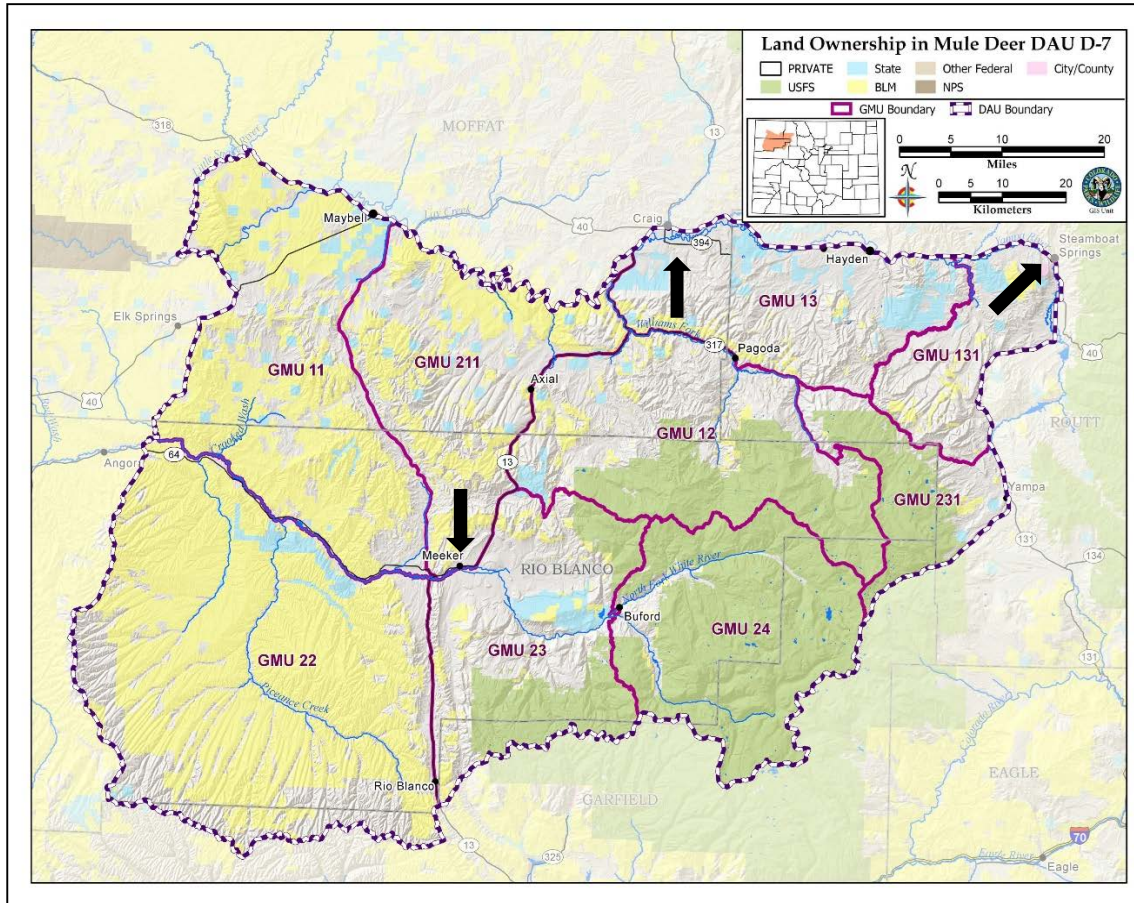


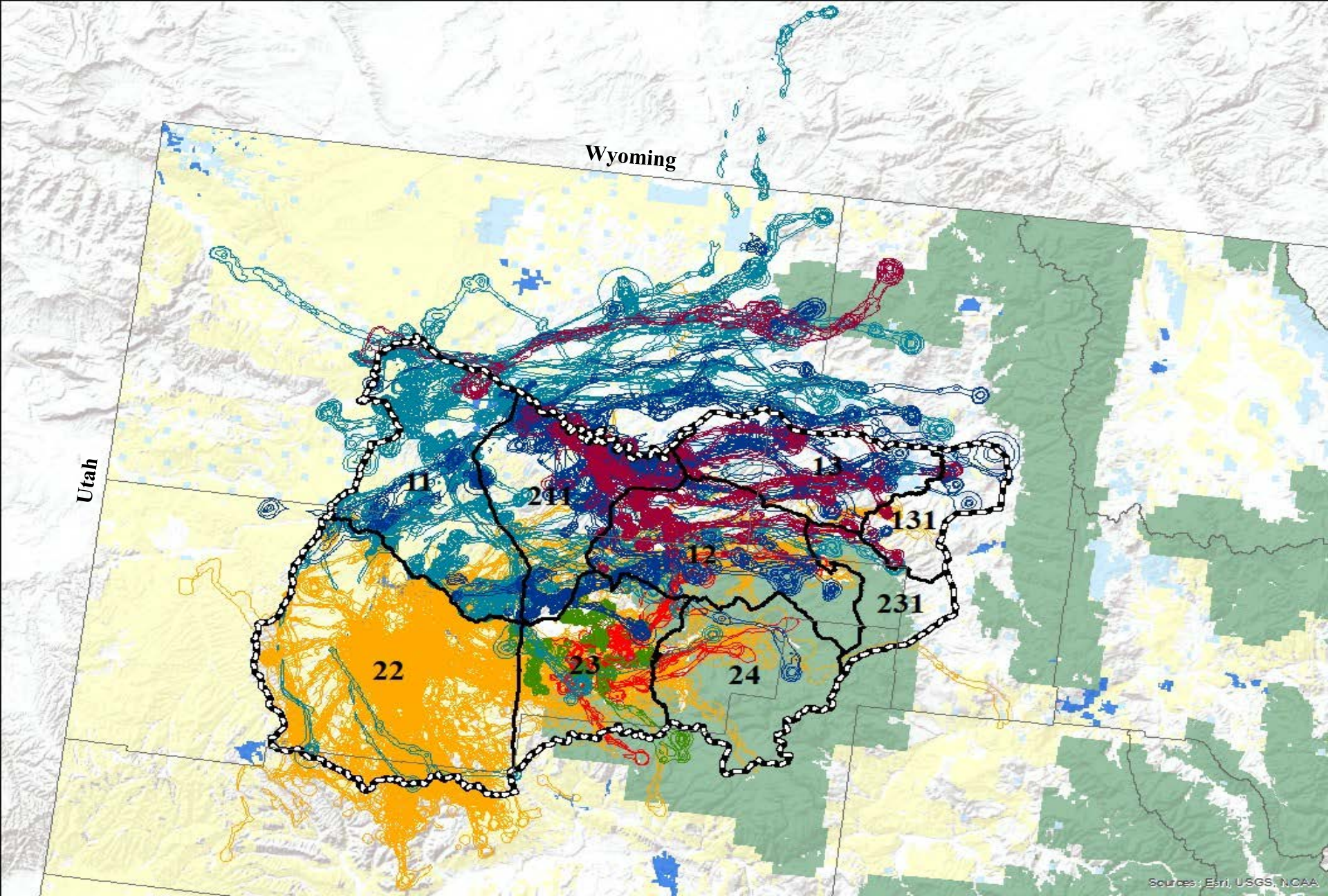
White River Deer Herd Management Plan Data Analysis Unit (DAU) D-7



- GMUs 11, 12, 13, 23, 24, 131, 231, and 211
- Portions of Rio Blanco, Moffat, Routt and Garfield Counties
- 4,120 mi²
- 58% public
- Intensive deer survival monitoring area
- Migratory mule deer herd



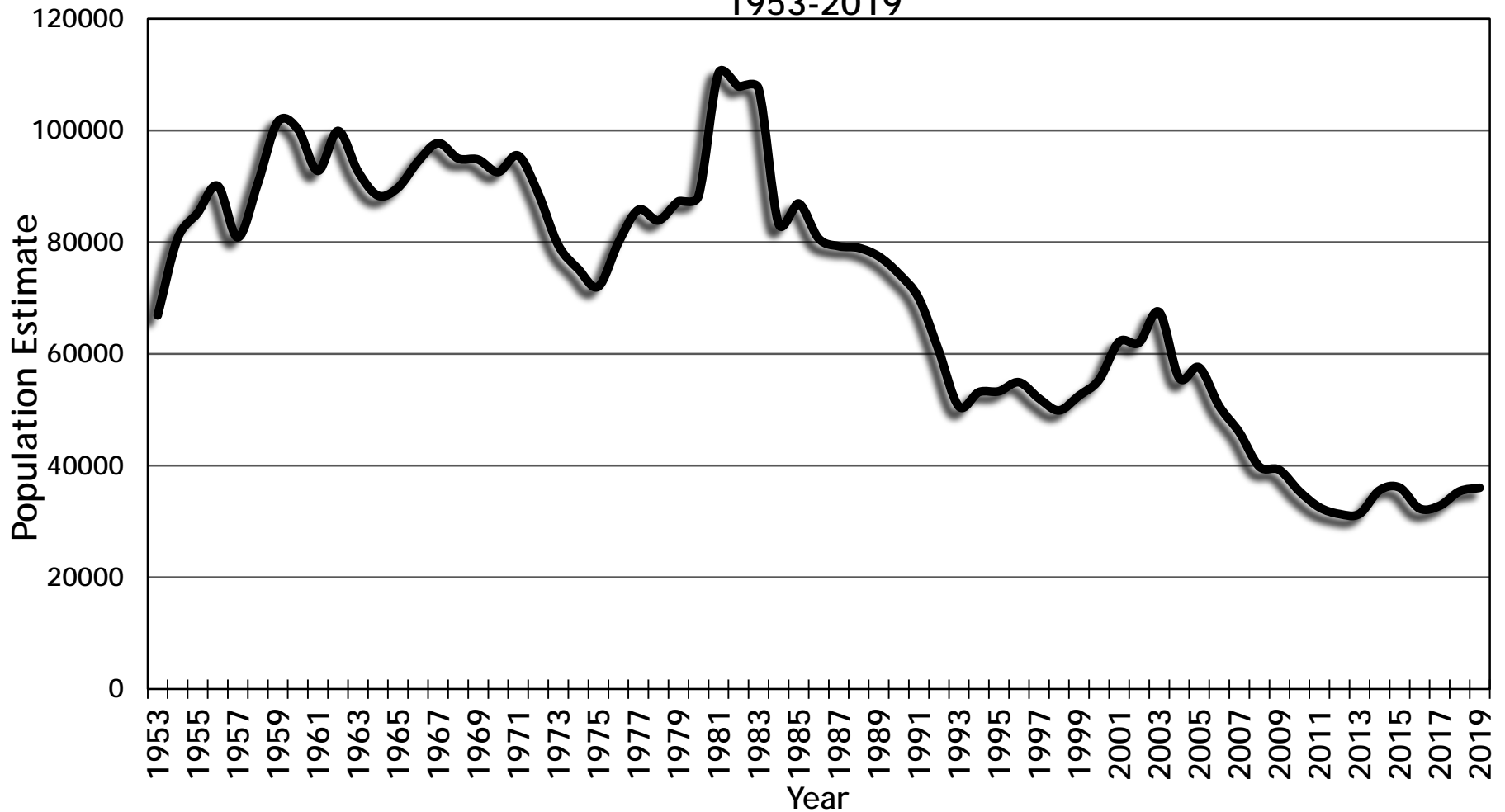
Darby Finley, Wildlife Biologist, Meeker, Area 6
Bill de Vergie, Area Wildlife Manager, Area 6



