

# Nevada Department of Wildlife Wildlife Heritage Program

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## Project Proposals State Fiscal Year 2024



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### Wildlife Heritage Proposals Submitted for FY 24 Funding

(Total Wildlife Heritage funds available for FY24 projects: \$1,540,135.58)

Heritage Proposal Number	Project Number	Project Title	Submitted By	FY24 Funding Requests	Other Funding Sources
H24-01	863	FY24 Bighorn Sheep and Mountain Goat Restoration and Management	Mike Cox	\$110,000.00	Volunteer in-Kind (\$16,590), NGO (\$69,000), Game Grant (100,500)
H24-02	856	FY24 Wildfire-Related Restoration and Seed Purchase	Mark Freese	\$150,000.00	BLM (\$500,000), IDF (\$120,000), Dream Tag (\$250,000), NGO (\$225,000), Restoration Grant (\$400,000)
H24-03	849	Parrado Partners Community Park and Ponds Land Acquisition	Madi Stout	\$100,000.00	AB84 (\$410,000), NGO (\$50,000), DS (\$25,000)
H24-04	855	Gilbert Creek Fencing and Habitat Restoration	Katie Andrie	\$50,000.00	Lander Co. (\$250,000)
H24-05	840	Waking Spring Habitat Restoration	Maira Kolada	\$65,000.00	HCF (\$35,000), RMEF (\$75,000), Other FY23 (\$100,000), Other FY24 (\$767,445)
H24-06	861	FY24 Nevada Spring Protection Project	Matt Maples	\$85,000.00	IDF (\$50,000), Wat Dev Grant (\$75,000)
H24-07	845	Bald Mountain PJ Thinning*	Sarah Hale	\$68,677.58	BLM (\$119,787.42), Dream Tag (\$75,000)
H24-08	841	FY24 Corta Fire Habitat Improvement Phase II*	Matt Glenn	\$60,000.00	HCF 24 (\$35,000), UGBS (\$25,000)
H24-09	831	FY24 Wildcat Fire Mule Deer Migration Corridor Bitterbrush Planting*	Brittany Trimble	\$75,000.00	RMEF (\$35,000), Dream Tag (\$7,000)
H24-10	832	FY24 Lake Tahoe Fish Management Structure Phase 1	Sam Sedillo	\$80,000.00	HCF 23 (\$50,000), IVGID (\$60,000)
H24-11	862	FY24 Nevada Water Developments	Matt Maples	\$50,000.00	Wat Dev Grant (\$50,000)
H24-12	848	Bruneau WMA Habitat Improvement	Matt Glenn	\$31,000.00	HCF 24 (\$15,000), UGBS (\$15,000)
H24-13	842	Steptoe Valley Wildlife Management Area Water Enhancements	Adam Henroid	\$100,000.00	AB84 (\$165,000), WMA Grant (\$65,000)
H24-14	843	FY24 Izzenhood Mountains Habitat Improvement*	Matt Glenn	\$64,000.00	HCF 24 (\$26,000)
H24-15	847	FY24 Area 6 Toe Jam Mountain Mule Deer Corridor Fence Modification**	Travis Allen	\$70,000.00	HCF 24 (\$25,000), UGBS (\$25,000)
H24-16	894	Aspen Wildlife Fences (external proposal)	Shane Boren and Jake Brunson	\$70,600.00	DCNR and BLM (\$20,334.40)
H24-17	851	Pole Canyon Fence	Madi Stout	\$100,000.00	Dream Tag (\$50,000)
H24-18	853	Success Ward Habitat Improvements	Maira Kolada	\$50,000.00	
H24-19	852	FY24 MA13 Mule Deer Collaring*	Josh Kirk	\$30,000.00	Game Grant (\$15,000)
H24-20	839	FY24 Warmwater Fisheries Enhancement	Brad Bauman	\$130,858.00	BASS (\$15,000)
<b>Total</b>				<b>\$1,540,135.58</b>	<b>\$4,291,656.82</b>

\*mule deer enhancement project

\*\*mule deer enhancement project (on the bench)



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** FY24 Bighorn Sheep and Mountain Goat Restoration and Management

**Project ID:** 863

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Mike Cox Nevada Department of Wildlife

**Phone Number:** (775) 688-1556

**Email:** mcox@ndow.org

## Project Partners

Name	Agency	Role
Mike Cox	Nevada Department of Wildlife	Implementation Lead

## Project Schedule

**Project Start Date:** 07/01/2023 (FY 2024)

**Projected Completion Date:** 06/30/2024 (FY 2024)

**Multi-year Project:** yes

### Project Schedule:

Several different subprojects are being conducted. Lamb Survival Monitoring as part of Test and Remove Projects in spring and summer months in the Bare Mountains, Specter, and Santa Rosa Ranges to assess which subherds are still having poor lamb recruitment, likely due to a chronic-carrier ewe still present in the subherd. We may also conduct limited mountain goat kid surveys in Ruby Mountains to assess kid production and recruitment. Conduct Santa Rosa Range late summer capture for the few remaining bighorn that have not been sampled and tested for *Mycoplasma ovipneumoniae* (Movi) status. Conduct presampling in early Fall to detect exposure of resident bighorn to Movi in a selected desert bighorn herd for use as source stock for a translocation. Conduct desert bighorn capture in the Fall in selected source herd and complete translocation to a mountain range yet to be determined for either an augmentation or reintroduction. Conduct additional Fall bighorn captures if necessary to further sample and test for Movi status in desert bighorn herds. If necessary, conduct Winter mountain goat capture in Ruby Mountains to sample and test for Movi status. Conduct monitoring of satellite-collared animals throughout the year via computer webportals and apps.

## Project Location and Land Status

### Location Narrative:



Statewide

**NDOW Region:** Western, Southern, Eastern

**NDOW Management Units:** 046, 254, 051, , 102, 253, 181

**Nevada Sage Grouse Population Management Unit:** Ruby Valley, South Fork, Santa Rosa, Sonoma

**County:** Churchill, Humboldt, Elko, Pershing, Nye

## Land Status

Land Status	Acres	Percent of Project
No results		

**Bureau of Land Management Office:** Battle Mountain District - Tonopah Field Office, Elko District - Tuscarora Field Office, Carson City District - Stillwater Field Office, Elko District - Wells Field Office, Southern Nevada District - Pahrump Field Office, Winnemucca District - Humboldt River Field Office

**US Forest Service Ranger District:** Humboldt-Toiyabe National Forest - Santa Rosa Ranger District, Humboldt-Toiyabe National Forest - Mountain City-Ruby Mountains-Jarvis Ranger District

# Project Summary and Justification

**Project Activity and Sub-activity:** POPULATION MANAGEMENT, MONITORING, and RESEARCH: Terrestrial Wildlife

## Project Objectives:

- To measurably increase wildlife populations, wildlife use, or habitat for the benefit of public use and hunter success.
- To conduct surveys or research that informs disease management or monitoring needs.
- To reintroduce species to promote species recovery or expansion.

**NDOW Initiative Addressed:** No initiatives

**Priority Resource Impacted:** Big Game

**Priority Species Impacted:** California Bighorn Sheep, Desert Bighorn Sheep, Mountain Goat

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** no

**Project Clearance or Authorization Status:** Not Applicable

## Project Rationale:

The last desert bighorn translocation in Nevada was in 2016 from Lone Mountain to the Garfield Hills. Since then a series of deadly pathogen spillovers or disease transmission events occurred across the range of our desert bighorn populations in Nevada. Future translocations would only occur if pathogen strain typing and transmission dynamics were better understood, majority of herds previously impacted by pneumonia begin to show signs of recovery associated with reduced pathogen carrier status, greater understanding of herd connectivity, and reduced pathogen transmission risk from domestic sheep flocks. Many of these factors and information needs have been addressed or met in certain areas of the state, though the future reality is that disease transmission reservoirs will always exist.

The concept of "Test and Remove" - After a deadly pneumonia event in a bighorn herd, a limited number of persistent/chronic carrier bighorn sheep exist with a novel pathogen strain of *Mycoplasma ovipneumoniae* (Movi). It is a "trigger" pathogen involved in west-wide wild sheep pneumonia dieoffs that has decimated and even extirpated entire herds. Most bighorns that survive a disease event will mount an immune response and clear their Movi infection. But a small percent of the adults will continue to have an active Movi infection yet look fine or asymptomatic. Each year when nursery groups form, a single chronic-shedding ewe can reinfect lambs and other adults in the nursery group which can cause lambs to die because their immune system is not yet fully developed until 4 months of age. Research and several trials conducted westwide have shown if you can identify the chronic shedders and remove them from the herd, you can greatly improve lamb/kid recruitment to recover herds that have struggled for years.

1. Santa Rosa Range California bighorn herd had a Movi spillover event in 2003 and many of its subherds have struggled ever since. Test and Remove was initiated in January 2021. Since then 5 ewes were removed in August and November 2021 confirmed to be chronic shedders and 1 ewe from February 2022 was removed that tested positive. August 2022 captured 18 bighorn and all tested negative. There remains approximately 25 ewes that have not been sampled yet.

2. Nevada Test and Training Range/Stonewall Mountain desert bighorn herd has been severely impacted by extremely low lamb survival since 2014 from chronic pneumonia with detection of novel "NTTR" Movi strain (unknown origin) and its population has declined 50% since then. A Test and Remove project was initiated in November 2021. Considerable coordination was conducted with Department of Defense liaisons to plan the effort with support from the NTTR commander and environmental staff. A total of 26 bighorn were captured and 1 ewe and 1 ram tested positive and were euthanized. Weather restricted a November 2022 capture of only 8 animals tested and all tested negative.

3. Bare Mountains has had single digit lamb ratios for the last 4 years and has shown a 50% decline in the population since 2015 when it experienced its first pathogen spillover of Movi. The Bare Mountains based on collar data and ram harvest has known connectivity with the eastern subherd of the NTTR. Test and Remove was initiated in November 2022 with 15 animals sampled and none were found to be chronic carriers.

4. The Specter Range bighorn herd went through a pathogen spillover beginning in 2002 and declined by 45%. it began to rebound in 2008 and by 2018 had grown beyond its population level prior to the 2002. But due to the fact that it has known connectivity with the adjacent Nevada National Security Site pioneering bighorn herd and that herd has connectivity to the NTTR, a Test and Remove project was initiated in November 2022. Weather also hampered capture efforts and only 6 bighorn were sampled with 1 tested positive on PCR for Movi.

Mountain goat herd disease surveillance in the Ruby Mountains - In summer 2022, a dead mountain goat kid was found by a hunter scouting in the Ruby Mountains. Tissue samples were taken from the carcass and submitted to diagnostic lab. Test results came back positive for *Mycoplasma ovipneumoniae* (Movi) and histopathology of tissues showed signs that the kid likely died of pneumonia. We need to investigate the extent of pneumonia in the mountain goat subherd that exists near where the kid was found.

## Project Treatments and Actions

**Treatment Name:** Herd Areas for Management

**Acres:** 959,182

**Action:** Disease monitoring, treatment, or research

**Approach Narrative:**

Sample bighorn sheep and mountain goat for various pathogens

**Planned Start:** 10/2024

**Action:** Deploy GPS/VHF collars on big game species

**Approach Narrative:**

Capture and collar bighorn sheep and mountain goats

**Planned Start:** 10/2024

**Action:** Trap and transplant big game species

**Approach Narrative:**

Capture and transplant bighorn sheep for augmentation or reintroduction

**Planned Start:** 10/2024

# Project Monitoring

## Monitoring Plan:

Opportunities for augmentations and reintroductions will continue to be evaluated and those that have manageable risks will be considered for FY2024.

Ruby Mountains mountain goat disease surveillance will include our standard aerial surveys, ground surveys, and possibly the need to capture, sample, and test mountain goats for Movi exposure and or active infection.

## Test and Remove Efforts

Santa Rosa Range - will continue in FY2023 with monitoring nursery groups in each subherd for production, clinical signs, and ultimately lamb recruitment in late summer. Continued testing of animals will occur in August 2022 and February 2023.

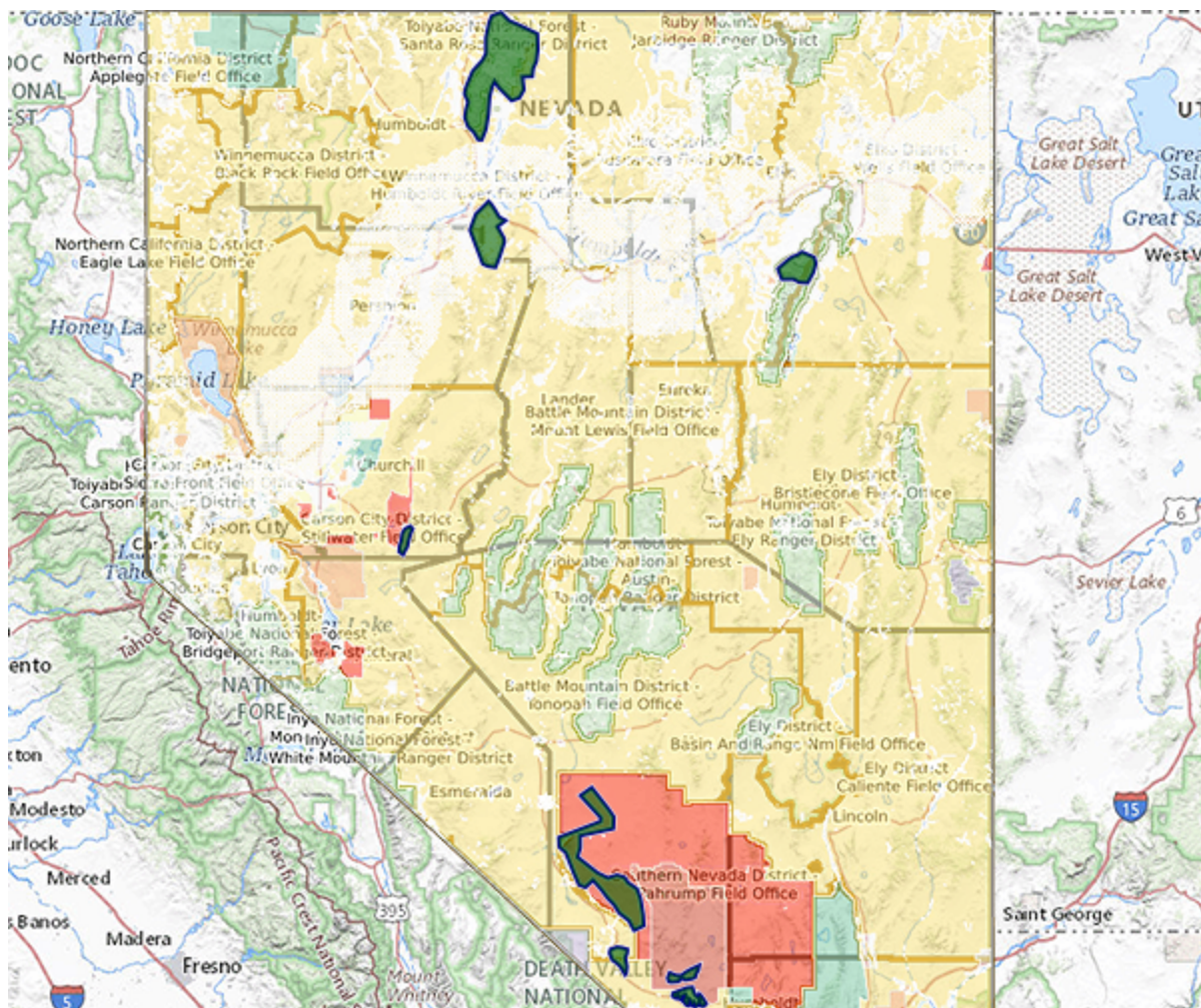
NTTR/Stonewall Mountain, Bare Mountain, and Specter Range herds will be sampled again Fall 2023

# Project Funding and Budget

Budget Item	In-Kind Contributions (Volunteers) 2024	NDOW Heritage Trust Account 2024	NGO Donations 2024	USFWS Grant - Statewide Game Management 2024	Subtotal
<b>Contracts</b>					
Aerial Net-gun Capture Contract	\$0	\$51,500	\$34,000	\$48,000	\$133,500
Laboratory Testing	\$0	\$1,000	\$0	\$3,000	\$4,000
<b>Equipment Purchase</b>					
Mountain Goat GPS Collars	\$0	\$2,500	\$8,000	\$5,500	\$16,000
Bighorn GPS Collars	\$0	\$53,000	\$27,000	\$34,000	\$114,000
<b>Other</b>					
Satellite Transmission - GPS Collars	\$0	\$2,000	\$0	\$10,000	\$12,000
<b>Personnel</b>					
Volunteer Work	\$12,000	\$0	\$0	\$0	\$12,000
<b>Travel</b>					
Volunteer Mileage	\$4,590	\$0	\$0	\$0	\$4,590
<b>Total Costs:</b>	<b>\$16,590</b>	<b>\$110,000</b>	<b>\$69,000</b>	<b>\$100,500</b>	<b>\$296,090</b>

## Budget Narrative:

InKind Contributions in the form of volunteer hours and mileage conducting lamb surveys and mountain ungulate base camp capture operations. Heritage Trust Account to pay for captures, collars, testing, and GPS collar satellite transmission fees. NGO Donations from 5 or 6 conservation organizations in Nevada to contribute to collar and capture costs. NDOW Wildlife Restoration Grant (Federal Aid Grant) to contribute to capture, collars, testing, and satellite transmission fees.



### Boundaries

- County Boundary
- USFS Office Boundaries
- BLM Office Boundaries
- NDOW Region Boundary

### Land Status

- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Reclamation
- Department of Defense
- Department of Energy
- Fish and Wildlife Service
- US Forest Service
- National Park Service
- Nevada State Lands
- Nevada Park Service
- Private
- Other

### Project Geometry

- Project Boundary
- Treatment Area: Herd Areas for Management



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** FY24 Wildfire-Related Restoration and Seed Purchase

**Project ID:** 856

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Mark Freese Nevada Department of Wildlife

**Phone Number:** (775) 688-1542

**Email:** markfreese@ndow.org

## Project Partners

Name	Agency	Role
No results		

## Project Schedule

**Project Start Date:** 07/01/2023 (FY 2024)

**Projected Completion Date:** 06/30/2024 (FY 2024)

**Multi-year Project:** no

### Project Schedule:

May - October - Coordinate with land management agencies and private landowners on fire suppression and fire rehabilitation plans (including fires from previous years), including post fire field assessments.

September - February - Seed and herbicide purchase will occur in late summer to early fall with herbicide seedbed preparation occurring in early fall. Seed application through aerial broadcasting or drilling will begin early fall and carry through to late winter with most application wrapping up by the end of February. Shrub plantings may occur in the fall to early spring depending on need and site availability.

September - July - Monitoring crews will collect pre and post treatment data based upon schedules determined by the restoration efforts at individual fires. It is difficult to predict precise timing and locations for the monitoring.

## Project Location and Land Status

### Location Narrative:

Statewide



**NDOW Region:** Not Applicable – Statewide Project

**NDOW Management Units:** Not Applicable – Statewide Project

**Nevada Sage Grouse Population Management Unit:** Not Applicable – Statewide Project

**County:** Not Applicable – Statewide Project

## Land Status

Land Status	Acres	Percent of Project
No results		

**Bureau of Land Management Office:** Not Applicable – Statewide Project

**US Forest Service Ranger District:** Not Applicable – Statewide Project

# Project Summary and Justification

**Project Activity and Sub-activity:** HABITAT RESTORATION and REHABILITATION: Wildland fire rehabilitation

## Project Objectives:

- To control cheatgrass and other non-native annual grasses with herbicide application.
- To control noxious weeds with herbicide application.
- To apply seed on habitat impacted by wildfire to improve ecological conditions, prevent expansion of invasive annual grasses, and rehabilitate wildlife habitat.
- To re-apply seed on habitat impacted by wildfire to improve ecological conditions, prevent expansion of invasive annual grasses, and rehabilitate wildlife habitat.
- To plant seedlings on habitat impacted by wildfire to improve ecological conditions, prevent expansion of invasive annual grasses, and rehabilitate wildlife habitat.

## NDOW Initiative Addressed:

- Sagebrush Habitat Plan (NDOW)

**Priority Resource Impacted:** Not Applicable – Statewide Project

**Priority Species Impacted:** Not Applicable – Statewide Project

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** yes

**Project Clearance or Authorization Status:** Not Started

## Project Rationale:

The primary goal of this project is to work with the Nevada BLM, FS, and private landowners to supplement and conduct fire rehabilitation efforts. Approximately 1,526,178 acres of habitat have burned in Nevada during the 2018-2022 period. Emergency Stabilization and Rehabilitation (ESR) funding granted to BLM covers only a portion of the acres burned. BLM has requested that NDOW assist with securing additional funding to purchase seeds, apply seeds and conduct seed bed preparation to the remaining acreage and to partner with the BLM to leverage funding and contracting abilities so that the largest acreage and most effective treatments can be applied. Similar to BLM, the FS and private landowners also need assistance. Funds awarded for this project will be used to purchase seeds, apply seed, and conduct other seed bed preparation during the rehabilitation of fires across high priority sage grouse, mule deer and other habitat across the state of Nevada. The seeding and other activities will augment the amount and diversity of plant species that will be applied to key burned habitats on public and private lands across Nevada. Treatment effectiveness monitoring will be conducted to inform project success and inform the need for future management actions.

# Project Treatments and Actions

**Treatment Name:** Statewide Fire Rehabilitation

**Acres:** 70,739,191.5

**Action:** Herbicide application (aerial)

**Approach Narrative:**

May apply herbicide depending upon fire rehabilitation priorities

**Planned Start:** 09/2023

**Action:** Seeding (aerial)

**Approach Narrative:**

May apply seed depending upon fire rehabilitation priorities

**Planned Start:** 11/2023

## Project Monitoring

### Monitoring Plan:

Fire rehabilitation projects will be monitored and assessed for project effectiveness and knowledge gained will be applied towards future projects in an adaptive management framework. At a minimum, projects will be visited by NDOW biologist to monitor and assess project outcomes. Products may include repeat photograph points, density measurements, field trip reports, etc. Projects may also be monitored with vegetation survey crews to collect vegetation community structure and composition data (Line-Point-Intercept, density and belt transects, soil assessment, etc.) on large and/or important projects. Monitoring products for the more extensive survey efforts include producing reports with photographs, statistical analysis, project summaries of what worked or didn't work well, etc.

## Project Funding and Budget

Budget Item	Bureau of Land Management 2024	NDOW Heritage Trust Account 2024	NDOW Industrial Development Fund 2024	Nevada Dream Tag 2024	NGO Donations 2024	USFWS Grant - Statewide Habitat Restoration 2024	Subtotal
<b>Contracts</b>							
Seed and Herbicide Application	\$500,000	\$0	\$120,000	\$0	\$0	\$0	\$620,000
<b>Materials Purchase</b>							
Seed and Herbicide	\$500,000	\$150,000	\$0	\$250,000	\$225,000	\$400,000	\$1,525,000
<b>Total Costs:</b>	<b>\$1,000,000</b>	<b>\$150,000</b>	<b>\$120,000</b>	<b>\$250,000</b>	<b>\$225,000</b>	<b>\$400,000</b>	<b>\$2,145,000</b>

### Budget Narrative:

The budget above is an estimate of potential funding sources based primarily on funds received in FY 2023. Heritage Project funding may be used for seed and herbicide acquisition or application with not more than 15% going towards monitoring.

These are our best estimates at this time but are subject to change depending upon the needs and priorities of the calendar year 2023 fire season. The Heritage Account will be given credit for providing funding in project completion reports and will also be used as match for NDOW's Restoration Program.



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** Parrado Partners Community Park and Ponds Land Acquisition

**Project ID:** 849

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Madi Stout Nevada Department of Wildlife

**Phone Number:** (775) 777-2392

**Email:** mstout@ndow.org

## Project Partners

Name	Agency	Role
Madi Stout	Nevada Department of Wildlife	Implementation Lead
Parrado Family	Not Applicable	Private Landowner

## Project Schedule

**Project Start Date:** 02/01/2023 (FY 2023)

**Projected Completion Date:** 12/31/2023 (FY 2024)

**Multi-year Project:** no

**Project Schedule:**

The NDOW intends to purchase the Parrado Partners parcel for a Community Park and Urban Fishing Pond by the fall of 2023.

## Project Location and Land Status

**Location Narrative:**

The Project is within the City limits of Elko, Nevada. The Figure 1(attached) shows the vicinity of proposed Project location.

**NDOW Region:** Eastern

**NDOW Management Units:** 102

**Nevada Sage Grouse Population Management Unit:** South Fork

**County:** Elko

## Land Status

Land Status	Acres	Percent of Project
Private	69	100

**Bureau of Land Management Office:** Elko District - Tuscarora Field Office

**US Forest Service Ranger District:** N/A

**Special Land Designations:** N/A

## Project Summary and Justification

**Project Activity and Sub-activity:** INFRASTRUCTURE and LAND: Land or water right acquisition

**Project Objectives:**

- To prevent conversion to agriculture and other anthropogenic development and fulfill conservation goals

**NDOW Initiative Addressed:** No initiatives

**Strategic Habitats and Threats Addressed:**

**Priority Resource Impacted:** Diversity/Non-game, Fish, Waterfowl

**Priority Species Impacted:** Dabbling duck species, Diving duck species, Geese, Migratory songbirds (multiple species), Rainbow trout, Raptor species, Shorebirds, Warmwater sport fish

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** no

**Project Clearance or Authorization Status:** Not Applicable

**Project Rationale:**

The Parrado Partner Community Park and Ponds, in conjunction with the 12th Street ponds, which will conserve a total of 60-acres within the city of Elko, Nevada. In partnership with both the City of Elko, Elko County, KG and NGM, this project will include the improvement of five fishing ponds, the creation of a nature trail system, the construction of a nature center, bathrooms, picnic areas and park. The Nevada Department of Wildlife intends to dredge out the current ponds to make them a more suitable fishery and stock the ponds with warm water fish species including Bass, Sunfish. If late summer temperatures allow, the Rainbow Trout from the Gallagher fish hatchery will also be stocked. This project will allow the community, especially kids, to explore and be exposed to conservation and the great outdoors without having to travel.

