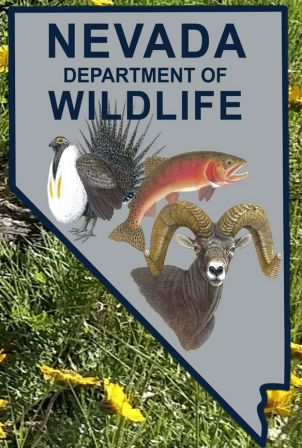


# Nevada Habitat Status & Trend

Nevada Board of Wildlife Commissioners Meeting March 3, 2024

Nevada Department of Wildlife  
Mark Freese, Habitat Division Administrator  
Jasmine Kleiber, Habitat Division Administrator





# Roadmap

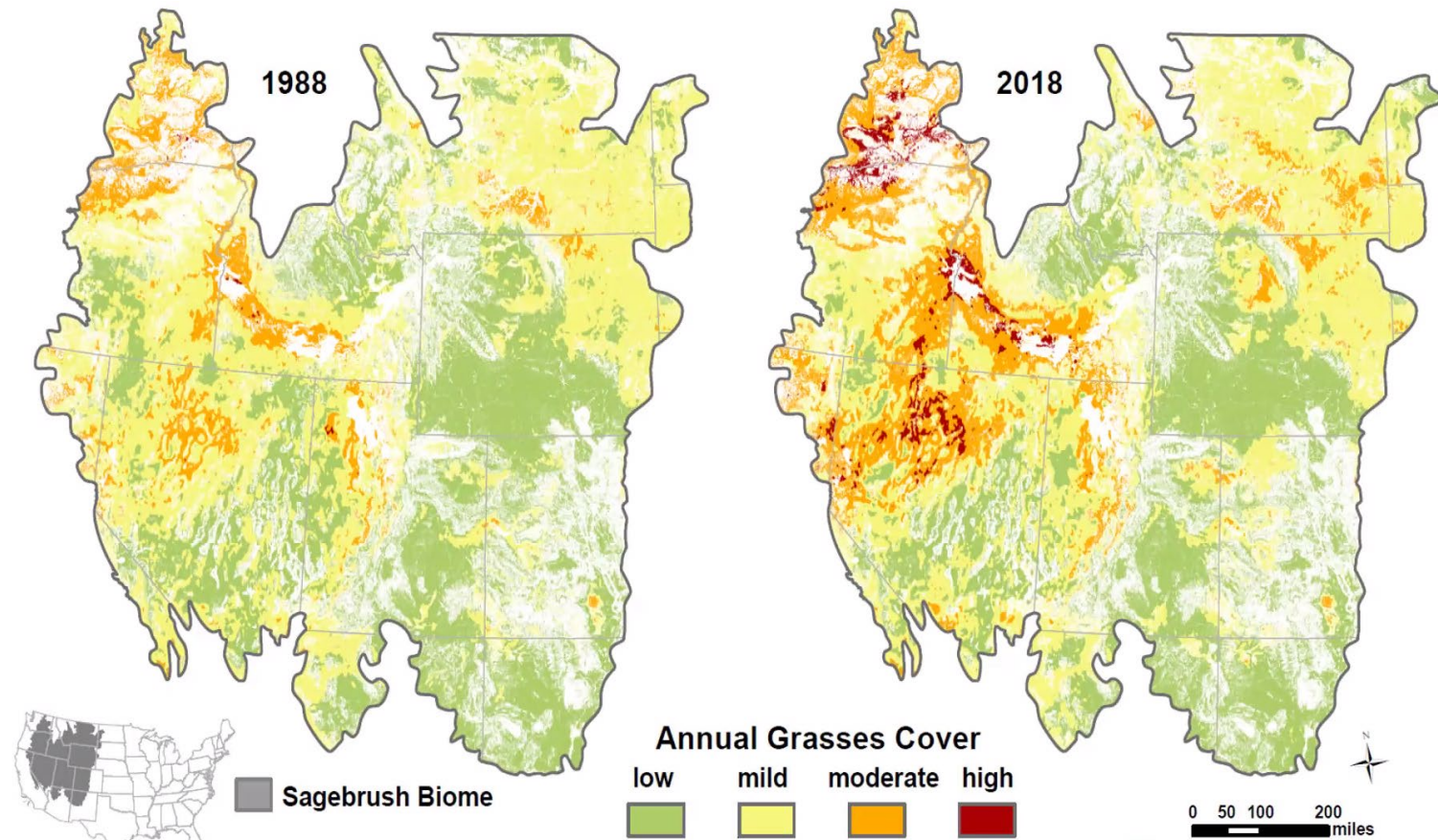
- General Habitat Threats and Long-Term Vegetation Trends
- Short-Term Weather and Vegetation Conditions
- Great Basin Wildfire Season Outlook
- Emerging Threats and Consideration
- Department Activities



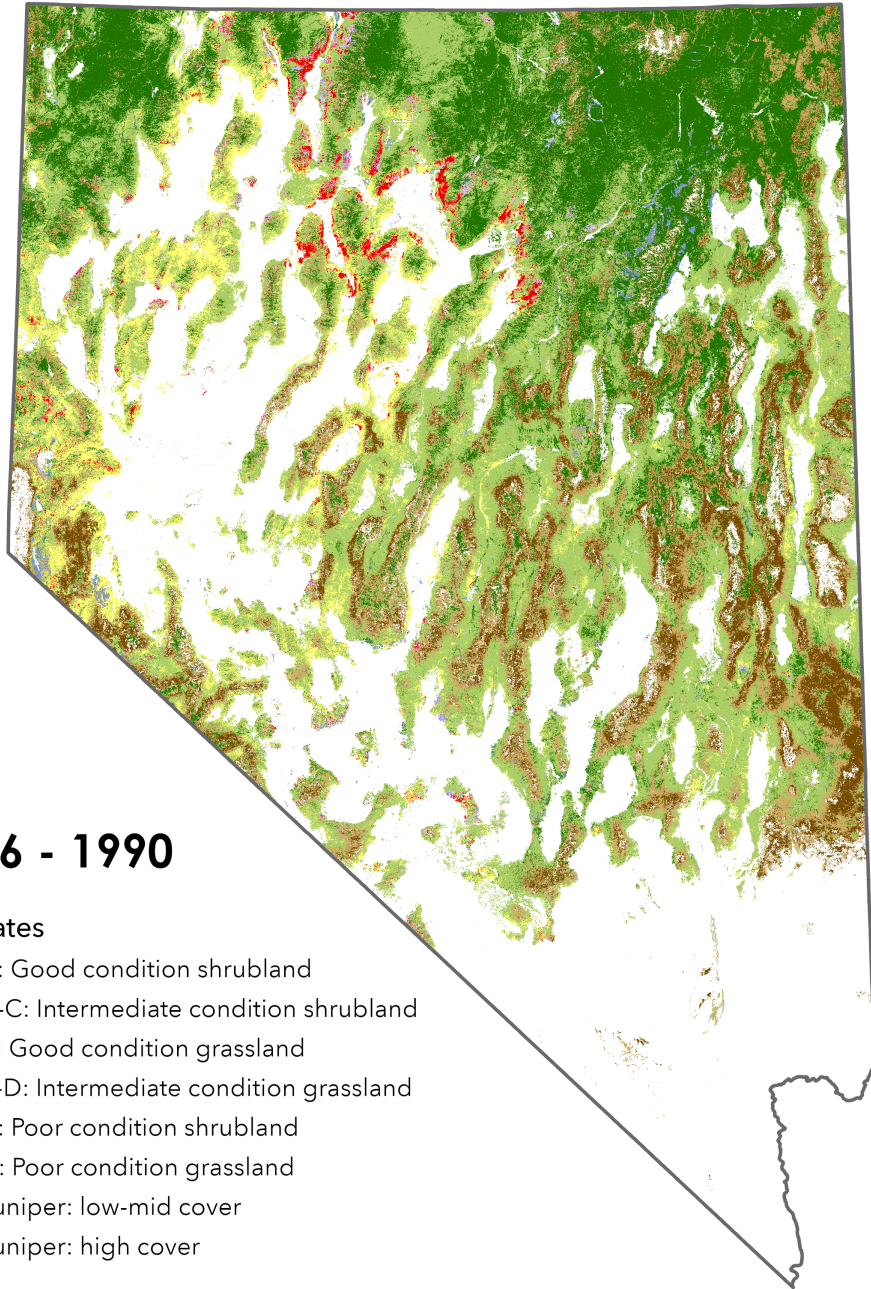


# Threats

- Invasive Species and Wildfire
- Pinion Juniper Encroachment
- Spring/Riparian/Meadow Degradation
- Drought
- Anthropogenic Development