Sources: Esri, USGS, NOAA

HERD HISTORY

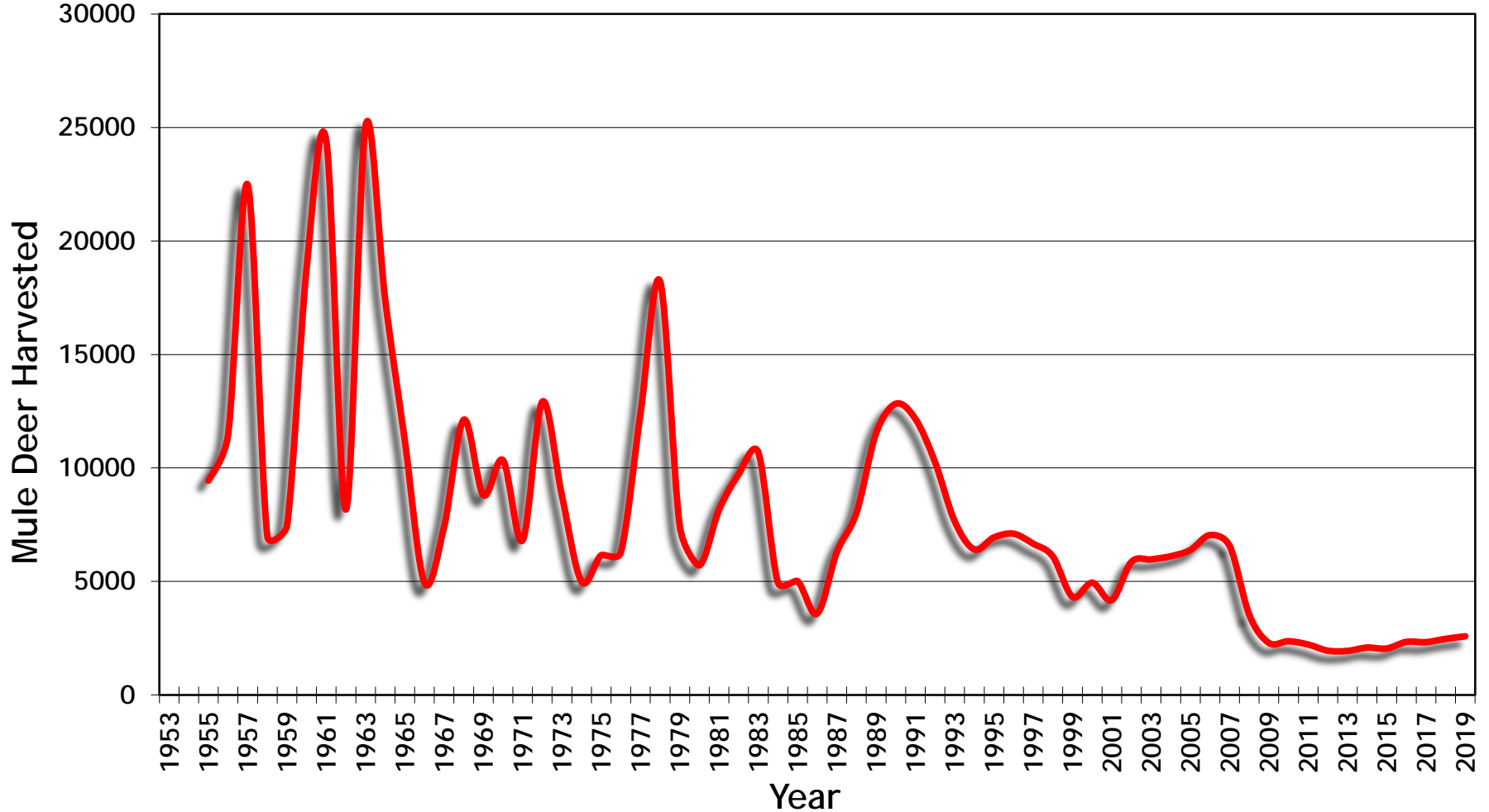
White River Mule Deer DAU D-7
Post-Hunt Population Estimate
1953-2019



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OUTSIDE

HARVEST HISTORY

White River Mule Deer DAU D-7 Total Deer Harvest
1953 - 2019



Herd Management Objectives

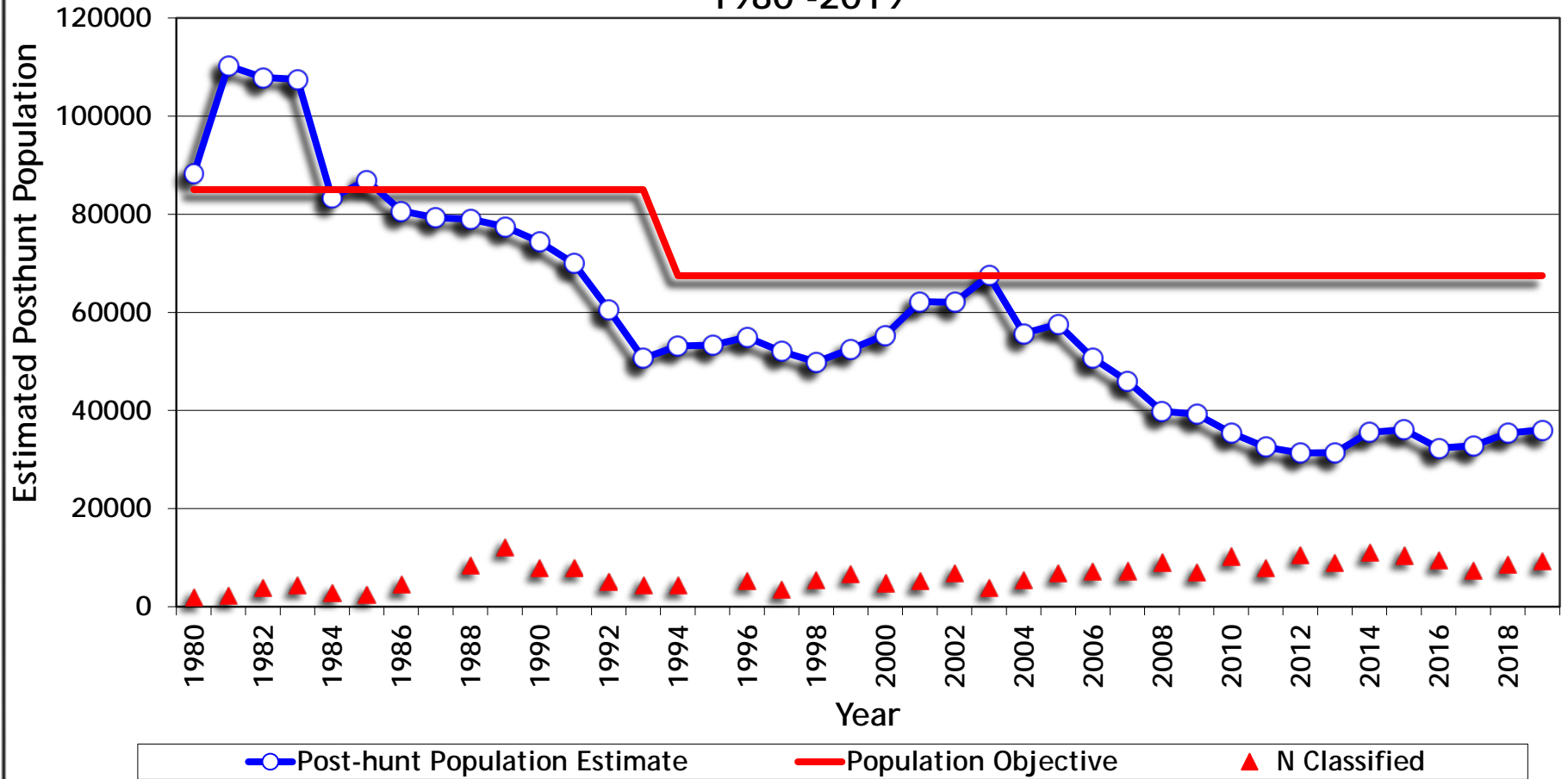
	Population size	Sex ratio (3-year average)
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Current estimate (post-hunt 2019)	36,000	31 bucks:100 does
Preferred new objective range	25,000 – 35,000	18-25 bucks:100 does



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OUTSIDE

Current Modeled Population Estimate

White River Mule Deer Herd DAU D-7
Post-Hunt Population Estimate
1980 -2019



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OUTSIDE

Sociopolitical Considerations

- Hunters want more deer
- Damage situations fewer deer
- Hunters want to hunt mature bucks
- Economics of hunting
- Numbers of licenses
- Outfitters
- Landowners
- Land management agencies (BLM, USFS)
- County Commissioners

Public Outreach

- 2 public meetings in Meeker
- 1 public meeting in Craig
- Survey mailed to 2000 hunters
- 3 Habitat Partnership Program meetings
- Federal partner review
- Work session with Rio Blanco County Commissioners
- 30-day online public comment period



