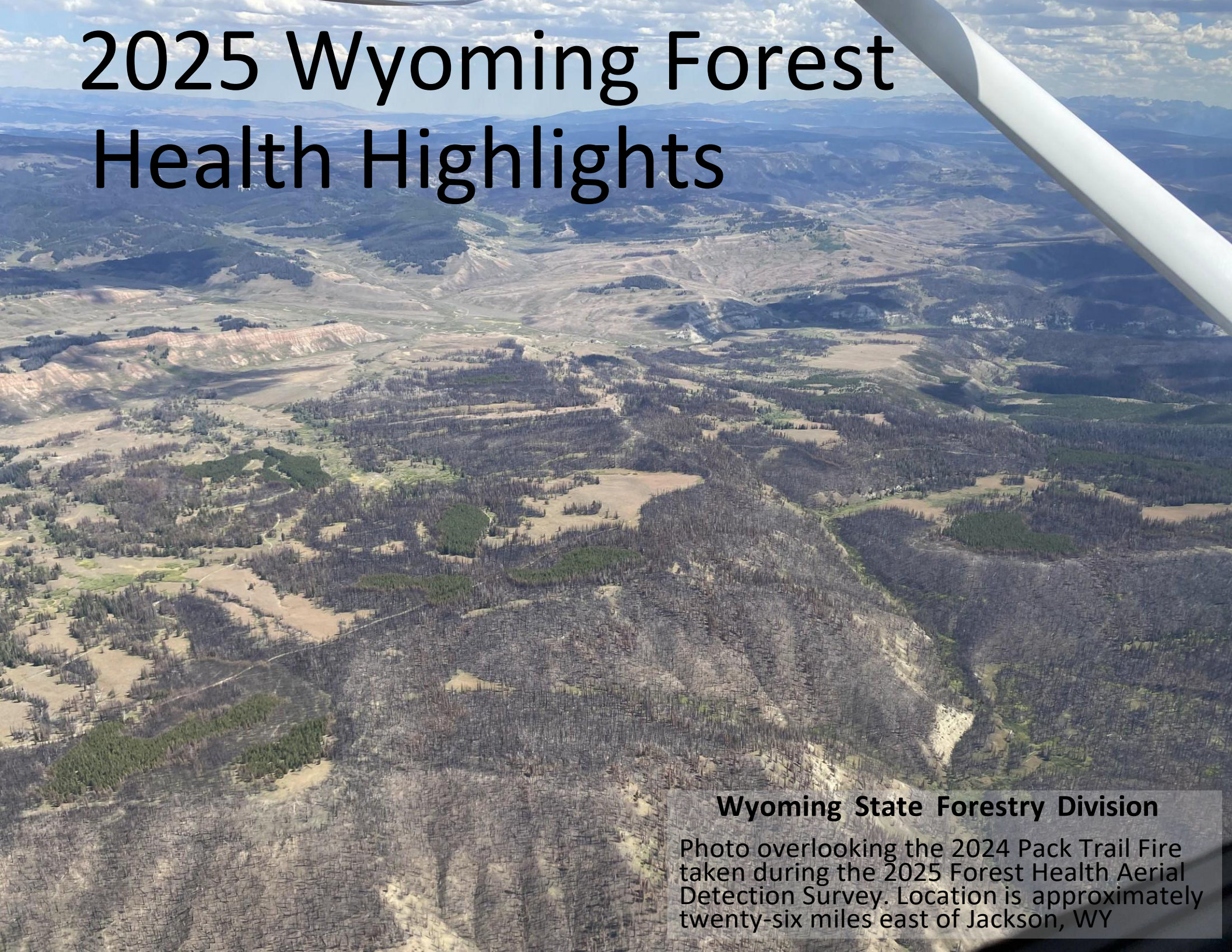
2025 Wyoming Forest Health Highlights



Wyoming State Forestry Division

Photo overlooking the 2024 Pack Trail Fire taken during the 2025 Forest Health Aerial Detection Survey. Location is approximately twenty-six miles east of Jackson, WY

In 2025:

- Over 9,214,804 acres were surveyed primarily by aircraft across Wyoming's Federal, State, and Private Forests.
  - Coverage was reduced in 2025 by 50% due to USFS staffing challenges. The Shoshone and Medicine Bow NFs were not included in the 2025 survey.
- 3,221 separate observations of damage were recorded by aerial survey.
- Approximately 76,039 total acres were damaged by insect, disease, and abiotic factors excluding fire.
- Mortality from bark beetles is estimated at 40,225 acres.