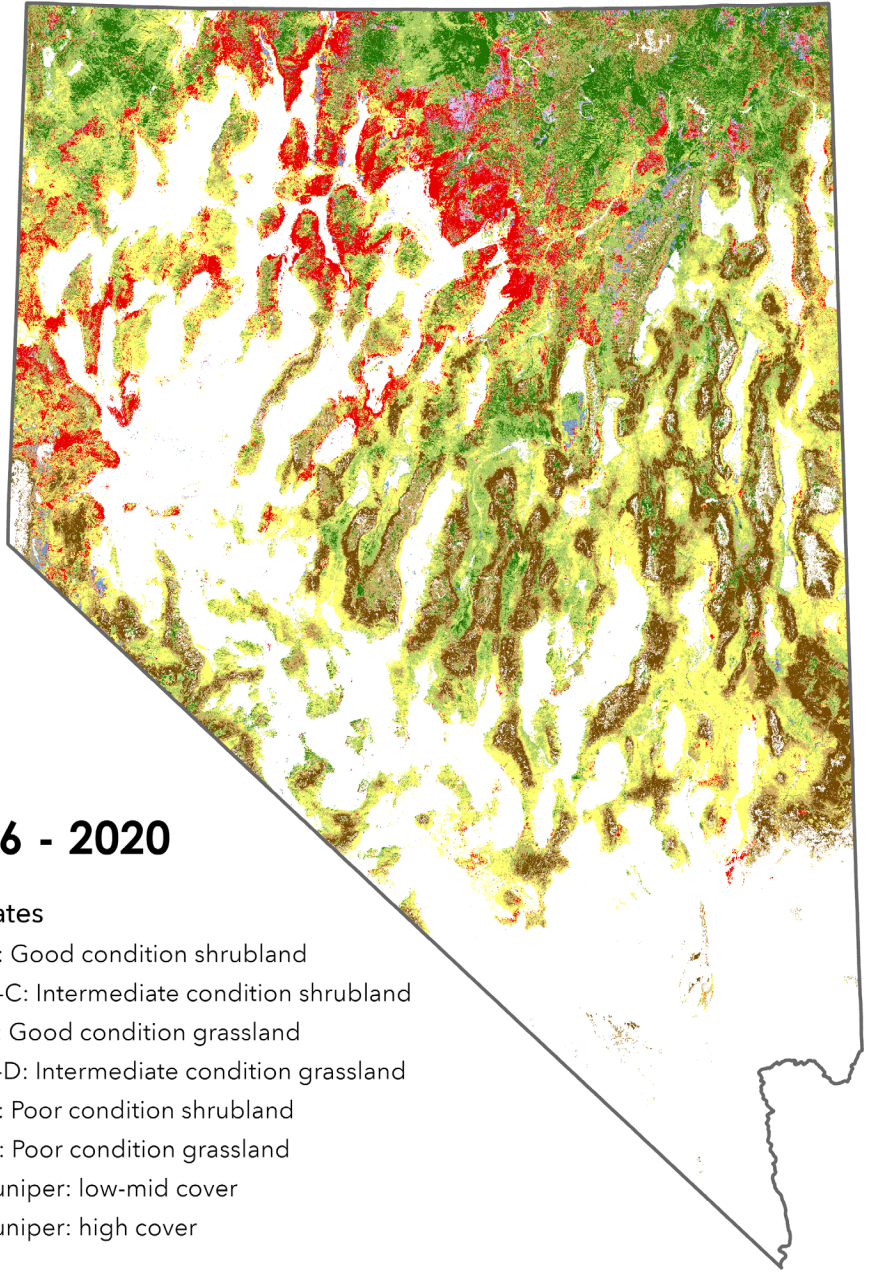




## 1986 - 1990

### Ecostates

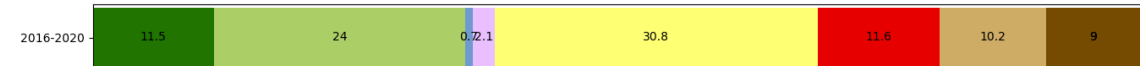
- A: Good condition shrubland
- A-C: Intermediate condition shrubland
- B: Good condition grassland
- B-D: Intermediate condition grassland
- C: Poor condition shrubland
- D: Poor condition grassland
- Juniper: low-mid cover
- Juniper: high cover