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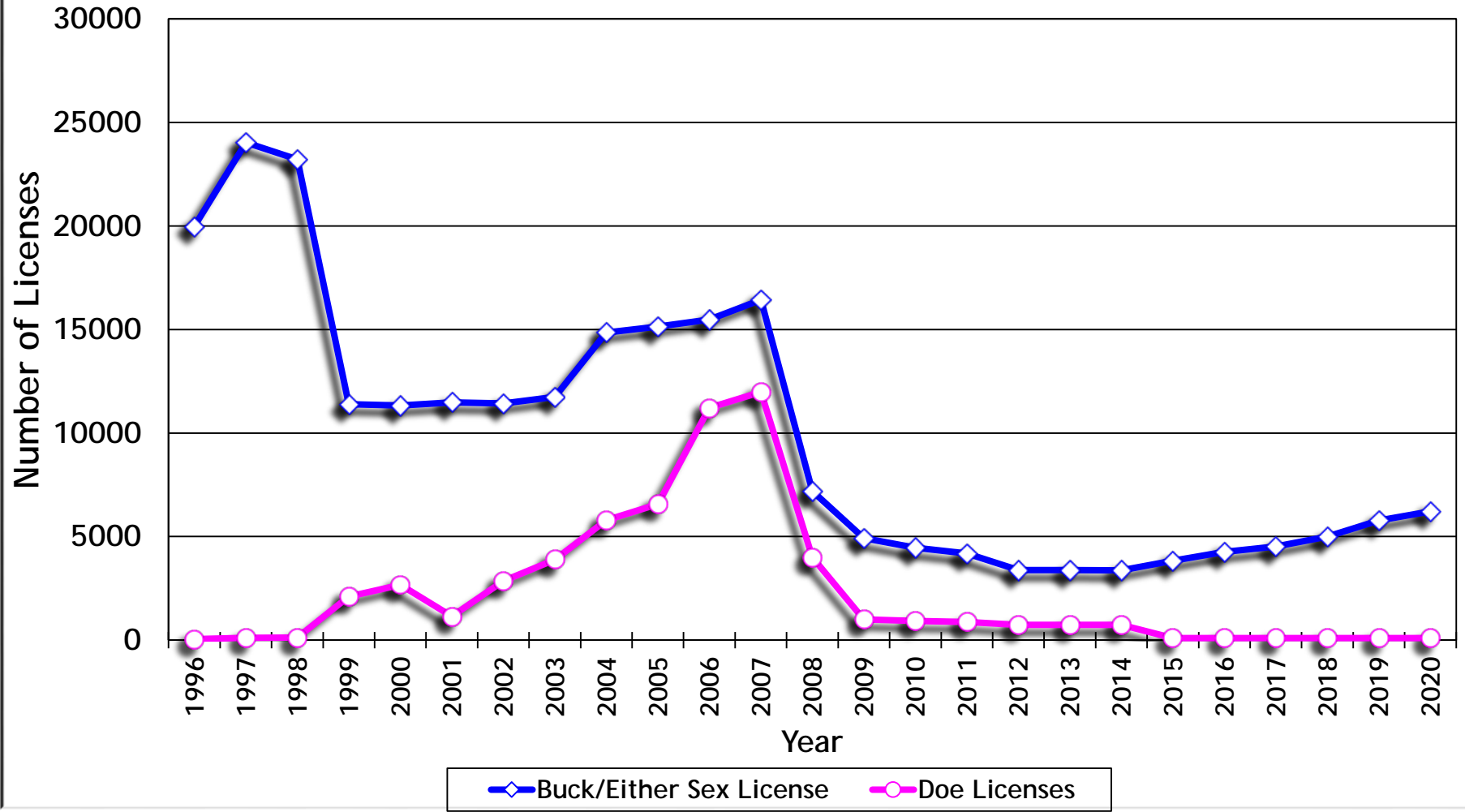
PUBLIC ISSUES AND CONCERNS

- Public Survey (2000 Questionnaires)
 - 1069 Respondents (55.2% response rate)
- Herd Management
 - D-7 Population trend last 10 years
 - ✓ Majority indicated unsure or decreased
 - D-7 Population change next 10 years
 - ✓ Majority preferred population increase
 - Hunting Opportunity
 - ✓ Majority responses to hunt mature bucks
- Threats and Concerns
 - 1. Habitat loss, 2. winter starvation, 3. predation, 4. recreation
- Chronic Wasting Disease
 - CWD Concerns
 - ✓ Majority concerned about hunting opportunity and herd health
 - CWD Management
 - ✓ Majority concerned about balance between herd health and hunting opportunity



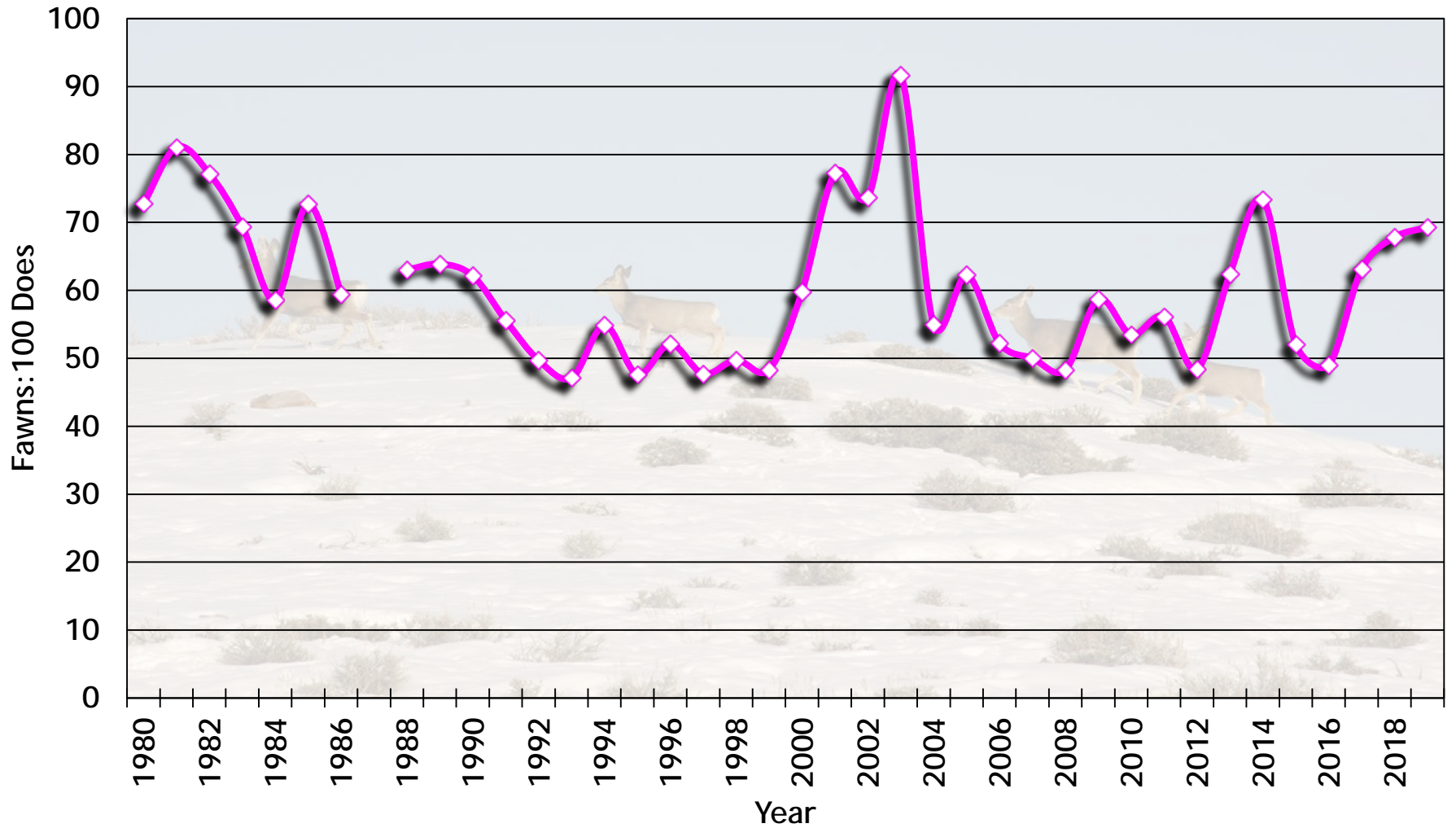
LICENSE HISTORY

White River DAU D-7 License History
1996-2020



FAWN:DOE RATIO

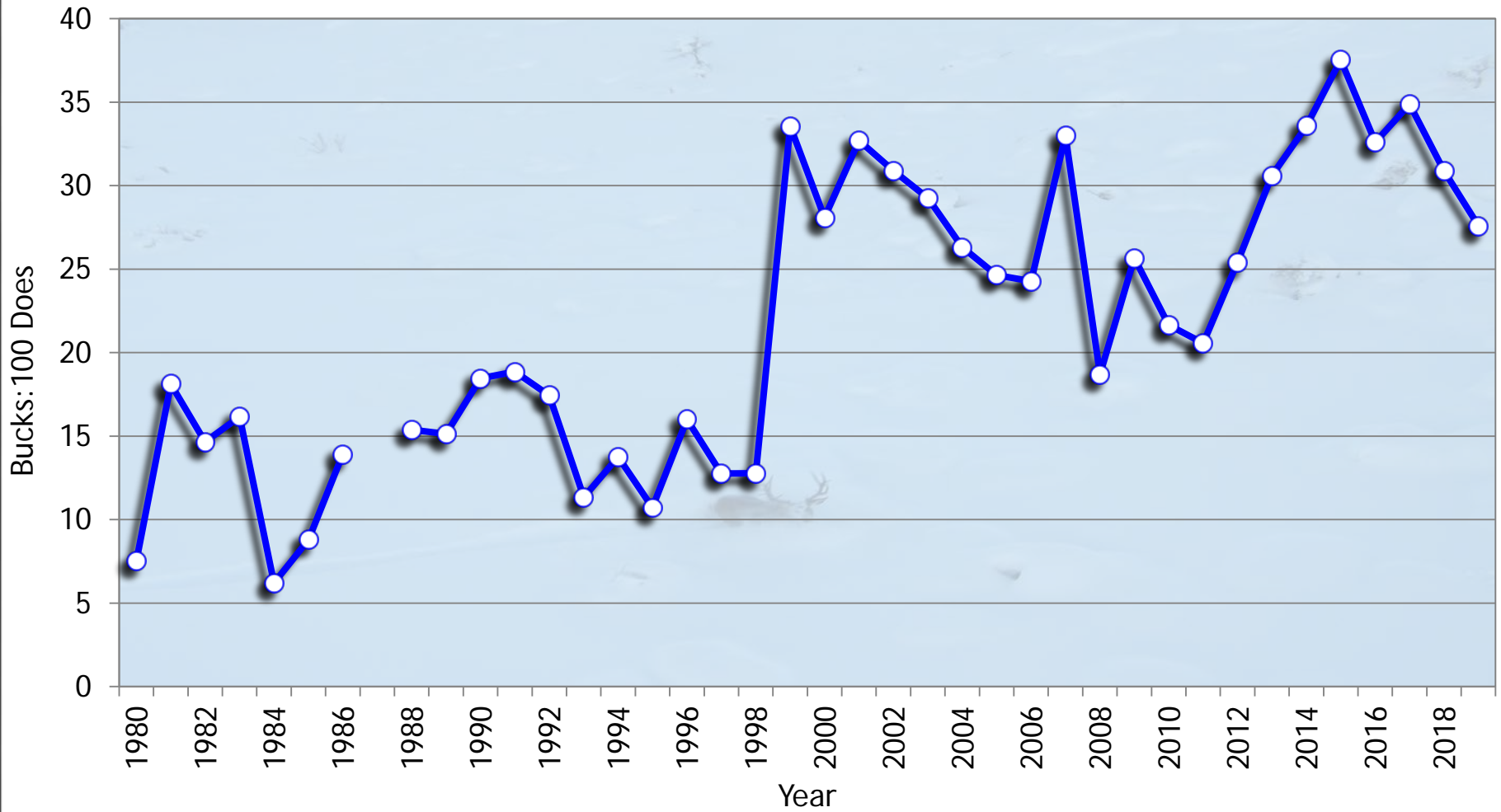
White River DAU D-7 Observed Post-Hunt Fawn:Doe Ratios



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BUCK:DOE RATIO

White River Mule Deer DAU D-7 Observed Post-Hunt Buck Ratios



Biological Considerations

- Weather
 - Drought
 - Severe Winters
- Habitat Resources
 - Habitat Condition
 - Weather
 - Habitat Capability
 - Density dependence (mule deer stocking rates)
 - Fire
 - Interspecific competition (mule deer and elk)
 - Habitat Function
 - Development (recreation, rural residential, oil and gas, solar, etc.)
 - Increasing outdoor recreation
- Predation
- Chronic wasting disease



