

**ELK HERD UNIT MANAGEMENT PLAN**  
**Elk Herd Unit #28**  
**PANGUITCH LAKE**  
**2023**

**BOUNDARY DESCRIPTION**

Garfield, Iron, and Kane counties - Boundary begins at US-89 and SR-14; north on US-89 to SR-20; west of SR-20 to I-15; Sound on I-15 to SR-14; east on SR-14 to US-89. EXCLUDES ALL NATIVE AMERICAN TRUST LANDS WITHIN THIS BOUNDARY. EXCLUDES ALL NATIONAL PARKS.

**UNIT MANAGEMENT GOALS**

- Manage for a population of elk capable of providing a broad range of recreational opportunities including hunting and viewing
- Continue with the limited entry bull harvest strategy

**UNIT MANAGEMENT OBJECTIVES**

**Habitat**

- Continued commitment to habitat projects that increase forage for both big game and livestock
- Maintain and/or enhance forage production through direct range improvements throughout the unit to achieve population management objectives
- Work with private, state, and federal agencies to maintain and protect crucial ranges
- Continue projects with USFS, BLM, state, and private entities to enhance habitat
- Provide improved habitat security and escapement opportunities for elk through support and cooperation of approved Dixie National Forest Travel Plan
- Encourage the maintenance and development of water sources
- Focus on providing water sources in remote areas or on abandoned/sources such as old water troughs, ponds, and tanks that can benefit both livestock and wildlife. Primarily on the north end of the units where water is limited
- Discourage the encroachment of pinyon and juniper (PJ) trees into sagebrush and other habitats
- Work with land management agencies to improve elk calving habitat and minimize disturbance in calving areas
- Seek opportunities to improve aspen communities, and sagebrush ranges where elk calving and foraging are occurring
- Discourage high densities of elk wintering along the Parowan Front below 7,000ft to protect crucial deer range, reduce human safety issues from vehicle collisions, and minimize depredation issues
- Work with agencies and permittees to focus antlerless harvest in areas where elk are congregated and need to be more evenly distributed

**Population** - Manage for a range between 1000 - 1500 total elk wintering across the unit. Aerial surveys and annual preseason classification surveys (July – August) will be used to monitor the population. Population modeling will also be used to generate annual postseason (winter) population estimates. Antlerless harvest using a variety of harvest methods and seasons will be the primary means to achieving the wintering population objective. (Previous population objective was 1100.)

## **CURRENT STATUS OF ELK MANAGEMENT**

**Habitat** - Overall, range conditions on the Panguitch Lake WMU are good with stable to increasing range conditions on most of the unit (UDWR Range Trend / USFS and BLM Vegetation Monitoring). Some challenges facing elk habitat include;

- conifer encroachment of aspen stands
- recovering forests from epidemic of spruce bark beetle
- water availability and distribution that is dependent on precipitation

Many habitat restoration projects have been completed in the past 7 years that have improved over 87,765 acres of habitat and there are several thousand additional acres proposed for restoration in the near future.

### **Range Area and Approximate Ownership**

	Winter Range		Year Long		Summer Range	
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
USFS	32,570	53%	58,870	67%	186,728	75%
BLM	43,022	33%	19,084	22%	5,540	5%
SITLA	1,922	8%	1,783	2%	1,524	2%
Private	16,798	5%	7,610	9%	51,794	15%
UDWR	6,547	1%	0	0%	1,256	1%
NPS	0	0%	0	0%	6007	2%
TOTAL	100,859		87,347		252,849	

### **Habitat Projects Completed 2016 - 2023**

Project Title	Acres	Year
Buckhorn Flat/Swayback Knoll - Chaining (Phase 1)	899	2022
Sawyer Point/Ikes Veg Phase 2	503	2020
Bone Hollow and Greenville Bench Project Maintenance	3,352	2019
Sage Hen Hollow Water Project	0	2018
Cedar City to Parowan I-15 Deer Fence and Double Cattle Guards Ph 2	0	2018
Billingsly Creek Stewardship Project	664	2020
Brian Head Fire Rehabilitation Phase II	217	2019
Panguitch Municipal Watershed Seeding	27	2020