## 2016 - 2020

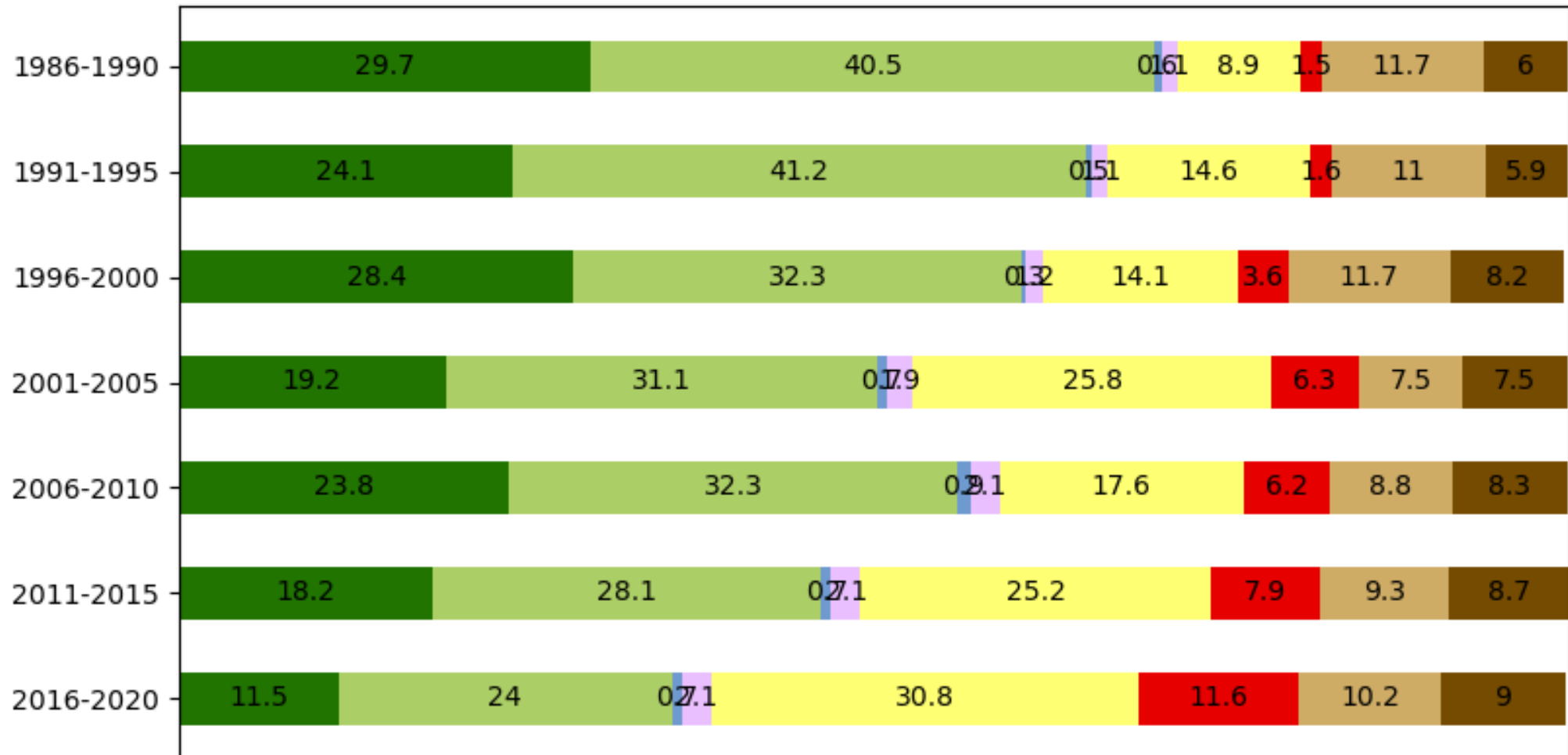
### Ecostates

- A: Good condition shrubland
- A-C: Intermediate condition shrubland
- B: Good condition grassland
- B-D: Intermediate condition grassland
- C: Poor condition shrubland
- D: Poor condition grassland
- Juniper: low-mid cover
- Juniper: high cover





Over the last 30 years Nevada's habitats characterized as moderate-to-good shrub and grasslands have decreased by half while areas classified as being in poor condition have increased four-fold.







Natural Resources Conservation Service

## Nevada Water Supply Outlook Report April 1, 2024

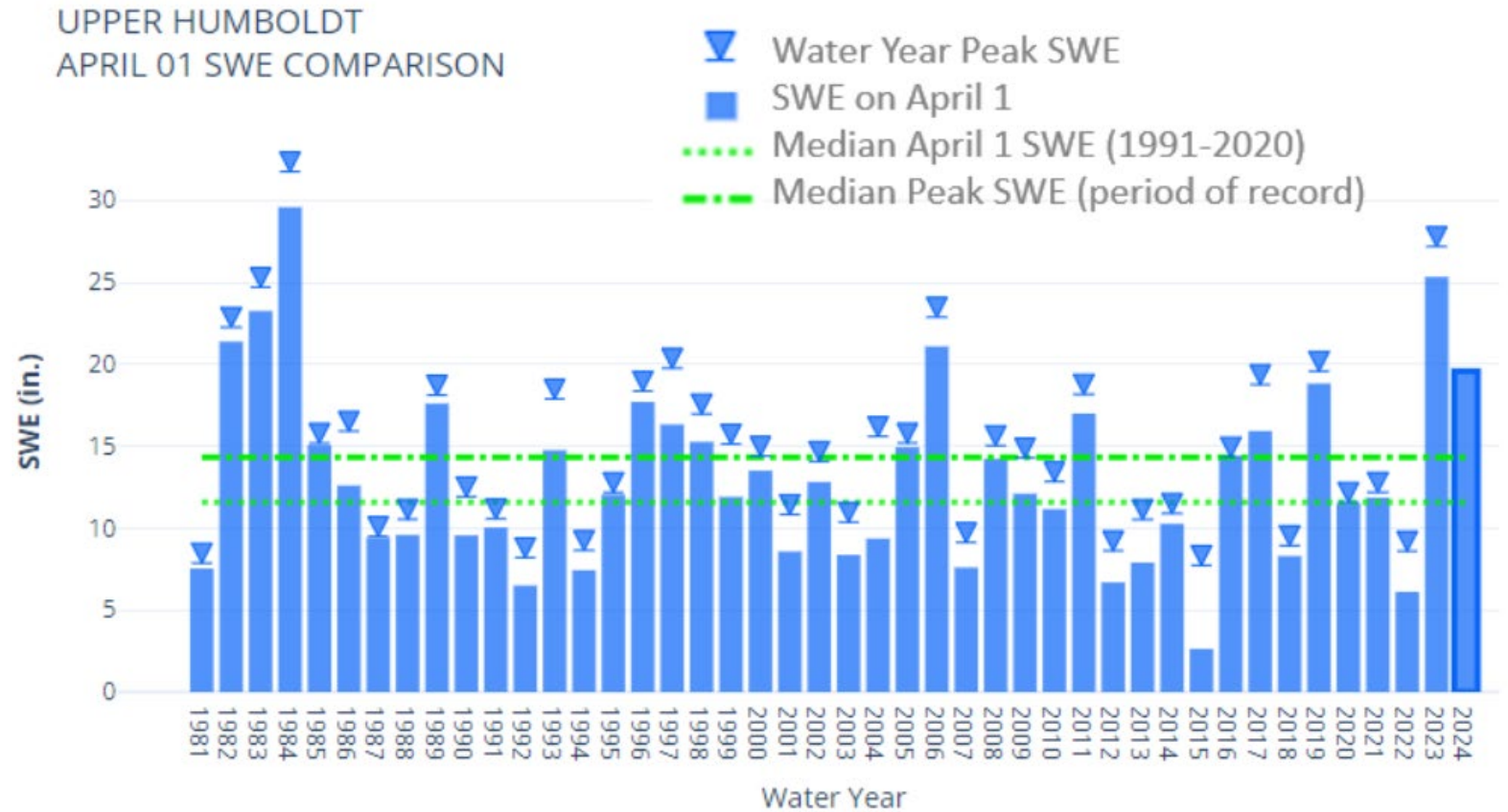


Figure 1: Upper Humboldt Basin comparison of April 1 snow water equivalent (blue bars) with each year's peak snow water equivalent (triangles). Compared to 2023 and 2024, the last time back-to-back winters had similar snow amounts was in 1982 and 1983. Peak SWE typically occurs after April 1 in the Upper Humboldt Basin so the 2024 peak SWE could end up a bit higher than the April 1 amount displayed.