State Lands Forest Health Project Laramie Range

State lands forest health work is often funded with a 50/50 combination from the State Trust Preservation and Enhancement account and USFS Federal funding.

Before Treatment

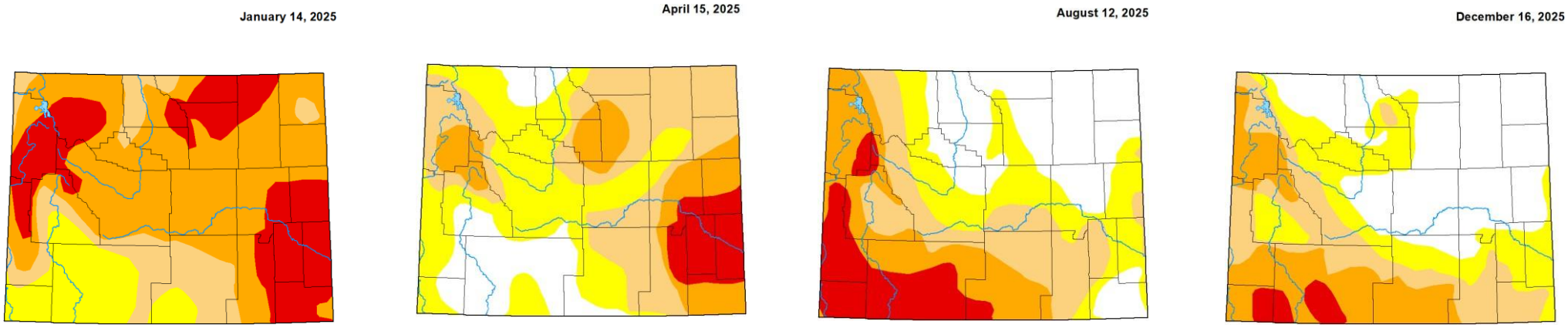


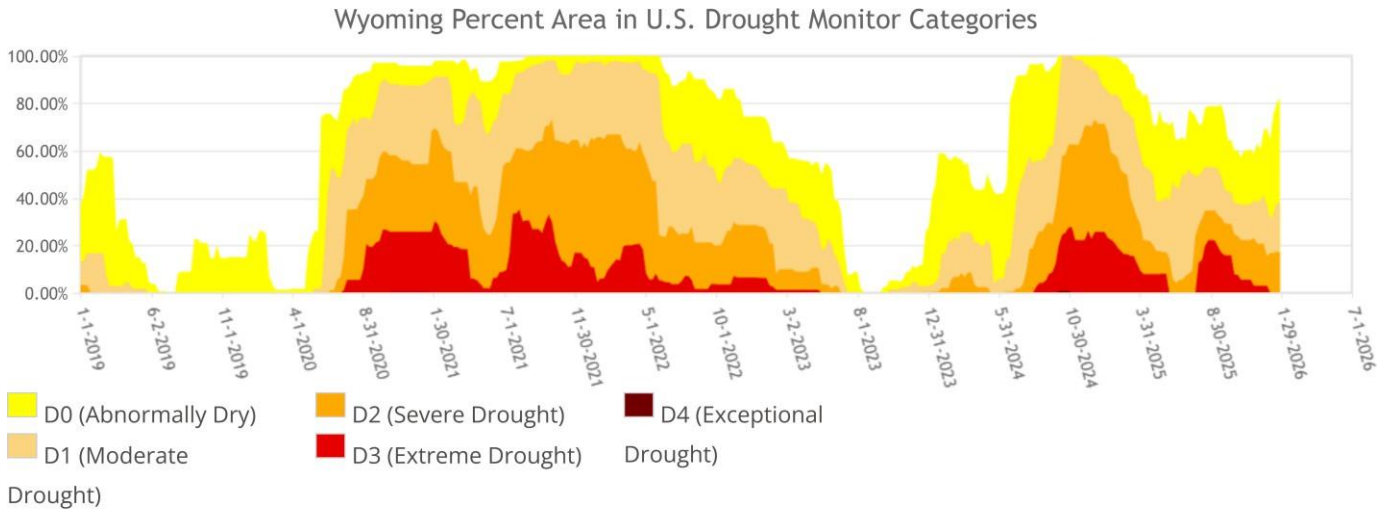
After Treatment



2025 Summary of Drought in Wyoming's Forests

- In 2025 drought stress was high early on but reduced and shifted towards the SE part of the state.
- Drought has a substantial impact on the health of Wyoming's forests.
- Water stress contributes to the likelihood of insect and disease outbreaks/mortality.
- The effects of drought can be both immediate or cumulative depending on forest type, timing and duration. Decreases in growth and fire effects are heavily influenced by year-to-year rainfall while bark beetle epidemics are frequently the result of 3+ consecutive years of inadequate moisture. A single year of increased moisture is often inadequate to disrupt large scale epidemics.



