if irrigated and reclaimed of excess salts and sodium	 Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season	 Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season	 Not prime farmland	 Prime farmland if irrigated and reclaimed of excess salts and sodium
 Farmland of statewide importance	 Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer	 Farmland of statewide importance, if warm enough	 All areas are prime farmland	 Farmland of statewide importance
 Farmland of statewide importance, if drained	 Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	 Farmland of statewide importance, if irrigated and thawed	 Prime farmland if irrigated	 Farmland of statewide importance, if drained
 Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season	 Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	 Farmland of local importance	 Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	 Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
 Farmland of statewide importance, if irrigated		 Farmland of local importance, if irrigated	 Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season	 Farmland of statewide importance, if irrigated
<b>Soil Rating Points</b>				
 Not prime farmland				
 All areas are prime farmland				
 Prime farmland if drained				
 Prime farmland if protected from flooding or not frequently flooded during the growing season				
 Prime farmland if irrigated				
 Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season				
 Prime farmland if irrigated and drained				
 Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season				

## Custom Soil Resource Report

<ul style="list-style-type: none"> <li>Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season</li> <li>Farmland of statewide importance, if irrigated and drained</li> <li>Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season</li> <li>Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer</li> <li>Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60</li> </ul>	<ul style="list-style-type: none"> <li>Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium</li> <li>Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season</li> <li>Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season</li> <li>Farmland of statewide importance, if warm enough</li> <li>Farmland of statewide importance, if thawed</li> <li>Farmland of local importance</li> <li>Farmland of local importance, if irrigated</li> </ul>	<ul style="list-style-type: none"> <li>Farmland of unique importance</li> <li>Not rated or not available</li> </ul>	<p>The soil surveys that comprise your AOI were mapped at 1:24,000.</p> <p><b>Water Features</b></p> <ul style="list-style-type: none"> <li>Streams and Canals</li> </ul> <p><b>Transportation</b></p> <ul style="list-style-type: none"> <li>Rails</li> <li>Interstate Highways</li> <li>US Routes</li> <li>Major Roads</li> <li>Local Roads</li> </ul> <p><b>Background</b></p> <ul style="list-style-type: none"> <li>Aerial Photography</li> </ul> <p>Warning: Soil Map may not be valid at this scale.</p> <p>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.</p> <p>Please rely on the bar scale on each map sheet for map measurements.</p> <p>Source of Map: Natural Resources Conservation Service      Web Soil Survey URL: <a href="http://websoilsurvey.nrcs.usda.gov/">http://websoilsurvey.nrcs.usda.gov/</a>      Coordinate System: Web Mercator (EPSG:3857)</p> <p>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.</p> <p>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</p> <p>Soil Survey Area: Washington County Area, Utah      Survey Area Data: Version 18, Aug 28, 2024</p> <p>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</p> <p>Date(s) aerial images were photographed: Sep 8, 2022—Sep 29, 2022</p> <p>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Table—Farmland Classification**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
WBD	Winkel gravelly fine sandy loam, 1 to 8 percent slopes	Not prime farmland	1.5	100.0%
<b>Totals for Area of Interest</b>			<b>1.5</b>	<b>100.0%</b>

**Rating Options—Farmland Classification**

*Aggregation Method:* No Aggregation Necessary

*Tie-break Rule:* Lower

# References

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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](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](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](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](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=stelprdb1043084>

## 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](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](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](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf)