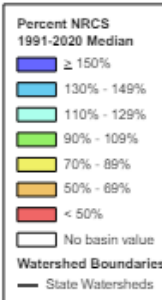
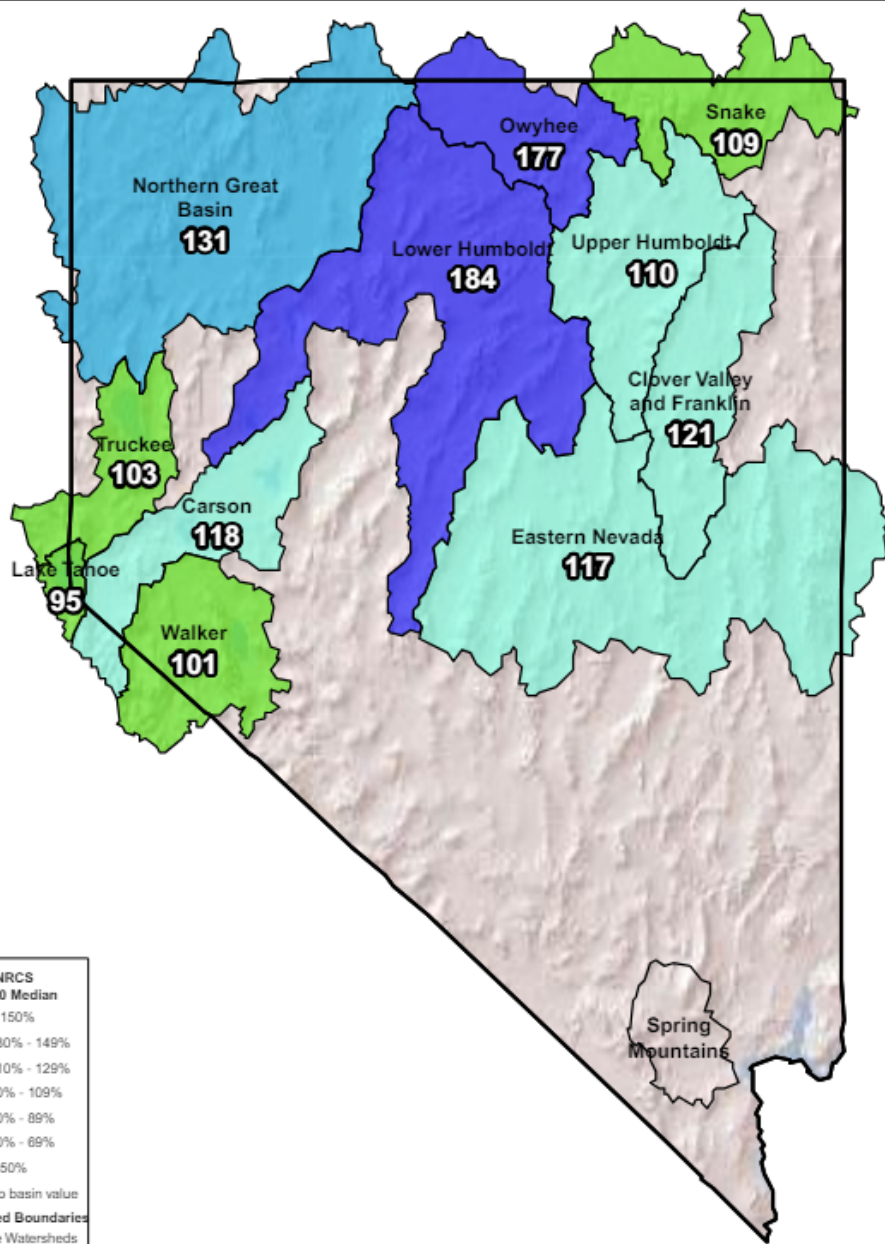


Snow Water Equivalent

# NEVADA & EASTERN SIERRA

May 1, 2024, first of day

Percent NRCS 1991-2020 Median



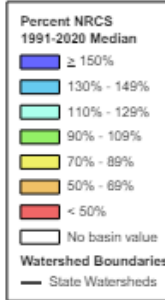
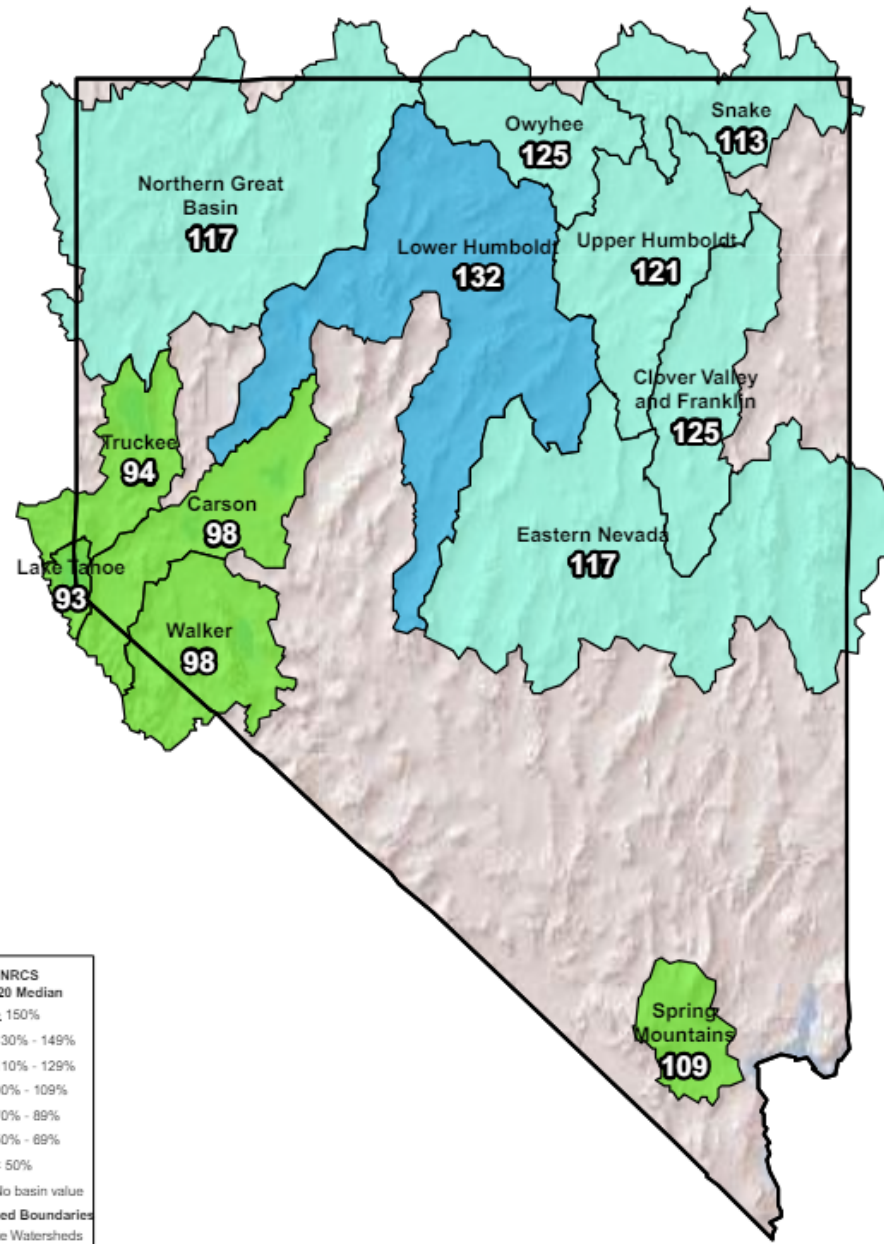
Created 5-01-2024