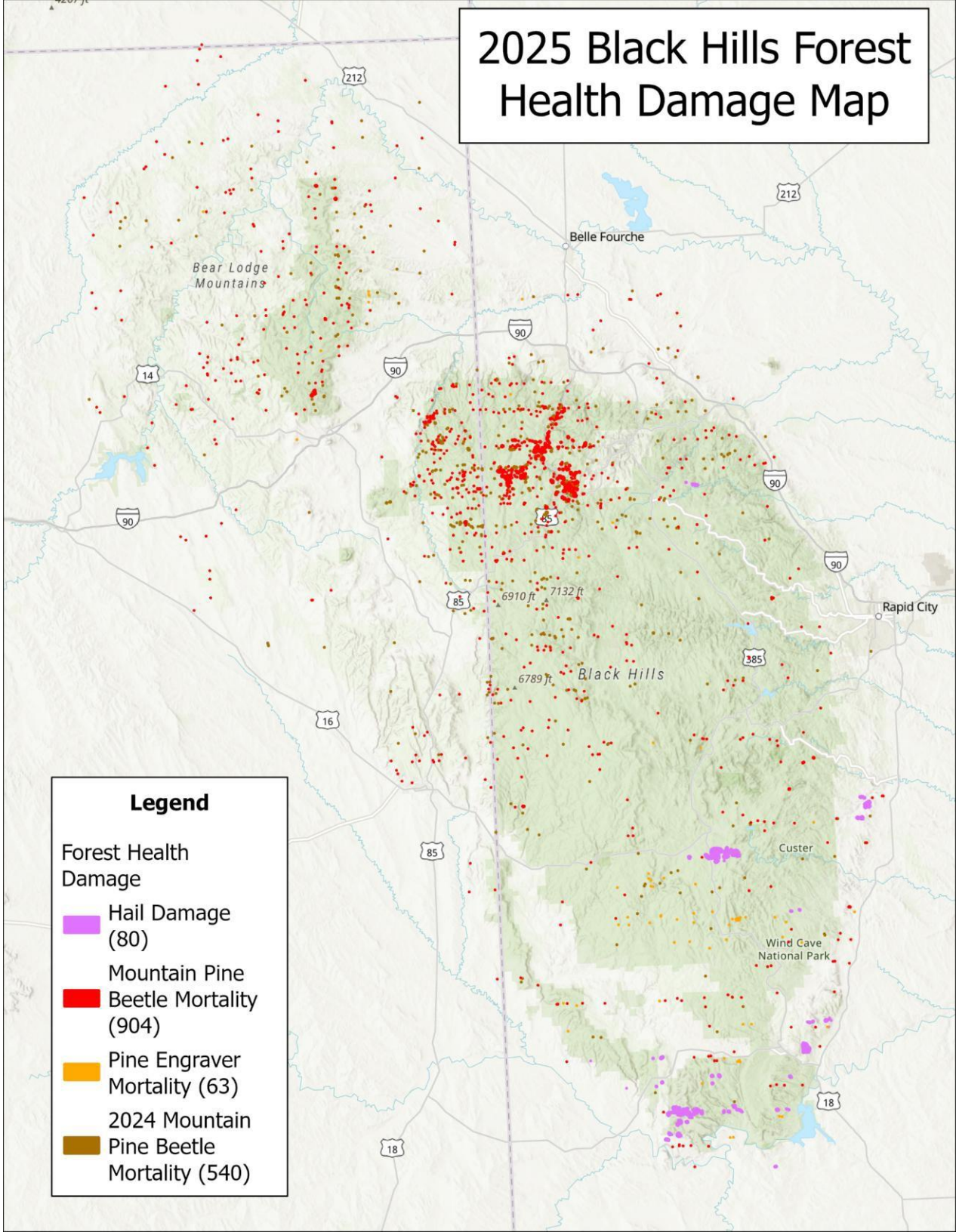


From the U.S. Drought Monitor website, https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx, 2-2-2026

2025 Mountain Pine Beetle in the Black Hills

Year	Number of Records	Acres of Damage
2024	540	425
2025	904	1,468

- Mountain pine beetle continues to increase in frequency and acreage across the Black Hills.
- Highest concentrations and areas of concern are currently in Spearfish Canyon, South Dakota.
- Damage is primarily seen in steep or remote unmanaged areas where timber is difficult to access.