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WEATHER



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POPULATION VITAL RATES

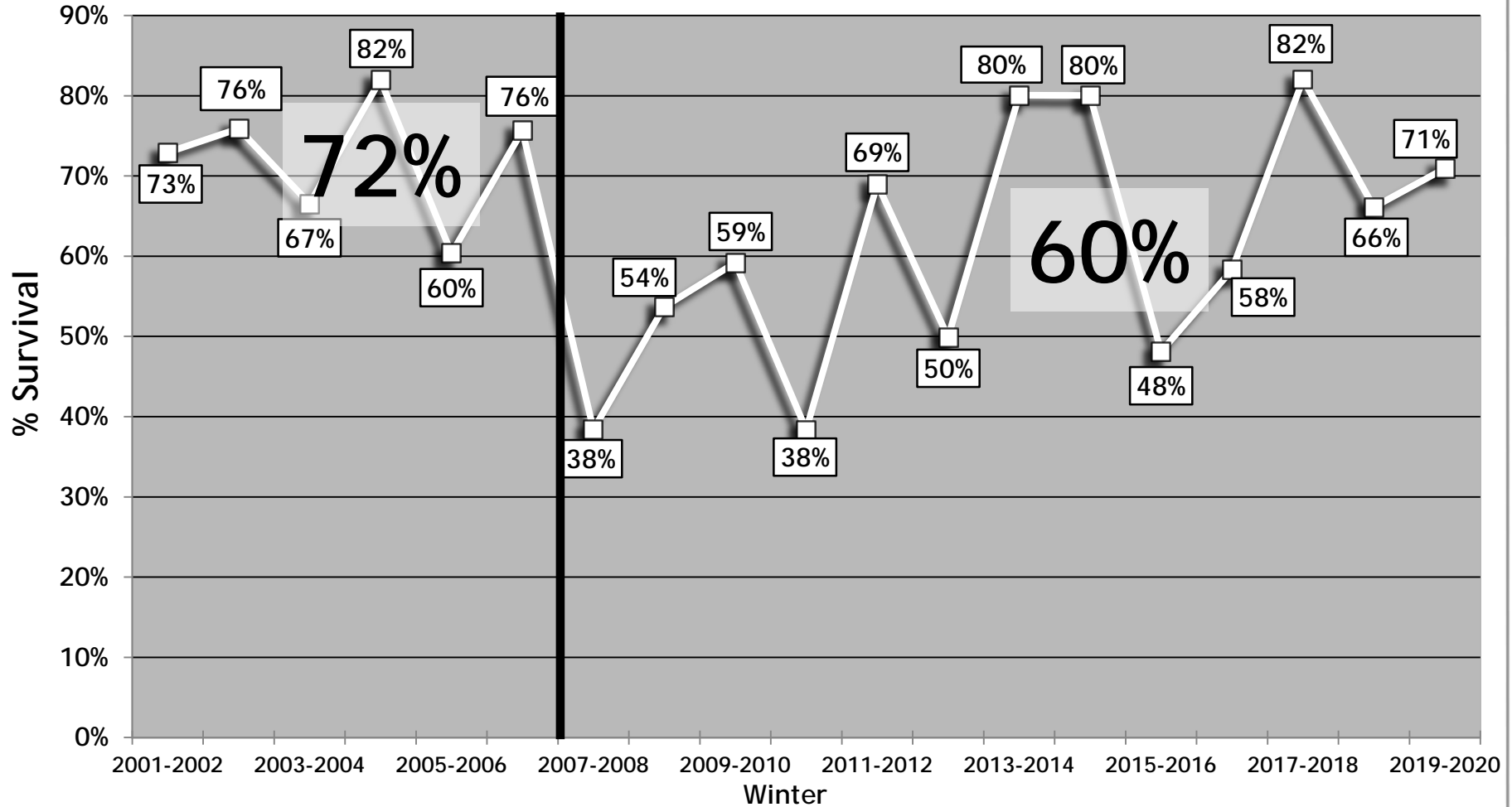
- D-7 survival study - 2001 - 2020
 - Over-winter Fawn Survival (December - June)
 - ✓ 1775 Fawn Winters
 - Annual Doe Survival (December - December)
 - ✓ 1900 Doe Years
 - Annual Buck Survival (December - December)
 - ✓ 1059 Buck Years
 - Cause Specific Mortality



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OVER-WINTER FAWN SURVIVAL

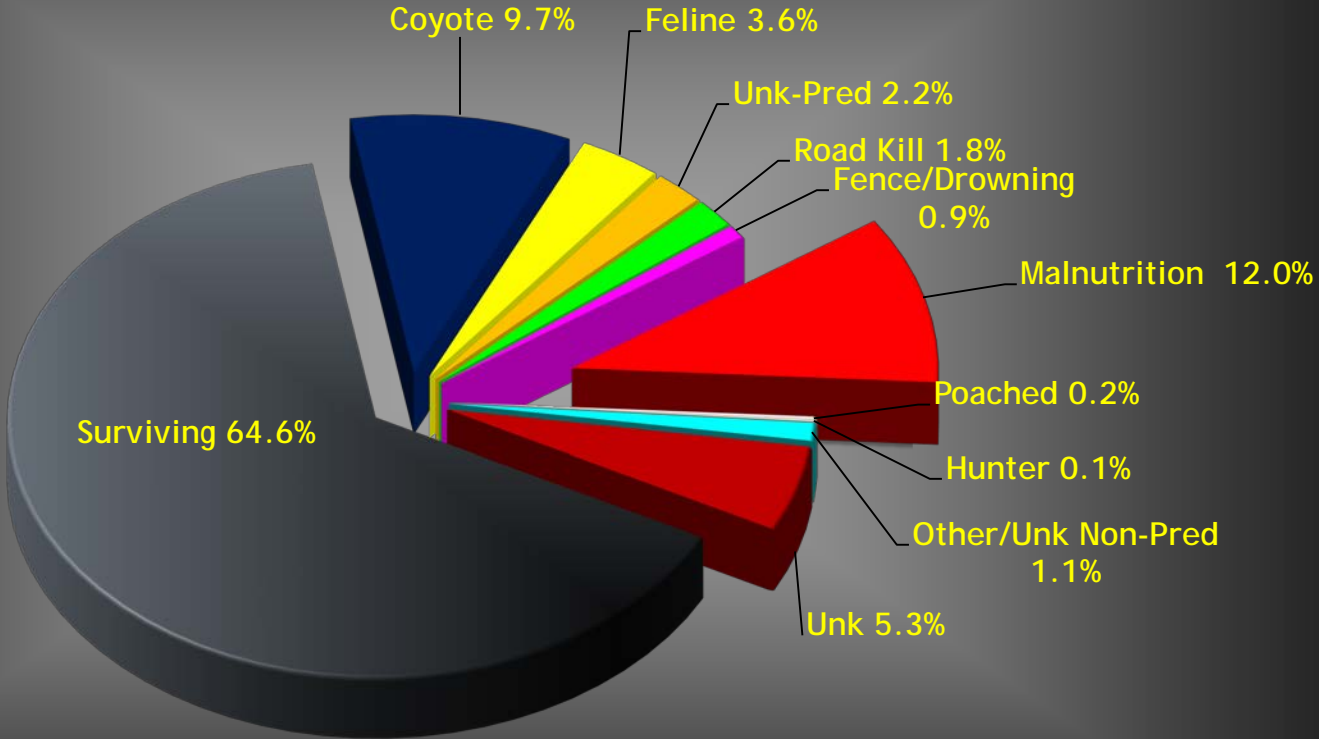
White River Mule Deer Herd DAU D-7
Over-Winter Fawn Survival (n=1775)
2001-2019



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OVER-WINTER FAWN SURVIVAL

D-7 White River Mule Deer Study
Average Winter Fawn Survival
2001 - 2019
(1775 Fawn Winters)

