

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; South 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 pre-season classification surveys (July – August) will be used to monitor the population. Population modeling will also be used to generate annual post-season (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/lkes 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. Revision of this plan may also take place as needed to address future issues or incorporate new management strategies. Unit elk plan goals, objectives, recommendations 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 plans.

APPENDIX

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

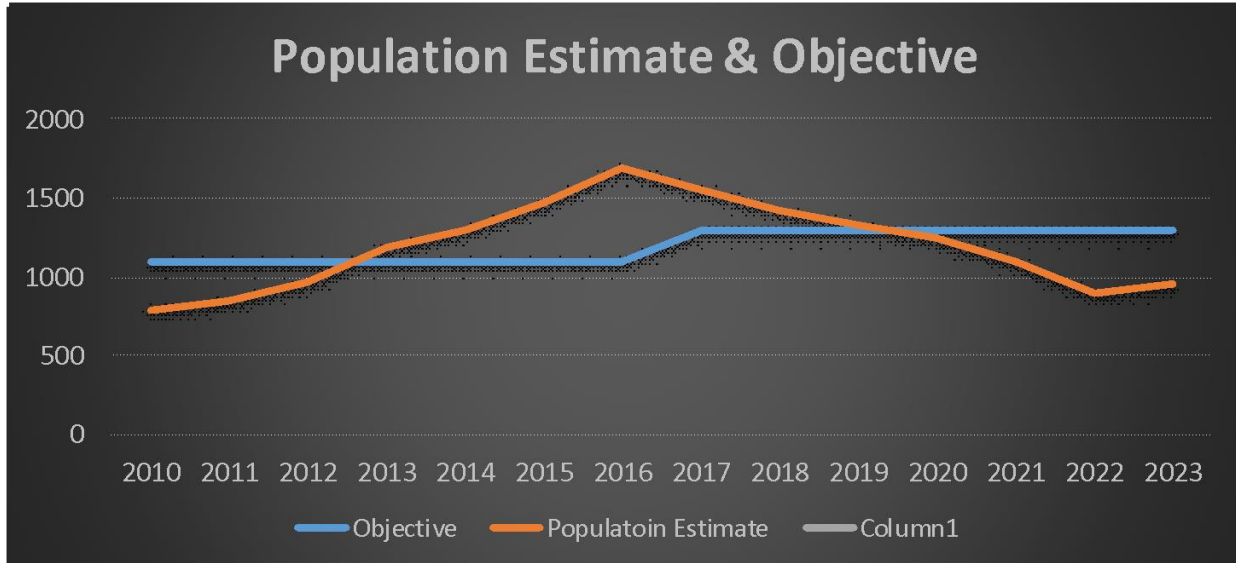


Figure 2. Harvest of elk on Panguitch Lake WMU #28.