## **Appendix E. Wildlife Habitat Analysis Tool Report**



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



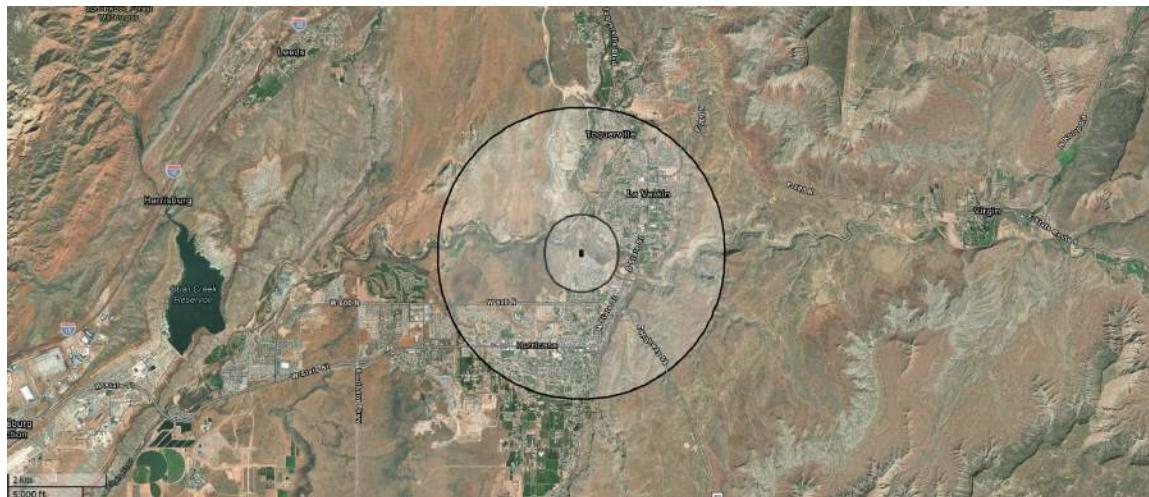
Report Number: jen\_16805

Report Date: 2025-02-15 11:14:08

## confluence Park Land Exchange

**Location:** confluence Park in Washington County

**Description:** Land exchange



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

### Half-Mile Radius

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
<a href="#">California Myotis</a>	<i>Myotis californicus</i>	None	None	1964-04-19	
<a href="#">Western Red Bat</a>	<i>Lasiurus blossevillii</i>	SGIN	None	1935-06-15	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
<a href="#">Long-nosed Leopard Lizard</a>	<i>Gambelia wislizenii</i>	None	None	2001-05-30	
<a href="#">Desert Sucker</a>	<i>Catostomus clarkii</i>	None	None	2006-09-25	
<a href="#">Speckled Dace</a>	<i>Rhinichthys osculus</i>	None	None	2012-10-08	
<a href="#">Groundsnake</a>	<i>Sonora semiannulata</i>	None	None	2023-04-04	
<a href="#">Woundfin</a>	<i>Plagopterus argentissimus</i>	SGCN	LE	2016-06-14	
<a href="#">Gila Monster</a>	<i>Heloderma suspectum</i>	SGCN	None	2023-06-16	
<a href="#">Mojave Desert Tortoise</a>	<i>Gopherus agassizii</i>	SGCN	LT	2020-05-17	
<a href="#">Virgin Chub</a>	<i>Gila seminuda</i>	SGCN	LE	2016-04-05	
<a href="#">Arizona Toad</a>	<i>Anaxyrus microscaphus</i>	SGCN	None	2019-09-02	
<a href="#">Flannelmouth Sucker</a>	<i>Catostomus latipinnis</i>	SGCN	None	2006-09-25	
<a href="#">Virgin Spinedace</a>	<i>Lepidomeda mollispinis</i>	SGCN	None	2006-09-25	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
<a href="#">Smith's Black-headed Snake</a>	<i>Tantilla hobartsmithi</i>	SGIN	None	2020-05-22	
<a href="#">Peregrine Falcon</a>	<i>Falco peregrinus</i>	None	None	1987-04-04	

## Two-Mile Radius

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
<a href="#">California Myotis</a>	<i>Myotis californicus</i>	None	None	1964-04-19	
<a href="#">Western Red Bat</a>	<i>Lasiurus blossevillii</i>	SGIN	None	1935-06-15	
<a href="#">Asian Clam</a>	<i>Corbicula fluminea</i>	None	None	2023-10-11	
<a href="#">West Coast Lady Butterfly</a>	<i>Vanessa annabella</i>	SGCN	None	2023-10-20	
<a href="#">Viceroy</a>	<i>Limenitis archippus</i>	None	None	1963-05-09	
<a href="#">Monarch butterfly</a>	<i>Danaus plexippus</i>	SGCN	None	2022-10-07	 <a href="#">Full View</a>