Pickering Creek Big Game Transitional Range Enhancement	177	2022
SR Mule Deer Winter Range Bitterbrush Enhancement FY20	1,739	2020
Greater Fremont Plateau Habitat Restoration Phase II	5,745	2020
Parowan Front Braffits Creek	1,506	2020
Panguitch Creek Private Lands Lop and Scatter	58	2023
Parowan Pond Community Fishery Dredging and Inflow Structure Upgrade	0	2022
Greater Fremont Plateau Habitat Restoration Phase III	2,072	2021
Henrie Knolls North Riparian	65	2020
Parowan Front - Cottonwood Creek Phase I	1,975	2021
Restoration on the Brian Head Fire using Aspen Seedlings	0	2018
Southern Region Riparian Restoration FY22	0	2022
Sawyer Point Veg	1,369	2018
Yankee Meadow WMA Brianhead Fire Rebuild	0	2018
Co-op Valley Lop and Scatter	352	2021
Parowan Front P-Hill	1,646	2022
South Canyon Hatch Mountain	1,938	2023
Southern Region Riparian Restoration FY23	0	2023
Parowan Front Mastication	169	2019
Center Creek/Panguitch Creek Vegetation Improvement	169	2021
Panguitch Municipal Watershed NEPA	0	2017
South Canyon Water Distribution Project	0	2018
Southern Region Riparian Restoration FY 20	0	2020
Dixie National Forest FY 2016 Exclosure Repair and Rebuild project	0	2016
Parowan Front WMA Arc for Bullhog and Lop and Scatter	1,673	2016
Little Bear Valley to Fremont Canyon Sagebrush Steppe Habitat Restoration	6,466	2019
Sandy Creek Ranch Rabbitbrush Removal	126	2016
Yankee Meadow WMA Improvement Project	0	2016
FY 21 Southern Region Small Fires	1,058	2021
Dog Valley Hand Thinning	9,767	2016
South Canyon (Limestone)	3,850	2016
Garfield County Rabbitbrush Wet Mow	127	2017
Southern Region Barriers for Bonneville Cutthroat Trout Restoration	0	2016
Alton/South Canyon Retreatment - large tree removal	1,210	2016
UDWR / Dixie NF Cooperative Project - Fisheries Habitat Improvement	0	2016
Southern Region Riparian Restoration FY16	0	2016
South Canyon (Coal Pit Wash)	2,242	2017
Second Mound Water System	0	2020
South Summit WMA Boundary Fence Improvements	0	2023
Yankee Meadow WMA Improvement Project Phase 2	0	2017
South Canyon (Panguitch Creek)	2,230	2021

Bench Fire 2020	33	2022
Brian Head Fire Rehabilitation	15,987	2018
Southern Region Riparian Restoration FY21	0	2021
Rock Canyon Water Project	0	2018

**Population** - Population trends can be found in the Appendix. The most recent aerial surveys were conducted in February 2019 and in 2022 with estimates of 1,395 and 1,000, respectively.

**2023 Unit Plan Advisory Committee** - The unit elk plan committee met in August 2023 and discussed adjusting the population objective. A proposal was made to manage for a range of 1,300 to 1,600 with a target population of 1,450. After all comments were received, it was agreed that a larger range should be adopted of 1,000 to 1,500. This range will be reviewed in annual meetings to assess if it would be appropriate to change to the original proposal of 1,300 to 1,600 with a target of 1,450.