## Project Treatments and Actions

**Treatment Name:** Parrado Parcel

**Acres:** 69

**Action:** Land acquisition

**Approach Narrative:**

Purchase of private property.

**Planned Start:** 03/2023



# Project Monitoring

## Monitoring Plan:

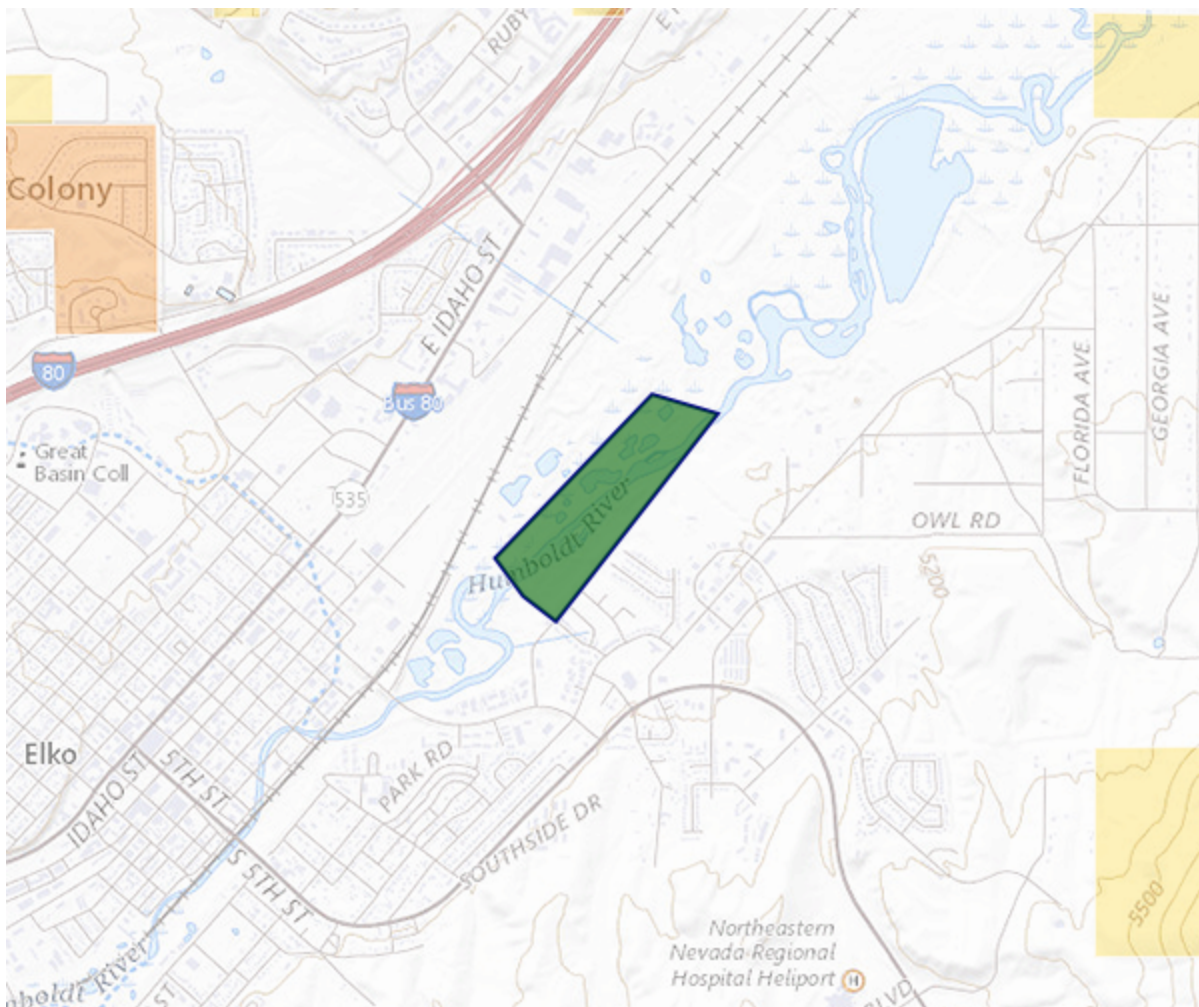
A monitoring plan is not applicable to this project.

# Project Funding and Budget

Budget Item	AB84 - Conservation Bond Initiative 2023	NGO Donations 2023	NDOW Duck Stamp 2024	NDOW Heritage Trust Account 2024	Subtotal
<b>Land Acquisitions/Easements</b>					
	\$410,000	\$50,000	\$25,000	\$100,000	\$585,000
<b>Total Costs:</b>	<b>\$410,000</b>	<b>\$50,000</b>	<b>\$25,000</b>	<b>\$100,000</b>	<b>\$585,000</b>

## Budget Narrative:

All funds to be used to purchase the Parrado Partners Community Park and Ponds. Total purchase price is estimated to be \$585,000.00 (pending appraisal). Conservation Bond Initiative or other funding will be used to makeup budget deficiencies.



#### Boundaries

- County Boundary
- USFS Office Boundaries
- BLM Office Boundaries
- NDOW Region Boundary

#### Land Status

- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Reclamation
- Department of Defense
- Department of Energy
- Fish and Wildlife Service
- US Forest Service
- National Park Service
- Nevada State Lands
- Nevada Park Service
- Private
- Other

#### Project Geometry

- Project Boundary
- Treatment Area: Parrado Parcel



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** Gilbert Creek Fencing and Habitat Restoration

**Project ID:** 855

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Katie Andrie Nevada Department of Wildlife

**Phone Number:** (775) 688-1145

**Email:** kmandrie@ndow.org

## Project Partners

Name	Agency	Role
Tori Cernoch	Nevada Department of Wildlife	Implementation Lead
Jeremy Lutz	Nevada Department of Wildlife	Implementation Lead

## Project Schedule

**Project Start Date:** 07/01/2023 (FY 2024)

**Projected Completion Date:** 06/30/2028 (FY 2028)

**Multi-year Project:** yes

### Project Schedule:

Summer/Fall 2023 - 2024: Plan and construct drill stem pipe rail fence surrounding three springhead sources and barbed wire perimeter fencing associated with the Gilbert Creek property.

Summer/Fall 2023 - 2026: Plan and implement riparian and stream restoration techniques and projects; including BDAs, rock structures, willow/shrub staking, seeding, and others as developed.

Summer 2024-2028: Project monitoring, which may include photos, vegetation surveys or measurements, fence and other project maintenance.

## Project Location and Land Status

### Location Narrative:

The Gilbert Creek property is approximately 477 acres located within the New Pass Mountains, Lander County.

**NDOW Region:** Eastern

**NDOW Management Units:** 183

**Nevada Sage Grouse Population Management Unit:** Desatoya

**County:** Lander

## Land Status

Land Status	Acres	Percent of Project
Private	480.4	99.8

**Bureau of Land Management Office:** Battle Mountain District - Mount Lewis Field Office

**US Forest Service Ranger District:** N/A

**Special Land Designations:** N/A

## Project Summary and Justification

**Project Activity and Sub-activity:** HABITAT RESTORATION and REHABILITATION: Riparian, Meadow, Spring Restoration

### Project Objectives:

- To measurably increase wildlife populations, wildlife use, or habitat for the benefit of public use and hunter success.
- To control cheatgrass and other non-native annual grasses with herbicide application.
- To install fencing that excludes livestock or wild horses/burros and prevents grazing and enhances spring and riparian habitat conditions.
- To install fencing that allows for improved management of livestock or wild horse/burro grazing and enhances spring and riparian habitat conditions.
- To install spring development features that improve water management and allows for providing water outside exclusionary fencing.
- To install fencing that allows for protection and recovery of natural water sources to increase water availability for wildlife.
- To control noxious weeds with herbicide application.
- To apply seed on riparian areas to improve ecological conditions, prevent expansion of invasive annual grasses, and rehabilitate wildlife habitat.

### NDOW Initiative Addressed:

- Sagebrush Habitat Plan (NDOW)

### Strategic Habitats and Threats Addressed:

- Aspen woodland: Over-utilization, Wildfire or lack of fire
- Linear riparian: perennial and ephemeral rivers and streams: Over-utilization, Nonnative invasive species
- Other riparian: meadow, marsh, spring, seep, and lakeshore: Over-utilization, Nonnative invasive species

**Priority Resource Impacted:** Big Game, Upland Game

**Priority Species Impacted:** Greater sage-grouse, Mule deer, Pronghorn antelope

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** yes

**Project Clearance or Authorization Status:** Complete

### Project Rationale:

Approximately 477 acres of land surrounding Gilbert Creek in the New Pass Mountains was acquired by Lander County in 2022. NDOW has been coordinating with the County to plan, design, and implement habitat restoration projects on the property. Proposed projects include property perimeter barbed wire fencing, which may include drill stem fencing in sections expected to experience increased pressure from snow pack, livestock, or feral horses. Additional drill stem pipe rail

fencing is proposed to exclude feral horses and livestock from three spring sites and associated riparian areas within the property; it is reasonable to assume at some point the perimeter barbed wire fence may fail temporarily, enabling access by horses or cattle. Therefore it is important that drill stem fencing be constructed surrounding the most critical riparian resources to permanently exclude feral horses and cattle from these valuable resources.

In addition to fencing, we propose riparian and stream restoration projects along the ~2-mile stretch of perennial stream within the Gilbert Creek property boundary. Gilbert Creek and associated springs are heavily overutilized, which has resulted in degraded vegetation, large amounts of bare ground, negligible riparian vegetation, impaction, and non-functioning riparian systems. Beaver Dam Analogs, rock structures, willow or other shrub staking or planting, as well as seeding will be planned and implemented along Gilbert Creek. Currently, there is little streambank incision and no major headcuts along Gilbert Creek, which presents an ideal opportunity to quickly improve riparian vegetation, soils, and maintain streambank stability with minimal effort that will result in meaningful and immediate uplift. The goal of any stream restoration will be to maintain bank stability and to spread water out across the floodplain, reducing erosive velocity and activating the "soil as a sponge" to keep water on the land for longer periods, especially into the hot season. If this system is not protected and continues to be overutilized by livestock and feral horses, cost of restoration efforts will only increase over time and lengthen the recovery timeline. Additional potential habitat treatments we hope to implement in the future pending available funding sources includes herbicide treatments and re-seeding efforts along the springs, creek, and uplands. In addition, Lander County obtained all water rights associated with these waters as part of their acquisition.

The Gilbert Creek property occurs within Hunt Unit 183, containing mapped mule deer, antelope and sage-grouse habitat. Field visits to the site have determined that big game species regularly and heavily use this site. Sage-grouse sign was also commonly seen, despite the site's degraded condition. Gilbert Creek is the only perennial water source on the east side of the New Pass Range, which appears to result in wildlife concentrating use on this riparian system. Improving the riparian and stream systems along Gilbert Creek, and excluding livestock and feral horses, will allow upland and riparian vegetation to improve and provide forage and cover for wildlife, including small mammals, passerines, and bats. Proposed riparian improvements will increase water quality, retention, and availability longer into the hot season. This parcel presents an important opportunity to improve habitat conditions in a fire-affected region where overall rangeland conditions are in a degraded state, and therefore significant uplift is expected.

Since 2020, in cooperation with the Battle Mountain BLM and local private landowners, NDOW has initiated several habitat projects immediately adjacent to this property including the treatment of ~2,000 acres with pre-emergent herbicide to control invasive non-native annuals, followed by seeding with a mix that included a variety of grasses, forbs and several different shrub species desirable by wildlife. In the spring of 2021, tens of thousands of sagebrush and bitterbrush seedlings were hand planted north of Gilbert Creek towards Water Canyon to help establish critical forage for sagebrush obligate species. Currently, work is underway to fence off another privately-owned parcel that contains several important springs and seeps critical for wildlife in Water Canyon (north of Gilbert Creek).

## Project Treatments and Actions

**Treatment Name:** Spring Enclosures

**Acres:** 1.1

**Action:** Install or maintain bioengineering or streambank stabilization features

**Planned Start:** 07/2024

**Action:** Install or maintain pipe-rail fence

**Planned Start:** 08/2023

**Action:** Seeding (broadcast)

**Planned Start:** 11/2024

**Action:** Herbicide application (truck or atv)

**Planned Start:** 09/2023

**Action:** Install or maintain post-assisted log or beaver dam analogs

**Planned Start:** 07/2024



**Treatment Name:** Gilbert Creek Perimeter Fence

**Acres:** 481.3

**Action:** Herbicide application (truck or atv)

**Planned Start:** 09/2023

**Action:** Install gates or cattle guards

**Planned Start:** 08/2023

**Action:** Seeding (broadcast)

**Planned Start:** 11/2024

**Action:** Install or maintain bioengineering or streambank stabilization features

**Planned Start:** 07/2024

**Action:** Install or maintain post-assisted log or beaver dam analogs

**Planned Start:** 07/2024

**Action:** Install or maintain range fence

**Planned Start:** 08/2023

## Project Monitoring

### Monitoring Plan:

We plan to monitor habitat improvements when fencing and habitat restoration projects are implemented, starting in 2024 following fence installing in summer/fall 2023.

Summer 2024-2028: Annual monitoring, which may include photos and vegetation transects or measurements.

## Project Funding and Budget

Budget Item	Lander Conservation District 2024	NDOW Heritage Trust Account 2024	Subtotal
<b>Contracts</b>			
	\$245,000	\$50,000	\$295,000
<b>Materials Purchase</b>			
	\$5,000	\$0	\$5,000
<b>Total Costs:</b>	<b>\$250,000</b>	<b>\$50,000</b>	<b>\$300,000</b>

### Budget Narrative:

Total project costs are approximately \$300,000, which will include materials and contracting to construct 2,038 linear feet of welded drill stem fencing surrounding the three spring sites and 31,777 linear feet of barbed wire perimeter fence, plus materials costs for riparian/stream restoration:

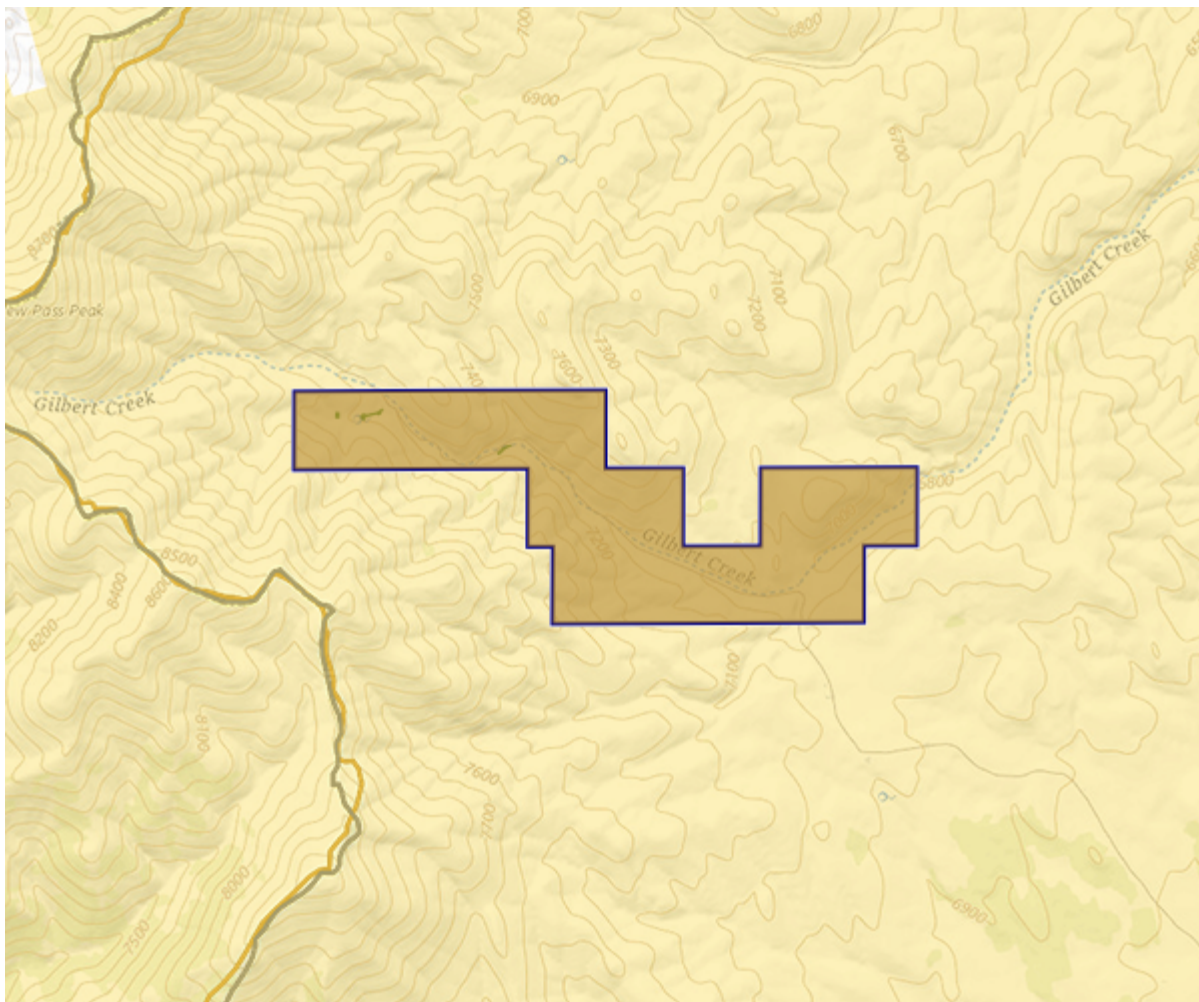
Welded drill stem fence: \$50,000

Barbed wire perimeter fence: \$245,000

Riparian/stream restoration materials and seed: \$5,000

We are requesting \$50,000 from the Heritage Trust Account to contribute to the total cost of the project, specifically to install the drill stem pipe rail fence surrounding the three spring sources. This will be matched at 5:1. Lander County will be

contributing approximately \$250,000 that is expected to cover the barbed wire perimeter fencing and installation, cattle guards, and costs of materials and seed for riparian restoration projects.



#### Boundaries

- County Boundary    ● USFS Office Boundaries    ● BLM Office Boundaries    ● NDOW Region Boundary

#### Land Status

- Bureau of Indian Affairs    ● Bureau of Land Management    ● Bureau of Reclamation
- Department of Defense    ● Department of Energy    ● Fish and Wildlife Service    ● US Forest Service
- National Park Service    ● Nevada State Lands    ● Nevada Park Service    ● Private    ● Other

#### Project Geometry

- Project Boundary    ● Treatment Area: Spring Enclosures    ● Treatment Area: Gilbert Creek Perimeter Fence



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** Waking Spring Habitat Restoration

**Project ID:** 840

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Moira Kolada Nevada Department of Wildlife

**Phone Number:** (775) 289-1655

**Email:** mkolada@ndow.org

## Project Partners

Name	Agency	Role
Kellie Dobrescu	Bureau of Land Management	Agency Coordinator

## Project Schedule

**Project Start Date:** 07/31/2023 (FY 2024)

**Projected Completion Date:** 07/31/2024 (FY 2025)

**Multi-year Project:** no

**Project Schedule:**

Final project design—Spring 2023 after completion of cultural clearances

Release of Scope of Work for bid—Summer 2023

Project work—Fall 2023-Fall 2024

## Project Location and Land Status

**Location Narrative:**

Snake Range, Weaver Creek, White Pine County

**NDOW Region:** Eastern

**NDOW Management Units:** 115, 114

**Nevada Sage Grouse Population Management Unit:** Spring/Snake Valley

**County:** White Pine

## Land Status

Land Status	Acres	Percent of Project
Bureau of Land Management	23259.7	97.7

**Bureau of Land Management Office:** Ely District - Bristlecone Field Office

**US Forest Service Ranger District:** N/A

**Special Land Designations:** N/A

## Project Summary and Justification

**Project Activity and Sub-activity:** HABITAT RESTORATION and REHABILITATION: Conifer removal

### Project Objectives:

- To remove pinyon and juniper trees as a restorative measure to reduce expansion, restore degraded sagebrush habitat, increase hydrologic function, improve forage and cover for wildlife, and/or increase connectivity of sagebrush habitat.
- To remove pinyon and juniper trees as a preventative measure against uncharacteristic wildfire and prevent loss of positive ecological conditions.
- To apply seed in conjunction with conifer removal to improve ecological conditions, prevent expansion of invasive annual grasses, and restore wildlife habitat.
- To measurably increase wildlife populations, wildlife use, or habitat for the benefit of public use and hunter success.

### NDOW Initiative Addressed:

- Mule Deer Enhancement Program (NDOW)

### Strategic Habitats and Threats Addressed:

- High-elevation sagebrush dominated shrubland: Conifer invasion, Wildfire or lack of fire

**Priority Resource Impacted:** Big Game

**Priority Species Impacted:** Mule deer

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** yes

**Project Clearance or Authorization Status:** In Progress

### Project Rationale:

The Bureau of Land Management (BLM) Ely District, in coordination with the Nevada Department of Wildlife has identified approximately 4,500 acres of being affected by pinyon and juniper encroachment. The Bristlecone Field Office is currently processing a DNA for these treatments. The CX and necessary cultural clearances will be completed by July 2023. Treatment will consist of complete removal of pinyon and juniper within the treatment area. Islands and stringers would be designed to benefit big game, upland game, and nongame species.

Vegetation attributes in within the Waking Spring Habitat Restoration area have been altered from their desired (historic) range and now include uncharacteristically high densities of trees and below normal levels of perennial grasses and forbs. Current conditions indicate that appropriate management actions (i.e. vegetation treatments) could prevent these areas from further departure from the desired condition and instead move towards a more ecologically sound condition. In addition, strategically placed fuel breaks will help protect crucial wildlife habitats. Tree removal would be done utilizing hand thinning and mastication, treatment type will be based on tree density and other factors to achieve the desired outcome. Biomass created from mastication or mulching equipment would be left on-site to naturally degrade. When masticating or mulching, biomass material depth would be restricted to six inches or less. Aerial seeding would occur to help bolster the understory species. Shrub species such as bitterbrush would be seeded utilizing seeders mounted on the masticators.

The areas proposed for treatment were selected because of the importance of the area for the Area 11 mule deer and habitat values that they provide, specifically for wintering mule deer, However, these treatments and their designs will be designed to benefit a variety of game and non-game wildlife species. This area was also prioritized because of the lack of feral horse pressure.

## Project Treatments and Actions

**Treatment Name:** WakingSpringProposedHT

**Acres:** 3,267.6

**Action:** Phase 2 Hand Thinning or Lop-Scatter

**Approach Narrative:**

Hand Crew

**Planned Start:** 07/2024

**Treatment Name:** WakingSpringsProposedMast

**Acres:** 1,217.5

**Action:** Phase 1-2 Mastication

**Approach Narrative:**

Mastication-with aerial seed

**Planned Start:** 07/2023

**Action:** Seeding (aerial)

**Approach Narrative:**

Aerial seed --timing will depend on seed availability

**Planned Start:** 07/2024

## Project Monitoring

### Monitoring Plan:

Photo monitoring will be used to monitor this project.