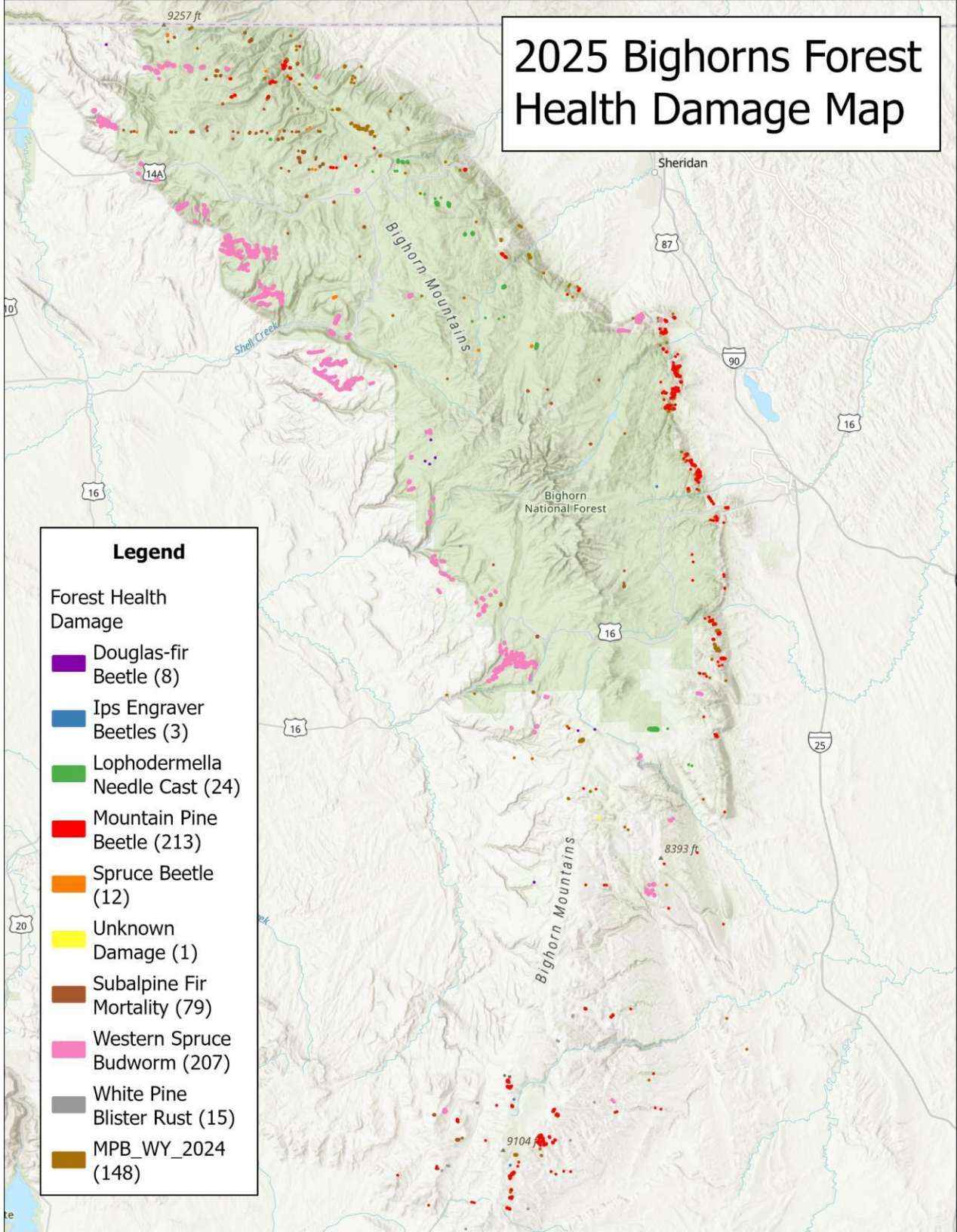
2025 Bighorns Insect and Disease Damage

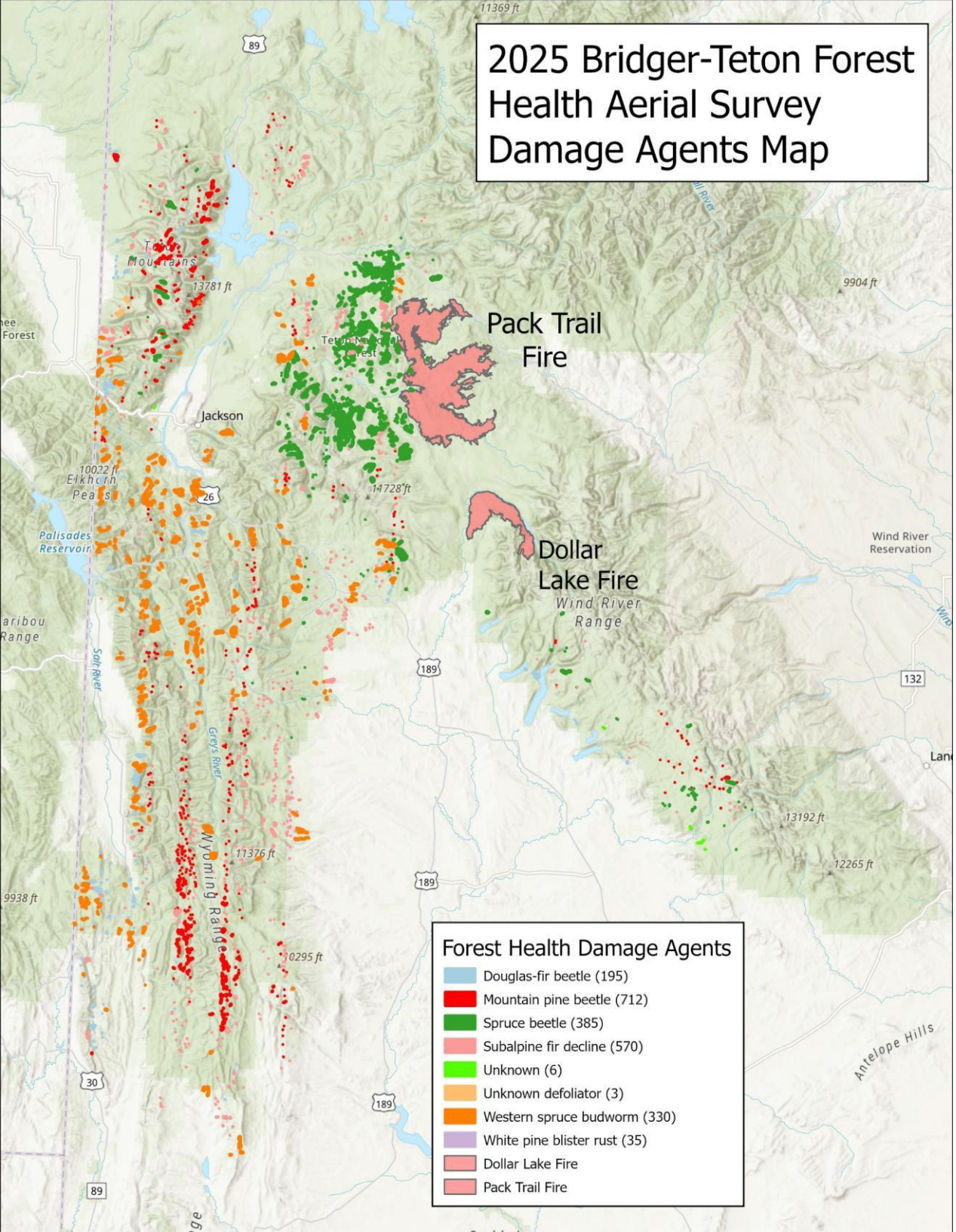
- Western spruce budworm is decreasing throughout the southern Bighorns but increasing along the western slope.
  - Recorded acreage increased from 4,600 in 2024 to 6,705 in 2025.