Water Year to Date Precipitation

# NEVADA & EASTERN SIERRA

October 1, 2023 - April 30, 2024

Percent NRCS 1991-2020 Median



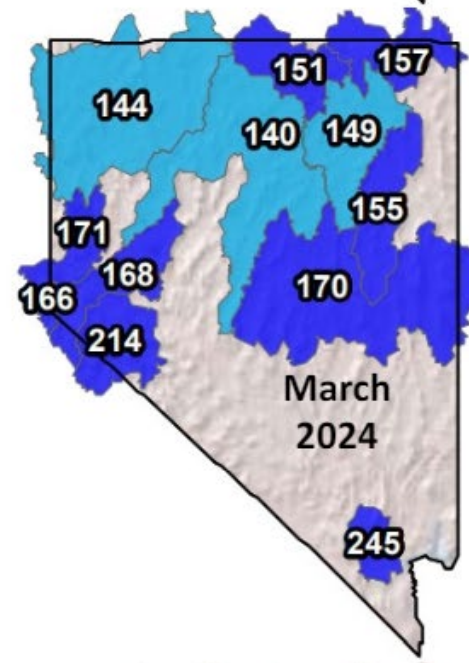
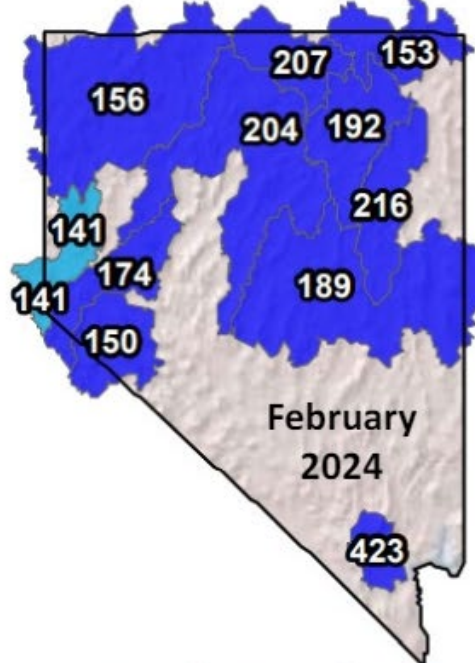
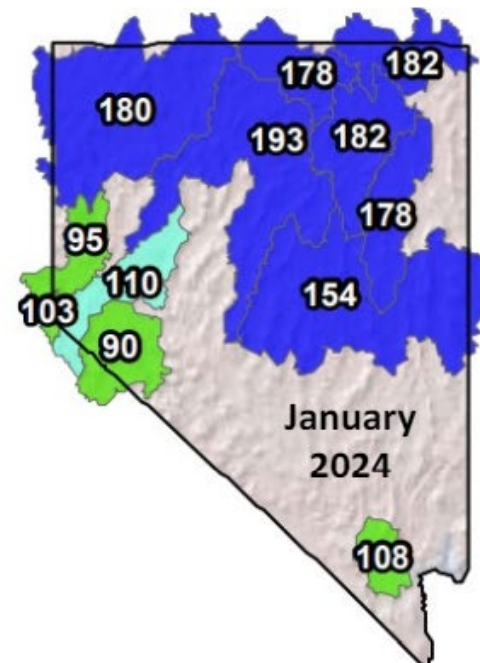
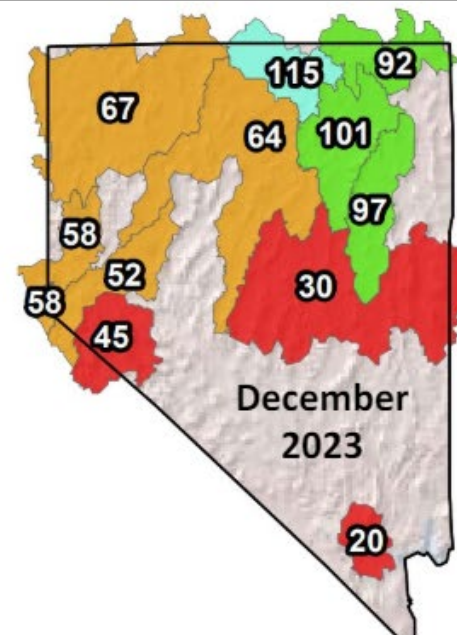
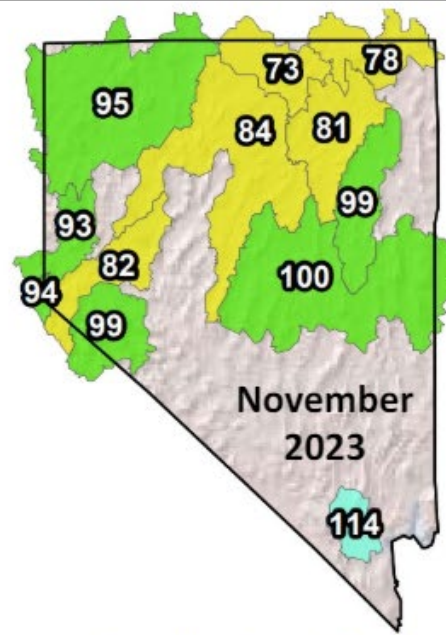
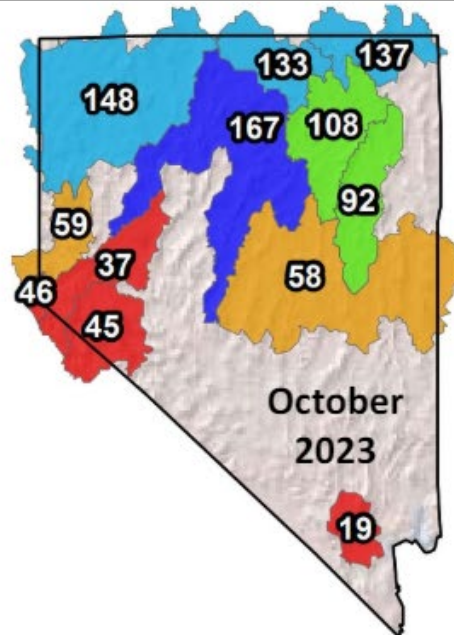
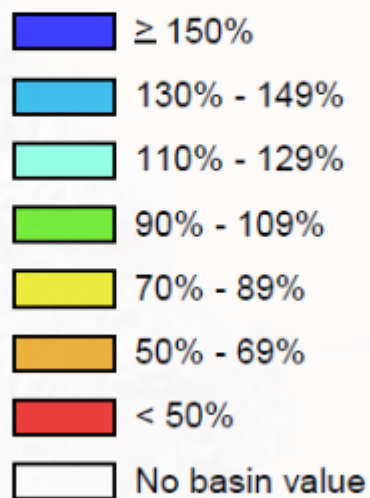
Created 5-01-2024