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
<a href="#">Shy Gilia</a>	<i>Gilia inconspicua</i>	None	None	2016-03-19 00:00:00	
<a href="#">Fremont's Mahonia</a>	<i>Mahonia fremontii</i>	None	None	2016-03-19 00:00:00	
<a href="#">White Burrow-brush</a>	<i>Ambrosia salsola</i>	None	None	2011-05-11 00:00:00	
<a href="#">Heermann's Buckwheat</a>	<i>Eriogonum heermannii var. sulcatum</i>	None	None	2016-03-20 00:00:00	
<a href="#">Scarlet Hedgehog Cactus</a>	<i>Echinocereus triglochidiatus var. melanacanthus</i>	None	None	2016-03-19 00:00:00	
<a href="#">Coliche Milkvetch</a>	<i>Astragalus nuttallianus var. imperfectus</i>	None	None	2016-03-19 00:00:00	
<a href="#">Long-nosed Leopard Lizard</a>	<i>Gambelia wislizenii</i>	None	None	2001-05-30	
<a href="#">Western Lyresnake</a>	<i>Trimorphodon lambda</i>	None	None	1985-02-01	
<a href="#">Abert's Towhee</a>	<i>Melozone aberti</i>	None	None	2002-06-03	
<a href="#">Desert Sucker</a>	<i>Catostomus clarkii</i>	None	None	2014-09-30	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
<a href="#"><u>Desert Horned Lizard</u></a>	<i>Phrynosoma platyrhinos</i>	None	None	2023-05-15	
	<i>Sceloporus uniformis</i>	None	None	2023-04-20	
<a href="#"><u>Western Chorus Frog</u></a>	<i>Pseudacris maculata</i>	None	None	2023-07-30	
<a href="#"><u>California Kingsnake</u></a>	<i>Lampropeltis californiae</i>	None	None	2001-05-24	
<a href="#"><u>Western Banded Gecko</u></a>	<i>Coleonyx variegatus</i>	None	None	2021-05-04	
<a href="#"><u>Common Chuckwalla</u></a>	<i>Sauromalus ater</i>	None	None	2004-06-13	
<a href="#"><u>Canyon Treefrog</u></a>	<i>Dryophytes arenicolor</i>	None	None	2005-06-17	
<a href="#"><u>Groundsnake</u></a>	<i>Sonora semiannulata</i>	None	None	2023-04-04	
<a href="#"><u>Sidewinder</u></a>	<i>Crotalus cerastes</i>	None	None	1985-05-16	
<a href="#"><u>Speckled Dace</u></a>	<i>Rhinichthys osculus</i>	None	None	2014-09-30	
<a href="#"><u>Woundfin</u></a>	<i>Plagopterus argentissimus</i>	SGCN	LE	2016-09-12	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
<a href="#">Arizona Toad</a>	<i>Anaxyrus microscaphus</i>	SGCN	None	2020-05-25	
<a href="#">Gila Monster</a>	<i>Heloderma suspectum</i>	SGCN	None	2023-09-05	
<a href="#">Virgin Chub</a>	<i>Gila seminuda</i>	SGCN	LE	2016-04-05	
<a href="#">Mojave Desert Tortoise</a>	<i>Gopherus agassizii</i>	SGCN	LT	2023-09-20	
<a href="#">Virgin Spinedace</a>	<i>Lepidomeda mollispinis</i>	SGCN	None	2014-09-30	
<a href="#">American White Pelican</a>	<i>Pelecanus erythrorhynchos</i>	SGCN	None	1995-03-18	
<a href="#">Smith's Black-headed Snake</a>	<i>Tantilla hobartsmithi</i>	SGIN	None	2020-05-22	
<a href="#">Flannelmouth Sucker</a>	<i>Catostomus latipinnis</i>	SGCN	None	2014-09-30	
<a href="#">Peregrine Falcon</a>	<i>Falco peregrinus</i>	None	None	1987-04-04	