- Mountain pine beetle continues to increase in frequency across the eastern slope of the Bighorns in Ponderosa.
  - Steep terrain is the primary barrier to management.

Mountain Pine Beetle in the Bighorns

Year	Number of Records	Acres of Damage
2024	148	530
2025	213	543

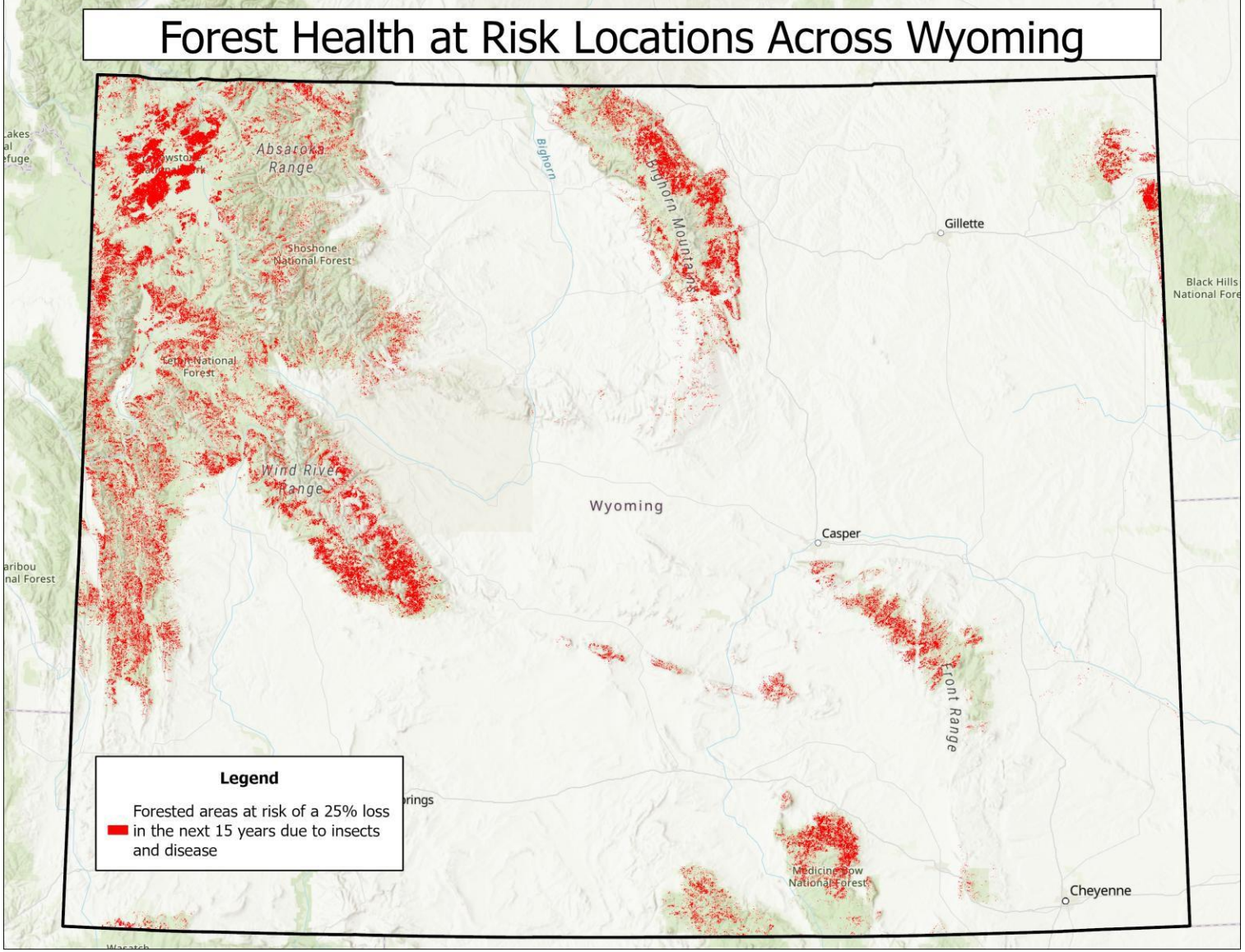




2025 Bridger-Teton Insect and Disease Damage

2025 survey coverage was reduced in R4 due to smoke from the Dollar Lake Fire

- Mountain pine beetle mortality levels remain similar to last year.
  - 92% of impacted trees are whitebark or limber five needle pines
- Western spruce budworm defoliation decreased from 96,086 acres in 2024 to 25,091acres in 2025.
  - Decrease is due to favorable weather conditions and reduced survey coverage.
- Spruce beetle mortality continues in known areas.
  - A decrease in acreage was observed due to the removal of susceptible trees within the Pack Trail Fire perimeter.



Year of Risk Analysis	Estimated Acres of Insect and Disease Mortality Risk
2012	2,647,957
2024	2,839,252

Wyoming Forested Areas	Estimated Acres of Insect and Disease Mortality Risk
Roadless	838,557
Wilderness	475,728
State Lands	44,813

- The number of acres of forested lands at risk of insect and disease mortality is increasing across Wyoming.
- The increase between 2012 and 2024 is estimated at 191,295 acres or 6.7% throughout the state.
- Of Wyoming's 10,804,151 acres of forested land, 26% is expected to see a 25% loss in live trees in the next 15 years from insects and disease.
- Data is from the USFS National Insect and Disease Risk Mapping strategic assessment.

Forest Health Pathogens in Wyoming

Root Rots

Root rots are long lasting destructive pathogens found in forested settings. They may contribute to insect outbreaks by providing influxes of suitable host material or make sites hazardous to falling trees. In areas heavily impacted by root rot, it is common to find more than one insect or disease species causing damage. Root rot pathogens persist in the soil and are commonly spread by root to root contact of trees.