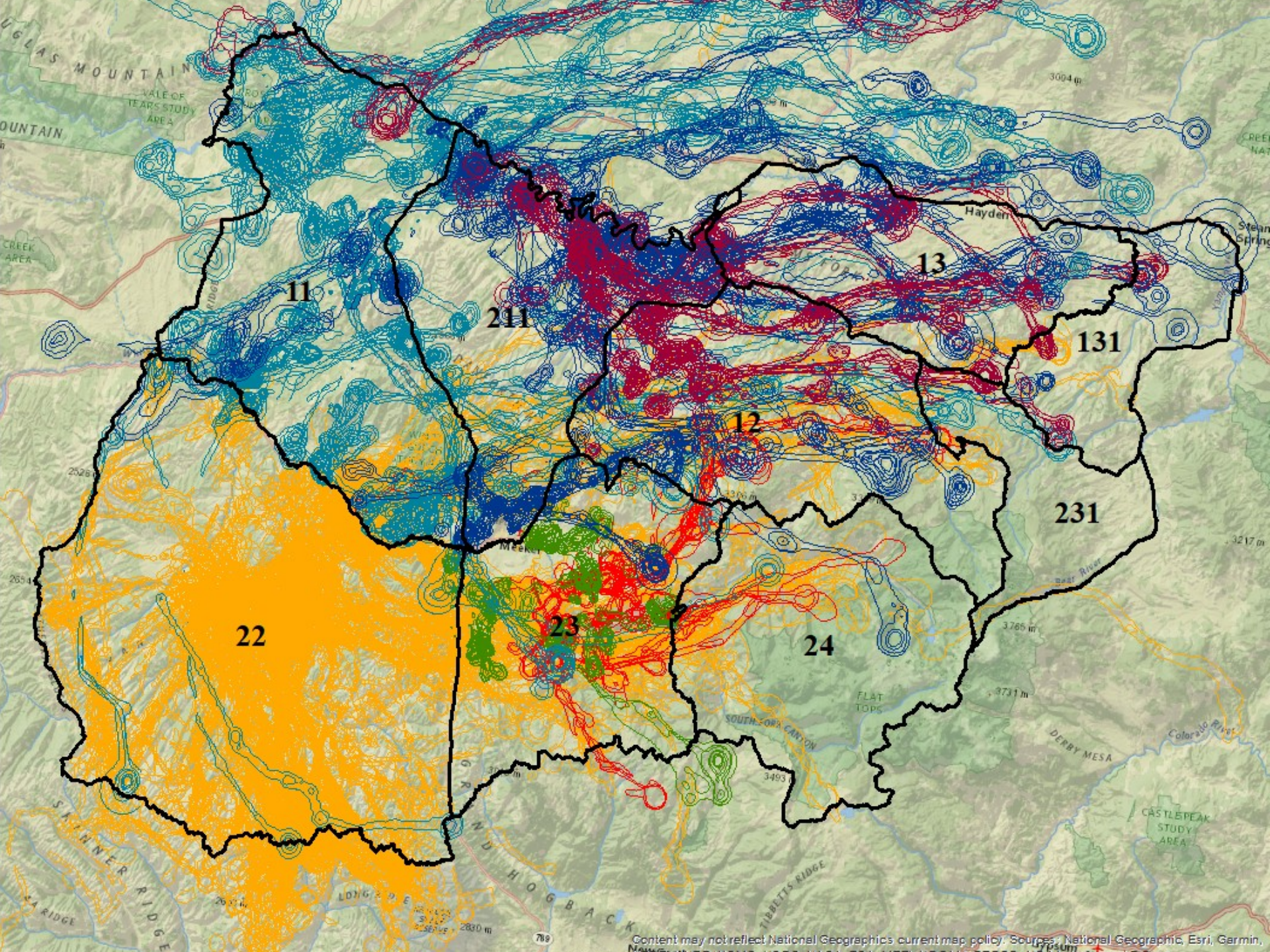


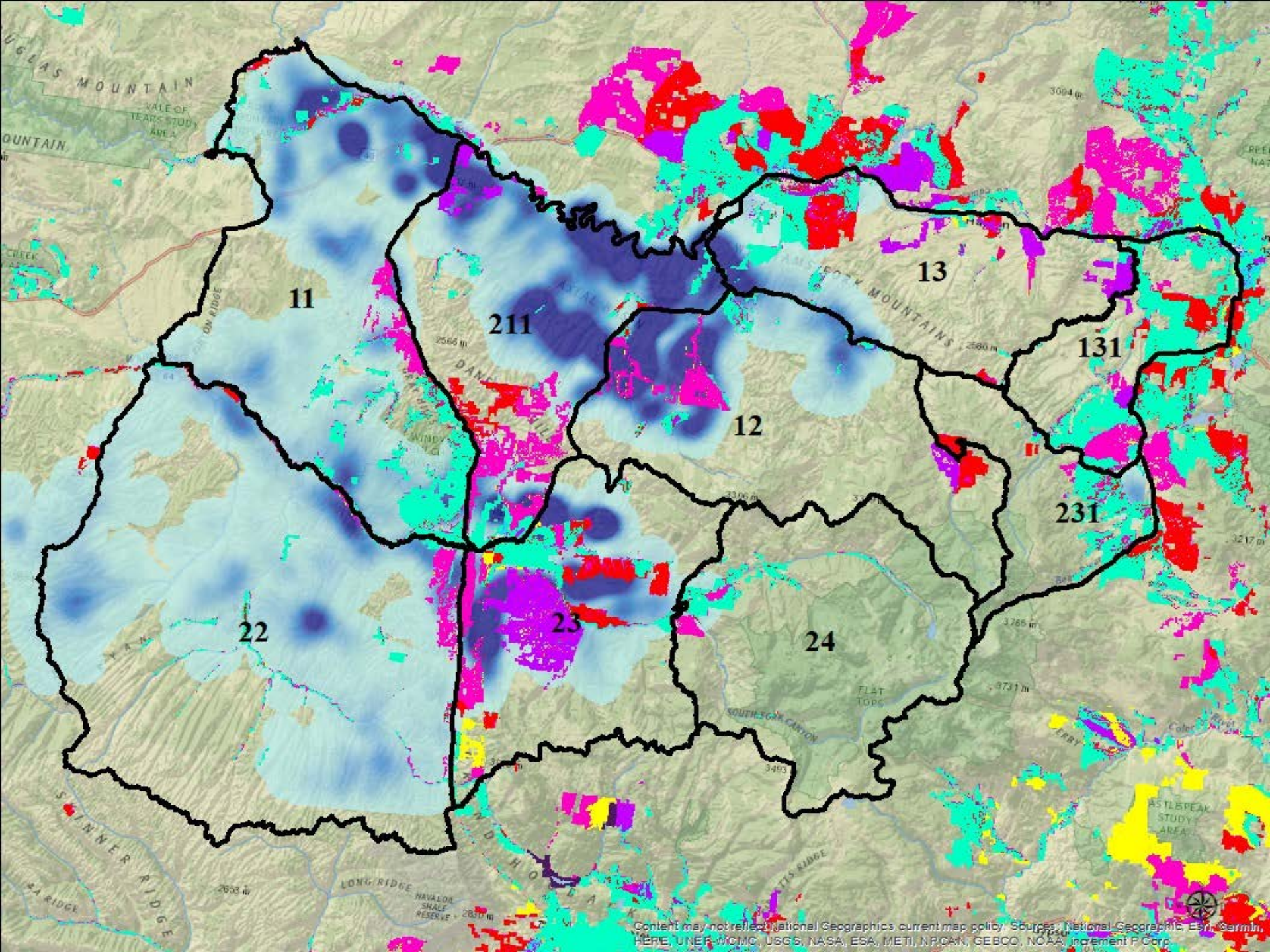
HABITAT

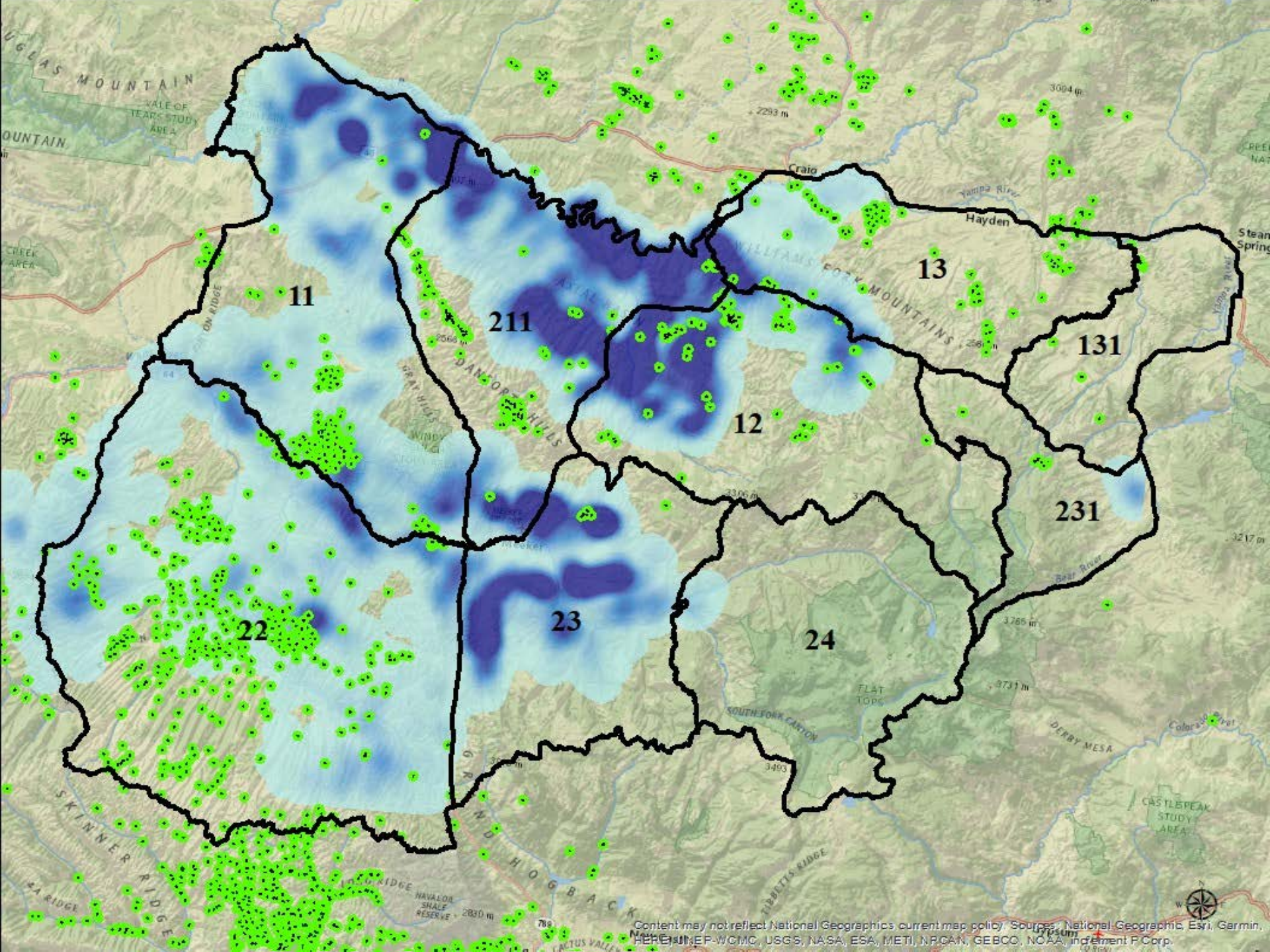
- Wildlife abundance ultimately limited by quality and availability of habitat