## Project Funding and Budget

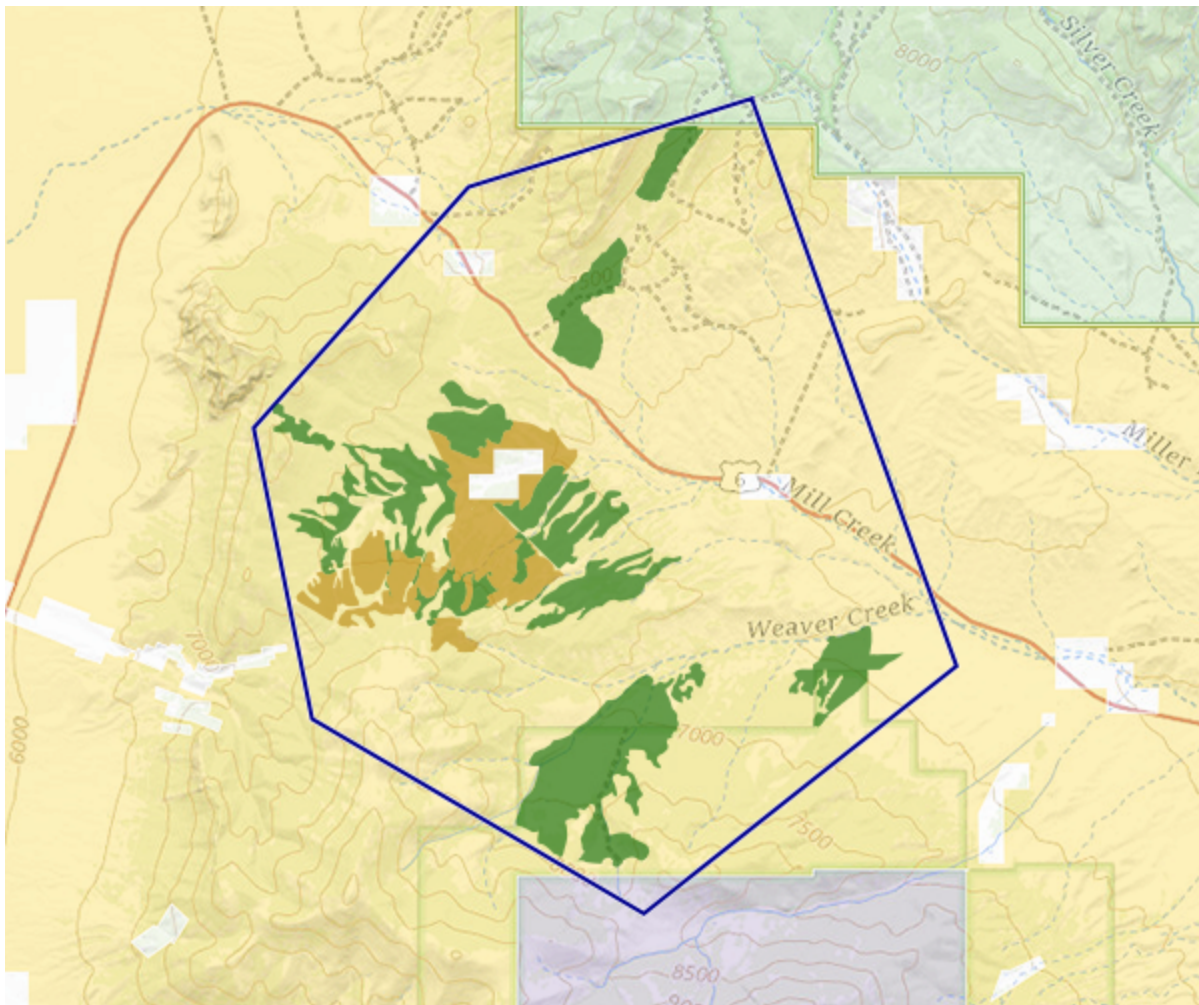
Budget Item	Other/Not Specified 2023	NDOW Habitat Conservation Fee 2024	NDOW Heritage Trust Account 2024	Other/Not Specified 2024	Rocky Mountain Elk Foundation 2024	Subtotal
<b>Contracts</b>						



Budget Item	Other/Not Specified 2023	NDOW Habitat Conservation Fee 2024	NDOW Heritage Trust Account 2024	Other/Not Specified 2024	Rocky Mountain Elk Foundation 2024	Subtotal
	\$100,000	\$35,000	\$65,000	\$767,445	\$75,000	\$1,042,445
<b>Total Costs:</b>	<b>\$100,000</b>	<b>\$35,000</b>	<b>\$65,000</b>	<b>\$767,445</b>	<b>\$75,000</b>	<b>\$1,042,445</b>

**Budget Narrative:**

Funds would be spent using 99SWC-S1426 fire fuels reduction contract, aerial seeding contract, and seed would be purchase utilizing the BLM seed buy.



#### Boundaries

- County Boundary    ● USFS Office Boundaries    ● BLM Office Boundaries    ● NDOW Region Boundary

#### Land Status

- Bureau of Indian Affairs    ● Bureau of Land Management    ● Bureau of Reclamation
- Department of Defense    ● Department of Energy    ● Fish and Wildlife Service    ● US Forest Service
- National Park Service    ● Nevada State Lands    ● Nevada Park Service    ● Private    ● Other

#### Project Geometry

- Project Boundary    ● Treatment Area: WakingSpringProposedHT
- Treatment Area: WakingSpringsProposedMast



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** FY24 Nevada Spring Protection Project

**Project ID:** 861

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Matt Maples Nevada Department of Wildlife

**Phone Number:** (775) 688-1568

**Email:** mmaples@ndow.org

## Project Partners

Name	Agency	Role
Tracy Kipke	Nevada Department of Wildlife	Agency Cooperator
Caleb McAdoo	Nevada Department of Wildlife	Agency Cooperator
Katie Andrie	Nevada Department of Wildlife	Agency Cooperator

## Project Schedule

**Project Start Date:** 07/01/2023 (FY 2024)

**Projected Completion Date:** 06/30/2024 (FY 2024)

**Multi-year Project:** no

**Project Schedule:**

Summer 2023 - Identify spring sites for protection projects

Summer/Fall 2023 - Construct fences

Spring 2024 - Identify spring sites for protection projects

Summer/Fall 2024 - Construct fences

## Project Location and Land Status

**Location Narrative:**

Specific project areas have not yet been finalized; however, the proposed project would occur on spring sites needing protection and enhancement throughout Nevada.

**NDOW Region:** Not Applicable – Statewide Project

**NDOW Management Units:** Not Applicable – Statewide Project

**Nevada Sage Grouse Population Management Unit:** Not Applicable – Statewide Project

**County:** Not Applicable – Statewide Project

## Land Status

Land Status	Acres	Percent of Project
No results		

**Bureau of Land Management Office:** Not Applicable – Statewide Project

**US Forest Service Ranger District:** Not Applicable – Statewide Project

# Project Summary and Justification

**Project Activity and Sub-activity:** HABITAT RESTORATION and REHABILITATION: Riparian, Meadow, Spring Restoration

## Project Objectives:

- To measurably increase wildlife populations, wildlife use, or habitat for the benefit of public use and hunter success.
- To install fencing that excludes livestock or wild horses/burros and prevents grazing and enhances spring and riparian habitat conditions.
- To install fencing that allows for improved management of livestock or wild horse/burro grazing and enhances spring and riparian habitat conditions.
- To install fencing that allows for protection and recovery of natural water sources to increase water availability for wildlife.

## NDOW Initiative Addressed:

- Mule Deer Enhancement Program (NDOW)

**Priority Resource Impacted:** Not Applicable – Statewide Project

**Priority Species Impacted:** Not Applicable – Statewide Project

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** yes

**Project Clearance or Authorization Status:** Not Started

## Project Rationale:

The purpose of this project is to protect natural water sources from over-utilization by wild horses and/or livestock. Protecting natural water sources will lead to improved riparian conditions, protection spring heads, improved ecological function, and increased water supply for wildlife and other species.

Spring protection will be achieved by installing exclusionary fencing around the spring source, and when necessary, installing water development structures to provide water outside the fence for use by all species. Spring fencing materials will either be pipe-rail, bison fence, or welded drill-stem. Selection of fencing materials will be determined based on site specific conditions. Nevada Department of Wildlife biologists have identified approximately ten spring sites that could be fenced in FY2024 and this project will provide additional funding to fence approximately 3-5 of these sites. The actual spring sites will be determined early in FY2024 and will be based on wildlife priority, clearance status from the BLM, agreements with private landowners, and availability of materials and labor to complete the project. NDOW's water development program will provide additional funding assistance for this project.

This project meets the mission objectives of the Wildlife Heritage Account by improving habitat, protecting spring sources, and enhancing populations of mule deer, antelope, and sage-grouse in Nevada. The status and condition of springs are critical for many species of wildlife by providing an essential source of water and crucial riparian habitat values. The Nevada

Department of Wildlife is expanding its efforts to protect natural water sources for the benefit of wildlife. Heritage funding is needed to increase the number of priority projects that can be completed over the next two years.

## Project Treatments and Actions

**Treatment Name:** Statewide Spring Protection

**Acres:** 70,739,191.5

**Action:** Intall or maintain pipe-rail fence

**Approach Narrative:**

Purchase and install pipe-rail fence as appropriate for specific project site conditions and needs.

**Planned Start:** 07/2023

**Action:** Install or maintain spring box/trough and associated plumbing

**Approach Narrative:**

Purchase and install spring boxes, pipelines, and troughs as appropriate for specific project site conditions and needs.

**Planned Start:** 07/2023

**Action:** Install or maintain liberty fence

**Approach Narrative:**

Install liberty or bison fence as appropriate for specific project site conditions and needs.

**Planned Start:** 07/2023

## Project Monitoring

### Monitoring Plan:

Construction of the fences and water development features (if needed) will be monitored to ensure compliance with any contracts that are issued for fence construction. Spring protection projects will be monitored over time to ensure they are functioning as designed and to determine maintenance needs. Future maintenance needs will be covered by NDOW's Water Development Program.

## Project Funding and Budget

Budget Item	NDOW Heritage Trust Account 2024	NDOW Industrial Development Fund 2024	USFWS Grant - Water Development and Maintenance 2024	Subtotal
<b>Contracts</b>				
Fencing Contracts	\$85,000	\$50,000	\$30,000	\$165,000
<b>Materials Purchase</b>				
Fence Materials	\$0	\$0	\$30,000	\$30,000

Budget Item	NDOW Heritage Trust Account 2024	NDOW Industrial Development Fund 2024	USFWS Grant - Water Development and Maintenance 2024	Subtotal
<b>Other</b>				
Air Operations (Slinging Materials)	\$0	\$0	\$15,000	\$15,000
<b>Total Costs:</b>	<b>\$85,000</b>	<b>\$50,000</b>	<b>\$75,000</b>	<b>\$210,000</b>

**Budget Narrative:**

Heritage funding will be used to pay for fencing contracts and materials (provided by the contractor) necessary to complete the project. Non-Heritage funding will be used to pay for additional materials not covered by the contractor, flight time to sling materials into project sites, and additional contracting costs not covered by Heritage funding. Additional costs such as NDOW labor, mileage, and per diem are unknown and dependent upon project sites selected. These costs will be covered by NDOW's Water Development Program.

The Heritage Account will be given credit for providing funding in project completion reports and will also be used as match for NDOW's Water Development Program.



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** Bald Mountain PJ Thinning

**Project ID:** 845

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Sarah Hale Nevada Department of Wildlife

**Phone Number:** (775) 635-5070

**Email:** slhale@ndow.org

## Project Partners

Name	Agency	Role
Bureau of Land Management	Bureau of Land Management	Agency Cooperator
Jeremy Lutz	Nevada Department of Wildlife	Implementation Lead

## Project Schedule

**Project Start Date:** 07/01/2023 (FY 2024)

**Projected Completion Date:** 06/30/2024 (FY 2024)

**Multi-year Project:** yes

**Project Schedule:**

October 2023-March 2024 up to 2,291 acres of PJ hand thinning.

## Project Location and Land Status

**Location Narrative:**

Bald Mountain, North Toiyabe Range, northeastern portion of hunt unit 154.

**NDOW Region:** Eastern

**NDOW Management Units:** 154

**Nevada Sage Grouse Population Management Unit:** Shoshone, Toiyabe

**County:** Lander

## Land Status

Land Status	Acres	Percent of Project
Bureau of Land Management	10925.3	100

**Bureau of Land Management Office:** Battle Mountain District - Mount Lewis Field Office

**US Forest Service Ranger District:** N/A

**Special Land Designations:** N/A

## Project Summary and Justification

**Project Activity and Sub-activity:** HABITAT RESTORATION and REHABILITATION: Conifer removal

### Project Objectives:

- To remove pinyon and juniper trees as a restorative measure to reduce expansion, restore degraded sagebrush habitat, increase hydrologic function, improve forage and cover for wildlife, and/or increase connectivity of sagebrush habitat.
- To remove pinyon and juniper trees as a preventative measure against uncharacteristic wildfire and prevent loss of positive ecological conditions.

### NDOW Initiative Addressed:

- Mule Deer Enhancement Program (NDOW)

### Strategic Habitats and Threats Addressed:

- High-elevation sagebrush dominated shrubland: Conifer invasion
- Low-elevation sagebrush dominated shrubland: Conifer invasion

**Priority Resource Impacted:** Big Game, Diversity/Non-game, Upland Game

**Priority Species Impacted:** Greater sage-grouse, Merriam's turkey, Mule deer, Pygmy rabbit

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** yes

**Project Clearance or Authorization Status:** Complete

### Project Rationale:

Woody encroachment is a widespread phenomenon affecting rangelands worldwide, and The Great Basin is no exception to this. In many areas, altered disturbance regimes have allowed pinyon pine and juniper (hereafter PJ) to encroach into previously unoccupied areas, and to increase density of existing stands. PJ has the capacity to outcompete native vegetation, and during periods of drought dense stands of PJ can act as fuel to propagate catastrophic wildfire. As native vegetation struggles to recover after high-intensity fires, a window of opportunity is created for cheatgrass to establish and dominate the landscape. One area that we would like to prevent this from happening in is Bald Mountain of the Toiyabe Range, in the northeastern portion of Hunt Unit 154. Bald Mountain supports a variety of mountain-shrub species, but PJ is currently encroaching into the area. This area falls within both year-round and crucial winter mule deer habitat, and deer have frequently been documented using the area (via aerial surveys and collar data). Over several years, we would like to thin PJ over a total of 11,000 acres in this area to enhance wildlife habitat and to reduce the potential of losing native vegetation to competition or wildfire. Additionally, we would like to hire a contractor to install welded drill-stem fencing around 12 sensitive springs in this area so that important riparian resources may be protected from large nonnative ungulates such as feral horses and cattle.

Due to the large scale of this project, implementation will occur incrementally over several years to keep objectives manageable. The total budget for this project is estimated to be \$2.4 million, but we will seek funding in smaller increments from various sources over several years. For FY24, we are seeking funding for PJ treatment of up to 2,291 acres (\$263,465) from several sources.



PJ thinning by hand crews in the proposed project area is authorized under an existing EA, so no further NEPA analysis is required. This EA authorized 3,000 acres of PJ hand thinning in our proposed project area, of which 2,291 acres remain untreated.

## Project Treatments and Actions

**Treatment Name:** Potential Treatment Area - FY24

**Acres:** 2,290.7

**Action:** Phase 1-2 Hand Thinning or Lop-Scatter

**Planned Start:** 10/2023

**Action:** Phase 1 Hand Thinning or Lop-Scatter

**Planned Start:** 10/2023

## Project Monitoring

### Monitoring Plan:

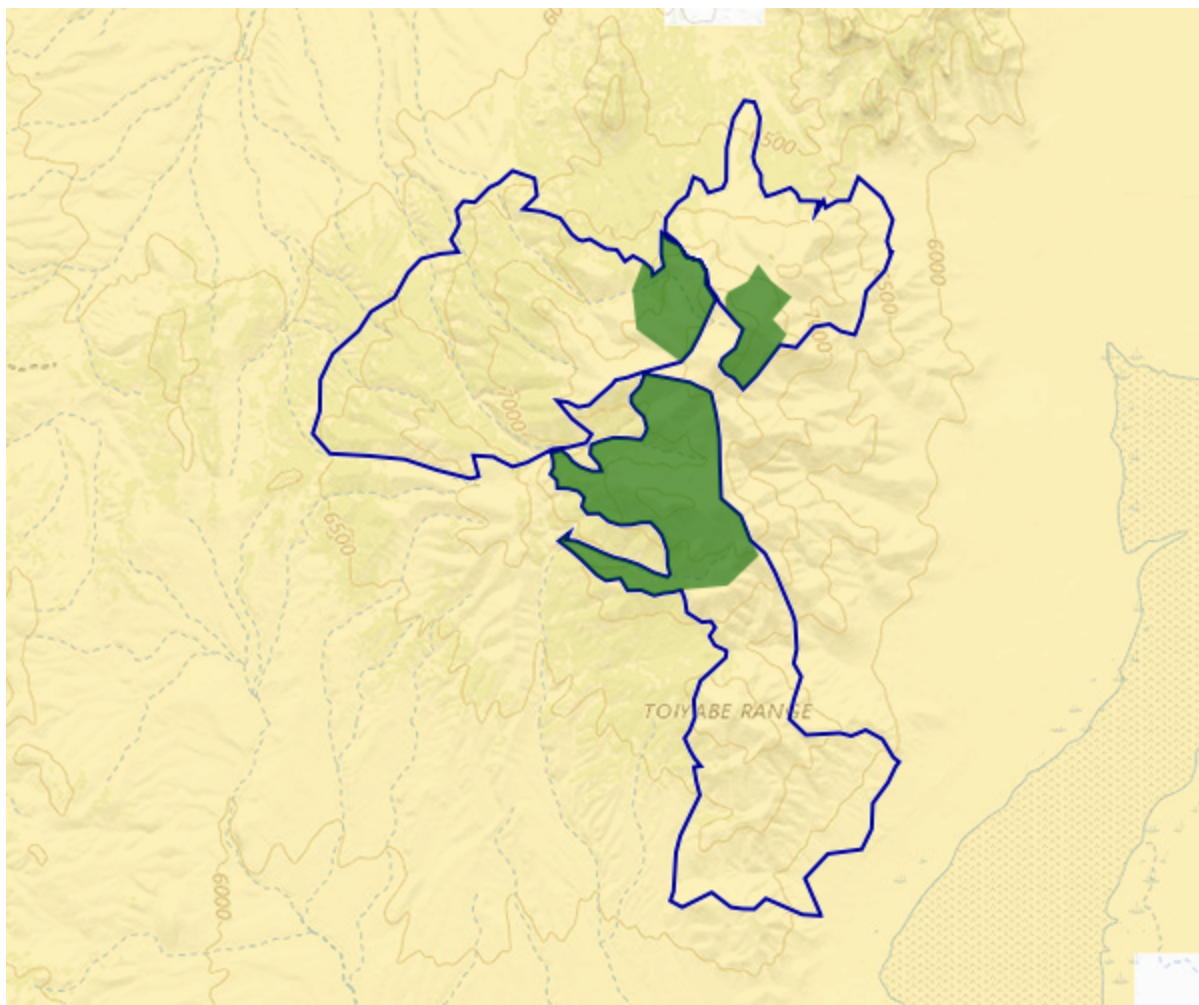
Long-term photo monitoring will be conducted after PJ removal to assess how the shrub community responds to treatment over time. Wildlife population responses will be monitored via trail cameras and/or aerial survey.

## Project Funding and Budget

Budget Item	Bureau of Land Management 2024	NDOW Heritage Trust Account 2024	Nevada Dream Tag 2024	Subtotal
<b>Contracts</b>				
PJ Removal	\$119,787.42	\$68,677.58	\$75,000	\$263,465
<b>Total Costs:</b>	<b>\$119,787.42</b>	<b>\$68,677.58</b>	<b>\$75,000</b>	<b>\$263,465</b>

### Budget Narrative:

Estimated cost of PJ hand-thinning is \$115/acre. Project cost for treating 2,291 acres would be \$263,465. We are requesting \$68,677.58 from the Heritage account, and will fund the remaining project balance through other sources (potentially through BLM AA, Dream Tag, and/or NGM Toiyabe Mule Deer Mitigation).



#### Boundaries

- County Boundary    ● USFS Office Boundaries    ● BLM Office Boundaries    ● NDOW Region Boundary

#### Land Status

- Bureau of Indian Affairs    ● Bureau of Land Management    ● Bureau of Reclamation
- Department of Defense    ● Department of Energy    ● Fish and Wildlife Service    ● US Forest Service
- National Park Service    ● Nevada State Lands    ● Nevada Park Service    ● Private    ● Other

#### Project Geometry

- Project Boundary    ● Treatment Area: Potential Treatment Area - FY24



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** FY24 Corta Fire Habitat Improvement Phase II

**Project ID:** 841

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Matt Glenn Nevada Department of Wildlife

**Phone Number:** (775) 777-2369

**Email:** mglenn@ndow.org

## Project Partners

Name	Agency	Role
No results		

## Project Schedule

**Project Start Date:** 11/01/2023 (FY 2024)

**Projected Completion Date:** 04/30/2025 (FY 2025)

**Multi-year Project:** yes

**Project Schedule:**

Project Timeline:

- Fall 2023- Seed purchased and delivered to nursery for grow out
- Fall 2024- Seedlings picked up and delivered to site for planting by contract and volunteer labor
- Spring 2025- Any seedlings not planted in fall of 2024 will be planted

## Project Location and Land Status

**Location Narrative:**

Harrison Pass, Ruby Mountains Elko County Nevada

**NDOW Region:** Eastern

**NDOW Management Units:** 103, 102

**Nevada Sage Grouse Population Management Unit:** South Fork

**County:** Elko

## Land Status

Land Status	Acres	Percent of Project
Private	164.1	3.7
Forest Service	4287.8	96.3

**Bureau of Land Management Office:** Elko District - Tuscarora Field Office

**US Forest Service Ranger District:** Humboldt-Toiyabe National Forest - Mountain City-Ruby Mountains-Jarbridge Ranger District

**Special Land Designations:** N/A

## Project Summary and Justification

**Project Activity and Sub-activity:** HABITAT RESTORATION and REHABILITATION: Wildland fire rehabilitation

### Project Objectives:

- To plant seedlings on habitat impacted by wildfire to improve ecological conditions, prevent expansion of invasive annual grasses, and rehabilitate wildlife habitat.
- To measurably increase wildlife populations, wildlife use, or habitat for the benefit of public use and hunter success.

### NDOW Initiative Addressed:

- Mule Deer Enhancement Program (NDOW)
- Shared Stewardship (USFS)

### Strategic Habitats and Threats Addressed:

- Other riparian: meadow, marsh, spring, seep, and lakeshore: Over-utilization, Nonnative invasive species
- Pinyon-juniper woodland (not encroachment): Wildfire or lack of fire, Drought and disease
- Low-elevation sagebrush dominated shrubland: Nonnative invasive species, Drought and disease, Wildfire or lack of fire
- Upper montane coniferous forest and woodland: Drought and disease, Wildfire or lack of fire
- High-elevation sagebrush dominated shrubland: Wildfire or lack of fire
- Linear riparian: perennial and ephemeral rivers and streams: Nonnative invasive species
- Salt desert shrub: Nonnative invasive species
- Aspen woodland: Wildfire or lack of fire

**Priority Resource Impacted:** Big Game, Upland Game

**Priority Species Impacted:** Chukar, Greater sage-grouse, Merriam's turkey, Mountain Lion, Mule deer

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** yes

**Project Clearance or Authorization Status:** Complete

### Project Rationale:

The treatment prescription necessary to restore brush species at this site just requires a single step in planting brush species seedlings. In this project approximately 150,000 antelope bitterbrush and sagebrush species seedlings would be grown out from seed at a nursery for 1-2 years, transported to the site, then planted by both contract and volunteer labor. Seed would be provided by the Nevada Department of Wildlife to the nursery in the fall of 2023 to be grown out for approximately one calendar year, seedlings will then either be planted in fall of 2024 or cold stored and planted in spring of 2025. Due to the

high use of this area by migrating deer, seedlings will require protective mesh to protect the young plants and allow time to mature sufficiently to handle herbivory.

A desktop analysis of the site has been completed to determine species composition and soil profiles to help increase likelihood of success of the project. Sagebrush composition is largely low and mountain sage with antelope bitterbrush as a higher density component of the composition. When considering the logistics of the nursery grow out process, and the time it takes to grow out low sage (in most cases two-years), antelope bitterbrush and mountain sage stand out as the best candidates for our purposes. Timing of the planting portion of the project is planned for fall, after the soil at the site has likely received some moisture and the young plants can take advantage the higher soil moisture throughout the winter and spring months.

## Project Treatments and Actions

**Treatment Name:** Phase II

**Acres:** 742

**Action:** Planting (container stock)

**Approach Narrative:**

Deliver seed for grow out, allow one year for growth then contract the planting.

**Planned Start:** 11/2023

## Project Monitoring

### Monitoring Plan:

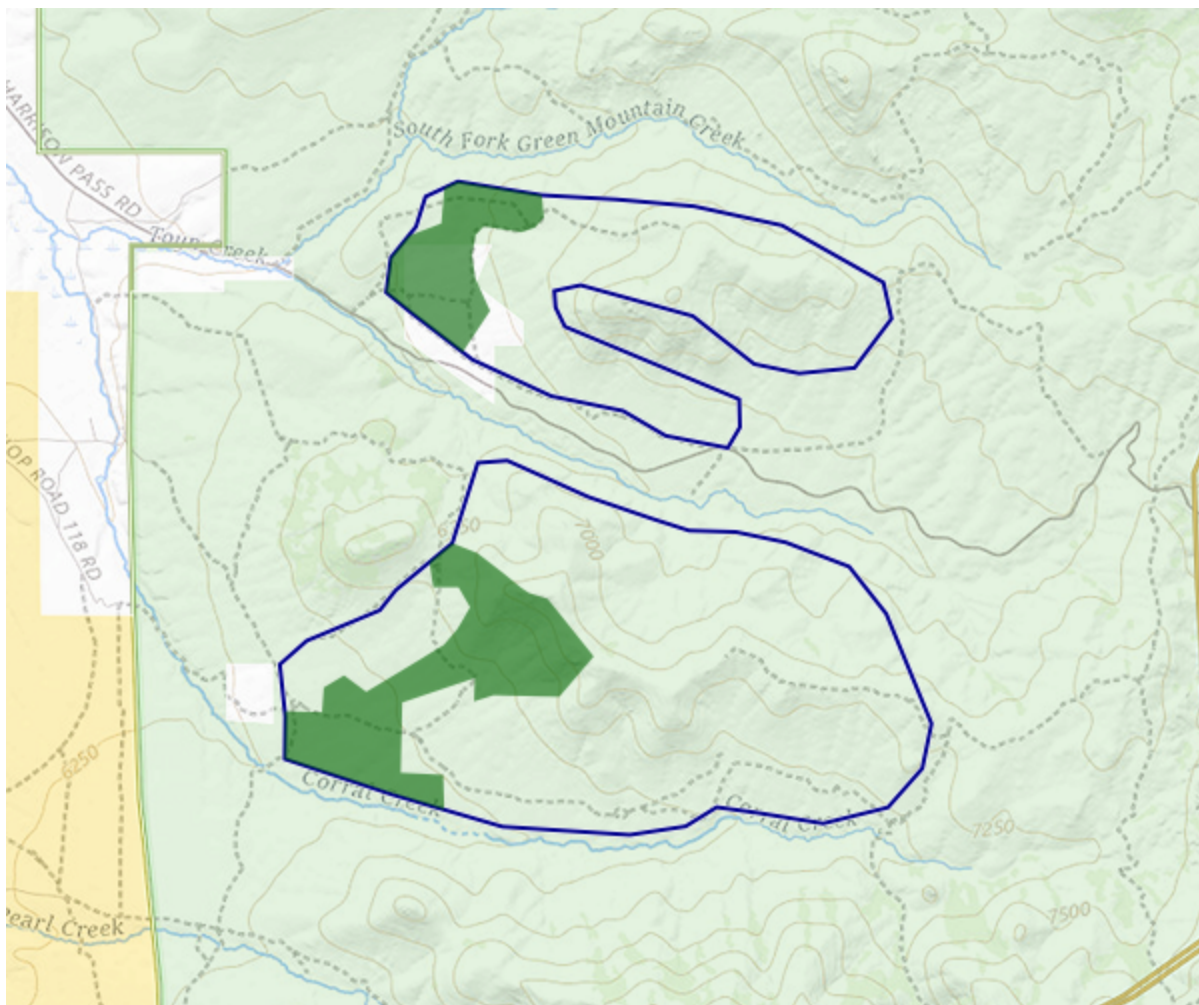
Photo points will be established and retaken on a 5-year interval.