# Monthly Precipitation as Percent of Median – Water Year 2024

## Monthly Precipitation as a Percent of Median

Based on NRCS SNOTEL data compared to 1991-2020 median





# Great Basin Fire Season Seasonal Outlook April – July 2024

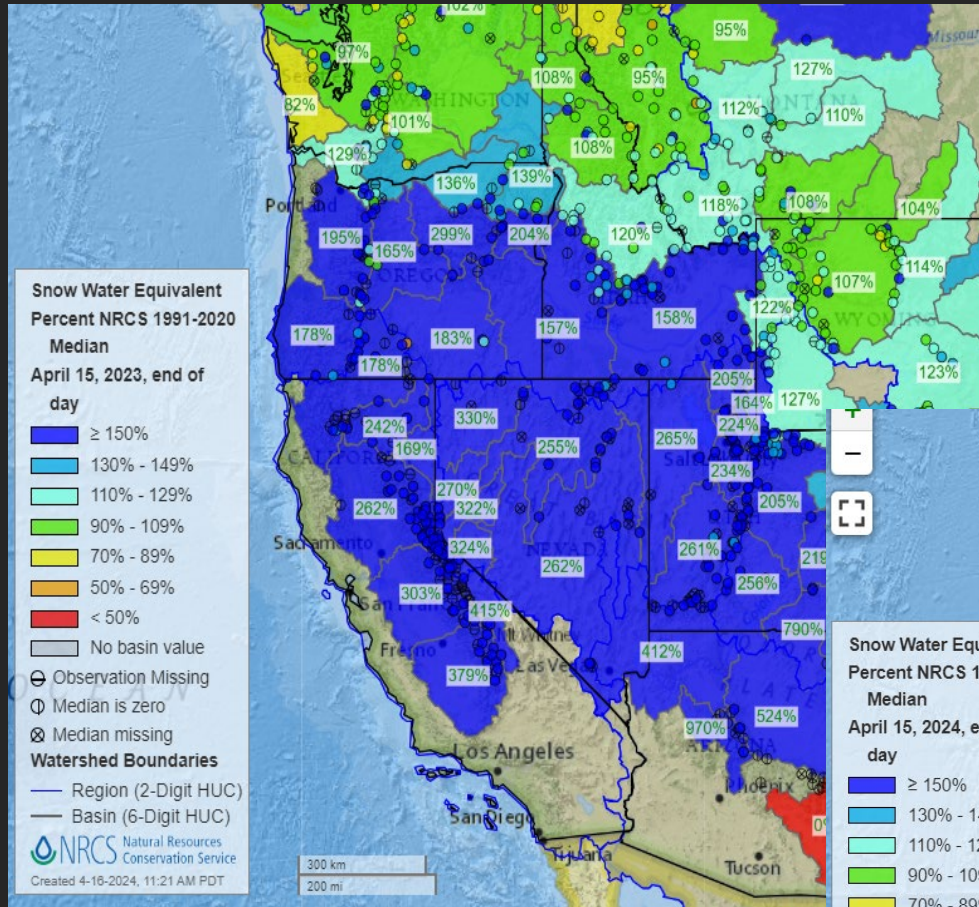


Basil Newmerzhycky   Shelby Law  
Gina Palma

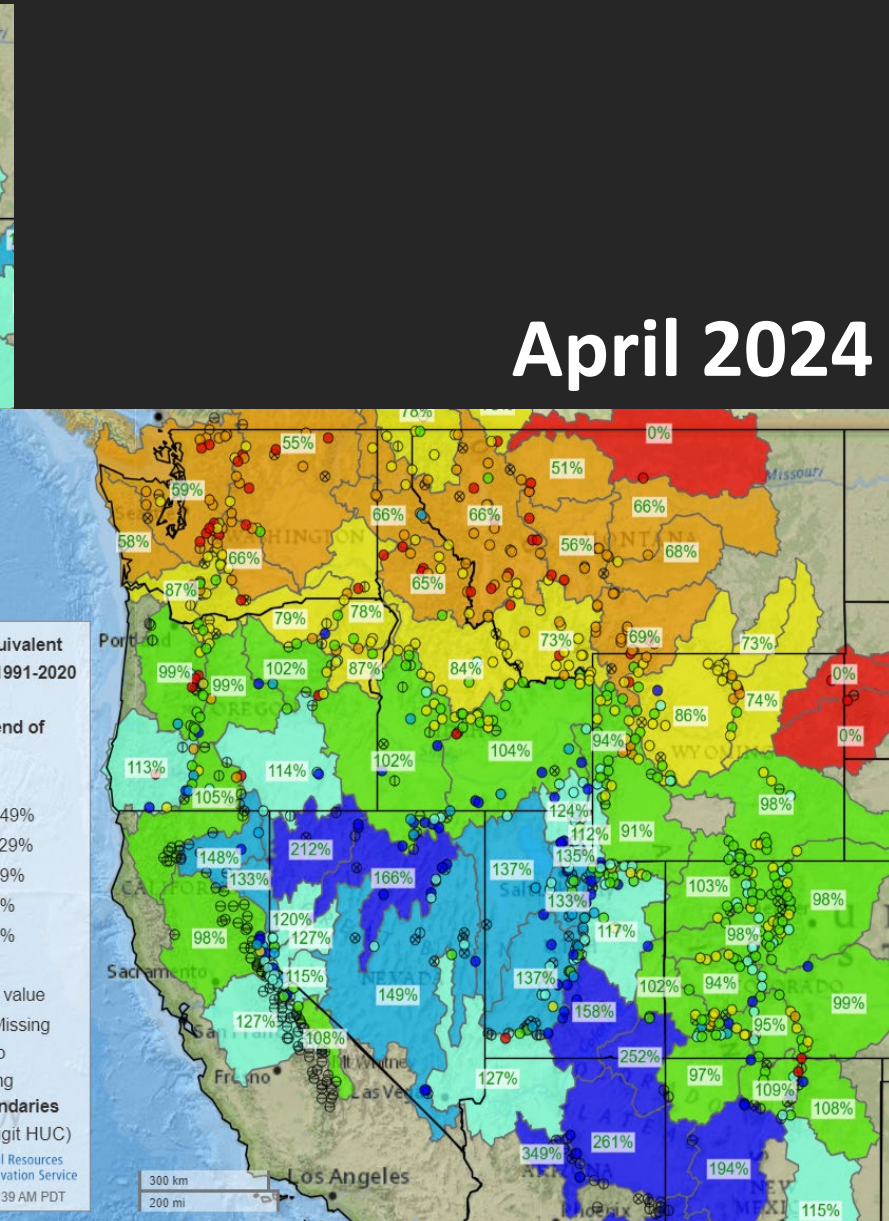