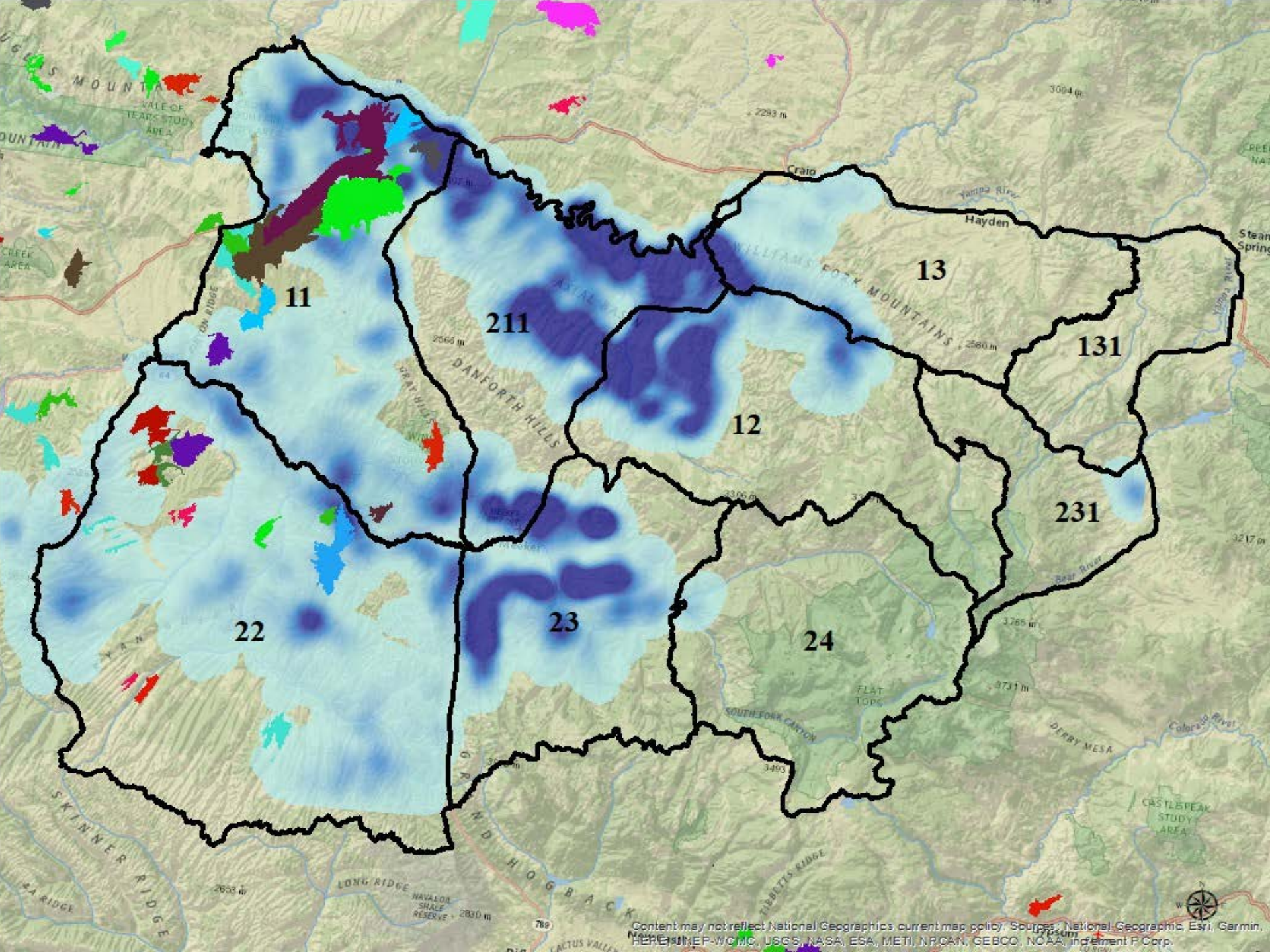


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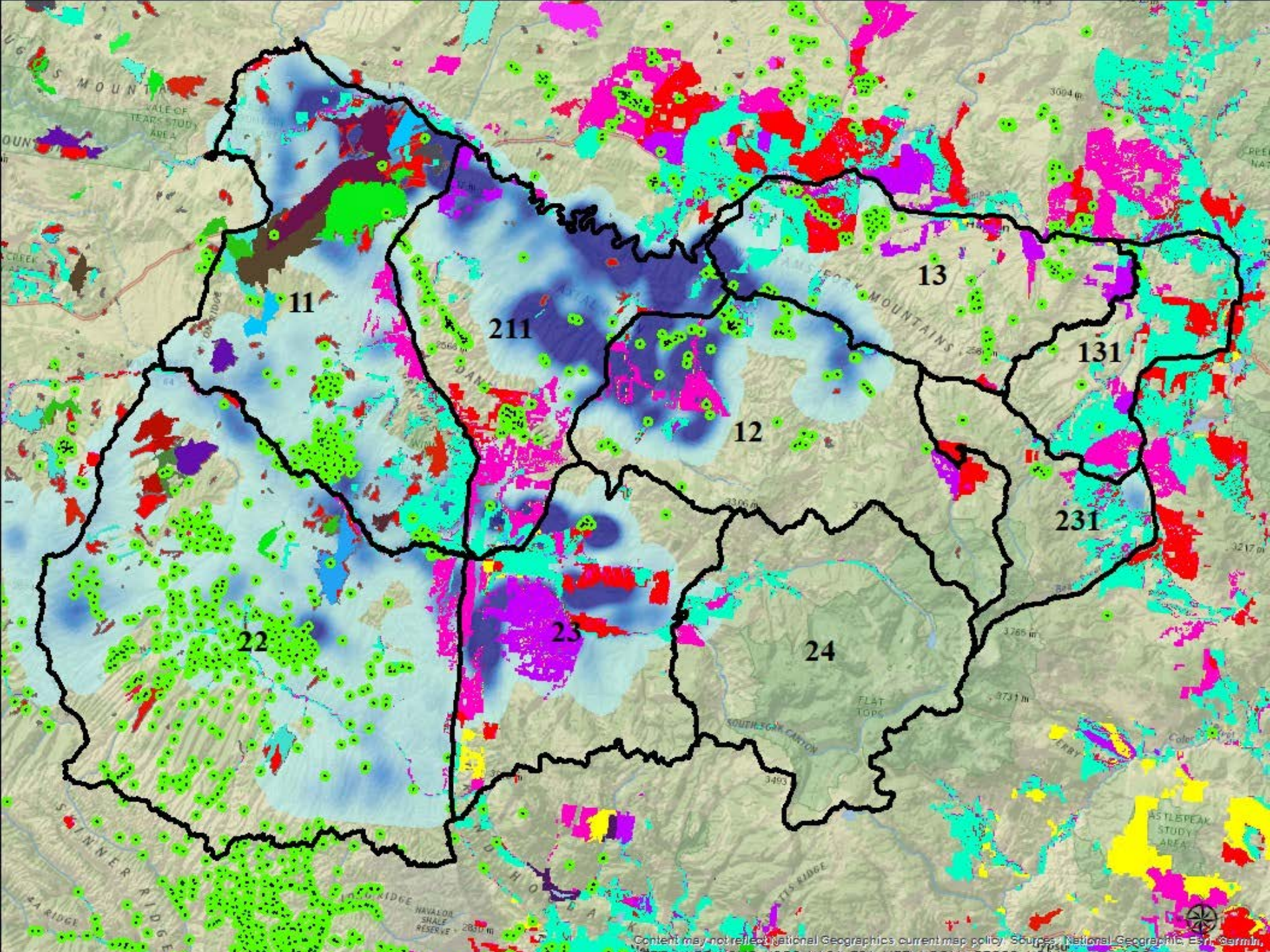








Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WFP, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.



11

211

13

131

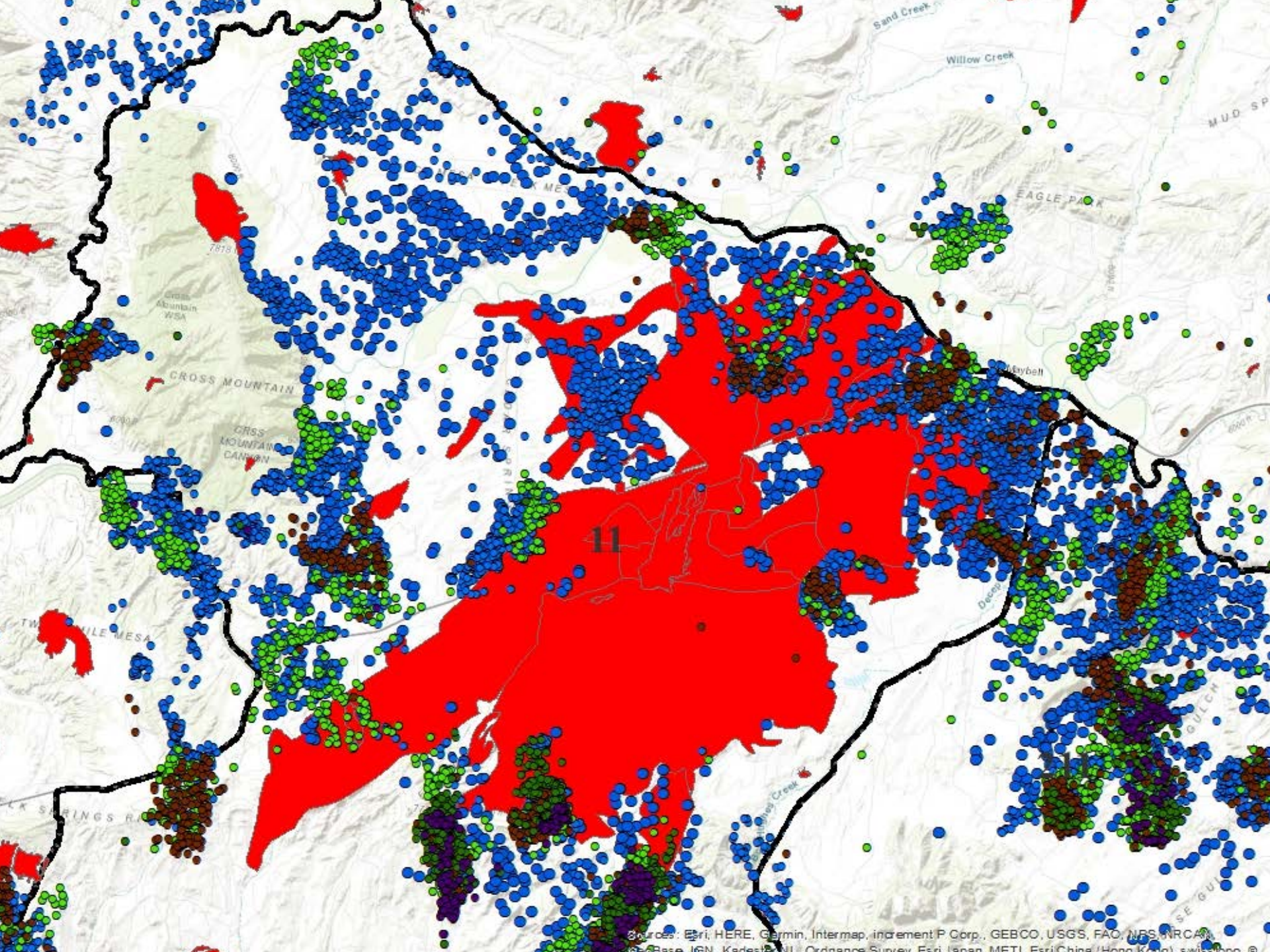
12

231

22

23

24





PREDATION

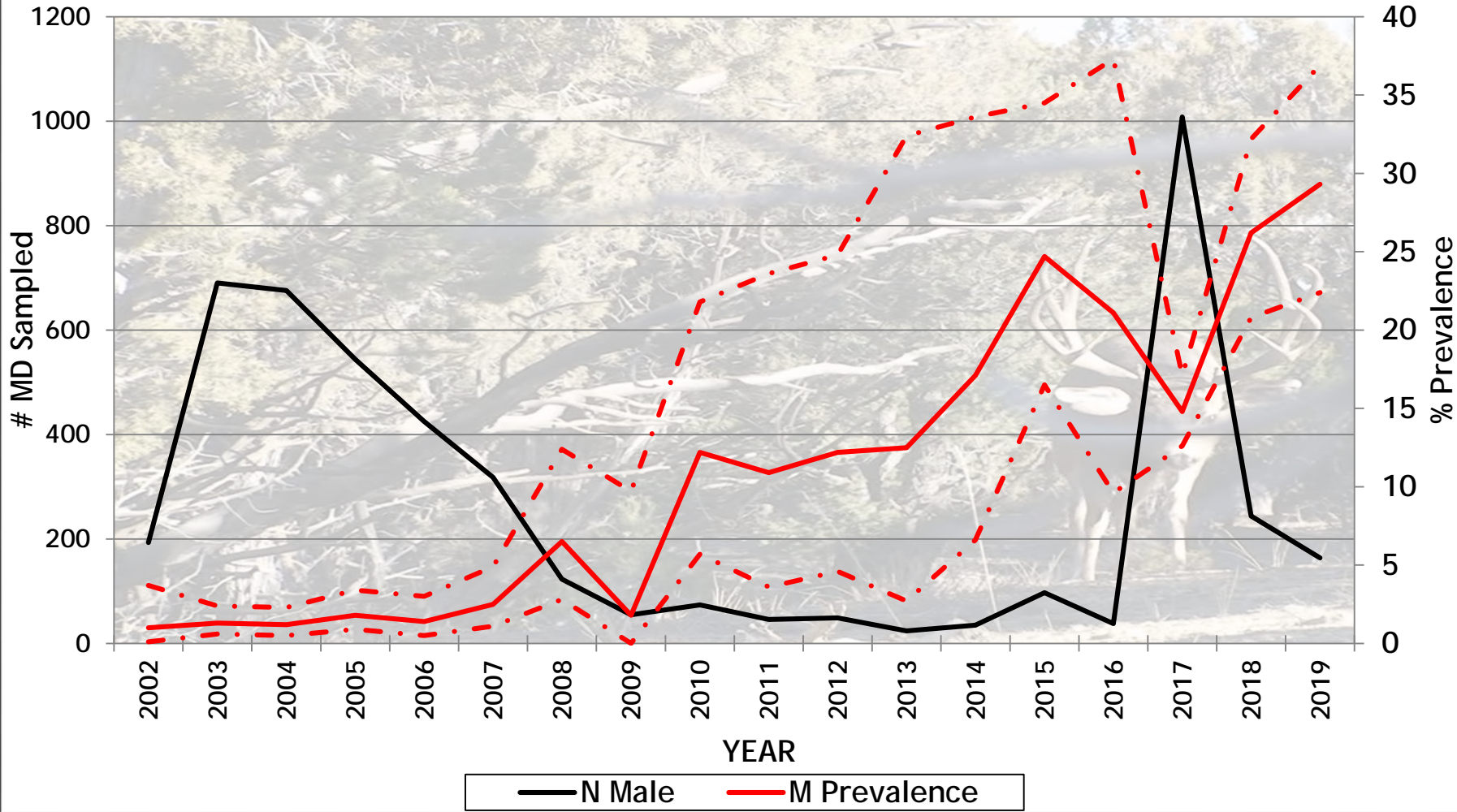
- Changes related to weather, disease, and habitat all have important effect on prey numbers and how effective predators are at preying upon deer