## Project Funding and Budget

Budget Item	NDOW Habitat Conservation Fee 2024	NDOW Heritage Trust Account 2024	NDOW Upland Game Stamp 2024	Subtotal
<b>Materials Purchase</b>				
Seedlings	\$35,000	\$60,000	\$25,000	\$120,000
<b>Total Costs:</b>	<b>\$35,000</b>	<b>\$60,000</b>	<b>\$25,000</b>	<b>\$120,000</b>

### Budget Narrative:

The identified budget will be used to purchase antelope bitterbrush seedlings and to pay for the contractual labor to plant them. All funds managed by NDOW personnel.



#### Boundaries

- County Boundary    ● USFS Office Boundaries    ● BLM Office Boundaries    ● NDOW Region Boundary

#### Land Status

- Bureau of Indian Affairs    ● Bureau of Land Management    ● Bureau of Reclamation
- Department of Defense    ● Department of Energy    ● Fish and Wildlife Service    ● US Forest Service
- National Park Service    ● Nevada State Lands    ● Nevada Park Service    ● Private    ● Other

#### Project Geometry

- Project Boundary    ● Treatment Area: Phase II



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** FY24 Wildcat Fire Mule Deer Migration Corridor Bitterbrush Planting

**Project ID:** 831

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Brittany Trimble Nevada Department of Wildlife

**Phone Number:** (775) 777-2393

**Email:** btrimble@ndow.org

## Project Partners

Name	Agency	Role
Kari Huebner	Nevada Department of Wildlife	Implementation Lead
Brittany Trimble	Nevada Department of Wildlife	Implementation Lead
US FOREST SERVICE	US Forest Service	Agency Cooperator

## Project Schedule

**Project Start Date:** 10/01/2023 (FY 2024)

**Projected Completion Date:** 04/30/2024 (FY 2024)

**Multi-year Project:** no

**Project Schedule:**

Bitterbrush seedlings will be ordered at Lucky Peak Nursery in time for seedling growout and out-planting in fall 2023. The planting contract performance period will be fall 2023 through spring 2024, but planting will be targeted for completion in fall 2023.

## Project Location and Land Status

**Location Narrative:**

Planting will occur on approximately 1,000 acres of the USFS HTNF Jarbidge Ranger District portion of the 2022 Wildcat Fire in Elko County.

**NDOW Region:** Eastern

**NDOW Management Units:** 072

**Nevada Sage Grouse Population Management Unit:** O'Neil Basin

**County:** Elko

## Land Status

Land Status	Acres	Percent of Project
Forest Service	3073.4	100

**Bureau of Land Management Office:** Elko District - Wells Field Office

**US Forest Service Ranger District:** Humboldt-Toiyabe National Forest - Mountain City-Ruby Mountains-Jarbridge Ranger District

**Special Land Designations:** N/A

## Project Summary and Justification

**Project Activity and Sub-activity:** HABITAT RESTORATION and REHABILITATION: Wildland fire rehabilitation

### Project Objectives:

- To measurably increase wildlife populations, wildlife use, or habitat for the benefit of public use and hunter success.
- To plant seedlings on habitat impacted by wildfire to improve ecological conditions, prevent expansion of invasive annual grasses, and rehabilitate wildlife habitat.

### NDOW Initiative Addressed:

- Mule Deer Enhancement Program (NDOW)
- Shared Stewardship (USFS)

### Strategic Habitats and Threats Addressed:

- High-elevation sagebrush dominated shrubland: Wildfire or lack of fire

**Priority Resource Impacted:** Big Game, Diversity/Non-game, Upland Game

**Priority Species Impacted:** Dark Kangaroo Mouse, Greater sage-grouse, Mule deer, Pronghorn antelope

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** yes

**Project Clearance or Authorization Status:** In Progress

### Project Rationale:

The 2022 Wildcat Fire burned 21,423 acres total with 17,353 acres occurring on BLM land, 3,075 acres occurring on Forest Service land, and 955 acres on private land. The burned area is classified as crucial stop over habitat, migration corridor, and summer range for the Area 7 mule deer herd, as well as year-round pronghorn antelope, elk, Greater Sage-grouse, Lahontan cutthroat trout, and dark kangaroo mouse habitat. Elko BLM seeded the entire BLM-managed burned area with upland grasses, forbs, and shrubs in fall 2022-early 2023 and is also planning to plant up to 1 million bitterbrush seedlings throughout burned BLM land over subsequent years. Forest Service is unsure how much funding they will receive to be able to reseed or plant seedlings on their portion of the burn, so in collaboration with the HTNF Jarbridge Ranger District, NDOW seeded a sagebrush and watershed mix on 1,550 acres of Forest Service land in January 2023 and the Area 7 MDEP subcommittee proposed bitterbrush seedling planting for fall 2023 to supplement the seeding in restoring the mountain brush community so relied upon by the diverse wildlife community in the area. The HTNF Jarbridge Ranger District is supportive of this effort and has committed to completing any NEPA/SHPO clearance required before planting is scheduled to occur in fall 2023. This project will also be a Shared Stewardship project, which may lead to additional funding availability for this project.

The proposed project area has experienced severe drought in the years previous to the Wildcat Fire and, in combination with the decadent age of the mountain brush community, was in an extremely stressed state at the time of the wild fire. These



conditions have been shown to reduce bitterbrush resprouting post-fire and, given the reluctance to drill-seed on Forest Service land, the near-zero establishment of bitterbrush from aerial seeding, and the importance of bitterbrush to the Area 7 mule deer herd during their migration through this burned area, planting of bitterbrush seedlings was determined to be a priority to help re-establish the habitat values in the burned area. Of the 3,075 acres of Forest Service land that burned in the Wildcat Fire, 1,000 acres will be targeted for planting 74,000 antelope bitterbrush seedlings in "shrub islands" with biodegradable caging to protect the seedlings from overutilization in the first couple years vital for establishment.

## Project Treatments and Actions

**Treatment Name:** Wildcat Fire Migration Corridor FS Seedling Planting

**Acres:** 3,074.9

**Action:** Planting (container stock)

**Approach Narrative:**

34,000 containerized bitterbrush seedlings will be planted by contract between October 2023-spring 2024 depending on site access and planting conditions.

**Planned Start:** 10/2023

**Action:** Planting (root stock)

**Approach Narrative:**

40,000 bareroot bitterbrush seedlings will be planted by contract between October 2023-spring 2024 depending on site access and planting conditions.

**Planned Start:** 10/2023

## Project Monitoring

### Monitoring Plan:

Monitoring will include repeated photo points that will be established in summer 2023 before project implementation and revisited annually to assess habitat changes over time, as well as ocular estimates of bitterbrush establishment from planting. Photo points will be shared with all project cooperators so everyone has the opportunity to revisit and contribute to project monitoring.

Implementation of planting will be inspected throughout the period of performance and upon completion of implementation to ensure the Scope of Work was adhered to appropriately.

## Project Funding and Budget

Budget Item	NDOW Heritage Trust Account 2024	Nevada Dream Tag 2024	Rocky Mountain Elk Foundation 2024	Subtotal
<b>Contracts</b>				
Planting Contract Services	\$4,000	\$7,000	\$35,000	\$46,000
<b>Materials Purchase</b>				
Containerized Seedlings	\$19,550	\$0	\$0	\$19,550
Bareroot Seedlings	\$18,000	\$0	\$0	\$18,000

Budget Item	NDOW Heritage Trust Account 2024	Nevada Dream Tag 2024	Rocky Mountain Elk Foundation 2024	Subtotal
Seedling Cages	\$33,450	\$0	\$0	\$33,450
<b>Total Costs:</b>	<b>\$75,000</b>	<b>\$7,000</b>	<b>\$35,000</b>	<b>\$117,000</b>

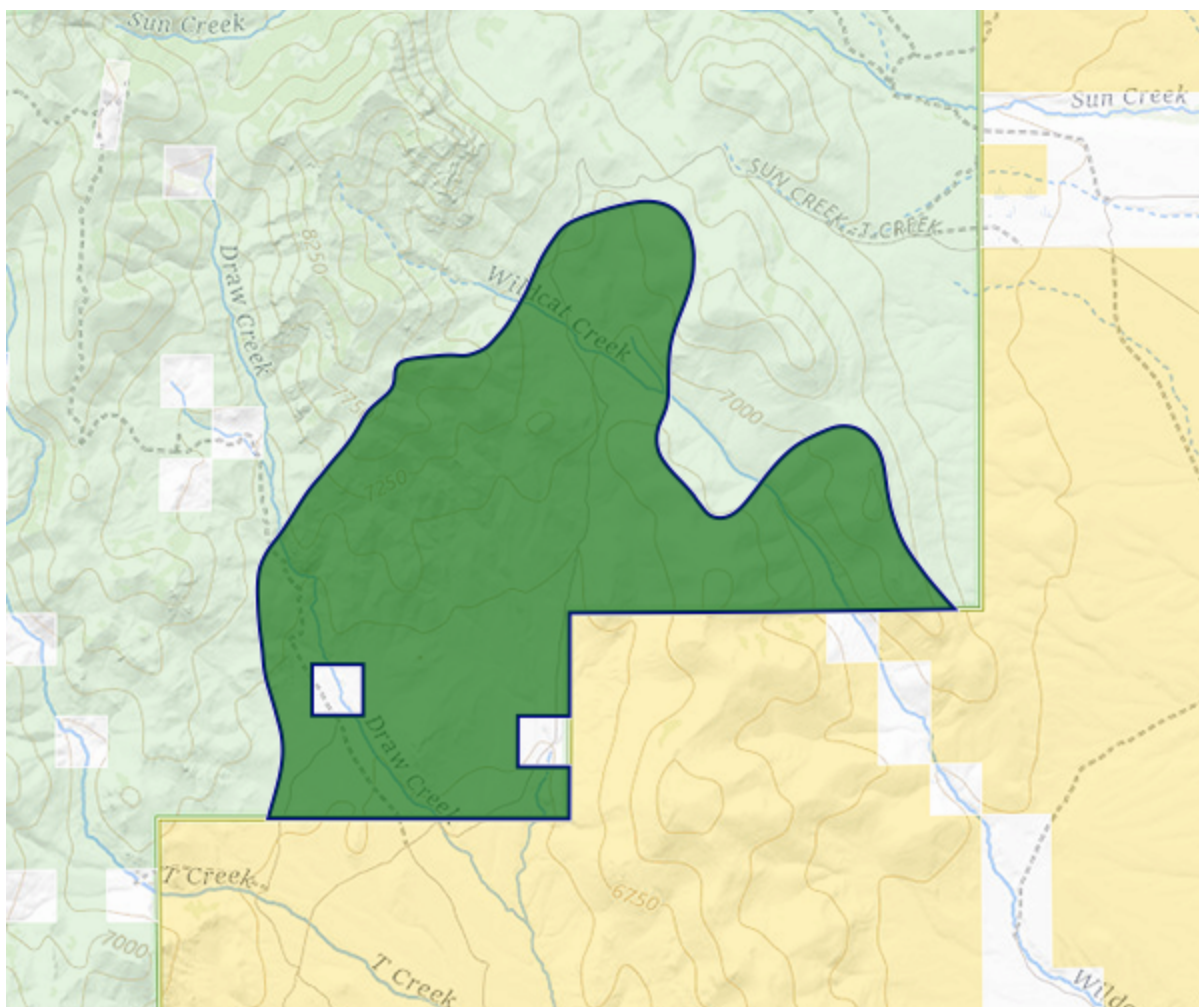
**Budget Narrative:**

34,000 containerized seedlings @ \$0.58/plug = \$19,550.00

40,000 bareroot seedlings @ \$0.45/plug = \$18,000.00

Caging to protect ~50,000 seedlings = \$33,450.00

Seedling planting contract @ an estimated \$0.62/plug = \$46,000.00



#### Boundaries

- County Boundary    ● USFS Office Boundaries    ● BLM Office Boundaries    ● NDOW Region Boundary

#### Land Status

- Bureau of Indian Affairs    ● Bureau of Land Management    ● Bureau of Reclamation
- Department of Defense    ● Department of Energy    ● Fish and Wildlife Service    ● US Forest Service
- National Park Service    ● Nevada State Lands    ● Nevada Park Service    ● Private    ● Other

#### Project Geometry

- Project Boundary    ● Treatment Area: Wildcat Fire Migration Corridor FS Seedling Planting



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** FY24 Lake Tahoe Fish Management Structure Phase 1

**Project ID:** 832

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Sam Sedillo Nevada Department of Wildlife

**Phone Number:**

**Email:** samuel.sedillo@ndow.org

## Project Partners

Name	Agency	Role
Steve Phillips	Incline Village General Improvement District	Non-Agency Cooperator
Travis Hawks	Nevada Department of Wildlife	Agency Cooperator

## Project Schedule

**Project Start Date:** 07/01/2023 (FY 2024)

**Projected Completion Date:** 04/01/2024 (FY 2024)

**Multi-year Project:** yes

**Project Schedule:**

Phase 1: Design, Permitting and consultation to be completed by the end of FY2024

## Project Location and Land Status

**Location Narrative:**

The Lake Tahoe Fisheries Management Structure will be constructed on Third Creek in Incline Village between Lakeshore Blvd and its terminus into Lake Tahoe.

**NDOW Region:** Western

**NDOW Management Units:** 194

**Nevada Sage Grouse Population Management Unit:** Project not within a sage-grouse PMU

**County:** Washoe

## Land Status

Land Status	Acres	Percent of Project
Private	841.7	69.6
Forest Service	367.6	30.4

**Bureau of Land Management Office:** Carson City District - Sierra Front Field Office

**US Forest Service Ranger District:** N/A

**Special Land Designations:** USDA Forest Service | Mt. Rose Wilderness | Designated Wilderness

## Project Summary and Justification

**Project Activity and Sub-activity:** POPULATION MANAGEMENT, MONITORING, and RESEARCH: Aquatic Wildlife

### Project Objectives:

- To reintroduce species to promote species recovery or expansion.
- To remove non-native fish to promote sport-fish populations and management.
- To remove non-native fish to promote native fish recovery actions.
- To measurably increase wildlife populations, wildlife use, or habitat for the benefit of public use and hunter/angler success.
- To conduct population surveys that inform management or monitoring needs.
- To stock fish in order to increase recreational angler use and success
- To reintroduce species to promote wildlife-dependent recreation.

### NDOW Initiative Addressed:

- Nevada Biodiversity Initiative (USFWS)

### Strategic Habitats and Threats Addressed:

- Upper montane coniferous forest and woodland: Anthropogenic development
- Lakes and reservoirs: Nonnative invasive species, Shoreline development, Water diversion
- Linear riparian: perennial and ephemeral rivers and streams: Anthropogenic development, Nonnative invasive species, Over-utilization, Water diversion
- Other riparian: meadow, marsh, spring, seep, and lakeshore: Anthropogenic development, Water diversion

**Priority Resource Impacted:** Fish

**Priority Species Impacted:** Lahontan cutthroat trout, Rainbow trout

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** no

**Project Clearance or Authorization Status:** Not Applicable

### Project Rationale:

Purpose and goals

Third Creek is in Incline Village on Incline Village General Improvement District (IVGID) land and is an important spawning tributary for Lake Tahoe Rainbow Trout and potentially Lahontan Cutthroat Trout in the future. In cooperation with IVGID, NDOW has been operating both the "Lake Tahoe LCT Feasibility Study" and the "Lake Tahoe Rainbow Trout Study" on Third Creek since 2014. These projects utilize a temporary weir and fish trap (annually installed fish management structure) to capture, monitor, tag, and spawn all adfluvial salmonids that utilize Third Creek for spawning purposes in the spring. These captured fish provide valuable information on the health of the Lake Tahoe fishery, eggs for the statewide stocking program, and are being used to develop a realistic plan to reestablish the native Lahontan Cutthroat Trout to the Lake Tahoe Basin. While reestablishment of LCT is a long term goal for the Basin, the risk of hybridization with Rainbow Trout remains an issue and solutions have yet to be fully grasped. This temporary fish management structure is maintained by NDOW staff and

volunteers on a daily basis from March through May on most years. The temporary structure has proven effective at preventing fish from moving upstream but can only be maintained at certain flows before runoff occurs in the beginning of May. A need for a permanent fish management structure has been identified based on the results of both aforementioned studies. In addition to constructing a permanent fish management barrier, the landowner (Incline Village General Improvement District) will remove the current pedestrian foot bridge and subsequent installation of a larger more accessible bridge that will incorporate an educational component and viewing area for the large numbers of visiting public to the site. We are requesting funding to design, permit, and consult for a permanent Lake Tahoe Fisheries Management Structure to be installed on Third Creek.

The overarching goals of this project are to construct a permanent fish management structure that will allow the Nevada Department of Wildlife to collect wild Rainbow Trout eggs annually, work towards the recovery of Lahontan Cutthroat Trout utilizing a realistic approach and incorporate public education and access to view on the groundwork. This project will be completed in two phases, the first being the design, permitting and consultation phase followed by the second being in stream construction. NDOW previously received \$50,000 from the Habitat Conservation fee to partially fund phase 1 of the Lake Tahoe Fish Management Structure, the additional \$80,000 requested from the Nevada Heritage Account will fully fund phase 1 of the project. Any additional funding not used during phase 1 of the project will be rolled over to construction.

NDOW is currently working with Stantec Design firm on the Scope of Work and 30% designs. Project materials will be available at request to the Nevada Heritage Account Committee.

#### Approach and Tasks

**Design:** We will identify and work with a design and engineering firm (Stantec) that has experience in fisheries management structures as well as public works projects. This process will result in the permitting and design of a fisheries management structure that will meet the needs of the Nevada Department of Wildlife. In this task, we will consider the role of adaptive management to develop more comprehensive plans to ensure that the fish management barrier will meet all requirements for future project success.

**Permitting:** To progress this project forward, permitting will be initiated with NDEP(401) and Army Corps of Engineers (404) as well as other required permits as identified. The designs developed will be used in the permitting process.

**Consultation:** NDOW will consult with the selected design and engineering firm which will help to develop a stepwise approach to project execution.

#### Anticipated Beneficial Effects

Increasing the operational time and capacity of the Lake Tahoe Fisheries Management Structure will allow for NDOW staff to more reliably capture and spawn an increased number of Rainbow Trout annually resulting in a more stable source for quality Rainbow Trout eggs benefitting the departments statewide fish stocking program. Identifying and utilizing in-state sources for brood stock Rainbow Trout (as this project does) will help the Nevada Department of Wildlife continue to maintain its popular fisheries with quality fish unique to Nevada. Additionally, the permanent structure will allow for a more thorough and quantitative data collection ability that will inform future management for the reestablishment of Lahontan Cutthroat Trout as the upper reaches of Third Creek have been identified as a potential site for LCT reintroduction.

The project location selected will also incorporate educational signage that will increase the public's awareness of the NDOW projects and the Lake Tahoe fishery. Currently NDOW has a great working relationship with Incline Village, and we anticipate this project to improve our reach within the community and the general public.

This project will provide a long-term solution to comprehensively manage the spawning run of Rainbow Trout in Third Creek. The fish management structure will allow for NDOW to preemptively begin addressing upcoming Lahontan Cutthroat Trout management practices and management within the Tahoe Basin.

## Project Treatments and Actions

**Treatment Name:** Lake Tahoe Fisheries Management Site

**Action:** Removal of undesirable aquatic species (physical removal)

**Approach Narrative:**

If needed, NDOW staff will use the trout population and distribution data on Third

Creek to determine potential areas for LCT populations in the upper reaches of Third Creek. If suitable habitat is available, NDOW will conduct physical removal of invasive trout through electrofishing in those pre-determined areas. This will not affect adfluvial populations of Lake Tahoe Rainbow Trout.

**Planned Start:** 04/2023

**Action:** Conduct population surveys

**Approach Narrative:**

NDOW staff will conduct population surveys of trout using e-fishing in Third Creek

to determine the extent of Rainbow Trout, and in the future, Lahontan Cutthroat Trout distribution in Third Creek and its tributaries

**Planned Start:** 04/2023

**Action:** Coldwater fish species stocking

**Approach Narrative:**

NDOW staff will capture and spawn Rainbow Trout annually at the Third Creek Fisheries Management Structure annually resulting in quality Rainbow Trout eggs benefitting the

departments statewide fish stocking program.

**Planned Start:** 04/2023

**Action:** Produce monitoring guidelines for aquatic wildlife species

**Approach Narrative:**

NDOW staff will utilize the permanent Fisheries Management Barrier to gather more

thorough and quantitative data to inform future management for the reestablishment of Lahontan Cutthroat Trout in Third Creek

**Planned Start:** 04/2023

## Project Monitoring

### Monitoring Plan:

The initial project phase will be monitored through the success at coordinating with a design and engineering firm through their development of initial designs and permitting processes. Once the project is completed, monitoring of the completed Lake Tahoe Fisheries Management Structure will be done on an annual basis as it relates to specific projects. Annual reports on the Lake Tahoe Rainbow Trout Study and the Lake Tahoe LCT Feasibility Study will be available by request to the Nevada Heritage Committee.

## Project Funding and Budget

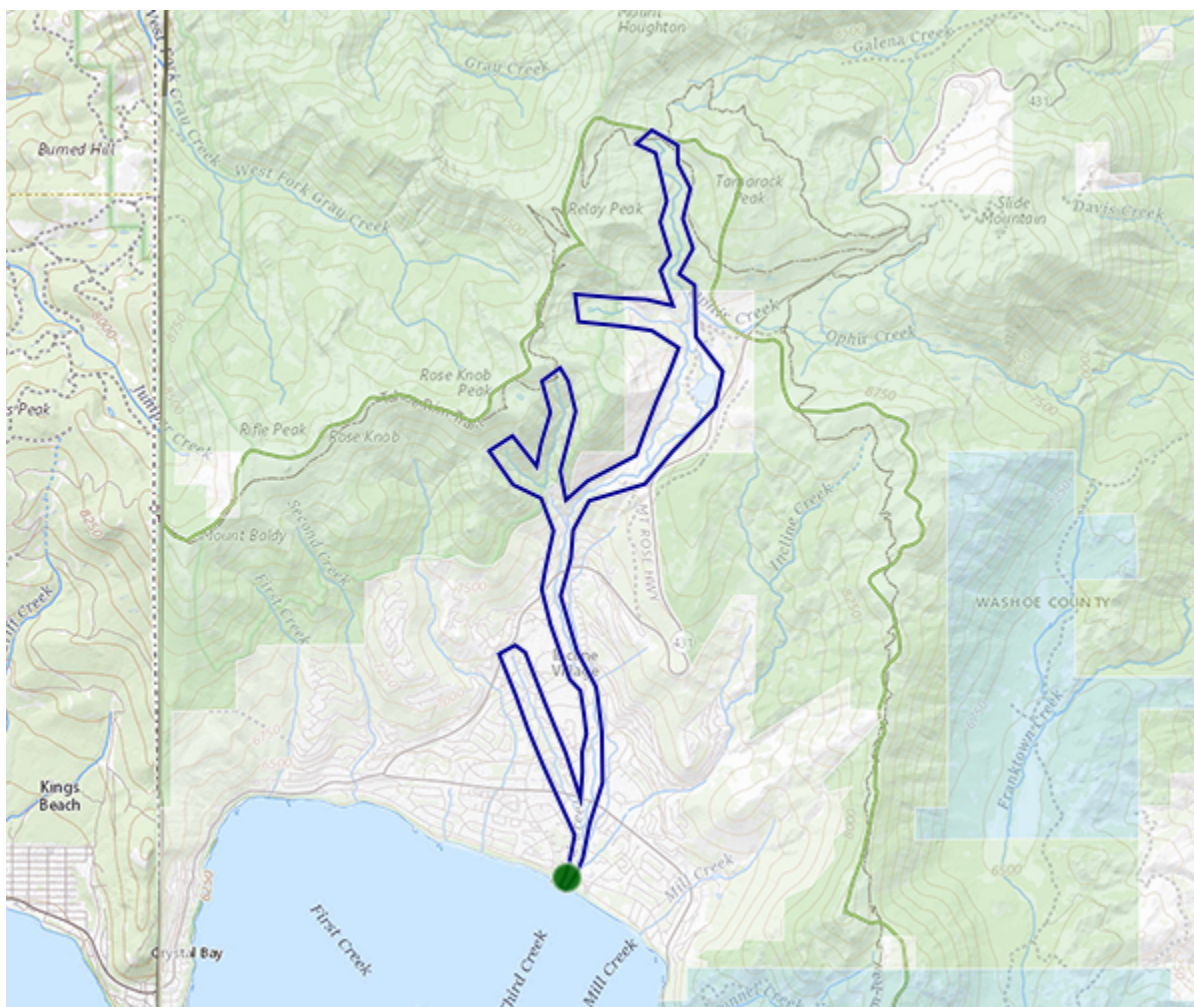
Budget Item	NDOW Habitat Conservation Fee 2023	Other/Not Specified 2023	NDOW Heritage Trust Account 2024	Subtotal
<b>Other</b>				

Budget Item	NDOW Habitat Conservation Fee 2023	Other/Not Specified 2023	NDOW Heritage Trust Account 2024	Subtotal
Designs Planning, and permitting for Fish Management Structure	\$50,000	\$0	\$80,000	\$130,000
IVGID COP Funding for Third Creek Bridge Consultation, Design, Permitting, and Construction	\$0	\$60,000	\$0	\$60,000
<b>Total Costs:</b>	<b>\$50,000</b>	<b>\$60,000</b>	<b>\$80,000</b>	<b>\$190,000</b>

**Budget Narrative:**

NDOW Heritage Funding will be available for project designs, permitting and consultation in FY 2024 if awarded. Additional funding sources such as the TU Sagebrush Conservation Grant will be applied for depending upon needs as well as potential National Fish and Wildlife Federation funds. \$50,000 is available from the Nevada Habitat Conservation fee for the designs planning, and permitting for Fish Management Structure (Awarded FY23) and \$60,000 is available from IVGID for the Third Creek Bridge design, consultation, permitting, and future construction. All project costs attached are estimated based on meetings with both the design firm (Stantec) and IVGID. Project planning funding is estimated at \$190,000 for the Fish Management Structure. Implementation and construction costs are estimated at based upon similar projects.