# High Snowpack 2022/23 Followed by "Normal-ish" Snowpack 2023/24



April 2023



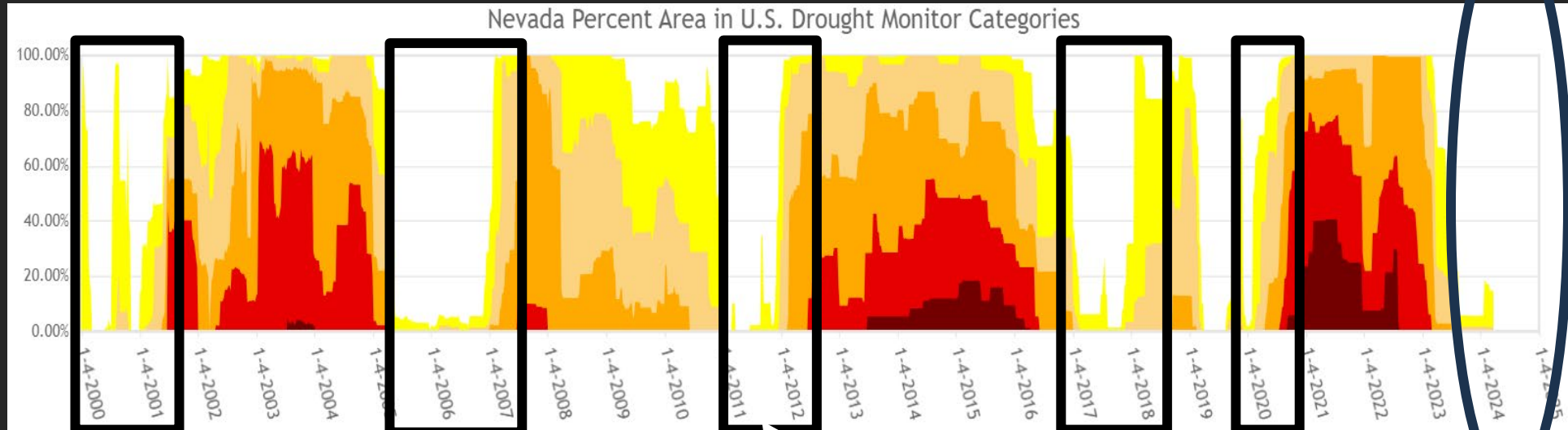
April 2024



# Nevada

**Black Box – Well Above Average BLM acres burned.**

**2024**

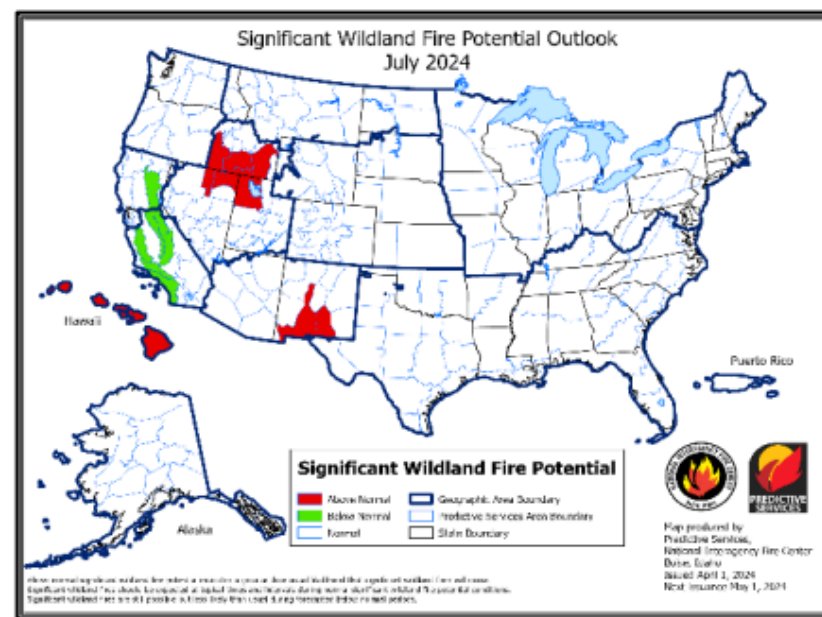
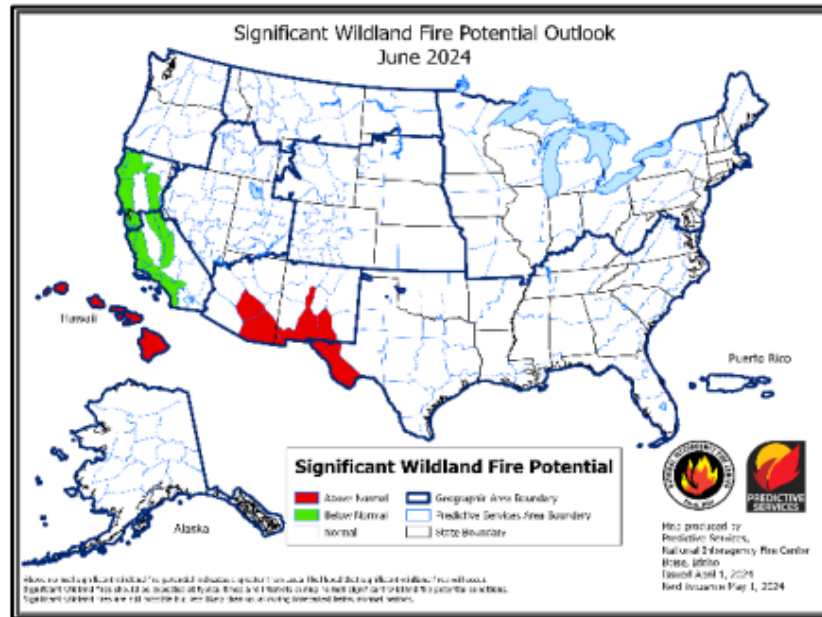
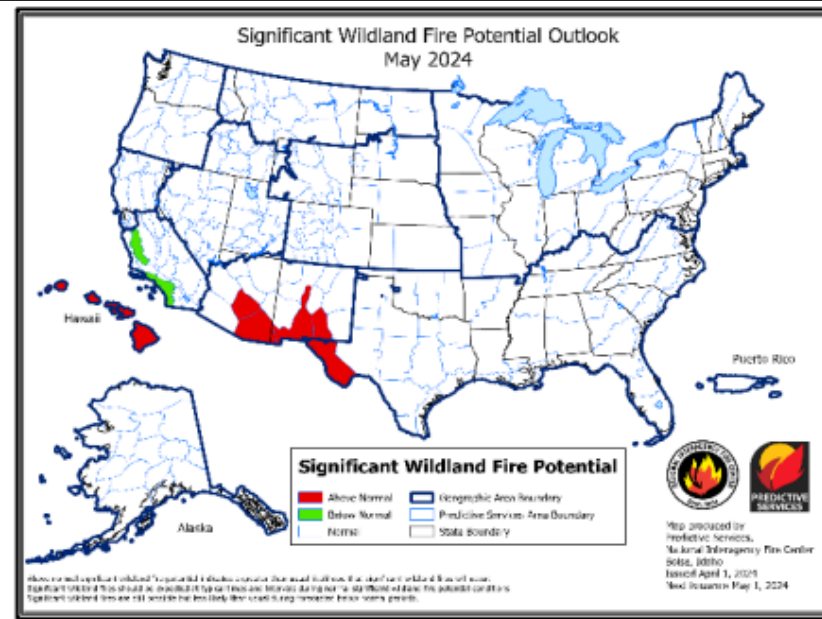
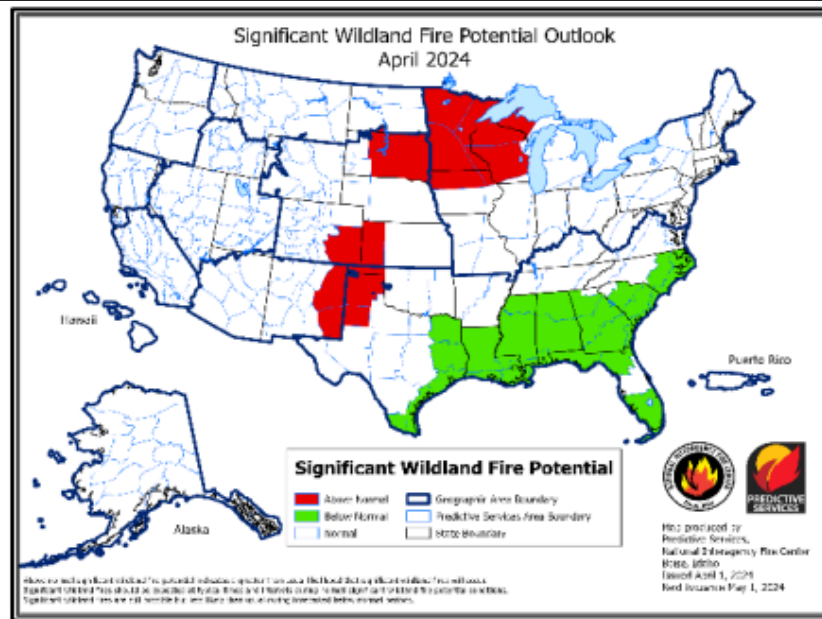