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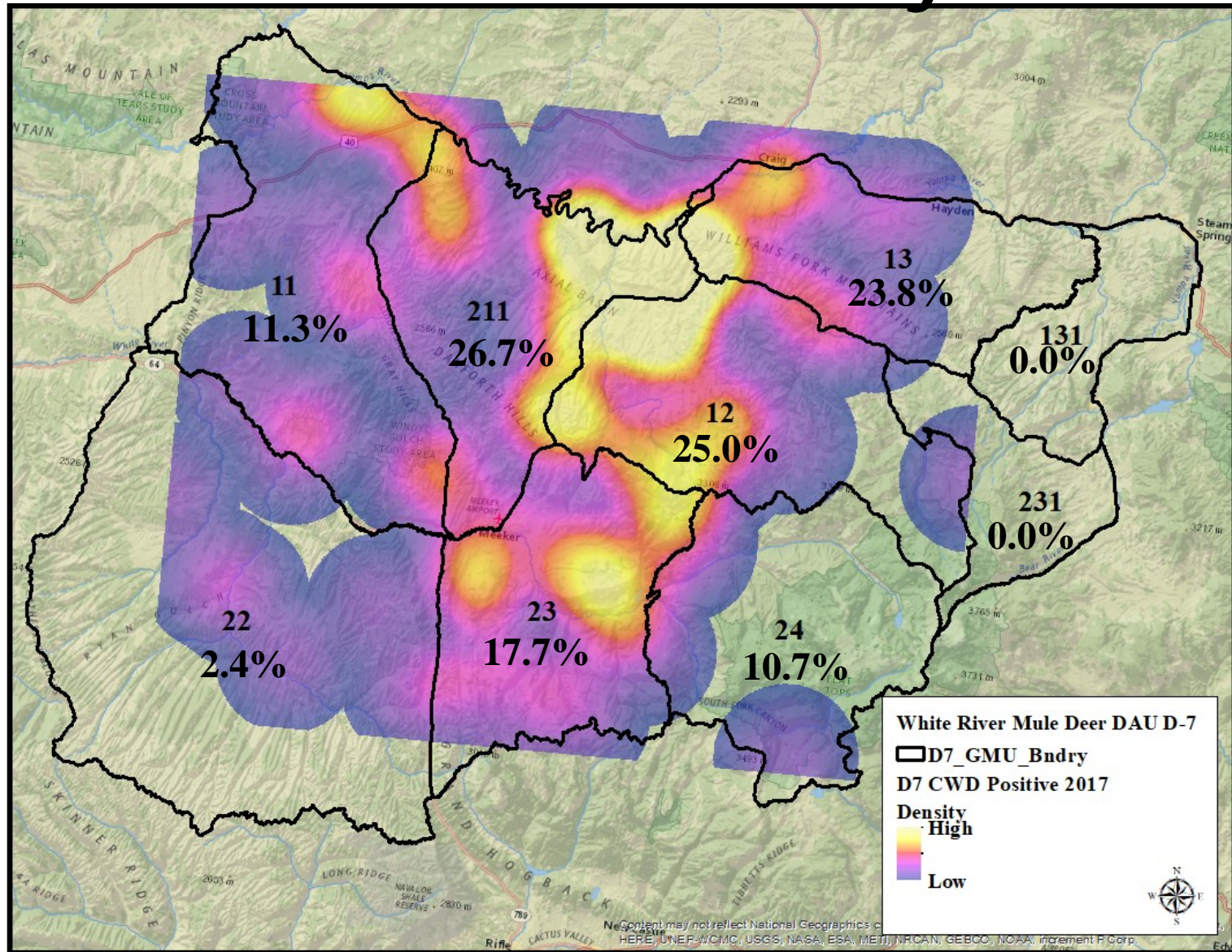
CHRONIC WASTING DISEASE

White River DAU D-7 Mule Deer
Male CWD Prevalence



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DAU D7 CWD Density 2017



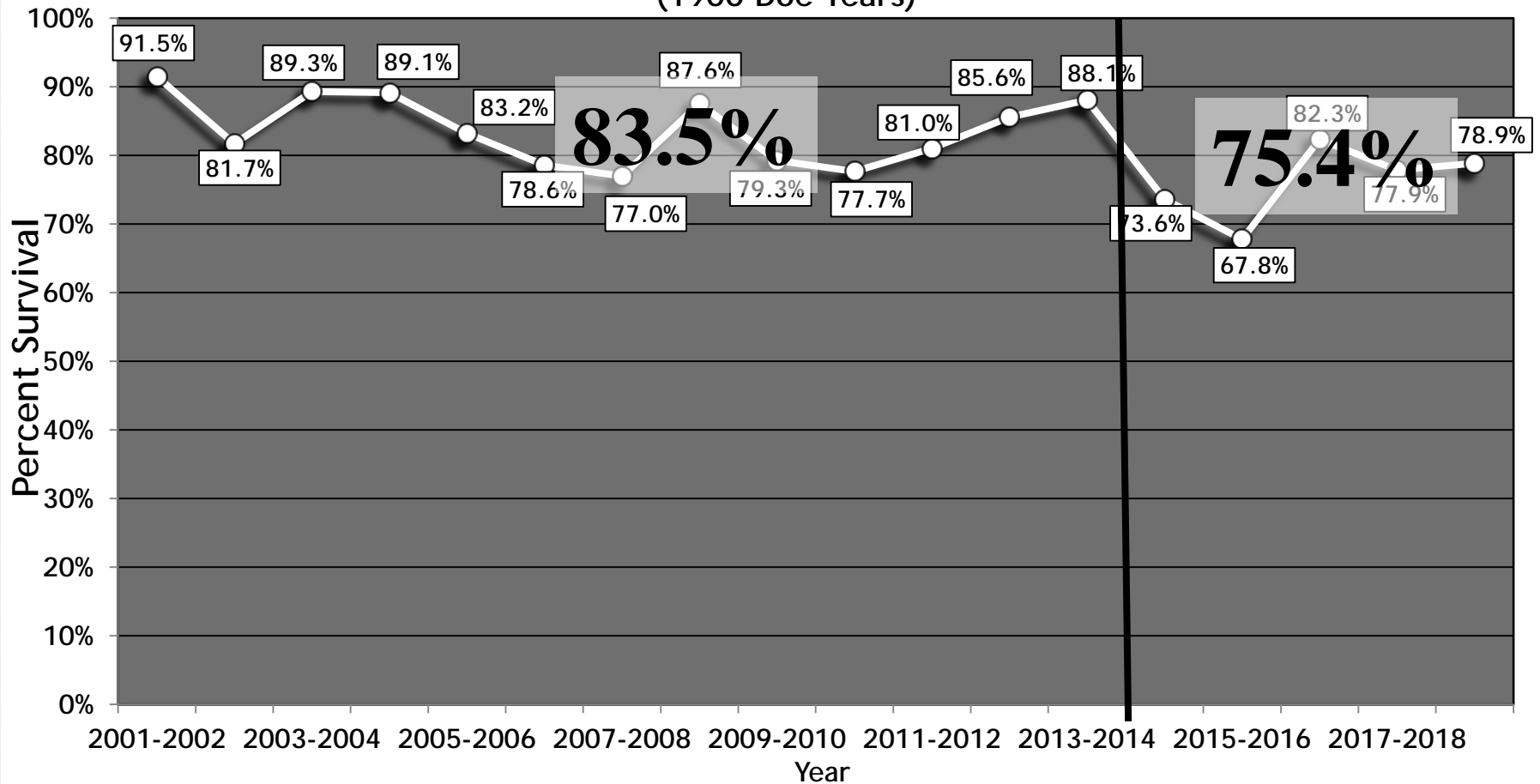
Content may not reflect National Geographic's position on climate change. HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment F Corp.