### Boundaries

- County Boundary
- USFS Office Boundaries
- BLM Office Boundaries
- NDOW Region Boundary

### Land Status

- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Reclamation
- Department of Defense
- Department of Energy
- Fish and Wildlife Service
- US Forest Service
- National Park Service
- Nevada State Lands
- Nevada Park Service
- Private
- Other

### Project Geometry

- Project Boundary
- Treatment Area: Lake Tahoe Fisheries Management Site



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** FY24 Nevada Water Developments

**Project ID:** 862

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Matt Maples Nevada Department of Wildlife

**Phone Number:** (775) 688-1568

**Email:** mmaples@ndow.org

## Project Partners

Name	Agency	Role
Kenny Pirkle	Nevada Department of Wildlife	Agency Cooperator
Sam Hughes	Nevada Department of Wildlife	Agency Cooperator
Tommy Casey	Nevada Department of Wildlife	Agency Cooperator

## Project Schedule

**Project Start Date:** 07/01/2023 (FY 2024)

**Projected Completion Date:** 06/30/2024 (FY 2024)

**Multi-year Project:** no

**Project Schedule:**

Summer 2023 - Complete annual aerial inspections of guzzlers and sling materials as needed in northern Nevada.

Winter 2023/Spring 2024 - Complete annual aerial inspections of guzzlers and sling materials as needed in southern Nevada.

Summer 2024 - Complete annual aerial inspections of guzzlers and sling materials as needed in northern Nevada.

## Project Location and Land Status

**Location Narrative:**

Annual maintenance flights occur throughout the state at existing water development (guzzler) locations. Slinging materials for guzzler construction or maintenance activities will be completed at guzzler sites planned for construction based on each region's annual build schedule. The specific water developments are unknown at this time. When possible sling materials in completed in coordination with other flight operations to minimize ferrying costs and increase efficiency.

**NDOW Region:** Not Applicable – Statewide Project

**NDOW Management Units:** Not Applicable – Statewide Project

**Nevada Sage Grouse Population Management Unit:** Not Applicable – Statewide Project

**County:** Not Applicable – Statewide Project

## Land Status

Land Status	Acres	Percent of Project
No results		

**Bureau of Land Management Office:** Not Applicable – Statewide Project

**US Forest Service Ranger District:** Not Applicable – Statewide Project

## Project Summary and Justification

**Project Activity and Sub-activity:** HABITAT IMPROVEMENT or MANAGEMENT: Install, maintain, or remove artificial habitat structures

### Project Objectives:

- To measurably increase wildlife populations, wildlife use, or habitat for the benefit of public use and hunter success.
- To install, rebuild, or maintain artificial water development(s) that increase water availability for the direct benefit of wildlife populations.

**NDOW Initiative Addressed:** No initiatives

**Priority Resource Impacted:** Not Applicable – Statewide Project

**Priority Species Impacted:** Not Applicable – Statewide Project

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** no

**Project Clearance or Authorization Status:** Not Applicable

### Project Rationale:

Purpose and Goals:

The purpose of this project is to complete annual aerial inspections at approximately 450 guzzlers throughout Nevada and where necessary, transport materials and personnel to existing or new guzzler sites in anticipation of project construction. Annual inspections of guzzler sites is essential to assess the condition and functionality of each project as well as assess water supply levels available at each guzzler. Where possible, minor repairs will be completed during the inspection flights and maintenance needs not corrected during the flights will be recorded and completed at another time. Many guzzlers serve as the only water source available to wildlife in a given area, thus continuing to ensure each site is functioning properly is essential to those wildlife populations. The results of these inspection flights are used to determine and prioritize maintenance needs for each water development crew.

Approach and Tasks:

Inspection flights will be completed to the greatest extent possible with NDOW helicopters and pilots. When this is not possible due to scheduling conflicts, a contracted helicopter service may be used. Water development crews will perform an inspection, either from the air or on the ground, of guzzlers scheduled for inspection. If possible given time constraints, the helicopter may land at certain guzzlers so that minor repairs or a more thorough inspection can be completed. During the inspection flights, the condition of all major guzzler components, such as the apron, plumbing, tanks, drinker, and fence will be recorded. The water level of each guzzler will also be recorded.

Slinging of guzzler materials and personnel to existing or proposed guzzler sites is necessary when the project site cannot be reasonably accessed by driving trucks and trailers to the site. Slinging materials transports all major guzzler components to the project site in anticipation of constructing or performing major maintenance at a project site. It is estimated that approximately four water development projects may require materials slinging during FY2024. Where possible, these activities are scheduled with other flight operations to reduce overall costs and increase efficiency.

#### Anticipated Beneficial Effects:

Guzzlers provide an essential source of dedicated water to a multitude of wildlife species such as bighorn sheep, mule deer, elk, upland game birds, and other non-game wildlife. Ensuring each unit is functioning is essential to providing a secure and reliable source of water and these inspection flights are used each year to assess and prioritize maintenance needs across the state.

This project meets the mission objectives of the Wildlife Heritage Account by improving habitat and enhancing populations of bighorn sheep, elk, and mule deer in Nevada. The status and condition of guzzlers are critical to ensure these water sources continue to provide a reliable source of water during the hot and dry months.

## Project Treatments and Actions

**Treatment Name:** Water Development Inspection Flights

**Acres:** 70,739,191.5

**Action:** Install or maintain guzzlers

#### Approach Narrative:

Conduct aerial inspections and maintenance of guzzlers and sling materials, as needed into new or existing guzzler sites.

**Planned Start:** 07/2023

## Project Monitoring

#### Monitoring Plan:

This project serves to monitor the condition and water supply at guzzlers. Inspection results are entered into a water development database for tracking repair needs. Expenditures and financial tracking is completed by the Wildlife Staff Specialist overseeing the water development program.

## Project Funding and Budget

Budget Item	NDOW Heritage Trust Account 2024	USFWS Grant - Water Development and Maintenance 2024	Subtotal
<b>Other</b>			
Air Operations	\$50,000	\$50,000	\$100,000
<b>Total Costs:</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$100,000</b>

#### Budget Narrative:

Heritage funding will be used to pay flight costs, either through NDOW helicopters or contracted helicopter services. The NDOW water development grant will cover the remaining costs of all aerial operations needed for the water development program.



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** Bruneau WMA Habitat Improvement

**Project ID:** 848

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Matt Glenn Nevada Department of Wildlife

**Phone Number:** (775) 777-2369

**Email:** mglenn@ndow.org

## Project Partners

Name	Agency	Role
Matt Glenn	Nevada Department of Wildlife	Implementation Lead

## Project Schedule

**Project Start Date:** 09/01/2023 (FY 2024)

**Projected Completion Date:** 04/30/2024 (FY 2024)

**Multi-year Project:** no

**Project Schedule:**

Project Timeline:

- Fall 2023- Preemergent herbicide application

## Project Location and Land Status

**Location Narrative:**

Bruneau Wildlife Management Area, Elko County

**NDOW Region:** Eastern

**NDOW Management Units:** 071, 061

**Nevada Sage Grouse Population Management Unit:** North Fork, Islands

**County:** Elko

## Land Status

Land Status	Acres	Percent of Project
Private	1086.3	4.2
Bureau of Land Management	8809.8	34
Forest Service	15368.9	59.3

**Bureau of Land Management Office:** Elko District - Tuscarora Field Office, Boise District Office - Bruneau Field Office, Twin Falls District Office - Jarbidge Field Office

**US Forest Service Ranger District:** Humboldt-Toiyabe National Forest - Mountain City-Ruby Mountains-Jarbidge Ranger District

**Special Land Designations:** N/A

## Project Summary and Justification

**Project Activity and Sub-activity:** HABITAT IMPROVEMENT or MANAGEMENT: Management of Wildlife Management Areas (WMA)

### Project Objectives:

- To measurably increase wildlife populations, wildlife use, or habitat for the benefit of public use and hunter success.
- To use water management or physical alterations in managed wetland and/or moist-soil habitats to improve water management.
- To control cheatgrass and other non-native annual grasses with herbicide application.

**NDOW Initiative Addressed:** No initiatives

### Strategic Habitats and Threats Addressed:

- Linear riparian: perennial and ephemeral rivers and streams: Nonnative invasive species
- Low-elevation sagebrush dominated shrubland: Nonnative invasive species, Wildfire or lack of fire
- Aspen woodland: Wildfire or lack of fire, Drought and disease, Over-utilization
- Other riparian: meadow, marsh, spring, seep, and lakeshore: Nonnative invasive species

**Priority Resource Impacted:** Big Game, Fish

**Priority Species Impacted:** Elk, Mule deer, Pronghorn antelope, Redband trout

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** yes

**Project Clearance or Authorization Status:** Not Applicable

### Project Rationale:

The Bruneau Wildlife Management Area (BWMA) provides the Nevada Department of Wildlife (NDOW) a unique opportunity to improve wildlife habitat for a myriad of wildlife species. Like much of the Great Basin, the uplands of the BWMA have been invaded by cheatgrass and are not presently fully functioning as they should for wildlife. Treatments identified within in the proposal aim to reduce cheatgrass densities within the BWMA boundaries to improve ecological function.

Winter annual invasion within the Bruneau River corridor has suppressed the native plant species response after catastrophic wildfire swept through the canyon in the 2007 Murphy Complex Fire. With the objective of reducing cheatgrass, a preemergent herbicide would be applied by rotorcraft to BWMA uplands where native and nonnative composition would allow for successful habitat improvements without additional seeding inputs.

The primary goal of this treatment is to improve wildlife habitats within the river corridor as well as to limit fine fuel loading along the busy road where there is increased potential for wildfire starts from the roadway traffic and or camping. The gravel road that parallels the Bruneau River within the BWMA is the primary access route for this geographic region of Nevada, and experiences high levels of traffic increasing the likelihood of wildfire given the amount of cheatgrass present.

## Project Treatments and Actions

**Treatment Name:** Winter Annual Treatment

**Acres:** 5,108.5

**Action:** Herbicide application (aerial)

**Approach Narrative:**

Preemergent herbicide application to reduce winter annual densities.

**Planned Start:** 09/2023

## Project Monitoring

**Monitoring Plan:**

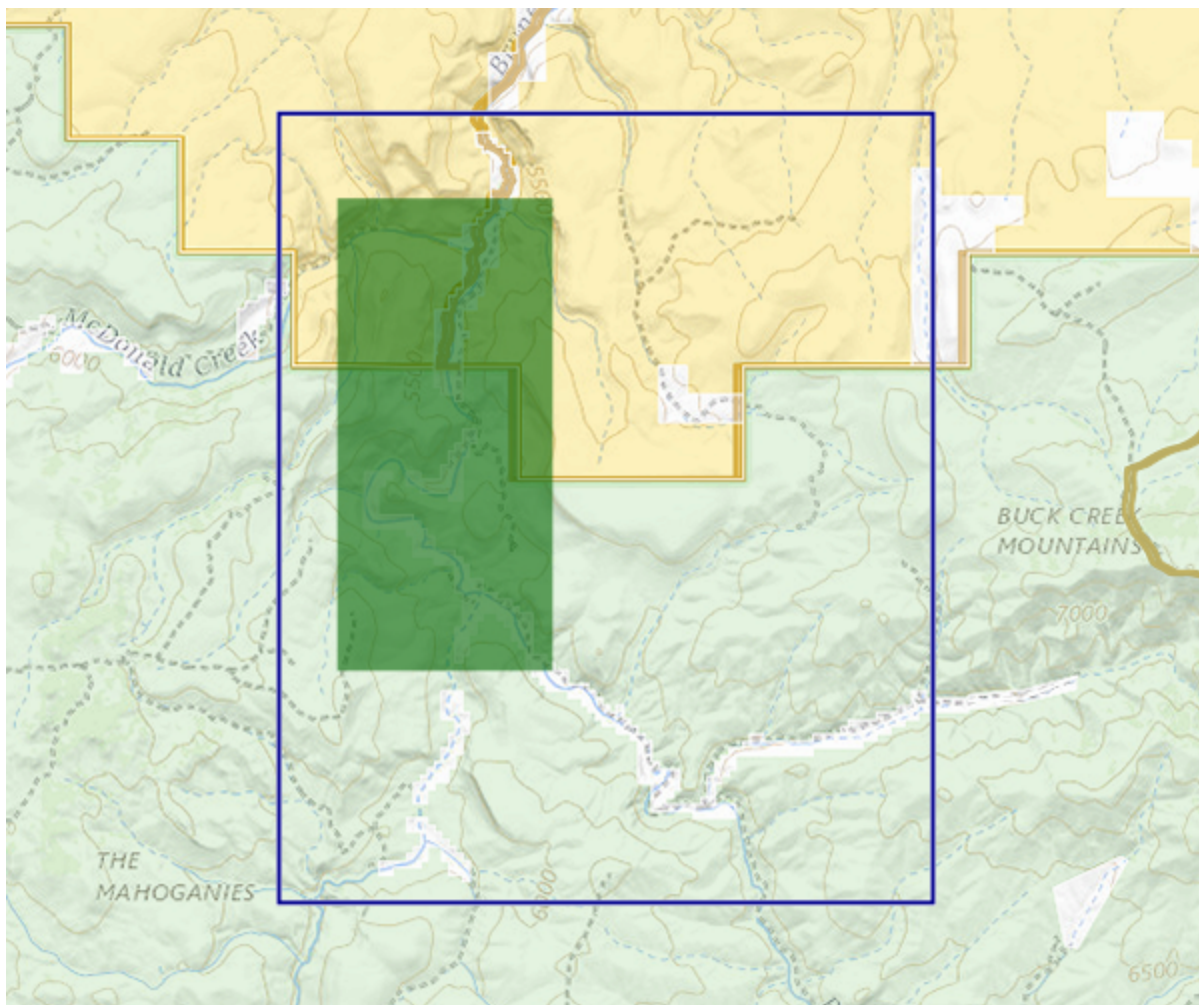
Photo points will be established and retaken on a 5-year interval.

## Project Funding and Budget

Budget Item	NDOW Habitat Conservation Fee 2024	NDOW Heritage Trust Account 2024	NDOW Upland Game Stamp 2024	Subtotal
<b>Contracts</b>				
Herbicide Application	\$15,000	\$0	\$15,000	\$30,000
<b>Materials Purchase</b>				
Herbicide	\$0	\$31,000	\$0	\$31,000
<b>Total Costs:</b>	<b>\$15,000</b>	<b>\$31,000</b>	<b>\$15,000</b>	<b>\$61,000</b>

**Budget Narrative:**

All funding will be utilized to apply preemergent herbicide to the uplands of the BWMA.



#### Boundaries

- County Boundary    ● USFS Office Boundaries    ● BLM Office Boundaries    ● NDOW Region Boundary

#### Land Status

- Bureau of Indian Affairs    ● Bureau of Land Management    ● Bureau of Reclamation
- Department of Defense    ● Department of Energy    ● Fish and Wildlife Service    ● US Forest Service
- National Park Service    ● Nevada State Lands    ● Nevada Park Service    ● Private    ● Other

#### Project Geometry

- Project Boundary    ● Treatment Area: Winter Annual Treatment





# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** Steptoe Valley Wildlife Management Area Water Enhancements

**Project ID:** 842

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Adam Henriod Nevada Department of Wildlife

**Phone Number:** (775) 289-1690

**Email:** ahenriod@ndow.org

## Project Partners

Name	Agency	Role
No results		

## Project Schedule

**Project Start Date:** 07/01/2023 (FY 2024)

**Projected Completion Date:** 09/30/2024 (FY 2025)

**Multi-year Project:** yes

### Project Schedule:

The first step in this process will be the installation of a test well on the Steptoe Valley Wildlife Management Area. The test well will be installed and findings analyzed as soon as access to the area is possible. Findings from the test well will allow appropriate design for a system to be installed in the fall/winter of 2023. Utilizing approved AB84 funding preliminary work will begin during the Spring of 2023. NDOW Engineering staff will oversee the planning and design with assistance from Shaw Engineering. The following is a list of tasks previously completed joined with a tentative schedule of tasks to be completed;

#### Date Task

1/11/23 NDOW met with White Pine County staff regarding leasing water rights.

1/12/23 NDOW prepared Memorandum of Agreement (MOA) to lease water rights from White Pine County.

1/24/23 Initial draft MOA emailed to White Pine County and NDOW staff for review and comment.

2/10/23 Amended contract with design consultant, Shaw Engineering (Shaw).

2/10/23 NDOW submitted application for AB 84 funds (\$165,000) which was internally approved by NDOW.

2/15/23 MOA updated based on review comments.

3/3/23 Shaw contract executed by all parties.

3/6/23 Shaw contract sent to Board of Examiners for consideration at April meeting.

3/30/23 Shaw preliminary research and data collection.

4/28/23 Shaw and NDOW field investigation.

5/15/23 Shaw develop test well plan.

6/30/23 Shaw conduct test well drilling.

7/14/23 Shaw test well evaluation and hydrogeologic report.

7/28/23 Shaw production well site plan development.

8/15/23 Shaw preliminary engineering report and cost estimates for production well.

## Project Location and Land Status

### Location Narrative:

This test well will be located on the Steptoe Valley Wildlife Management Area in White Pine County.

**NDOW Region:** Eastern

**NDOW Management Units:** 111, 222

**Nevada Sage Grouse Population Management Unit:** Steptoe/Cave

**County:** White Pine

### Land Status

Land Status	Acres	Percent of Project
Bureau of Land Management	6297.9	49.2
Private	6508.2	50.8

**Bureau of Land Management Office:** Ely District - Bristlecone Field Office

**US Forest Service Ranger District:** N/A

**Special Land Designations:** N/A

## Project Summary and Justification

**Project Activity and Sub-activity:** HABITAT IMPROVEMENT or MANAGEMENT: Management of Wildlife Management Areas (WMA)

### Project Objectives:

- Other - please specify

**NDOW Initiative Addressed:** No initiatives

**Strategic Habitats and Threats Addressed:**

**Priority Resource Impacted:** Big Game, Diversity/Non-game, Fish, Upland Game, Waterfowl

**Priority Species Impacted:** Dabbling duck species, Diving duck species, Elk, Geese, Greater sage-grouse, Migratory songbirds (multiple species), Mule deer, Pronghorn antelope, Rainbow trout, Relict dace, Shorebirds

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** yes

**Project Clearance or Authorization Status:** Not Applicable

**Project Rationale:**

Project Objectives-Other

1. Perform research and field reconnaissance to evaluate existing infrastructure and determine best place for test well location.
2. Design and construct test well.
3. Pump test well to evaluate aquifer properties.
4. Prepare hydrogeologic report.
5. Develop production well site plan.
6. Prepare engineer's estimate to design and construct production well capable of producing 2,875 acre-feet of water annually.

This project seeks funding for the installation of a well and appropriate pumping, delivery, and power infrastructure on Steptoe Valley Wildlife Management Area (SVWMA). After a test well has been completed a system will be designed that will allow NDOW to use ground water for wildlife benefits on SVWMA. NDOW will enter into a Memorandum of Agreement (MOA) with White Pine County Nevada to utilize approximately 2,875 acre feet of water annually. The value of this water will count as State matching dollars for Federal grants.

The addition of 2,875 acre feet of water yearly will benefit wildlife in multiple ways. Comins Lake is one of the top fisheries in Nevada. It is known for producing large rainbow trout. In addition anglers can also catch brown trout, tiger trout, largemouth bass and bluegill. Comins lake is also desirable nesting and foraging habitat for many waterfowl and shorebird species. Currently Comins lake can have drastic seasonal shifts in water elevation. This is particularly noticeable in drought years. Water from the well will allow Comins Lake levels to be more appropriately managed to provide better fishing and hunting opportunities as well as more desired habitat for wildlife.

Well water will also allow the creation of food plots on the management area. Food plots will be designed to benefit big game found on the property (elk, mule deer, pronghorn) as well as game birds (dove, waterfowl, sage-grouse). Additionally they will benefit many songbirds, wading birds, and small mammals.

This water will also be used to supplement the WMA pond system. The transport of water in earthen ditch systems and water storage in ponds on the WMA will benefit many species. During drought years as many as seven of the properties thirteen ponds can go dry. Big game, upland game, waterfowl, and shorebirds use these ponds and ditches as water and food sources. Relict Dace live within the spring systems found on the WMA. All species mentioned will benefit with the ability to better maintain pond levels through the installation of the well.

## Project Treatments and Actions

**Treatment Name:** Steptoe WMA

**Acres:** 12,806.5

**Action:** Create, modify, or maintain diversion canals, headgates, or water pipelines

**Approach Narrative:**

A production well and needed infrastructure will be installed.

**Planned Start:** 08/2023

**Action:** Other - please specify

**Approach Narrative:**

A test well will be installed. Findings from the test well will be analyzed. A production well will be designed.

**Planned Start:** 05/2023

## Project Monitoring

**Monitoring Plan:**

NDOW WMA and Fisheries staff will utilize the Steptoe WMA Water Management Plan to manage Comins Lake levels.

Food plots will be planted annually and planted species will be evaluated for effectiveness.

Ponds will be regularly checked and flows adjusted to provide the most ideal habitat conditions.

## Project Funding and Budget

Budget Item	AB84 - Conservation Bond Initiative 2024	NDOW Heritage Trust Account 2024	USFWS Grant - Wildlife Management Areas 2024	Subtotal
<b>Contracts</b>				
Design, engineering, well drilling	\$165,000	\$100,000	\$65,000	\$330,000
<b>Total Costs:</b>	<b>\$165,000</b>	<b>\$100,000</b>	<b>\$65,000</b>	<b>\$330,000</b>

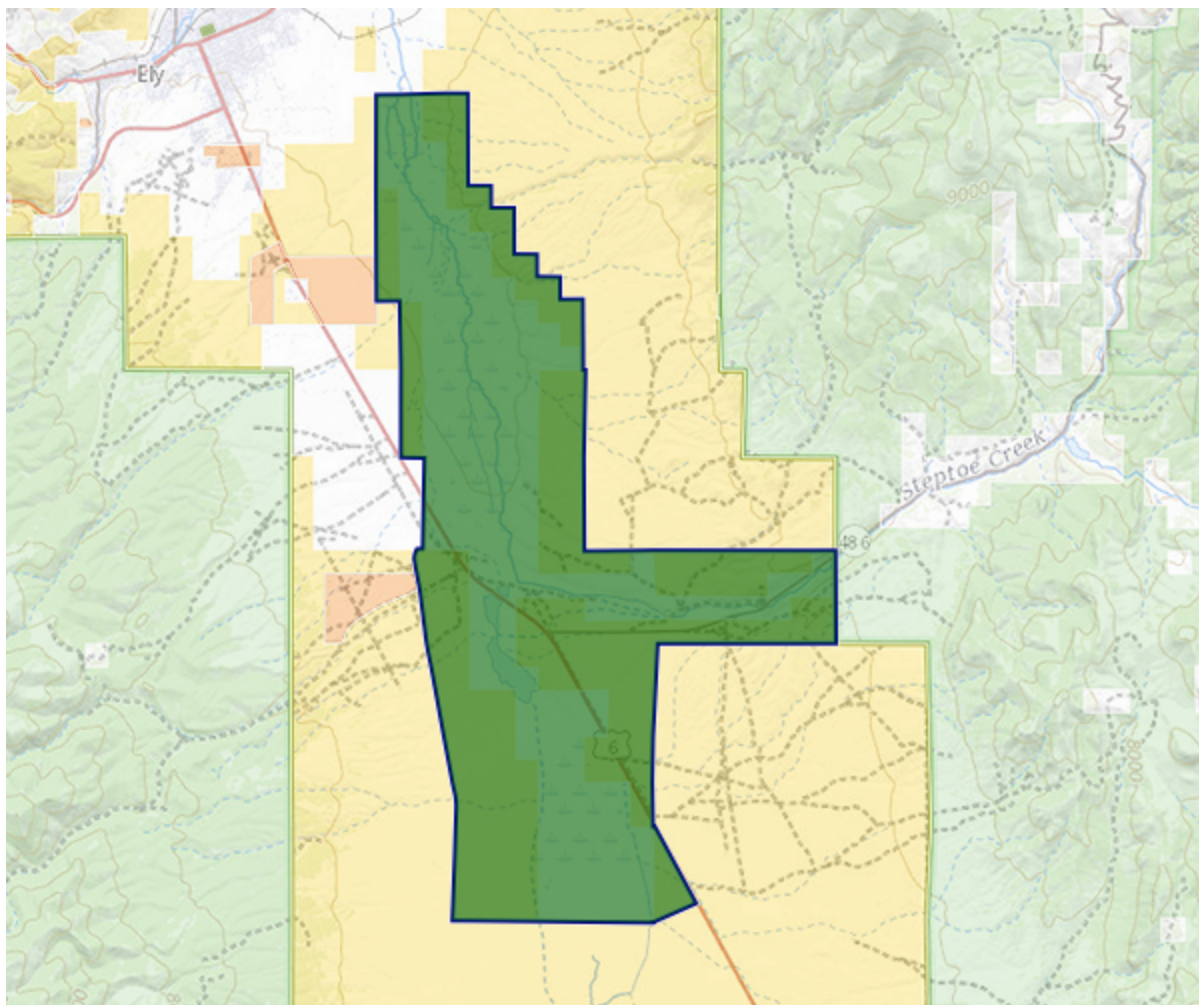
**Budget Narrative:**

Heritage Trust Account funding, if granted, will provide approximately 50% of the funding required to design and construct a test well on the Steptoe Valley WMA. The remaining funding has been requested from the Nevada Department of Conservation and Natural Resources via an application and is expected to be approved (AB84).