### **BARRIERS TO ACHIEVING UNIT MANAGEMENT OBJECTIVES**

**Habitat** - Restoration efforts on summer ranges to improve forest health and address watershed productivity are needed. Private landowners, livestock permittees, federal and state land management agencies and the Utah Division of Wildlife Resources are encouraged to continue to work together to conduct landscape wide treatments. In an effort to regenerate aspen communities, land managers are encouraged to use fire, mechanical or chemical treatments on landscape level projects. New water developments and maintenance of existing water sources can be an issue in drier portions of the unit and in drought conditions. Drought conditions and utilization standards can create conflict if livestock reductions are needed. Improved communication about project needs and ideas are needed to facilitate greater cooperative efforts.

**Population** - Dry conditions or high utilization may prompt changes to grazing practices while elk numbers have not historically been reduced beyond permit numbers issued in April. Many of the local landowners and public lands grazers may experience higher depredation to private lands and fence damages from an increase in the elk population.

### **STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES**

#### **Habitat**

- Encourage improved communication among stakeholders through Utah Partners for Conservation and Development as well as annual interagency coordination meetings
- Communicate annually with the advisory committee on elk population status and annual recommendations
- Use range trend and habitat improvement data to make appropriate habitat-related decisions
- Antlerless elk harvest may be recommended if drought conditions exist and/or if there is excessive habitat utilization. Any of these hunts should have definitive boundaries around the problem area and be focused early in the season if possible (example: Markagunt Plateau)
- Encourage USFS and BLM to control uses that negatively impact bottomlands and riparian areas. Focus areas should include Deer Creek, Little Valleys, and areas adjacent to the Cedar Breaks National Monument
- Maintain investments in previous habitat projects such as seedings, chainings, and water developments
- Encourage at least 15,000 acres of treatment in elk habitat during this plan

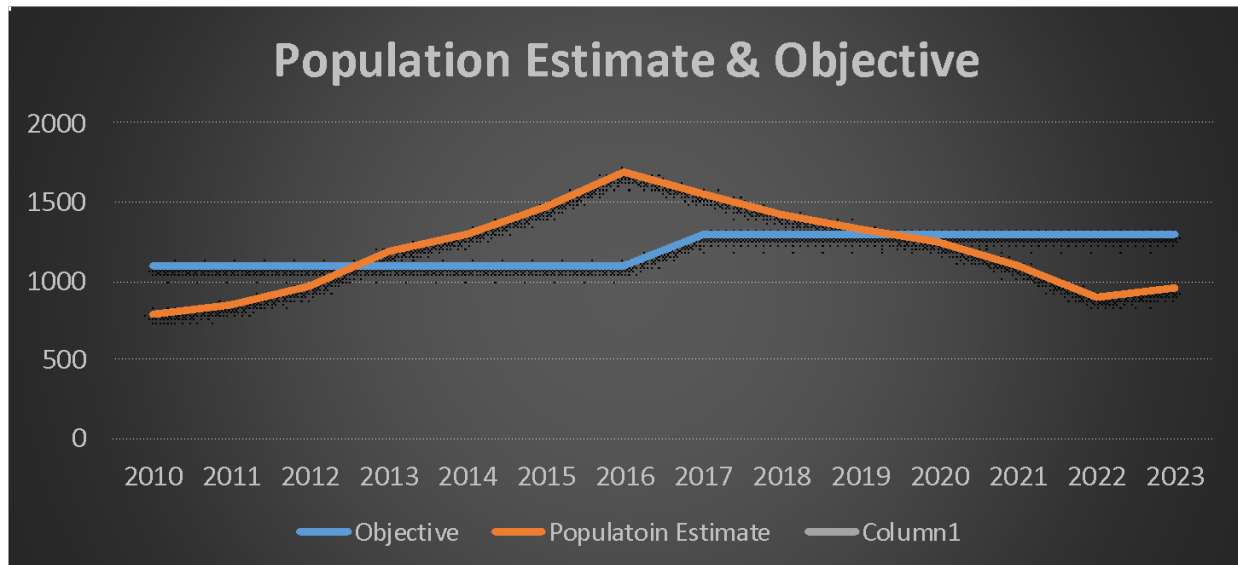
**Population**

- Monitor age class structure of the bull population through the use of harvest surveys and tooth analysis
- Support outreach efforts to document benefits of higher quality bull elk on Panguitch Lake, particularly to local economies (landowner permits, shed antler gathering, etc.)
- Support spike bull hunting to promote healthy bull to cow ratios and hunting opportunities