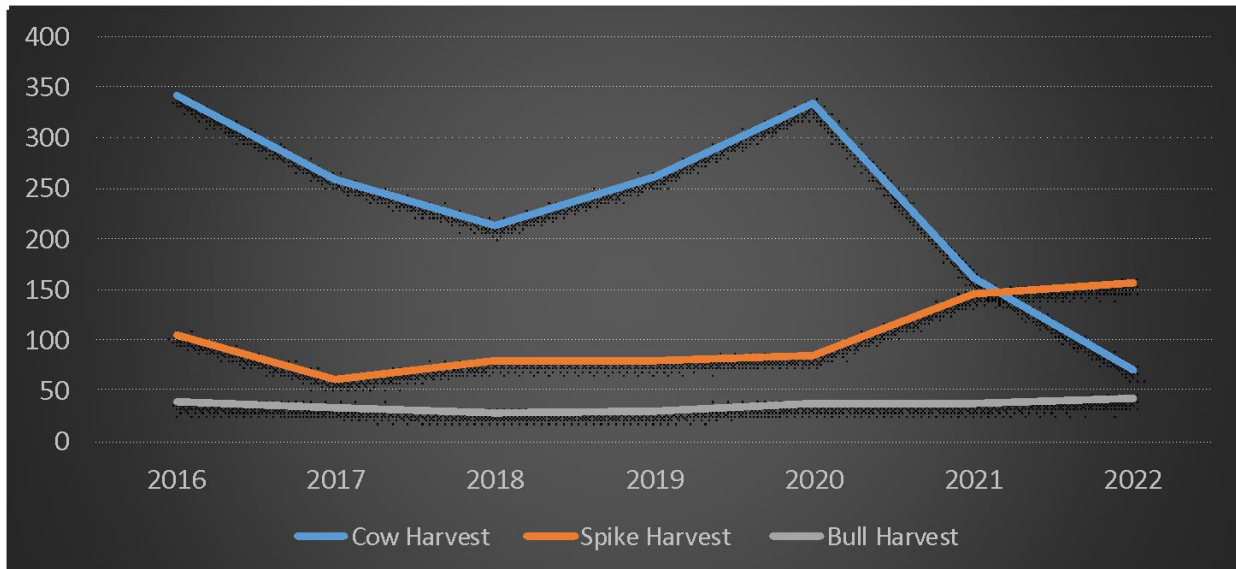
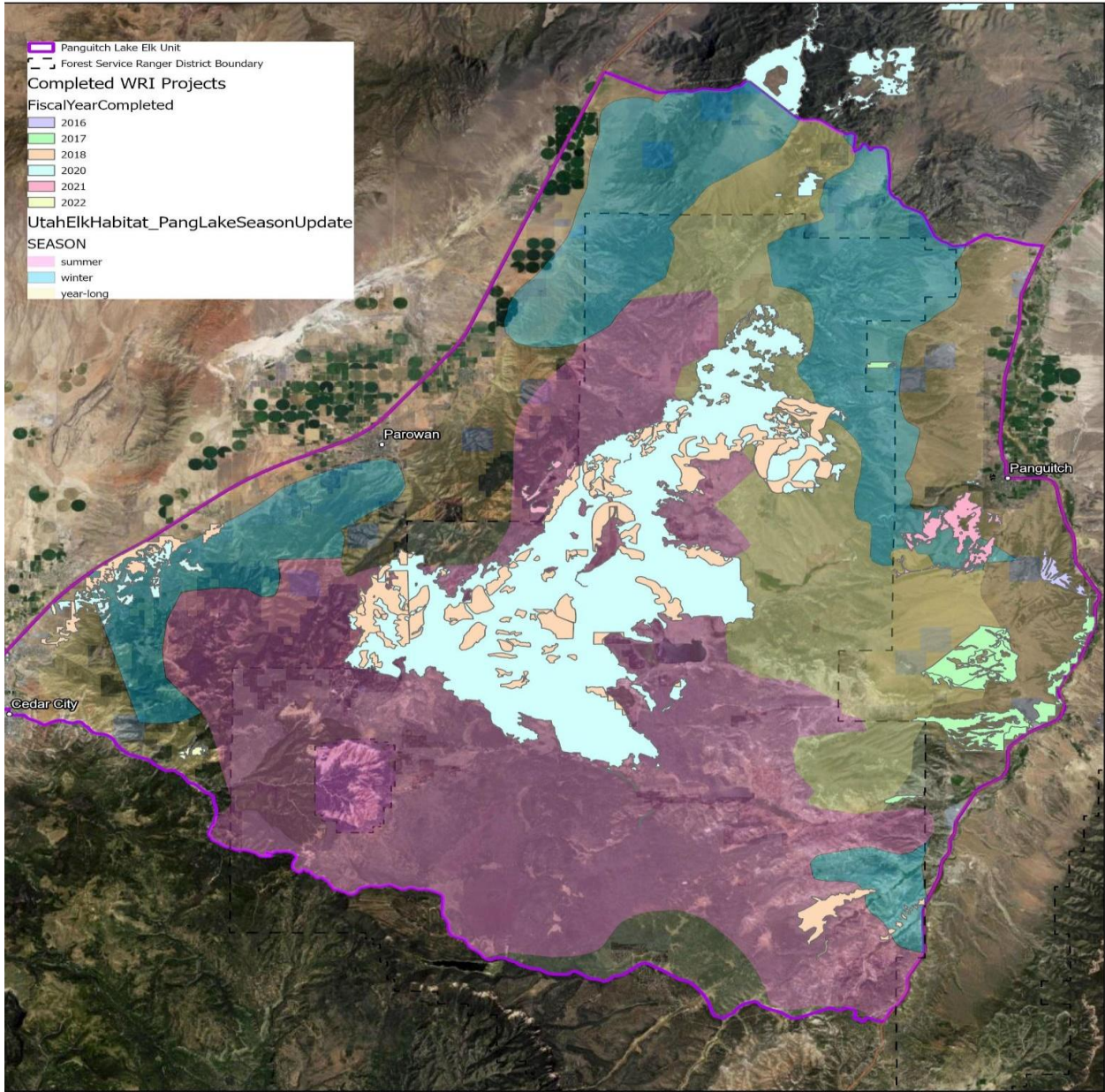