If funding is awarded, invaluable information will be obtained that will aid in the construction of a production well on the Steptoe Valley WMA for the future benefit of wildlife habitat and wildlife.

This funding may also be used as needed federal match, a requirement for US Fish and Wildlife Service (USFWS) grants. Using the Heritage Trust Account funding as match could generate an additional \$495,000 of funding through the USFWS grant which may be used to construct a production well on the Steptoe Valley WMA.

NGO's and other reserve accounts such as Duck Stamp and Upland Game Stamp may also be utilized.



#### Boundaries

- County Boundary    ● USFS Office Boundaries    ● BLM Office Boundaries    ● NDOW Region Boundary

#### Land Status

- Bureau of Indian Affairs    ● Bureau of Land Management    ● Bureau of Reclamation
- Department of Defense    ● Department of Energy    ● Fish and Wildlife Service    ● US Forest Service
- National Park Service    ● Nevada State Lands    ● Nevada Park Service    ● Private    ● Other

#### Project Geometry

- Project Boundary    ● Treatment Area: Steptoe WMA



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** Izzenhood Mountains Habitat Improvement

**Project ID:** 843

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Matt Glenn Nevada Department of Wildlife

**Phone Number:** (775) 777-2369

**Email:** mglenn@ndow.org

## Project Partners

Name	Agency	Role
No results		

## Project Schedule

**Project Start Date:** 08/15/2023 (FY 2024)

**Projected Completion Date:** 04/15/2025 (FY 2025)

**Multi-year Project:** no

**Project Schedule:**

Project Timeline:

- Fall 2023- Preemergent herbicide application, seed purchased, and delivered to nursery for grow out
- Fall 2024- Seedlings picked up and delivered to site for planting by contract and volunteer labor
- Spring 2025- Any seedlings not planted in fall of 2024 will be planted

## Project Location and Land Status

**Location Narrative:**

Izzenhood Mountains, Elko and Lander County

**NDOW Region:** Eastern

**NDOW Management Units:** 068

**Nevada Sage Grouse Population Management Unit:** Tuscarora

**County:** Elko, Lander

## Land Status

Land Status	Acres	Percent of Project
Private	10030.8	48.1
Bureau of Land Management	10537.5	50.5

**Bureau of Land Management Office:** Elko District - Tuscarora Field Office

**US Forest Service Ranger District:** N/A

**Special Land Designations:** N/A

## Project Summary and Justification

**Project Activity and Sub-activity:** HABITAT RESTORATION and REHABILITATION: Wildland fire rehabilitation

### Project Objectives:

- To measurably increase wildlife populations, wildlife use, or habitat for the benefit of public use and hunter success.
- To control cheatgrass and other non-native annual grasses with herbicide application.
- To plant seedlings on habitat impacted by wildfire to improve ecological conditions, prevent expansion of invasive annual grasses, and rehabilitate wildlife habitat.

### NDOW Initiative Addressed:

- Mule Deer Enhancement Program (NDOW)

### Strategic Habitats and Threats Addressed:

- Mixed desert scrub: Over-utilization, Nonnative invasive species, Wildfire or lack of fire
- High-elevation sagebrush dominated shrubland: Wildfire or lack of fire, Nonnative invasive species
- Low-elevation sagebrush dominated shrubland: Over-utilization, Drought and disease, Wildfire or lack of fire, Nonnative invasive species
- Upper montane coniferous forest and woodland: Wildfire or lack of fire, Drought and disease
- Salt desert shrub: Nonnative invasive species
- Lakes and reservoirs: Water diversion
- Other riparian: meadow, marsh, spring, seep, and lakeshore: Over-utilization, Water diversion, Nonnative invasive species
- Aspen woodland: Drought and disease, Over-utilization, Wildfire or lack of fire
- Pinyon-juniper woodland (not encroachment): Drought and disease

**Priority Resource Impacted:** Big Game, Upland Game

**Priority Species Impacted:** Chukar, Mountain Lion, Mule deer, Pronghorn antelope

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** no

**Project Clearance or Authorization Status:** Not Applicable

### Project Rationale:

The primary objective of this project is to improve compromised crucial winter habitat for the area six mule deer herd. The potential of this herd was observed in the 1960s when the estimated population was approximately 30,000; this was a period when most, if not all, winter range was intact and fully functioning even in difficult winter conditions. Since the 1960s a slow but steady decline has been observed throughout the western states and area six herd is no exception with a current

estimated population of 7-9,000 (approx. 20,000 decline). Many variables are contributors to this decline; however, habitat loss and degradation are thought to be the primary drivers.

Between the years of 1999 and 2018, over 2 million acres of habitat has burned in Management Area (MA) Six, much of it important transition and winter range. Unfortunately, the Izzenhood Mountains have burned several times over since the mid-1980's, in 2001 in the Hot Lake wildfire, again in the 2006 Sheep wildfire, and more recently in the 2016 Hot Pot Fire. As a result of these frequent wildfires and climate change, the crucial brush component needed by mule deer has had no real opportunity to respond favorably, and the area is presently dominated by winter annuals with a small forage kochia component. In most years this portion of the MA Six winter range will support approximately one-third (2-3,000 deer) of the area-six mule deer herd making this geographic region one of the most important in the state.

Without proactive restoration, most of the area six mule deer herd will migrate over 70 miles from summer range only to arrive to a sea of cheatgrass where they have historically sought forage and thermal cover in crucial winter months. Intact brush communities where mule deer would normally select for are virtually non-existent on the landscape, which in turn translates to lesser body condition and a significantly reduced recruitment rate. In the implementation of this project the Nevada Department of Wildlife will work to restore crucial winter range in the Izzenhood Mountains by applying preemergent herbicide to reduce winter annual densities and plant novel drought tolerant brush species to provide the crucial thermal and forage for wintering mule deer.

## Project Treatments and Actions

### **Treatment Name:** Izzenhood Improvement I

**Acres:** 611.8

**Action:** Planting (container stock)

**Approach Narrative:**

Plant novel and more drought tolerant species.

**Planned Start:** 04/2025

**Action:** Herbicide application (aerial)

**Approach Narrative:**

Apply preemergent herbicide to reduce annual grass densities.

**Planned Start:** 09/2023

### **Treatment Name:** Izzenhood Improvement II

**Acres:** 629

**Action:** Planting (container stock)

**Approach Narrative:**

Plant novel and more drought tolerant species.

**Planned Start:** 04/2025

**Action:** Herbicide application (aerial)

**Approach Narrative:**

Apply preemergent herbicide to reduce annual grass densities.



**Planned Start:** 09/2023

## Project Monitoring

### Monitoring Plan:

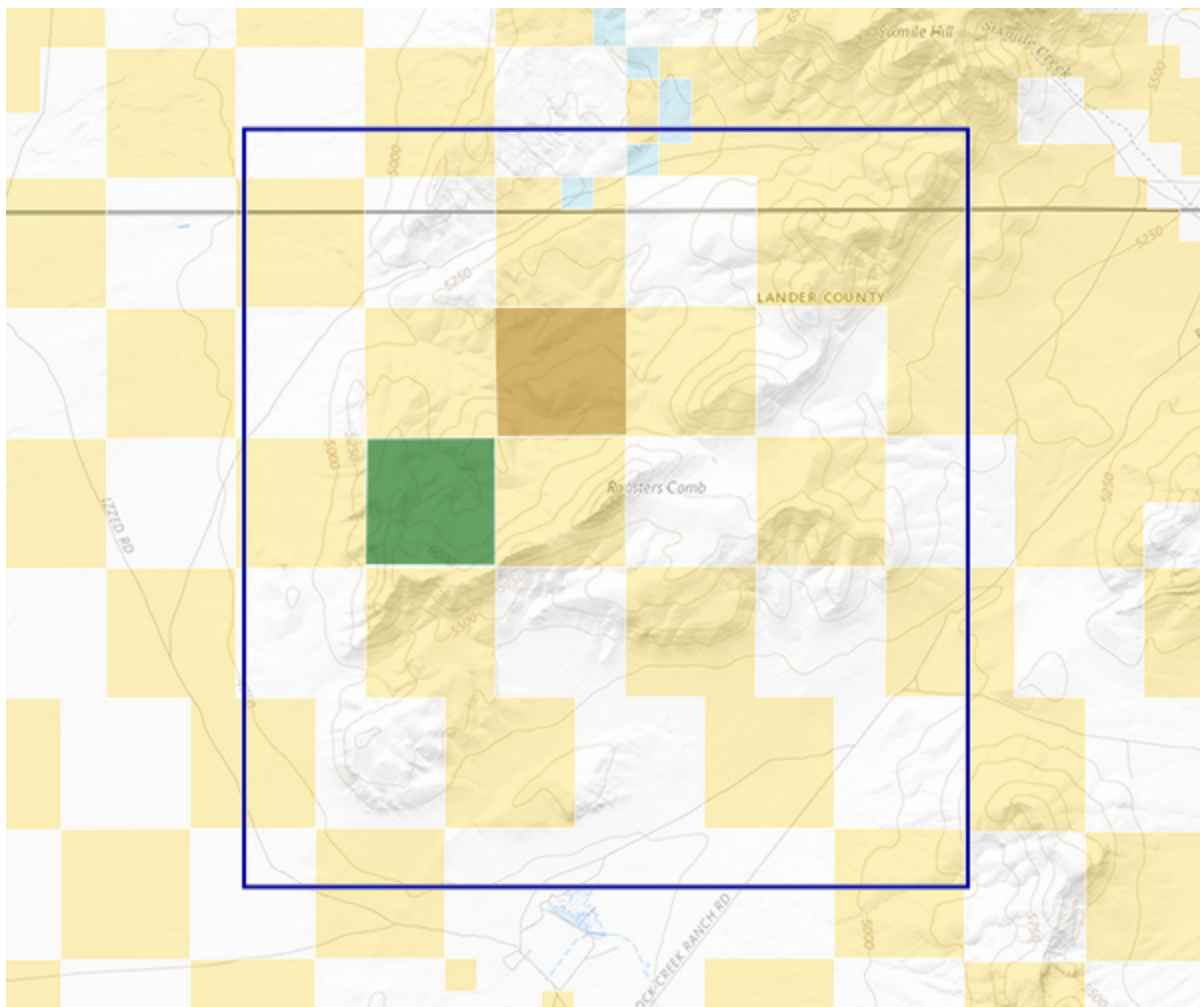
Photo points will be established and retaken on a 5-year interval.

## Project Funding and Budget

Budget Item	NDOW Habitat Conservation Fee 2024	NDOW Heritage Trust Account 2024	Subtotal
<b>Contracts</b>			
Herbicide Application	\$26,000	\$26,000	\$52,000
<b>Materials Purchase</b>			
Herbicide	\$0	\$33,000	\$33,000
Seedlings	\$0	\$5,000	\$5,000
<b>Total Costs:</b>	<b>\$26,000</b>	<b>\$64,000</b>	<b>\$90,000</b>

### Budget Narrative:

Funding will be used to purchase pre-emergent and to apply the herbicide via rotorcraft. Remaining funds will be used to purchase seedlings for fall 2024 planting.



#### Boundaries

- County Boundary
- USFS Office Boundaries
- BLM Office Boundaries
- NDOW Region Boundary

#### Land Status

- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Reclamation
- Department of Defense
- Department of Energy
- Fish and Wildlife Service
- US Forest Service
- National Park Service
- Nevada State Lands
- Nevada Park Service
- Private
- Other

#### Project Geometry

- Project Boundary
- Treatment Area: Izzenhood Improvement I
- Treatment Area: Izzenhood Improvement II



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** FY24 Area 6 Toe Jam Mountain Mule Deer Corridor Fence Modification

**Project ID:** 847

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Travis Allen Nevada Department of Wildlife

**Phone Number:** (775) 777-2322

**Email:** tallen@ndow.org

## Project Partners

Name	Agency	Role
Bureau of Land Management	BLM Tuscarora Field Office	Agency Coordinator
Chris Jasmine	Nevada Gold Mines	Private Landowner

## Project Schedule

**Project Start Date:** 07/01/2023 (FY 2024)

**Projected Completion Date:** 06/30/2024 (FY 2024)

**Multi-year Project:** no

**Project Schedule:**

Begin fence modification as early as July FY24, upon funding and contractor availability, and continue through the end of June FY24 as needed.

## Project Location and Land Status

**Location Narrative:**

Toe Jam Mountain, North Tuscarora Mountain Range, Hunt Unit 067, Elko County

**NDOW Region:** Eastern

**NDOW Management Units:** 067

**Nevada Sage Grouse Population Management Unit:** Tuscarora

**County:** Elko

## Land Status

Land Status	Acres	Percent of Project
Private	19992.2	63.1
Bureau of Land Management	11203.6	35.3

**Bureau of Land Management Office:** Elko District - Tuscarora Field Office

**US Forest Service Ranger District:** N/A

**Special Land Designations:** N/A

## Project Summary and Justification

**Project Activity and Sub-activity:** HABITAT IMPROVEMENT or MANAGEMENT: Install, maintain, or remove artificial habitat structures

### Project Objectives:

- To remove unnecessary fencing that impedes or harms wildlife
- To remove unnecessary fencing that impedes wildlife corridors
- To remove unnecessary fencing to remove collision hazard for sage grouse
- Other - please specify

### NDOW Initiative Addressed:

- Mule Deer Enhancement Program (NDOW)

### Strategic Habitats and Threats Addressed:

- Aspen woodland: Anthropogenic development
- High-elevation sagebrush dominated shrubland: Anthropogenic development
- Linear riparian: perennial and ephemeral rivers and streams: Anthropogenic development
- Low-elevation sagebrush dominated shrubland: Anthropogenic development
- Other riparian: meadow, marsh, spring, seep, and lakeshore: Anthropogenic development

**Priority Resource Impacted:** Big Game, Upland Game

**Priority Species Impacted:** Elk, Greater sage-grouse, Mule deer, Pronghorn antelope

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** yes

**Project Clearance or Authorization Status:** Not Applicable

### Project Rationale:

Fences are essential for managing livestock within Nevada's allotment and pasture system; however, many range fences were constructed long before the concept of wildlife friendly configurations became common practice. Animals are impacted by fences in many ways, fragmenting habitats and creating hazards for both an animal's daily movements and seasonal migrations. Likely the most common impact a fence has is an energetic expenditure. In Area 6 specifically, winter ranges have been vastly compromised by decades of wildfire and improper livestock management in some places. This lack of favorable winter range has negative impacts on ungulate body condition during average or above average winters. Under these conditions, for example, midterm gestational ungulates migrating to summer range in the worst body condition of the year need to avoid as many unnecessary additional energetic expenditures as possible to ensure their survival and maintain reproductive viability. Every fence line encountered is one more cumulative negative expenditure to be endured during migration. There comes a point when body condition is so compromised that they may choose not to cross, and the fence then becomes a barrier to movement. Also, or alternatively, at this point the chance of entanglement also increases significantly. In a worst-case scenario fence entanglement can lead to death but may more commonly result in muscle or tissue damage, broken bones, or loss of hair.

The Izzenhood migratory mule deer sub-herd, which encounters the fence line proposed for wildlife friendly modification by this project, is the largest sub-herd and has the longest mean migratory length of the three S.O. 3362 delineated Area 6 sub-herds at 59 miles, with some individuals traveling up to 83 miles between summer and winter ranges. This fence line is considered high priority due to its proximity to ongoing habitat restoration efforts, the number of deer that encounter it, its perpendicular orientation to migration, and its location both along the migratory corridor and within a large stopover site. Worth considering, the large stopover site that this fence bisects is in a parallel orientation with the fence but near perpendicular to the migratory corridor, which also widens at this fence line. This may indicate that the stopover site, and corridor width, is being influenced by the length of time deer spend traversing this fence line looking for a crossing, rather than forage quality and green wave surfing. However, it is recognized that this region is well documented as valuable transition and stopover habitat otherwise. In addition to mule deer, a wildlife friendly modification will benefit pronghorn and elk for the above-mentioned reasons, while also benefitting Greater sage-grouse by reducing collision hazards with the installation of sage grouse fence markers, a consistent fence height, and overall fewer wires. The proposed fence traverses steep terrain, making it even more challenging to navigate, is a five wire configuration, is well above the generally sought after top wire height of 40- to 42- inches and the bottom wire is barbed and well below the 16- to 18-inch ground clearance standard.

Concurrently, there are two habitat restoration projects totaling approximately 2,400 acres that are immediately adjacent to, and bisected by, this fence. These treatment polygons are receiving herbicide for annual invasive plant control and brush seedling plantings. To maximize the benefits of these treatments, a reconfiguration of this fence to wildlife friendly specifications would better facilitate movement throughout the region and reduce energetic expenditures.

This project was proposed and supported by the Area 6/065 Mule Deer Enhancement Subcommittee. The fence is primarily located on private land, and permission has been granted by the landowner (Nevada Gold Mines) to perform this work. The livestock permittee for this allotment, Humboldt River Ranch, is in support of this wildlife friendly fence reconfiguration.

## Project Treatments and Actions

**Treatment Name:** Toe Jam Fence

**Linear Feet:** 38356

**Action:** Install sage grouse markers on fence

**Approach Narrative:**

Install Sage Grouse Markers on top wire of fence

**Planned Start:** 07/2023

**Action:** Remove or retrofit range fencing

**Approach Narrative:**

Reconfigure existing fence as follows: the top wire would not exceed 40-42 inches (and factor in slope of hillside) with at least a 12-inch distance between the top and second wire, the third wire 22-24-inches above the ground, and the bottom wire, smooth, 16-18-inches off the ground

**Planned Start:** 07/2023

## Project Monitoring

**Monitoring Plan:**

Final project inspection of proper modification specification.

## Project Funding and Budget

Budget Item	NDOW Habitat Conservation Fee 2024	NDOW Heritage Trust Account 2024	NDOW Upland Game Stamp 2024	Subtotal
<b>Contracts</b>				
	\$25,000	\$64,840	\$25,000	\$114,840
<b>Materials Purchase</b>				
	\$0	\$5,160	\$0	\$5,160
<b>Total Costs:</b>	<b>\$25,000</b>	<b>\$70,000</b>	<b>\$25,000</b>	<b>\$120,000</b>

**Budget Narrative:**

Cost of wire:

Smooth Bottom Wire = \$150.00/.25mile @ 30 rolls = \$4,500

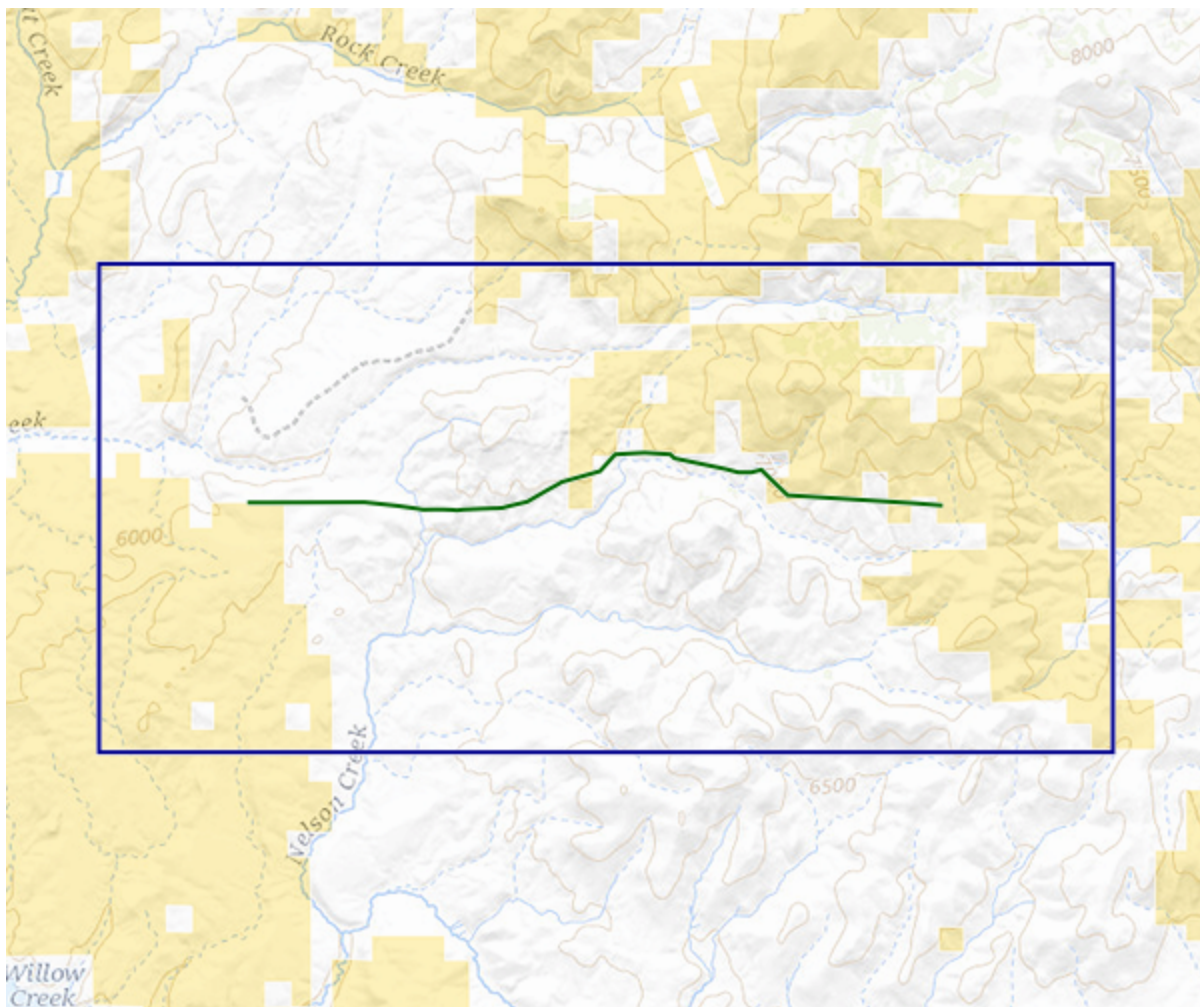
Additional for replacement of existing compromised fence materials (t-posts, clips, barbed-wire) = \$660

Contracted Labor:

\$2-3 per linear foot based on terrain and location of the project

\$15,840 mile @ 3.00\$/ft = \$114,840 (3\$ /ft due to the terrain and remote location).

Should some of the existing fence materials not be functional, linear feet of modification could be scaled appropriately, however the entire length (and beyond) of the identified area exists within migratory corridor and stopover.



#### Boundaries

- County Boundary    ● USFS Office Boundaries    ● BLM Office Boundaries    ● NDOW Region Boundary

#### Land Status

- Bureau of Indian Affairs    ● Bureau of Land Management    ● Bureau of Reclamation
- Department of Defense    ● Department of Energy    ● Fish and Wildlife Service    ● US Forest Service
- National Park Service    ● Nevada State Lands    ● Nevada Park Service    ● Private    ● Other

#### Project Geometry

- Project Boundary    ● Treatment Area: Toe Jam Fence



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** FY24 Aspen Wildlife Fences

**Project ID:** 894

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Moira Kolada Nevada Department of Wildlife

**Phone Number:** (775) 289-1655

**Email:** mkolada@ndow.org

## Project Partners

Name	Agency	Role
No results		

## Project Schedule

**Project Start Date:** 07/01/2023 (FY 2024)

**Projected Completion Date:** 06/30/2024 (FY 2024)

**Multi-year Project:** no

**Project Schedule:**

NEPA and arc surveys are complete at both fence locations, no further action is required. A Scope of Work (SOW) will be released once funds are secured at the June commission meeting. Barring any weather or other unforeseen roadblocks, these fences should be installed in 2-4 weeks in fall 2023.