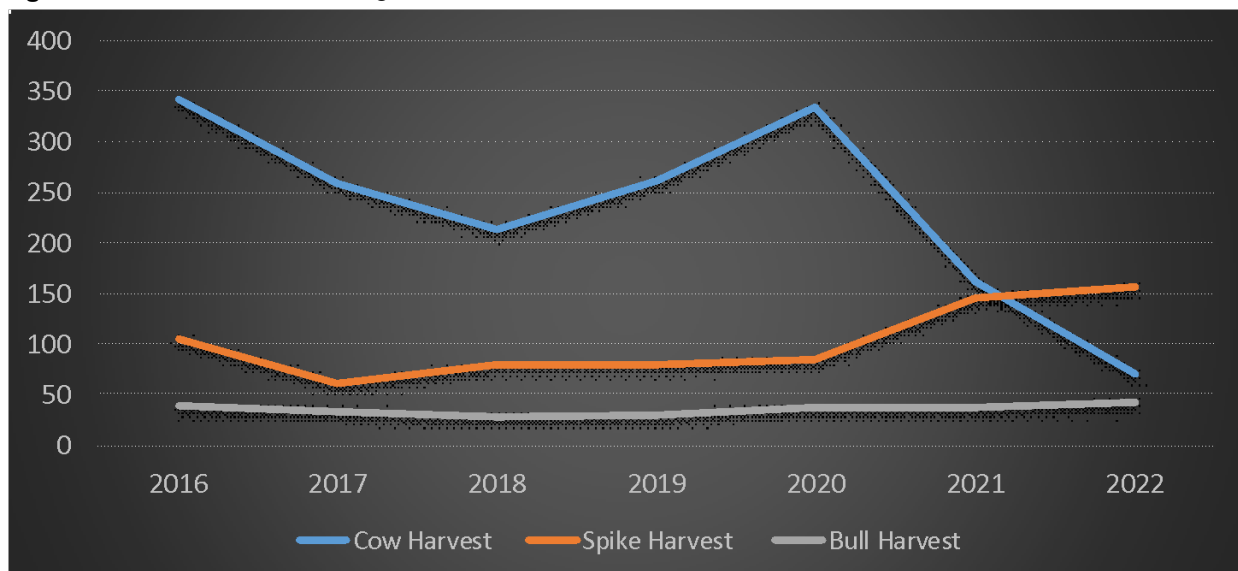
**Duration of This Management Plan** - This Unit Management Plan was revised in 2023 following the revision of the Statewide Elk Management Plan. This Unit Management Plan will be revised after the next Statewide Elk Management Plan revision to ensure all current management tools are being used. CWMU operators and landowners requested a mid-plan review and revisions may take place when improved data or management tools become available, or to address future issues. Unit elk plan goals, objectives, and strategies are constrained within the sideboards set in the Statewide Elk Plan, which supersedes unit plans. It is possible that changes to the Statewide Elk Plan may affect unit plans. Additionally, changes to Utah State Code and/or Administrative Rule may also affect elk unit plans.