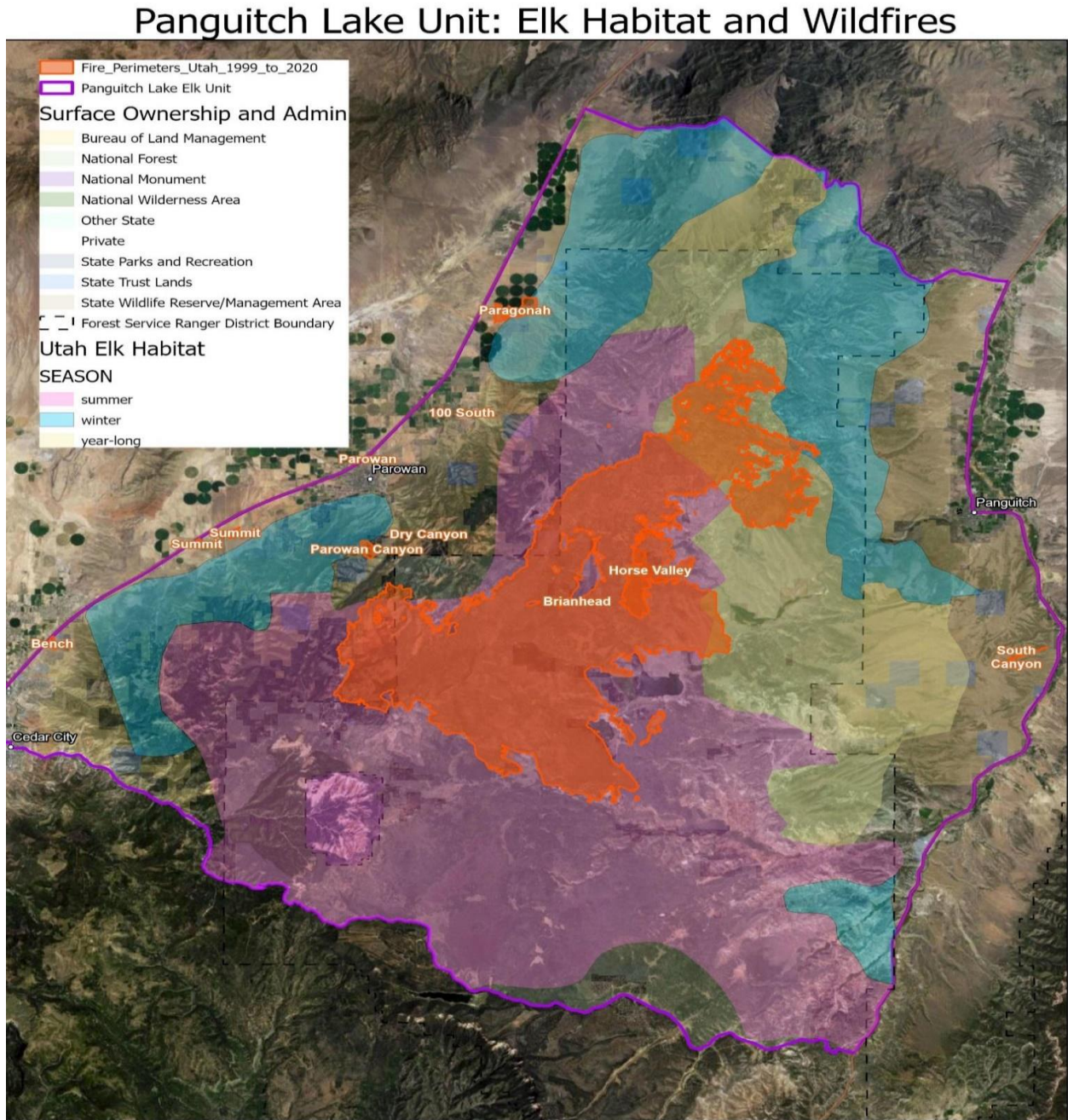
Figure 3. Map of WRI habitat projects 2016-2022

Panguitch Lake Unit: WRI Projects 2016 - 2022



7/31/2023

Figure 4. Panguitch Lake fire map 2016-2023.



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