## Project Location and Land Status

**Location Narrative:**

Duck Creek Basin, Schell Range near Ely, NV

**NDOW Region:** Eastern

**NDOW Management Units:** 111

**Nevada Sage Grouse Population Management Unit:** Schell/Antelope

**County:** White Pine



## Land Status

Land Status	Acres	Percent of Project
Bureau of Land Management	7.4	100

**Bureau of Land Management Office:** Ely District - Bristlecone Field Office

**US Forest Service Ranger District:** N/A

**Special Land Designations:** N/A

## Project Summary and Justification

**Project Activity and Sub-activity:** HABITAT RESTORATION and REHABILITATION: Riparian, Meadow, Spring Restoration

### Project Objectives:

- To install fencing that excludes livestock or wild horses/burros and prevents grazing and enhances spring and riparian habitat conditions.
- To measurably increase wildlife populations, wildlife use, or habitat for the benefit of public use and hunter success.

**NDOW Initiative Addressed:** No initiatives

### Strategic Habitats and Threats Addressed:

- Aspen woodland: Over-utilization, OHV Recreation

**Priority Resource Impacted:** Big Game, Diversity/Non-game

**Priority Species Impacted:** Elk, Mule deer, Northern goshawk

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** yes

**Project Clearance or Authorization Status:** Complete

### Project Rationale:

Buck and rail fencing will be built around two aspen stands in Duck Creek Basin. These stands have very limited to zero variation in their growth cycles due to over grazing from livestock. Constructing wildlife friendly fencing will allow stands to regenerate to a healthy and natural state.

This is a joint project between White Pine County Conservation District (WPCD) and BLM. The Ely BLM office has buck and rail fence materials ready for installation and WPCD wants to protect more aspen in Duck Creek Basin. The buck and rail fences will protect two aspen stands from livestock damage. Both stands show signs of decline due to pressure from livestock (see attached photos). One stand has been treated by BLM for encroaching conifers and dead aspen and the second stand will be treated this year. With encroaching conifers and dead trees gone, installing fences will protect remaining aspen and allow proper regeneration to take place. Fences will be installed according to wildlife friendly specifications (see attached document).

The northern aspen stand is in a popular area for recreation. To ensure public land integrity is maintained, this fence will be placed to protect the aspen as well as, allow visitors to enjoy the area. An educational sign will be placed on the outside of the fence in order to educate visitors on the need to protect limited resources.

This project meets the Heritage Objectives regarding “the protection, propagation, restoration, transplantation, introduction and management of any game fish, game mammal, game bird or fur-bearing mammal in this State; or the management and control of predatory wildlife in this State”? (See NRS 501.3575) in multiple ways: 1) local biodiversity will increase coincident with the improvement of aspen communities; 2) benefit local wildlife by increasing availability of forage, nesting opportunities, and cover; and, 3) support overall forest health by making space for healthy saplings to grow. Restoration of Nevada’s wildlife habitat will, in turn, protect numerous wildlife species by providing more natural habitat conditions capable of supporting a diversity of wildlife.

Project Partners: Lauren Williams, implementation lead; Ely BLM, agency cooperator; Moira Kolada, NDOW partner; White Pine County Conservation District, applicant; Jim Bath, private property and water rights owner.

## Project Treatments and Actions

**Treatment Name:** Aspen Fences

**Acres:** 7.4

**Action:** Other - please specify

**Approach Narrative:**

Install and maintain Buck and Rail fences

**Planned Start:** 07/2023

## Project Monitoring

### Monitoring Plan:

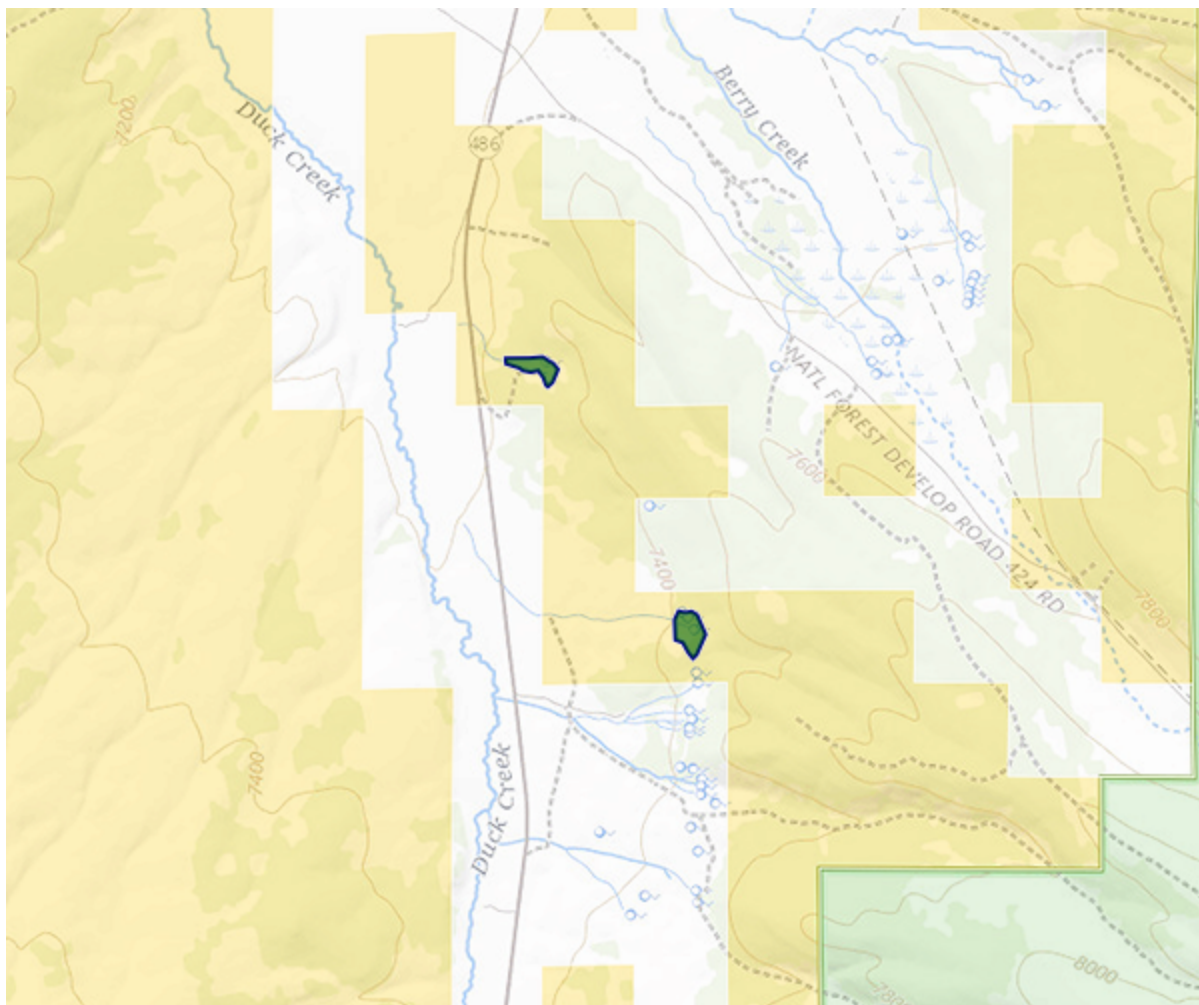
BLM will take on monitoring responsibilities. These fences will need to be checked for damage and aspen stands will be checked for proper regeneration. An appropriate schedule will be decided and implemented.

## Project Funding and Budget

Budget Item	Bureau of Land Management 2023	NDOW Heritage Trust Account 2024	Subtotal
<b>Contracts</b>			
Fence Contract	\$0	\$70,100	\$70,100
<b>In-Kind Services</b>			
DCNR and BLM employees	\$2,094.4	\$0	\$2,094.4
<b>Materials Purchase</b>			
Educational Signs	\$0	\$500	\$500
Buck and rail fences	\$18,240	\$0	\$18,240
<b>Total Costs:</b>	<b>\$20,334.4</b>	<b>\$70,600</b>	<b>\$90,934.4</b>

### Budget Narrative:

Contractors will be paid to install both fences. The fence material has already been purchased by BLM. After fences are installed, a sign will be placed on the popular rec area's fence for the public.



#### Boundaries

- County Boundary    ● USFS Office Boundaries    ● BLM Office Boundaries    ● NDOW Region Boundary

#### Land Status

- Bureau of Indian Affairs    ● Bureau of Land Management    ● Bureau of Reclamation
- Department of Defense    ● Department of Energy    ● Fish and Wildlife Service    ● US Forest Service
- National Park Service    ● Nevada State Lands    ● Nevada Park Service    ● Private    ● Other

#### Project Geometry

- Project Boundary    ● Treatment Area: Aspen Fences



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** Pole Canyon Fence

**Project ID:** 851

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Madi Stout Nevada Department of Wildlife

**Phone Number:** (775) 777-2392

**Email:** mstout@ndow.org

## Project Partners

Name	Agency	Role
RMEF	RMEF- Aaron Swift	Non-Agency Cooperator
Elko Bighorns Unlimited	Elko Bighorns Unlimited	Non-Agency Cooperator

## Project Schedule

**Project Start Date:** 07/01/2023 (FY 2024)

**Projected Completion Date:** 10/31/2023 (FY 2024)

**Multi-year Project:** no

**Project Schedule:**

The NDOW intends to begin construction of this fence as soon as snow conditions allows. The current projection is July of 2023.

## Project Location and Land Status

### Location Narrative:

The Project is located approximately 30 miles east of Elko, Nevada, in the northern portion of the East Humboldt Range in Elko County, Nevada. The Figure 1(attached) shows the vicinity of proposed Project location. The Project Area is located on private lands surrounded by National Forest System (NFS) land in the Ruby Mountain Ranger District.

**NDOW Region:** Eastern

**NDOW Management Units:** 105, 101, 102

**Nevada Sage Grouse Population Management Unit:** South Fork, Ruby Valley

**County:** Elko

## Land Status

Land Status	Acres	Percent of Project
Bureau of Land Management	8199.6	16.4
Forest Service	18788.4	37.5
Private	22032.5	44

**Bureau of Land Management Office:** Elko District - Wells Field Office

**US Forest Service Ranger District:** Humboldt-Toiyabe National Forest - Mountain City-Ruby Mountains-Jarbridge Ranger District

**Special Land Designations:** USDA Forest Service | East Humboldts Wilderness | Designated Wilderness

## Project Summary and Justification

**Project Activity and Sub-activity:** INFRASTRUCTURE and LAND: Direct infrastructure purchase, construction, or maintenance

### Project Objectives:

- To purchase new equipment or facilities.
- To measurably increase access for wildlife-dependent recreation.

**NDOW Initiative Addressed:** No initiatives

**Strategic Habitats and Threats Addressed:**

**Priority Resource Impacted:** Big Game, Diversity/Non-game, Upland Game

**Priority Species Impacted:** American Pika, Greater sage-grouse, Migratory songbirds (multiple species), Mountain Goat, Mule deer, Northern goshawk, Rocky Mountain Bighorn Sheep

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** no

**Project Clearance or Authorization Status:** Not Applicable

### Project Rationale:

The Pole Canyon Conservation Easement will permanently protect 12,122.43 acres of private rangeland along the base of the East Humboldt mountains in northern Nevada. The proposed conservation easement will conserve habitat along a critical migratory corridor for the largest population of mule deer in Nevada and will serve as important sagebrush, grassland and riparian habitat for mule deer, bighorn sheep, mountain goat, and several species of conservation priority, including the greater sage-grouse. The proposed conservation easement will also improve habitat connectivity to neighboring U.S. Forest Service administered lands for game and non-game species movement across the landscape. The Pole Canyon public access easement, a complementary document to the conservation easement, allows public access onto 4,600-acres of property as well as to United States Forest Service (USFS) lands beyond. As part of the access easement, the NDOW committed to building a roughly 4000-ft welded drill steel fence and parking area that will inform the public of where access is permitted. The construction of this fence/parking area is a crucial piece to continuing what has thus far been a very successful partnership.

## Project Treatments and Actions

**Treatment Name:** Pole Canyon Fence

**Linear Feet:** 17877

**Action:** Purchase/install new equipment

**Approach Narrative:**

NDOW will begin construction as soon as the snow conditions allow

**Planned Start:** 07/2023

## Project Monitoring

**Monitoring Plan:**

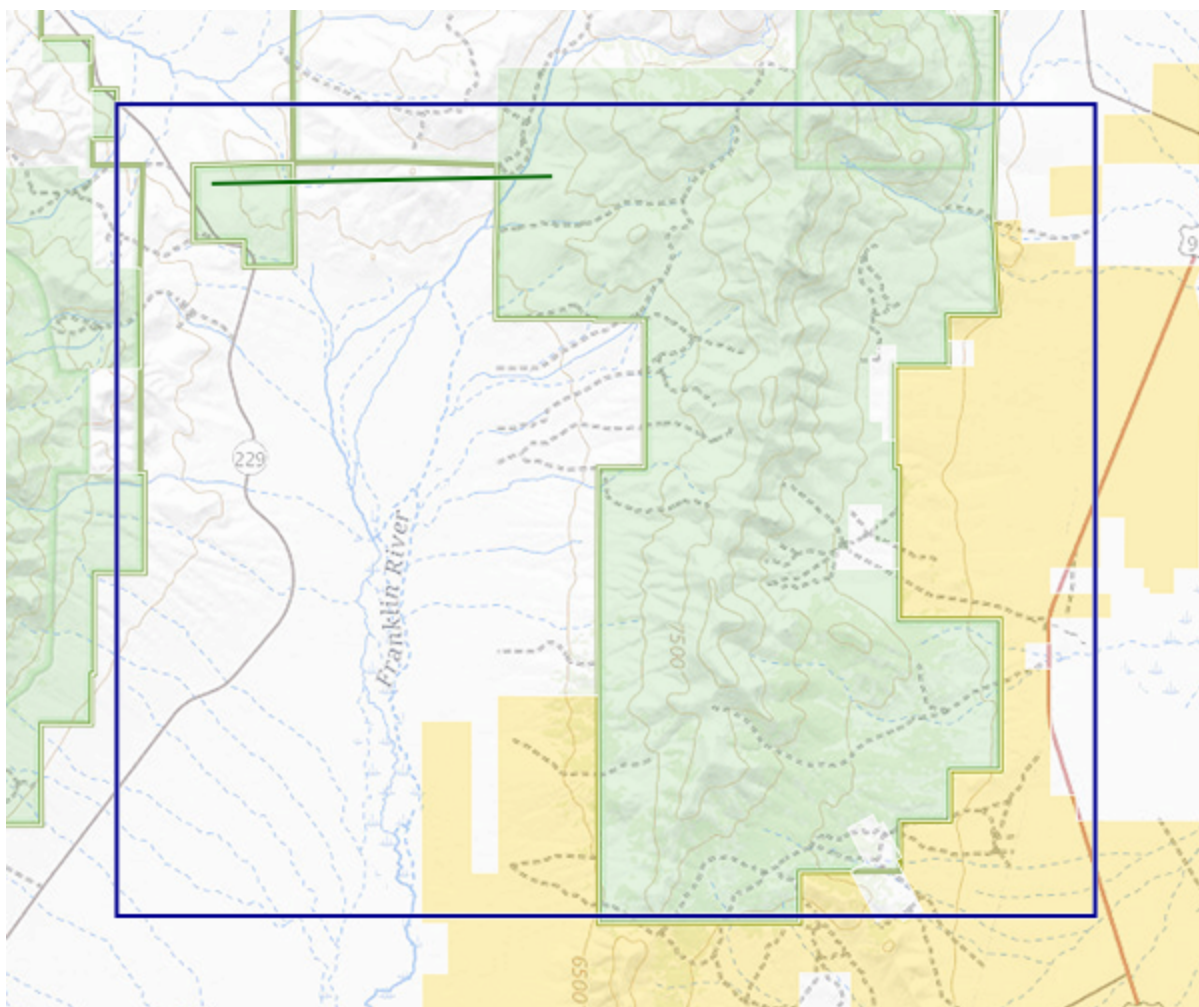
A monitoring plan is not applicable to this project.

## Project Funding and Budget

Budget Item	NDOW Heritage Trust Account 2024	Nevada Dream Tag 2024	Subtotal
<b>Contracts</b>			
Fence contract including material	\$100,000	\$50,000	\$150,000
<b>Total Costs:</b>	<b>\$100,000</b>	<b>\$50,000</b>	<b>\$150,000</b>

**Budget Narrative:**

All monies will be used to contract the construction of the fence/parking area as well as for signage to inform the public of access restrictions.



#### Boundaries

- County Boundary    ● USFS Office Boundaries    ● BLM Office Boundaries    ● NDOW Region Boundary

#### Land Status

- Bureau of Indian Affairs    ● Bureau of Land Management    ● Bureau of Reclamation
- Department of Defense    ● Department of Energy    ● Fish and Wildlife Service    ● US Forest Service
- National Park Service    ● Nevada State Lands    ● Nevada Park Service    ● Private    ● Other

#### Project Geometry

- Project Boundary    ● Treatment Area: Pole Canyon Fence



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** Success Ward Habitat Improvements

**Project ID:** 853

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Moira Kolada Nevada Department of Wildlife

**Phone Number:** (775) 289-1655

**Email:** mkolada@ndow.org

## Project Partners

Name	Agency	Role
Kody Menghini	Nevada Department of Wildlife	Agency Coordinator
Not Specified	Confidential Private Landowner	Private Landowner

## Project Schedule

**Project Start Date:** 08/01/2023 (FY 2024)

**Projected Completion Date:** 07/31/2024 (FY 2025)

**Multi-year Project:** no

**Project Schedule:**

Work is planned to be completed during the summer/fall of 2023 and summer of 2024.

## Project Location and Land Status

**Location Narrative:**

Ward Mountain and Schell Creek Mountains

**NDOW Region:** Eastern

**NDOW Management Units:** 111, 221

**Nevada Sage Grouse Population Management Unit:** Steptoe/Cave, Schell/Antelope, Butte/Buck/White Pine

**County:** White Pine



## Land Status

Land Status	Acres	Percent of Project
Bureau of Land Management	33.4	0.6
Forest Service	84.2	1.6
Private	4454.9	82.4

**Bureau of Land Management Office:** Ely District - Bristlecone Field Office

**US Forest Service Ranger District:** Humboldt-Toiyabe National Forest - Ely Ranger District

**Special Land Designations:** N/A

## Project Summary and Justification

**Project Activity and Sub-activity:** HABITAT RESTORATION and REHABILITATION: Riparian, Meadow, Spring Restoration

### Project Objectives:

- To install fencing that excludes livestock or wild horses/burros and prevents grazing and enhances spring and riparian habitat conditions.
- To install fencing that allows for improved management of livestock or wild horse/burro grazing and enhances spring and riparian habitat conditions.
- To install spring development features that improve water management and allows for providing water outside exclusionary fencing.
- To install fencing that allows for protection and recovery of natural water sources to increase water availability for wildlife.
- To control noxious weeds with herbicide application.

**NDOW Initiative Addressed:** No initiatives

### Strategic Habitats and Threats Addressed:

- Aspen woodland: Over-utilization, OHV Recreation
- Other riparian: meadow, marsh, spring, seep, and lakeshore: Over-utilization

**Priority Resource Impacted:** Big Game, Diversity/Non-game, Upland Game

**Priority Species Impacted:** Elk, Greater sage-grouse, Mule deer, Northern goshawk

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** no

**Project Clearance or Authorization Status:** Not Applicable

### Project Rationale:

The Department of Wildlife recently acquired approximately 5,500 acres on Ward Mountain and Success Summit. Many of these properties contain spring sources that are important water sources for wildlife and livestock operations in the area; however, most of these springs have had deferred maintenance on fencing and other improvements. In order to ensure spring health, as well as put these waters to beneficial use, the Department plans on conducting a variety of improvements to these water sources.

## Project Treatments and Actions

**Treatment Name:** Success Ward Riparian Enhancements

**Acres:** 5,403.4

**Action:** Install or maintain liberty fence

**Approach Narrative:**

Fences will be installed as needed.

**Planned Start:** 07/2024

**Action:** Install or maintain range fence

**Approach Narrative:**

Fences will be maintained as needed.

**Planned Start:** 07/2024

**Action:** Herbicide application (backpack/hand spraying)

**Approach Narrative:**

Weeds will be sprayed as detected.

**Planned Start:** 07/2024

**Action:** Install or maintain spring box/trough and associated plumbing

**Approach Narrative:**

Spring developments will be maintained/upgraded as needed.

**Planned Start:** 07/2024

## Project Monitoring

**Monitoring Plan:**

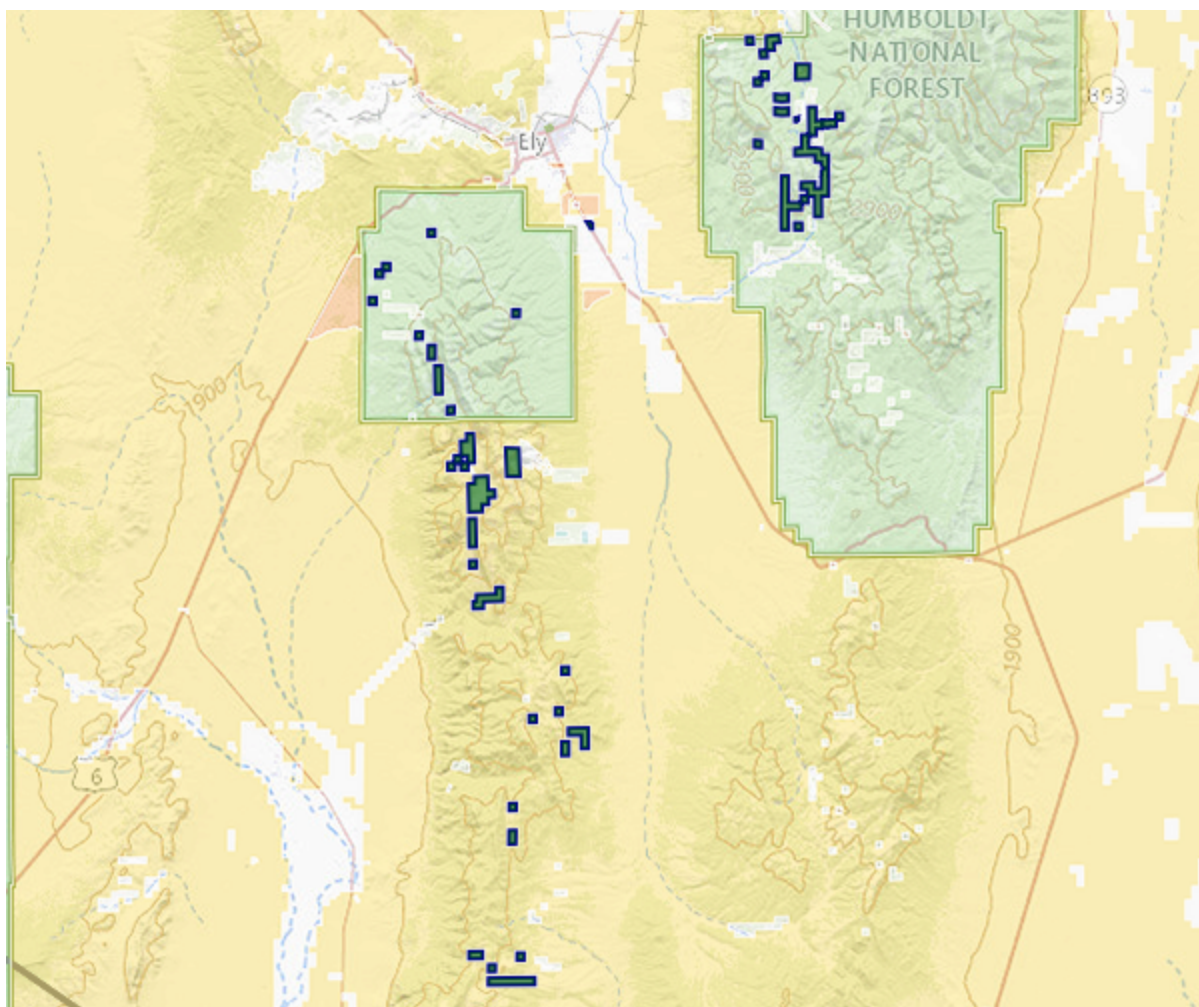
Improvements will be inspected annually.

## Project Funding and Budget

Budget Item	NDOW Heritage Trust Account 2024	Subtotal
<b>Materials Purchase</b>		
	\$50,000	\$50,000
<b>Total Costs:</b>	<b>\$50,000</b>	<b>\$50,000</b>

**Budget Narrative:**

Funds will be used to purchase materials needed to conduct maintenance on spring improvements and fencing.



#### Boundaries

- County Boundary    ● USFS Office Boundaries    ● BLM Office Boundaries    ● NDOW Region Boundary

#### Land Status

- Bureau of Indian Affairs    ● Bureau of Land Management    ● Bureau of Reclamation
- Department of Defense    ● Department of Energy    ● Fish and Wildlife Service    ● US Forest Service
- National Park Service    ● Nevada State Lands    ● Nevada Park Service    ● Private    ● Other

#### Project Geometry

- Project Boundary    ● Treatment Area: Success Ward Riparian Enhancements



# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** FY24 MA13 Mule Deer Collaring

**Project ID:** 852

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Josh Kirk Nevada Department of Wildlife

**Phone Number:** (775) 777-2342

**Email:** joshua.kirk@ndow.org

## Project Partners

Name	Agency	Role
Josh Kirk	Nevada Department of Wildlife	Implementation Lead

## Project Schedule

**Project Start Date:** 07/01/2023 (FY 2024)

**Projected Completion Date:** 06/30/2024 (FY 2024)

**Multi-year Project:** no

**Project Schedule:**

- 1) Purchase collars early FY24.
- 2) Mule deer capture and collar deployment in the winter of 2023-2024.
- 3) Redeployment of collars during the same period in subsequent years.
- 4) Continued monitoring and analysis of data to identify limiting factors and seasonal habitat use.