## Definitions

### State Status

SGCN	Species of greatest conservation need listed in the <a href="#">Utah Wildlife Action Plan (UWAP)</a> and also included in the <a href="#">Utah Field Guide</a>
<b>U.S. Endangered Species Act</b>	
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
Woundfin	Avoid construction activities that may disturb the stream during critical spawning months and migratory bird nesting (April 1 to August 31). If work will occur in floodplain or wetted channel, Please contact DWR at WFCO (435-216-6924) to discuss measures to minimize impacts to any native and T & E species and coordinate any necessary fish clearances.
Virgin Spinedace	Avoid construction activities that may disturb the stream during critical spawning months and migratory bird nesting (April 1 to August 31). If work will occur in floodplain or wetted channel, Please contact DWR at WFCO (435-216-6924) to discuss measures to minimize impacts to any native and T & E species and coordinate any necessary fish clearances.
Flannelmouth Sucker	Is managed under conservation agreements and strategies, which were implemented to help avoid federal listing. Avoid construction activities

Common Name	Strategy
	from April 1 to June 30 to reduce impacts on spawning fish.

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
Southern Region	435-865-6100	Jess Kinross	jessicavan@utah.gov	435-691-2372

## 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](mailto:utahfieldoffice_esa@fws.gov).

The "Not For Consultation" watermark is meant to inform users that this tool is not a substitute for the U.S. Fish and Wildlife Service (USFWS) environmental review process. While this tool provides courtesy information on ESA species for context, the U.S. Fish and Wildlife Service is the authority on Information for Planning and Consultation Endangered Species Act Reviews. Additionally, the Wildlife Habitat Analysis Tool provides information to assist in analysis but does not replace coordination and consultation with Utah Division of Wildlife Resource biologists who can often serve as an expert resource for site-specific information.

# Supplemental Data

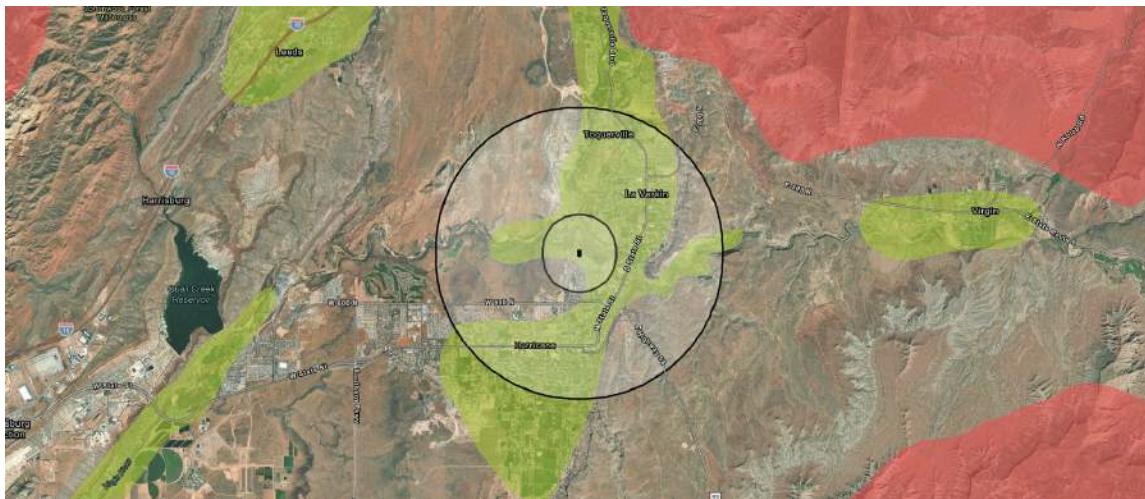
## Unmapped Corridors

Unmodeled Corridors: Absent

## Wildlife Habitat Information

Species	Season	Value	Comments
Gambel'S Quail	year-long	crucial	
Mule Deer	year-long	substantial	
Ring-Necked Pheasant	year-long	substantial	
Turkey	year-long	NA	
White-Winged Dove	summer-fall	substantial	

## Mule Deer Habitat



Comments	Season	Species	Value
	year-long	Mule Deer	substantial

## 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
Mojave 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 F. National Historic Preservation Act (NHPA) Section 106 UDWR  
Consultation Request Letter**



## 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*

October 30, 2024

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

RE: Confluence Park Land Exchange, Hurricane City, Washington County, Utah

Dear Dr. Merritt:

The Utah Division of Wildlife Resources (DWR) is proposing to exchange a parcel of land with Washington County in Hurricane City, Washington County, Utah. The parcel of land being disposed and leaving DWR's custody measures 1.46 acres. As the parcel was originally purchased using Federal Aid funds from the United States Fish and Wildlife Service (Service), DWR has identified the parcel disposal as an undertaking per 36 CFR 800 and Utah Code § 9-8a-402. Per the 2001 Programmatic Agreement between your office, the Service, the Advisory Council on Historic Preservation, and our agency, we wish to consult with you pursuant to 36CFR800.3(g) and Utah Code § 9-8a-404(1) about this proposed undertaking. Please see Figure 1 for a map of the undertaking's area of potential effect (APE).

Pursuant to 36 CFR 800.4, Utah Code § 9-8a-404(1), and the stipulations of the previously referenced Programmatic Agreement, our agency is required to consult with your office regarding the effect of the undertaking on any historic property. In 2014 our archaeologist, Mr. Monson Shaver, completed an intensive archaeological survey of our proposed disposal parcel in support of a proposed recreation infrastructure project. His survey did not identify any cultural resources within our proposed disposal parcel. Mr. Shaver's lack of findings (report U14UQ0183) and associated effects determination received concurrence from your office under SHPO case 14-0379. Please see Figure 2 for a map of the APE and the area of the 2014 archaeological survey effort.

While this past archaeological survey effort is on the cusp of the past survey acceptance lifespan of 10 years, we feel this past survey's level of effort adequately considers the potential effects to cultural resources for the current proposed land disposal undertaking (per 36CFR800.4[b]). A current review (10/23/2024) of the SHPO Sego database and historical aerial imagery did not



reveal any new cultural resource leads since the 2014 survey effort. Instead, it was found that a portion of the proposed disposal parcel is previously disturbed through neighboring land development and the installation of the previously proposed recreation infrastructure.

To further confirm there will be no potential impact to cultural resources, local Washington County archaeologist, Mr. Greg Woodall, visited the parcel in October 2024 and confirmed much of the disposal parcel is previously bulldozed or bladed. He also confirmed the presence of modern recreation infrastructure (trailhead facilities) constructed within the APE. He did not observe any cultural resources through an informal, but intensive, archaeological survey of the parcel.

Please see Figure 3 for a photograph provided by Mr. Woodall of the parcel area and the modern recreation infrastructure installations. While Mr. Woodall does not retain a current Utah Public Lands Policy Coordinating Office Principal Investigator Permit, few people are as familiar with the archaeology of Washington County as Mr. Woodall, and we explicitly trust his lack of cultural resource findings. Mr. Woodall's pro bono efforts in support of this project are greatly appreciated.

In agreement with the provisions of the 2001 Programmatic Agreement, given the lack of findings from our formal 2014 archaeological survey effort and Mr. Woodall's current, informal archaeological survey effort, we have made a determination of *no historic properties affected* for the disposal of this 1.46-acre parcel of land per 36 CFR 800.4(d)(1) and Utah Code § 9-8a-404(1)(a)(ii). We respectfully ask for your concurrence with our project determination.