## APPENDIX

**Figure 1.** Population estimates of elk on Panguitch Lake WMU #28.

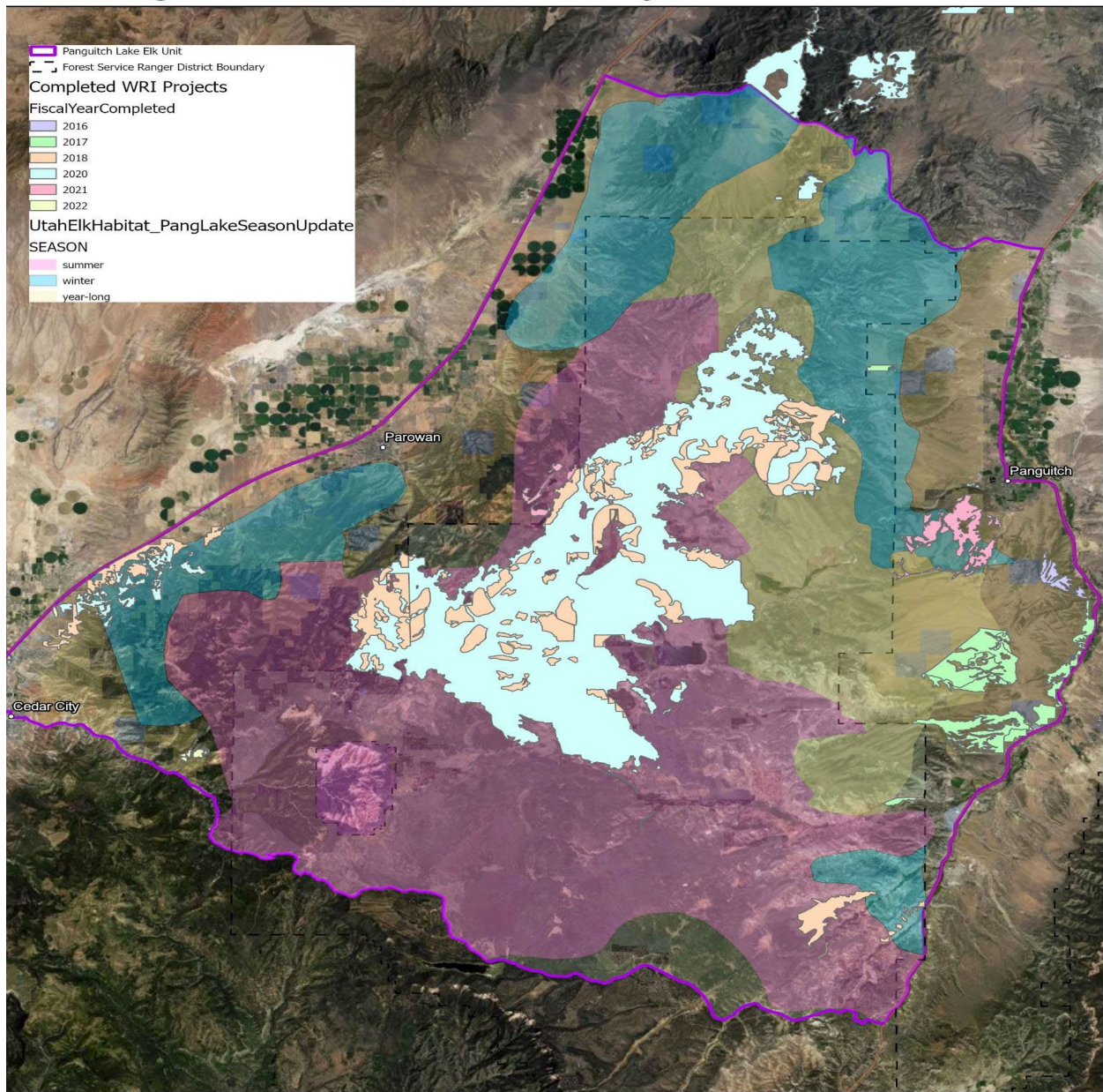


**Figure 2.** Harvest of elk on Panguitch Lake WMU #28.



**Figure 3.