## Project Location and Land Status

**Location Narrative:**

White Pine, Lincoln and Nye Counties, Nevada, MA 13, Mule Deer Winter Range (HU 131: Currant Hills, Ellison Knobs – HU 132: Douglas Hills, E. Horse Range, Scofield Bench – HU 133: Golden Gate Range)

**NDOW Region:** Eastern, Southern

**NDOW Management Units:** 134, 131, 133, 132

**Nevada Sage Grouse Population Management Unit:** Quinn, Butte/Buck/White Pine, Diamond

**County:** Lincoln, Nye, White Pine

## Land Status

Land Status	Acres	Percent of Project
No results		

**Bureau of Land Management Office:** Ely District - Bristlecone Field Office, Battle Mountain District - Tonopah Field Office, Ely District - Caliente Field Office, Ely District - Basin And Range Nm Field Office

**US Forest Service Ranger District:** Humboldt-Toiyabe National Forest - Ely Ranger District

# Project Summary and Justification

**Project Activity and Sub-activity:** POPULATION MANAGEMENT, MONITORING, and RESEARCH: Terrestrial Wildlife

## Project Objectives:

- To measurably increase wildlife populations, wildlife use, or habitat for the benefit of public use and hunter success.
- To conduct population surveys or research that informs management or monitoring needs.

## NDOW Initiative Addressed:

- Mule Deer Enhancement Program (NDOW)

**Priority Resource Impacted:** Big Game

**Priority Species Impacted:** Mule deer

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** no

**Project Clearance or Authorization Status:** Not Applicable

## Project Rationale:

MA13 has had very few collaring efforts in the past and currently, there are no existing projects in place monitoring the declining status and trends of the mule deer herd. There has been multiple habitat enhancement and water development projects over the years but little to no collar data to support their success. Recruitment rates in MA13 are one of the lowest in the state and population size has been steadily decreasing over the last few years. During the 2021-2022 survey season, the number of adults observed, as well as number of fawns observed and recruited into the population, were all significantly below the 5-year average. Additionally, buck ratios are significantly below the management objective, resulting in lower quota recommendations and reduced hunting opportunities for the public. Mule deer are also experiencing additional pressures resulting from unfavorable environmental conditions in the last five years. Extreme and persistent drought conditions, interspersed with extreme winter conditions combined with competition with wild horses for resource availability have resulted in additional additive mortality year to year. Without funding from the Wildlife Heritage Account, the project would likely be delayed or would not occur, limiting the critical data that these collars would provide. A delay in collaring mule deer in MA13 would likely result in continued herd contractions with little to no knowledge on the limiting factors causing the decline.

We would like to deploy 30 Satellite Global Positioning System (GPS) collars in the targeted mule deer wintering areas of MA13. We are asking that 20 of the collars and capture cost be funded through Wildlife Heritage Account, while the remaining 10 collars will be funded through the USFW Grant - Statewide Game Management account. We are asking for \$60,000 from the Wildlife Heritage Fund account and \$30,000 from the USFWS Grant, totaling \$90,000 for the project's entirety. Captures will take place during winter 2023-2024 and will be conducted by a professional contractor. The capture crew will use a net-gun to capture female mule deer and will physically restrain individuals with hobbles and blindfolds while outfitting them with the collars. Collars will remain on deer for a specific amount of time before a locking mechanism releases and allow collars to drop-off. Upon release, collars will transmit signals to notify managers who will retrieve them from the field. In the event of a mortality or slipped collar, the collar will be redeployed the following capture season to continue to gather data. Data from

collars will regularly upload to a database and will be accessible to managers online for seasonal space use, survival, and migration corridor analyses.

Understanding mule deer movements will aid the subcommittee in identifying future habitat projects through the Mule Deer Enhancement Program (MDEP). Radio-collaring mule deer will provide data on MA13 mule deer movements, space use, and resource selection in relation to their migration. Biologists will also be able to quantify survival rates and identify causes of mortality. A large enough sample size of radio-collars to properly analyze data has never been deployed in this management area. Mule deer will be captured throughout the winter range of MA13 in order to encompass potential variation in large scale movements. We are expecting that spatiotemporal movement data from radio-collared deer will further inform us on the most impactful locations for effective habitat management efforts. These data are vital in the decision-making process for future habitat projects and will ultimately greatly benefit the herd. This project will also allow NDOW to provide the BLM and USFS with valuable data during the EIS/NEPA process to inform sound mitigation decisions to best protect mule deer habitats while simultaneously protecting and enhancing other species habitats (i.e., Greater Sage-grouse, elk, pronghorn, and a variety of non-game species).

This project would also be in conjunction with the Pancake HMA 2022 horse gather conducted by the BLM (<https://www.blm.gov/programs/wild-horse-and-burro/herd-management/gathers-and-removals/nevada/2022-pancake-complex-wild>). In 2021, the Pancake Complex was estimated to be at a level of approximately 3,244 wild horses, 450%+ over the Appropriate Management Level of 361-638 wild horses. In February 2022, 2,054 wild horses were gathered by the BLM. The current wild horse population is estimated to be at about 700 individuals, which is still over the AML, but the density has been significantly reduced. The negative influence of wild horse overpopulation on mule deer populations and wildlife habitat (water and food resource availability) is well known, and following the gather the population is sure to increase over time without regular and frequent gathers. This presents a unique opportunity that will allow for inference on how changes in horse densities over time influence mule deer behavior on the greater landscape. Taking advantage of this scenario surrounding horse-deer interspecific interactions may also assist in management of mule deer in other areas of the state where wild horse populations are over AML.

## Project Treatments and Actions

**Treatment Name:** Currant Hills

**Acres:** 22,608.8

**Action:** Deploy GPS/VHF collars on big game species

**Planned Start:** 02/2024

**Action:** Collect, analyze, or model big game population or habitat use data

**Planned Start:** 02/2024

**Treatment Name:** East Horse Range

**Acres:** 46,792.4

**Action:** Deploy GPS/VHF collars on big game species

**Planned Start:** 02/2024

**Action:** Collect, analyze, or model big game population or habitat use data

**Planned Start:** 02/2024

**Treatment Name:** Ellison Knobs and Douglas Hills

**Acres:** 31,965.4

**Action:** Deploy GPS/VHF collars on big game species

**Planned Start:** 02/2024

**Action:** Collect, analyze, or model big game population or habitat use data  
**Planned Start:** 02/2024

**Treatment Name:** Golden Gate Range

**Acres:** 46,009.1

**Action:** Collect, analyze, or model big game population or habitat use data  
**Planned Start:** 02/2024

**Action:** Deploy GPS/VHF collars on big game species  
**Planned Start:** 02/2024

**Treatment Name:** Scofield Bench

**Acres:** 38,491.7

**Action:** Collect, analyze, or model big game population or habitat use data  
**Planned Start:** 02/2024

**Action:** Deploy GPS/VHF collars on big game species  
**Planned Start:** 02/2024

## Project Monitoring

### Monitoring Plan:

- 1) Monitor seasonal habitat use data, movement corridors, and survival rates post collar drop-off.
- 2) Analyze these data using home range size analysis, conduct known-fate survival incorporating exposure metrics, and analyze movement and space use data through resource and step selection functions.
- 3) Use these data to implement adaptive management decisions and propose projects to mitigate factors that are limiting this mule deer herd.

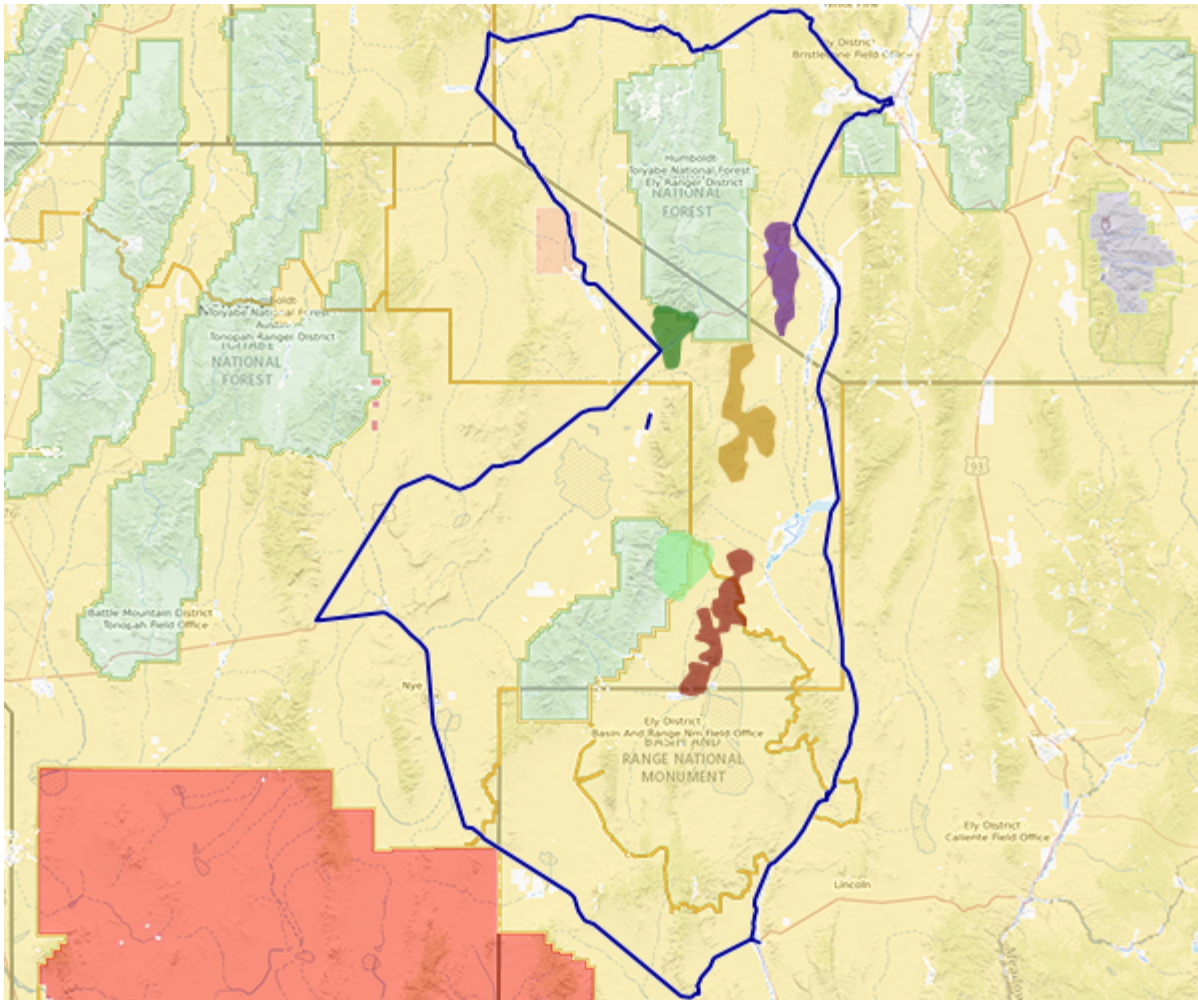
## Project Funding and Budget

Budget Item	NDOW Heritage Trust Account 2024	USFWS Grant - Statewide Game Management 2024	Subtotal
<b>Equipment Purchase</b>			
GPS/VHS Collar (\$1,500/collar)	\$30,000	\$15,000	\$45,000
<b>Other</b>			
Capture Cost (\$1,500/Animal)	\$30,000	\$15,000	\$45,000
<b>Total Costs:</b>	<b>\$60,000</b>	<b>\$30,000</b>	<b>\$90,000</b>

### Budget Narrative:

We are looking to get 30 adult female mule deer GPS/VHF collars deployed throughout the winter range of MA13 during the next capture season in the winter of 2023-2024. We are asking for \$60,000 from the Wildlife Heritage Account to fund 20 of

the GPS/VHF collars in addition to their capture costs. Each collar is roughly \$1,500 (\$1,500 x 20 collars = \$30,000) and each animal costs roughly \$1,500 to capture (\$1,500/Animal x 20 Animals = \$30,000). We are asking the USFWS Grant - State Game Management for \$30,000 to fund the remaining 10 GPS/VHF collars and capture cost. The total budget for the FY24 MA13 Mule Deer Collaring Project will be \$90,000.



#### Boundaries

- County Boundary
- USFS Office Boundaries
- BLM Office Boundaries
- NDOW Region Boundary

#### Land Status

- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Reclamation
- Department of Defense
- Department of Energy
- Fish and Wildlife Service
- US Forest Service
- National Park Service
- Nevada State Lands
- Nevada Park Service
- Private
- Other

#### Project Geometry

- Project Boundary
- Treatment Area: Currant Hills
- Treatment Area: East Horse Range
- Treatment Area: Ellison Knobs and Douglas Hills
- Treatment Area: Golden Gate Range
- Treatment Area: Scofield Bench





# NEVADA DEPARTMENT OF WILDLIFE

## Project Proposal Report

**Project Name:** FY24 Warmwater Fisheries Enhancement

**Project ID:** 839

**Lead Agency:** Nevada Department of Wildlife

**Project Manager:** Brad Bauman      Nevada Department of Wildlife

**Phone Number:** (775) 623-6517

**Email:** bbauman@ndow.org

## Project Partners

Name	Agency	Role
Kim Tisdale	Nevada Department of Wildlife	Agency Cooperator
Brandon Senger	Nevada Department of Wildlife	Agency Cooperator
Travis Hawks	Nevada Department of Wildlife	Agency Cooperator
Cody Byrne	Nevada Department of Wildlife	Agency Cooperator

## Project Schedule

**Project Start Date:** 07/01/2023 (FY 2024)

**Projected Completion Date:** 06/30/2024 (FY 2024)

**Multi-year Project:** no

**Project Schedule:**

FY2024

## Project Location and Land Status

### Location Narrative:

Warmwater fisheries throughout Nevada: Wildhorse Reservoir, Southfork Reservoir, Willow Creek Reservoir, Comins Lake, Chimney Reservoir, Rye Patch Reservoir, Bilk Creek Reservoir, James Kinney Pond, Squaw Valley Reservoir, Lennar Pond, Sparks Marina, Virginia Lake, Little Washoe Lake, Paradise Park Ponds, Mitch Park Pond, Lahontan Reservoir, Liberty Pond, North Pond, Fort Churchill Cooling Pond, Boulder City Urban Pond, Lorenzi Park Pond, Floyd Lamb Pond, Sunset Park Pond, and Mesquite Urban Pond

**NDOW Region:** Western, Eastern, Southern

**NDOW Management Units:** 051, 062, 021, 291, 065, 015, 022, 203, 194, 286, 222, 042, 067, 272, 263, 031, 266, 195

**Nevada Sage Grouse Population Management Unit:** Buffalo/Skedaddle, South Fork, Tuscarora, North Fork, Steptoe/Cave, Santa Rosa

**County:** Clark, White Pine, Douglas, Pershing, Lyon, Elko, Humboldt, Washoe

## Land Status

Land Status	Acres	Percent of Project
No results		

**Bureau of Land Management Office:** Southern Nevada District - Las Vegas Field Office, Ely District - Bristlecone Field Office, Carson City District - Sierra Front Field Office, Elko District - Tuscarora Field Office, Winnemucca District - Black Rock Field Office, Winnemucca District - Humboldt River Field Office

**US Forest Service Ranger District:** Humboldt-Toiyabe National Forest - Carson Ranger District

# Project Summary and Justification

**Project Activity and Sub-activity:** POPULATION MANAGEMENT, MONITORING, and RESEARCH: Aquatic Wildlife

## Project Objectives:

- To measurably increase wildlife populations, wildlife use, or habitat for the benefit of public use and hunter/angler success.
- To conduct population surveys that inform management or monitoring needs.
- To stock fish in order to increase recreational angler use and success

**NDOW Initiative Addressed:** No initiatives

**Priority Resource Impacted:** Fish

**Priority Species Impacted:** Warmwater sport fish

**Does this project benefit Greater Sage-grouse or Greater Sage-grouse habitat:** no

**Project Clearance or Authorization Status:** Not Applicable

## Project Rationale:

Warmwater Sportfish are an important and popular resource to the anglers of Nevada. While hatchery trout stocking is a critically important management tool to provide fishing opportunity, there are many waters where water temperature gets too warm for trout resulting in poor fishing conditions, especially throughout the summer when many people want to be outdoors recreating. Warmwater sport fisheries provide that opportunity allowing anglers to continue recreating throughout the summer and ultimately sells more fishing licenses.

Periods of drought are common in Nevada and can have severe impacts on sportfish populations by reducing the size of reservoirs and thereby reducing the number of warmwater sportfish in those waters. Stocking warmwater sportfish in fisheries throughout the State is done annually, not only to rebuild drought impacted reservoirs, but also to meet stocking recommendations, satisfy angler demand, or to use certain species as a biological control to maintain population balance within large reservoirs. Lakes and Reservoirs proposed to be stocked as part of this proposal include, but are not limited to, Washoe Lake, Squaw Creek Reservoir (Washoe Co.), North Pond (Lyon Co.), Rye Patch Reservoir (Pershing Co.), Lahontan Reservoir (Churchill Co.), South Fork Reservoir, Wildhorse Reservoir, Willow Creek Reservoir (Elko Co.) and Chimney Reservoir (Humboldt Co.). Urban fisheries requiring annual stocking of warmwater fish include Sparks Marina, Paradise Pond, Virginia Lake (Washoe Co.), James Kinney Pond (Humboldt Co.), Liberty Pond (Churchill Co.), Seaman Pond (Douglas Co.), Boulder City Pond, Floyd Lamb Pond, Lorenzi Pond, Mesquite Pond and Sunset Pond (Clark Co.). Fish species to be stocked include wiper (White Bass X Striped Bass hybrid), Channel Catfish, Largemouth Bass, Bluegill, or other species as determined by program need.

Wipers are a popular and unique species of warmwater sportfish. Wipers are an aggressive, hard-fighting, punch-packing, schooling fish that corral baitfish and attack with vigor making them not only a popular sportfish with anglers, but also an important tool for controlling populations of certain fish species that can overpopulate our larger reservoirs. Wipers are a sterile hybrid and do not reproduce, making it possible for biologists to closely manage their populations, but it also requires that they be stocked on a regular basis to maintain the population. Channel Catfish are used to stock many Urban Fisheries throughout the State during the summer months when it is too warm to stock trout. Bluegill and Largemouth Bass are popular sport fish that require occasional stocking to augment waters recovering from drought or to create new opportunity.

Warmwater fish stocking is included as a management activity in the annual Wildlife Sport Fish Restoration Act Grant proposal for the Fisheries Division. Consultation with the USFWS to address any affects to listed species is completed prior to approval of the grant. There are no additional permits or NEPA compliance required for this project.

## Project Treatments and Actions

**Treatment Name:** Warmwater Fisheries

**Acres:** 47,366,250.4

**Action:** Conduct population surveys

**Approach Narrative:**

Warmwater fisheries will be monitored throughout FY2024.

**Planned Start:** 07/2024

**Action:** Warmwater fish species stocking

**Approach Narrative:**

Warmwater fish stocking will occur statewide throughout FY2024.

**Planned Start:** 07/2024

## Project Monitoring

### Monitoring Plan:

Each of these reservoirs are monitored on an annual or biennial basis to determine fish species composition, size/age class structure, and population trends. Urban Ponds are generally monitored for angler use and success.

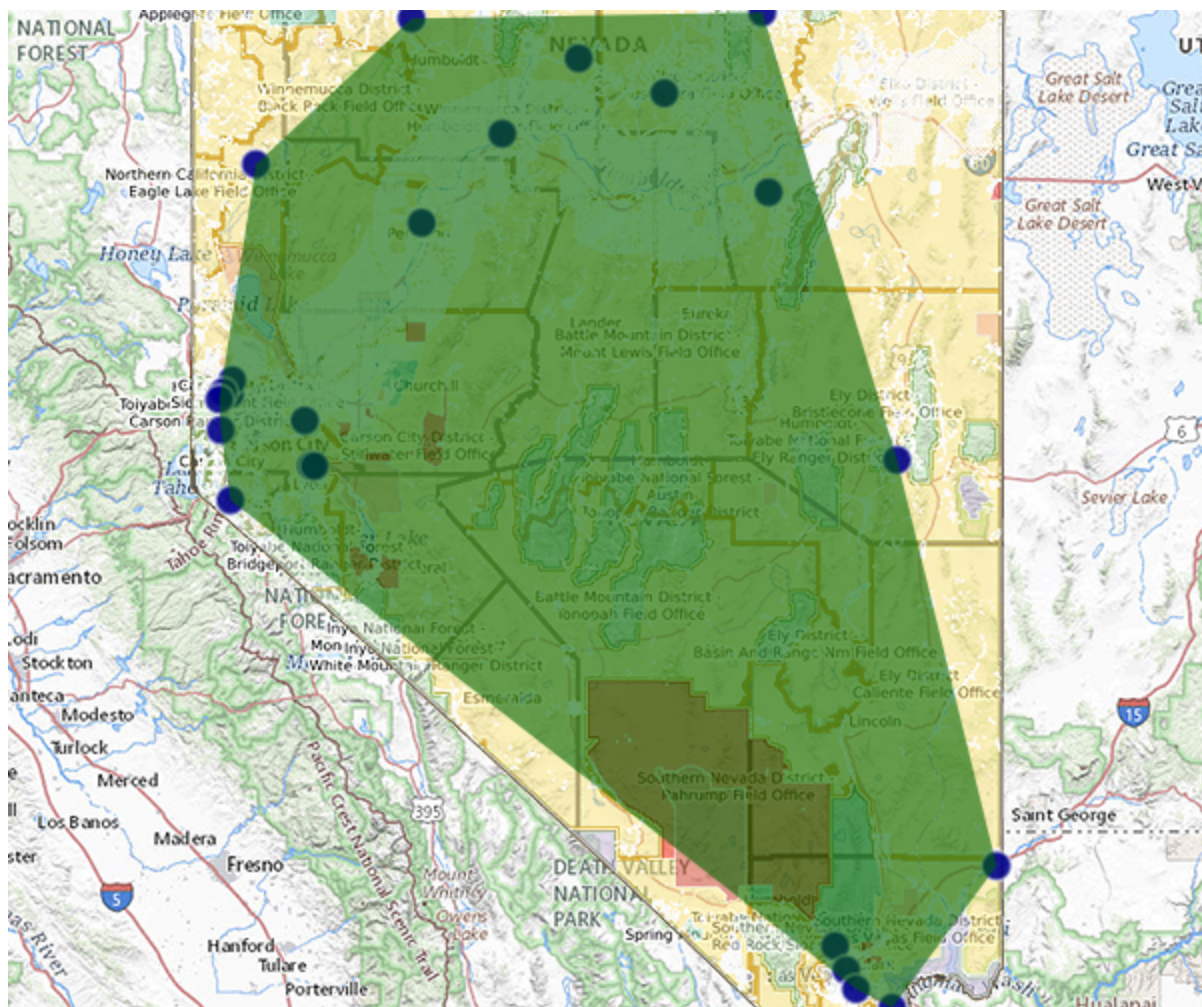
Wipers have proven to be an effective biological control of Yellow Perch in Wildhorse Reservoir. Annual NDOW monitoring data from 2002-2022 has shown the effectiveness of using wipers to control Yellow Perch populations. Ongoing monitoring at Wildhorse Reservoir to determine fish species composition, size/age class structure, and population trends is critical to inform biologists' decisions on stocking recommendations and management decisions for wipers and other warmwater species in the reservoir including Yellow Perch, Smallmouth Bass, and Channel Catfish. Every wiper stocked into Wildhorse will have a Floy tags attached to it. Tagging these fish will assist managers in monitoring the effectiveness of wipers as a biological control on yellow perch, as well as, monitoring harvest and growth rates of wipers.

## Project Funding and Budget

Budget Item	NDOW Heritage Trust Account 2024	NGO Donations 2024	Subtotal
<b>Contracts</b>			
Warmwater Fish Purchase (Vendors)	\$129,258	\$15,000	\$144,258
<b>Materials Purchase</b>			
Floy Tags	\$1,600	\$0	\$1,600
<b>Total Costs:</b>	<b>\$130,858</b>	<b>\$15,000</b>	<b>\$145,858</b>

**Budget Narrative:**

Budget constraints within the Fisheries Division has limited NDOW in purchasing warmwater fish from the Fisheries Division budget for the foreseeable future. Warmwater sportfish species are a resource that is heavily utilized by anglers of Nevada and is responsible for a significant portion of our fishing license sales every year. Eliminating warmwater fish stocking will negatively impact angler expectations and satisfaction at certain reservoirs, as well as diminish the use of wipers as a biological control of the Yellow Perch population at Wildhorse Reservoir resulting in the degradation of that very popular fishery. Warmwater fish are purchased through approved vendors and delivered and stocked into dozens of warmwater fisheries. We applied for a grant in the amount of \$15,000 from the Bass Fishing Hall of Fame Grant Program sponsored by the Bass Anglers Sportsman's Society (B.A.S.S.).



### Boundaries

- County Boundary
- USFS Office Boundaries
- BLM Office Boundaries
- NDOW Region Boundary

### Land Status

- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Reclamation
- Department of Defense
- Department of Energy
- Fish and Wildlife Service
- US Forest Service
- National Park Service
- Nevada State Lands
- Nevada Park Service
- Private
- Other

### Project Geometry

- Project Boundary
- Treatment Area: Warmwater Fisheries