- **Armillaria Root Disease (*Armillaria spp.*)**: Affects Douglas-fir, true firs, pines, aspen, and spruce. Part of the damage agent complex resulting in subalpine fir mortality.
- **Heterobasidion Root Disease S-type (*Heterobasidion occidentale*)**: Found in western Wyoming affecting spruce, Douglas-fir and true fir species.
- **Tomentosus Root Rot/False Velvet Top Fungus (*Onnia tomentosa*)**: Primarily found in spruce forests throughout western Wyoming.

Foliage Diseases

- **Marssonina Blight (*Drepanopeziza spp.*)**: Common leaf disease in aspen resulting in premature defoliation. Found throughout Wyoming.
- **Rhabdocline Needle Cast (*Rhabdocline spp.*)**: Causes drop of older needles in Douglas-fir. Rarely results in mortality. Recorded in Lincoln County in 2024.
- **Lophodremella (*Lophodermella spp.*) and other needle cast species in pine**: Causes browning and premature dropping of needles. Found throughout the Bighorns.
- **Diplodia Blight (*Sphaeropsis sapinea*)**: Kills current year shoots primarily on ponderosa pine in the NE corner of the state.

Other Forest Pathogens

- **Dwarf Mistletoe (*Arceuthobium spp.*)**: Most common conifer pathogen within the western part of Wyoming and throughout the intermountain west. Primarily affects pine species and Douglas-fir. Native parasitic plant causing branch die back, top kill and occasionally mortality.
- **Cytospora Canker of Fir (*Cytospora abietis.*)**: Contributes to subalpine fir mortality. It is commonly associated with stressed trees. Other cytospora species can be found throughout Wyoming impacting spruce and aspen tree species.
- **White Pine Blister Rust (*Cronartium ribicola*)**: Nonnative invasive pathogen resulting in mortality in limber and high elevation white bark pine stands throughout Wyoming.
- **Comandra Blister Rust (*Cronartium comandrae*)**: Native rust pathogen commonly causing top kill in lodgepole and ponderosa pines.

2025 Invasive Species Update

Spongy Moth

Lymantria dispar

As part of the national USDA spongy moth program, WSFD installed, monitored and evaluated 98 detection traps across 6 counties in 2025. One positive identification was made in Park County by the USFS at the Crazy Creek Campground in 2023. As a result, delimiting traps were placed to determine establishment in 2024 and no specimens were found. No spongy moths were found as part of the trapping program throughout Wyoming in 2025.

Thousand Cankers Disease

Geosmithia morbida

Thousand Cankers Disease (TCD) continues to cause black walnut tree mortality in Cheyenne. Many trees are not officially reported due to being in homeowner's back yards or located off the public right of way. The first confirmation of TCD in Wyoming was made in 2021. Two trees were identified as having TCD. Both are black walnuts (Juglans nigra) located in Cheyenne at separate sites. TCD is considered an "insect-disease complex" consisting of three factors: 1) walnut twig beetle (Pityophthorus juglandis), a native beetle that feeds on the inner bark, 2) fungal spores, (Geosmithia morbida), carried on wings of the beetle and deposited around galleries, and 3) subsequent canker formation around galleries. TCD originated in the western United States and is not native to Wyoming. As of 2025, no positive confirmations of TCD have been made in Wyoming outside of Cheyenne.

Emerald Ash Borer

Agrilus planipennis

Wyoming State Forestry continues to coordinate and carry out trapping for emerald ash borer (EAB) throughout the state. In 2025, traps were placed across Wyoming in high-risk communities and areas in coordination with local urban forestry partners, conservation districts, and city parks departments. Areas are considered high risk if they contain ash trees and are located near high use tourist areas or along major transportation routes. No EAB were found. EAB has not been positively confirmed in Wyoming to date.

Japanese Beetle

Popillia japonica

Established Japanese beetle populations continue to persist in Sheridan, but no noticeable increases in damage have been observed since the year following the initial detection in 2021. No new detections of Japanese beetle have been made outside of Sheridan.

For More Information Contact

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U.S. Forest Service

Forest Health Monitoring

https://www.fs.usda.gov/science-technology/forest-health-protection/monitoring