**2005 was only well above normal for Srn NV and Srn Ely**

**Season didn't start until lightning bust in late September 2011**



# National Predictive Services Outlook







# Emerging Threats and Considerations - Energy

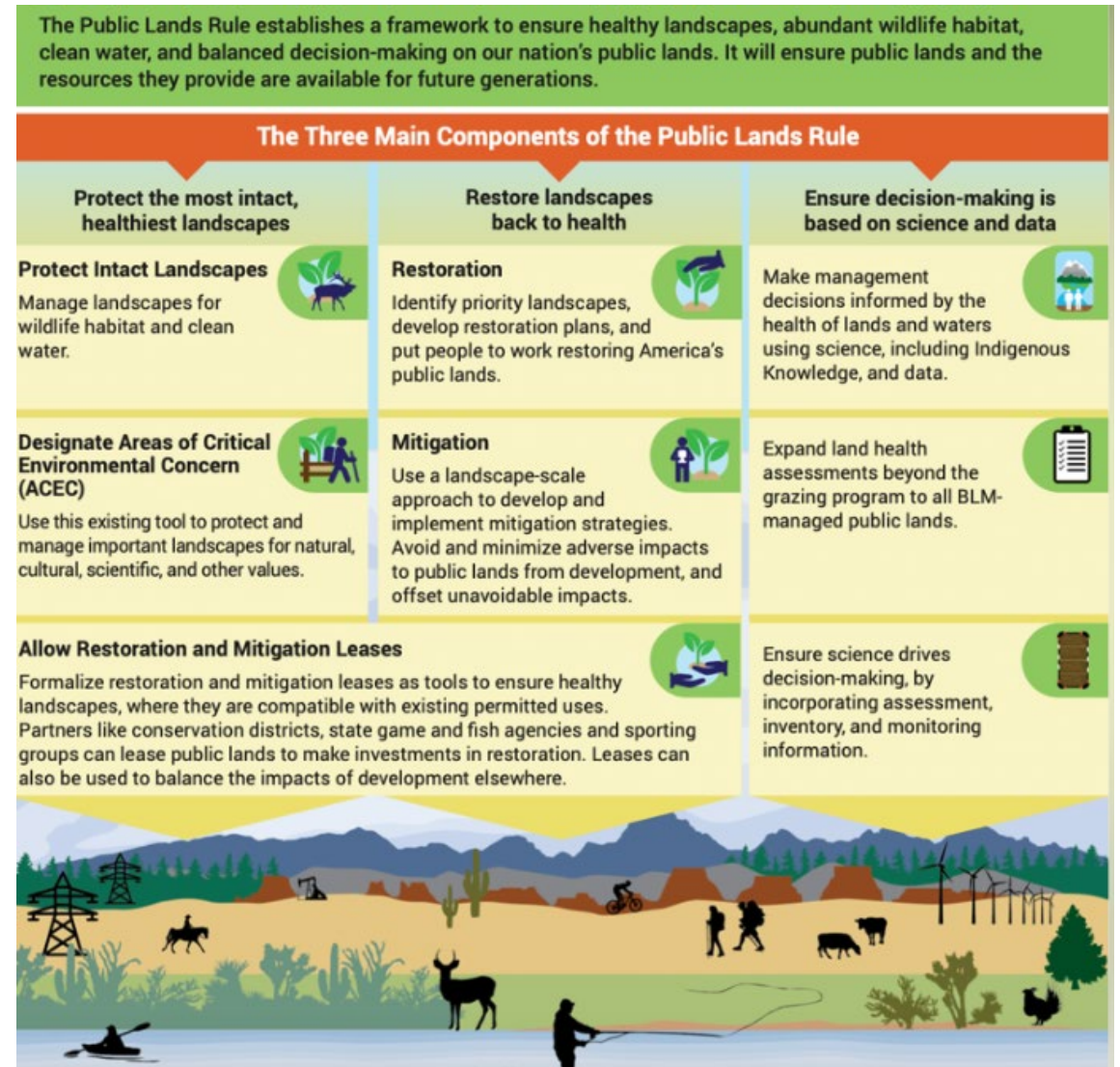
- BLM Renewable Energy Rule
- BLM Solar PEIS
- Section 368 Transmission Corridors EIS
- **Solar**
  - Libra
  - Bonanza
  - Rough Hat Clark
  - Dry Lake East Solar
  - Esmeralda Solar Complex
- **Wind**
  - Stagecoach
  - Scout Wind
  - CG Western Wind Test
  - Aquilo Wind
- **Other Energy**
  - Rplus Pumped Hydro Storage
  - Energy Storage x 8
- **Transmission**
  - Greenlink North and West Transmission Line projects
  - Cross-Tie Transmission Line
  - GridLiance West Core Transmission Upgrades EIS





# Emerging Threats and Considerations

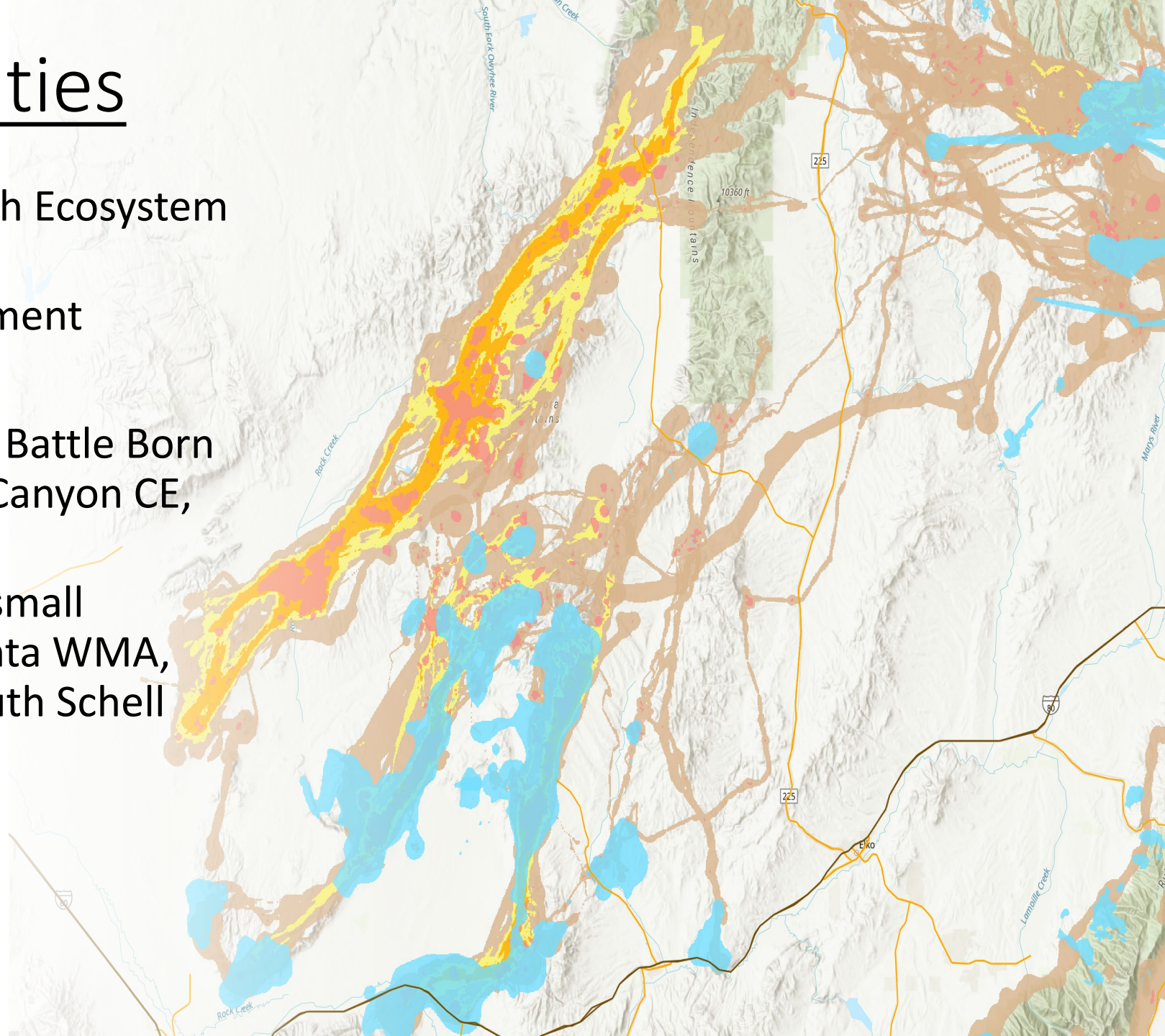
- Greater sage-grouse Approved Resource Management Plan Amendment
- BLM Public Lands Rule
- BLM Nevada Resource Management Plan Update
- Land Bills/Land Exchanges
  - Truckee Meadows Public Lands Management Act
  - Winecup Gamble





# Department Activities

- Technical Review and Sagebrush Ecosystem Programs
  - Energy Siting Tool Development
- Private Lands Program
  - Completed - Licking Ranch, Battle Born Pond, Blue Diamond, Pole Canyon CE, Parrado, Disaster Peak
  - Pending – Acquisition of 2 small inholdings within the Argenta WMA, Memory Ranch CE, and South Schell Acquisition.
- Sagebrush Habitat Plan
- Connectivity Plan and Webtool







### Restoration and Rehabilitation 2023:

- 73,934 acres fire rehabilitation at \$1.97 million
- 10,158 acres pinion juniper removal at \$1.1 million
- 334 acres (26,618 linear ft fence) spring, meadow, riparian enhancements at \$676,000

### Restoration and Rehabilitation 2017 to 2023:

- 644,543 acres at \$14 million
- 54,989 acres pinion juniper removal at \$5.3 million
- 1,905 acres spring (170,591 linear ft fence) meadow, riparian enhancements at \$2.3 million





# Questions