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ANNUAL DOE SURVIVAL

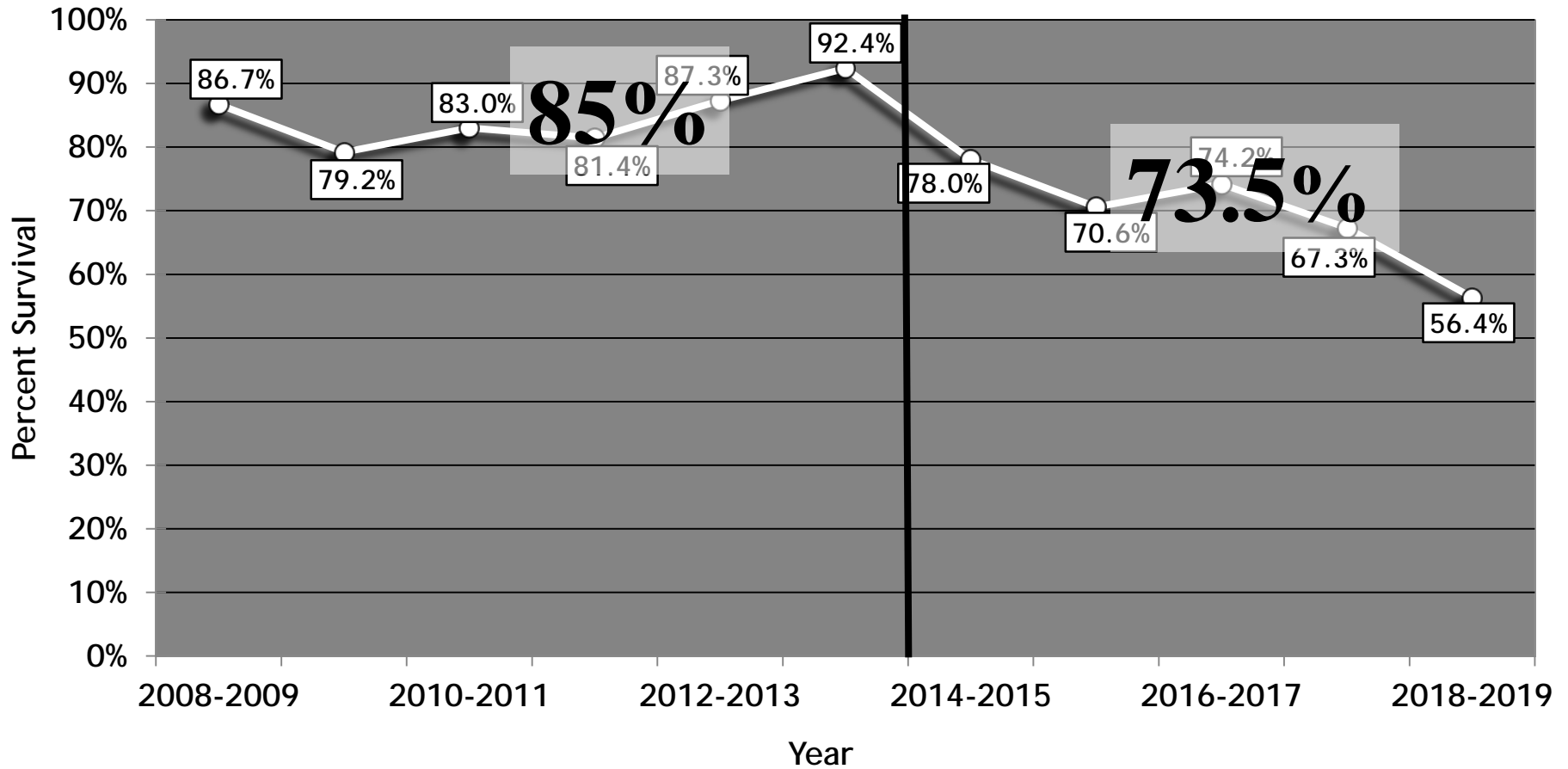
White River Mule Deer Herd DAU D-7
Annual Doe Survival
2001-2019
(1900 Doe Years)



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ANNUAL BUCK SURVIVAL

White River Mule Deer Herd DAU D-7
Annual Buck Survival
2008-2019
(1059 Buck Years)



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Strategies for Achieving Objectives

- Management actions will be implemented to reduce CWD prevalence and population densities
- CWD DAU prevalence 15% (mandatory testing 2017)
 - Moderate incremental or seasonal shifts in licenses by hunt code will be used to achieve desired objectives
 - Objective achievement will require sustained effort through time



Strategies for Achieving Objectives

- **Protect and enhance mule deer habitat**
 - **Habitat treatment projects**
 - ✓ Landscape scale habitat improvement
 - ✓ 129 habitat improvement projects, ~40,000 acres, \$2.6 million
 - **Conservation easements**
 - ✓ 70,586 acres protected, \$42 million
 - ✓ D-7 has most acres protected in the state

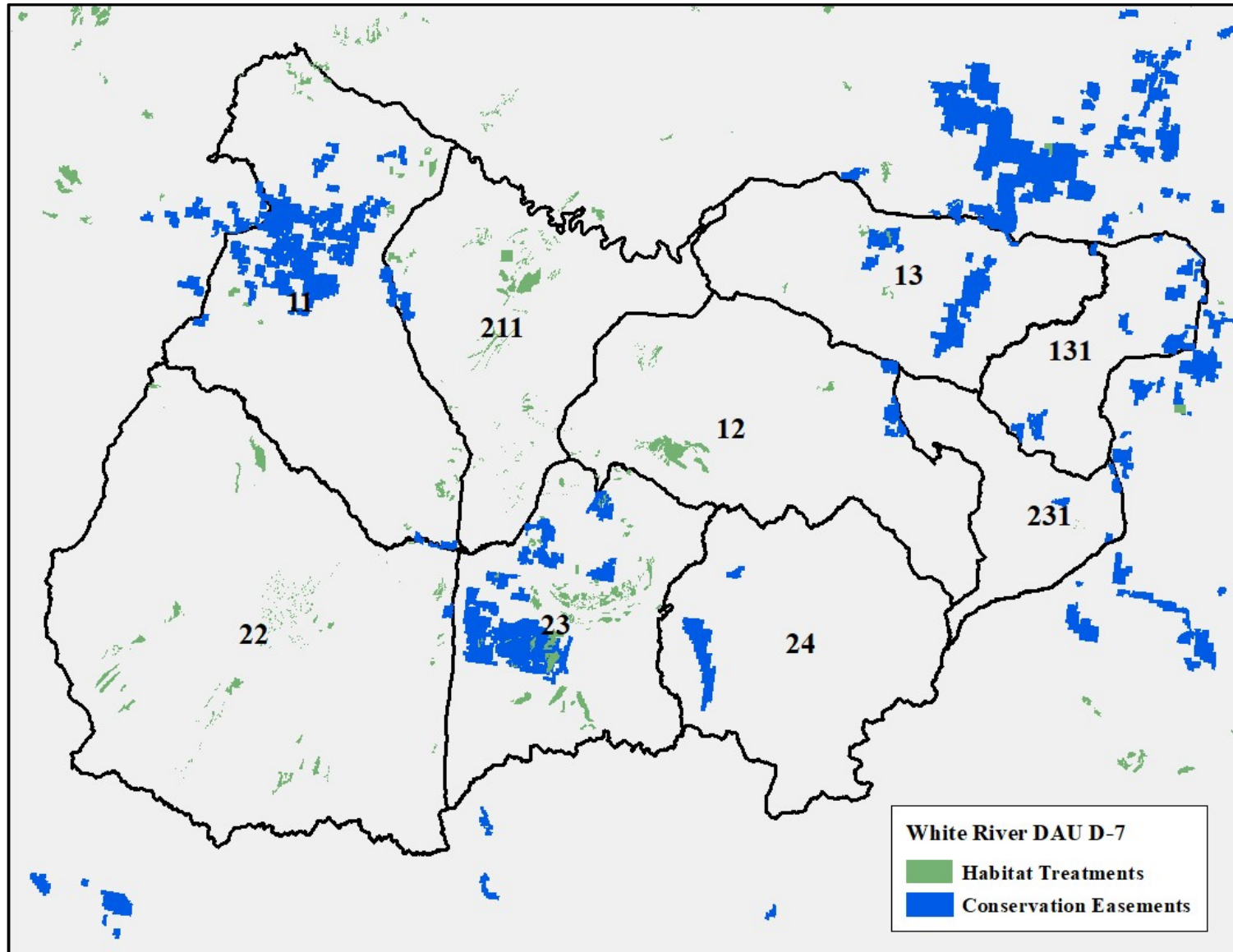


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Conservation Easements and Habitat Treatments



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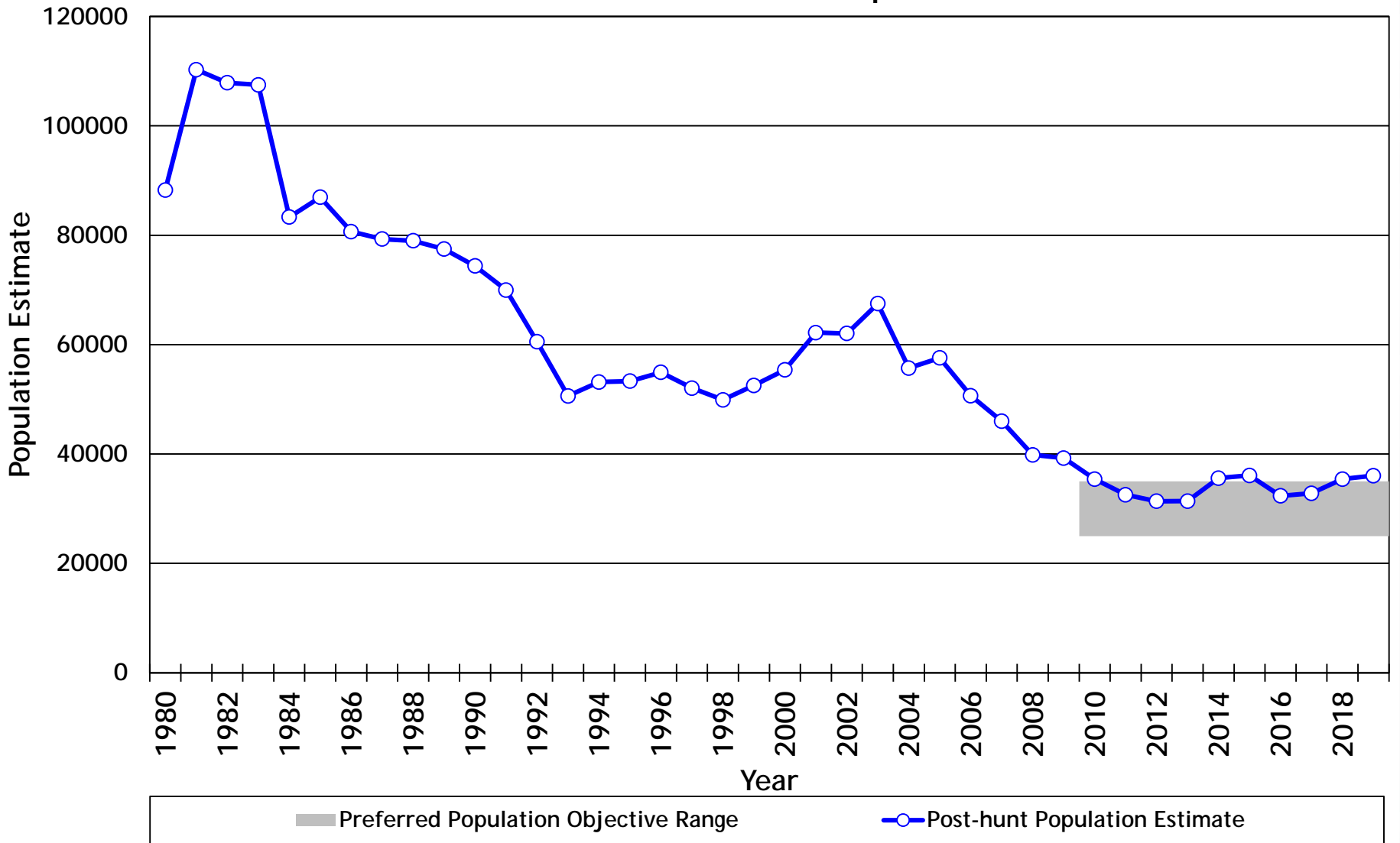
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White River DAU D-7 Post-Hunt Population Trend



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