** Map of WRI habitat projects 2016-2022

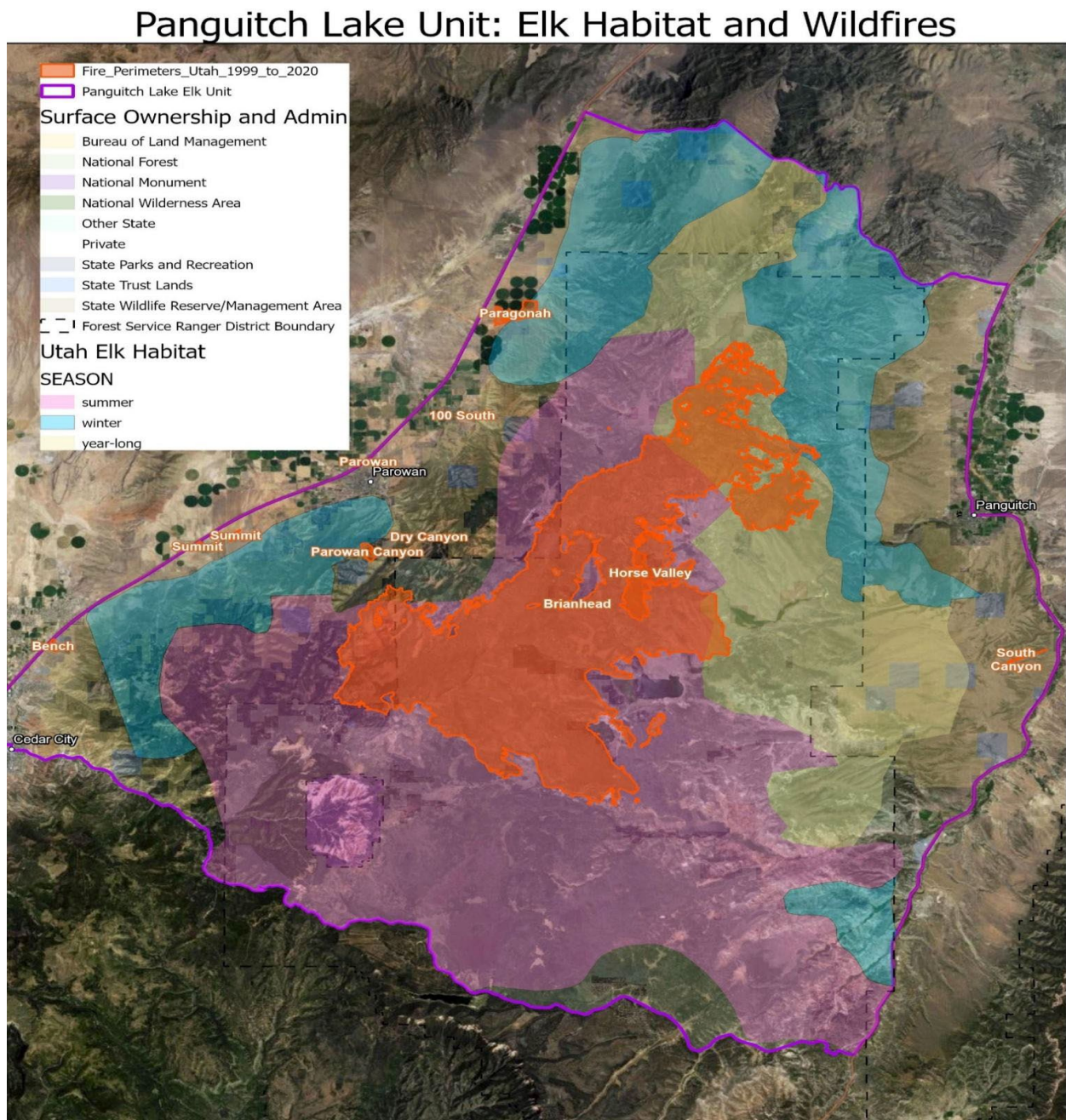
### Panguitch Lake Unit: WRI Projects 2016 - 2022



7/31/2023



**Figure 4.** Panguitch Lake fire map 2016-2023.



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