Sincerely,



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

EE/AWL  
Enclosure  
cc: Jolene Rose, DWR Wildlife Lands Specialist



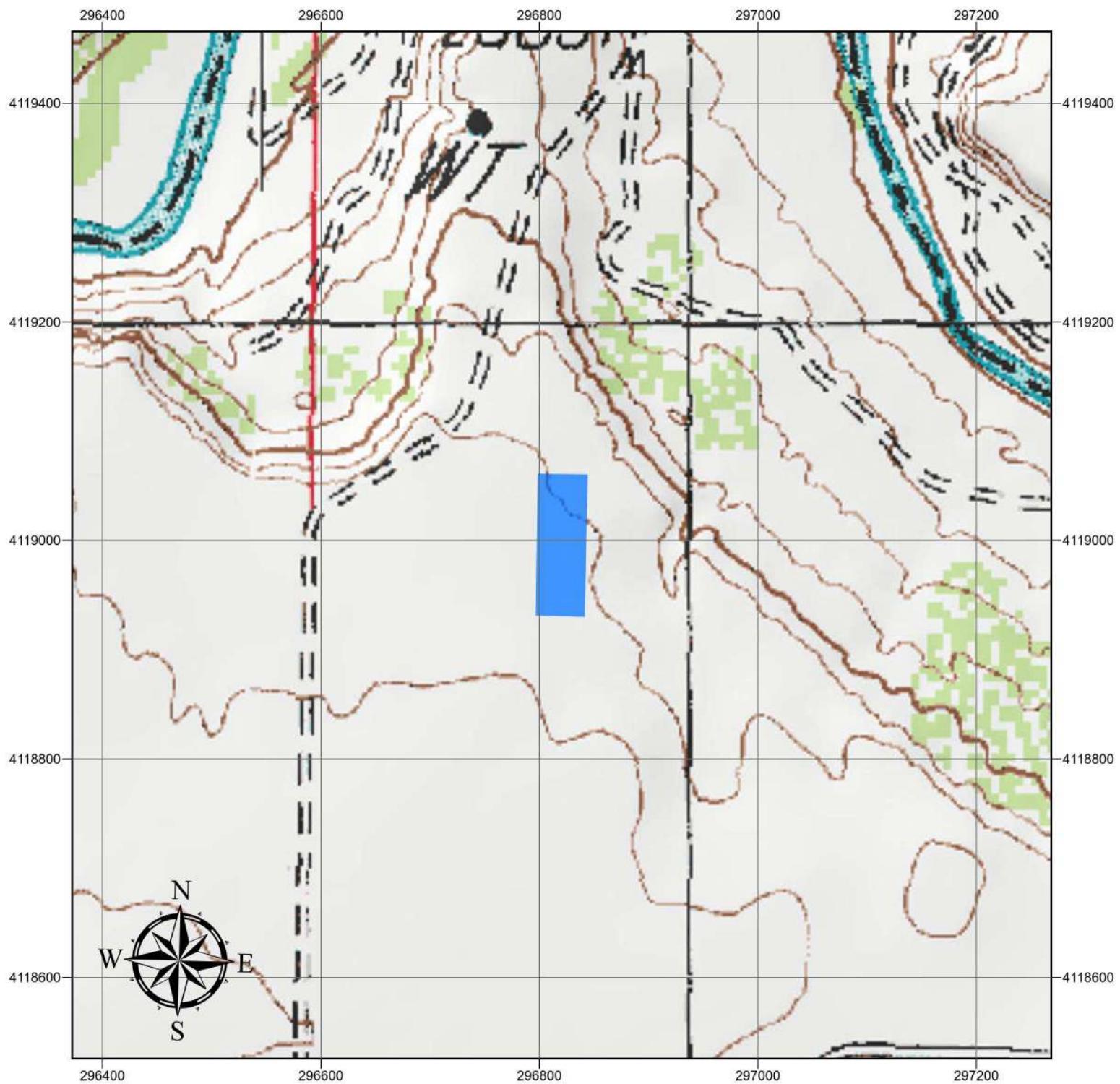


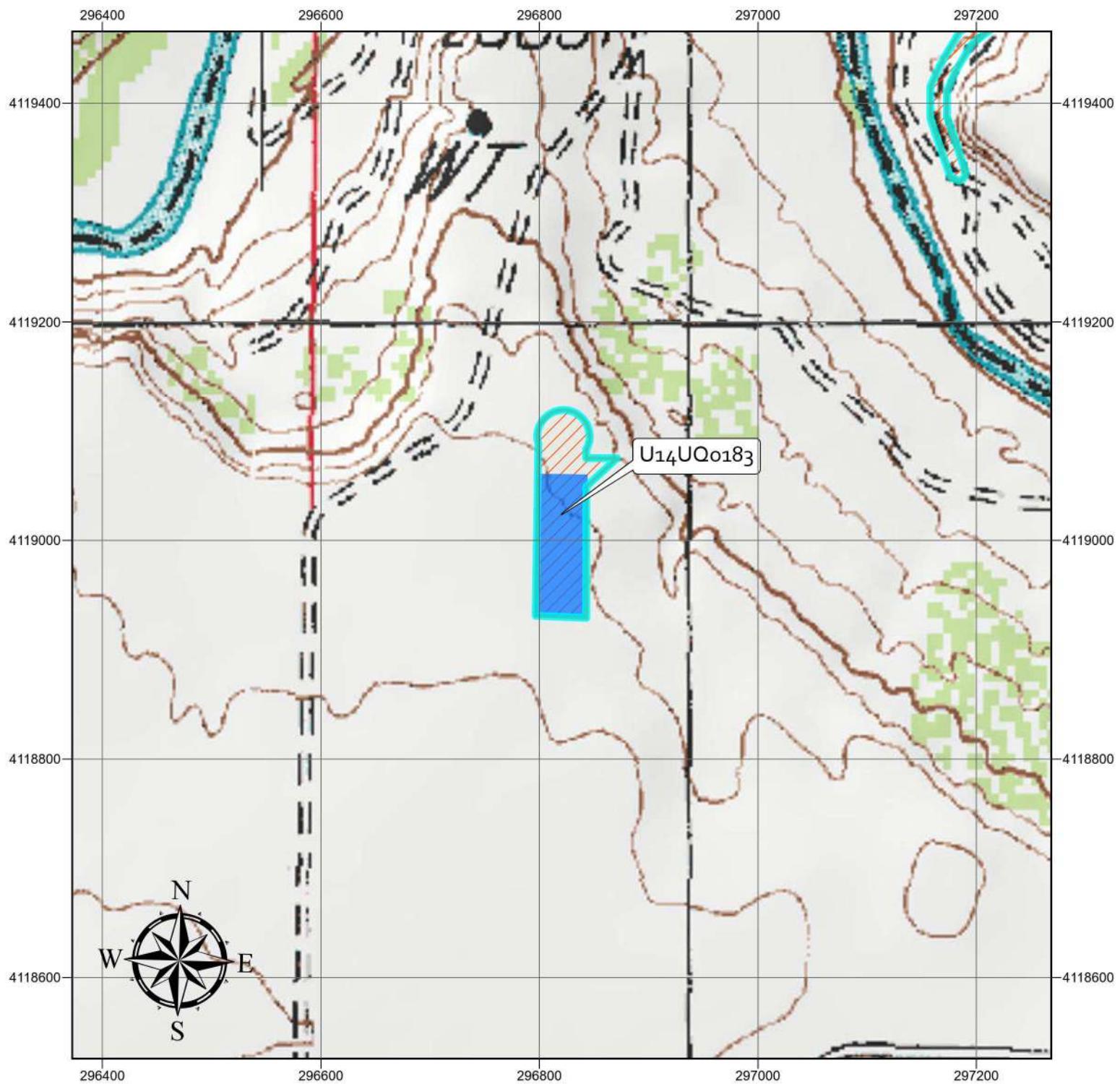
Figure 1. Confluence Park Land Exchange, Washington County, Utah. Township 41 south, Range 13 west, section 26, northwest quarter. Area of Potential Effect.



Disposal Parcel and APE

80 40 0 80 160 240 320  
Meters





**Figure 2. Confluence Park Land Exchange, Washington County, Utah.**  
 Township 41 south, Range 13 west,  
 section 26, northwest quarter.  
**Area of Potential Effect and Survey Area**



80 40 0 80 160 240 320  
 Meters





Figure 1. View north across the parcel showing recent trailhead developments and a residential access road entering from the right (east). Photograph generously provided by Mr. Greg Woodall of Hurricane City, Washington County, Utah.



**Appendix G. National Historic Preservation Act (NHPA) Section 106 Utah SHPO  
Consultation Response Letter**



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*

October 31, 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: Confluence Park Land Exchange, Hurricane City, Washington County, Utah

For future correspondence, please reference Case No. 24-2758

Dear Eric Edgley,

The Utah State Historic Preservation Office received your request for our comment on the above-referenced undertaking on October 30, 2024.

We concur with your determinations of 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](mailto:rmcgrath@utah.gov).

Sincerely,

Ryan McGrath  
Compliance Archaeologist