BLM Threatened and Endangered Species Program

BLM

Foundations of the T & E Program

- ESA Section 7(a)(1) **requires** all federal agencies to carry out programs for the conservation of listed species
- Federal Land Policy and Management Act of 1976 (FLMPA): *Directs the management of fish and wildlife as one of six "principle or major uses" of public lands.*
- BLM Wildlife and Fisheries Management Policy: *"to manage habitat with emphasis on **ecosystems** to ensure **self-sustaining** populations and a **natural abundance and diversity** of wildlife, fish, and plant resources on the public lands."*
- BLM Special Status Species Management Manual 6840

Ecosystem Management

Ecological Applications, Volume 6, No. 3: The Report of the Ecological Society of America Committee on the Scientific Basis for Ecosystem Management.

Ecosystem approach depends on three things:

- Basing management decisions on the best available scientific and technical information
- Working with local communities and others to educate people regarding how their actions effect the health of the land; and
- Communicating the benefits of maintaining healthy, diverse, and productive ecological systems

Michael P. Dombeck, Acting Director of the BLM (1994– 1997) – appointed by Bruce Babbit, Secretary of Interior

6840 SSS Manual

This policy establishes an agencywide emphasis on proactive, landscape-and ecosystem-level, scientifically informed conservation and recovery of special status species and their habitats.

6840 SSS Manual

Objectives:

1. Focus on Proactive Conservation and Recovery for Special Status Species
2. Use ESA Section 7(a)(2) Consultation to Support Conservation and Recovery
3. Promote Healthy Species Populations and Biodiversity through Landscape- and Ecosystem-Level Management.
4. Use Science and Adaptive Management to Advance Conservation and Recovery
5. Engage Stakeholders through Internal and External Involvement

U.S. Department of the Interior
Bureau of Land Management

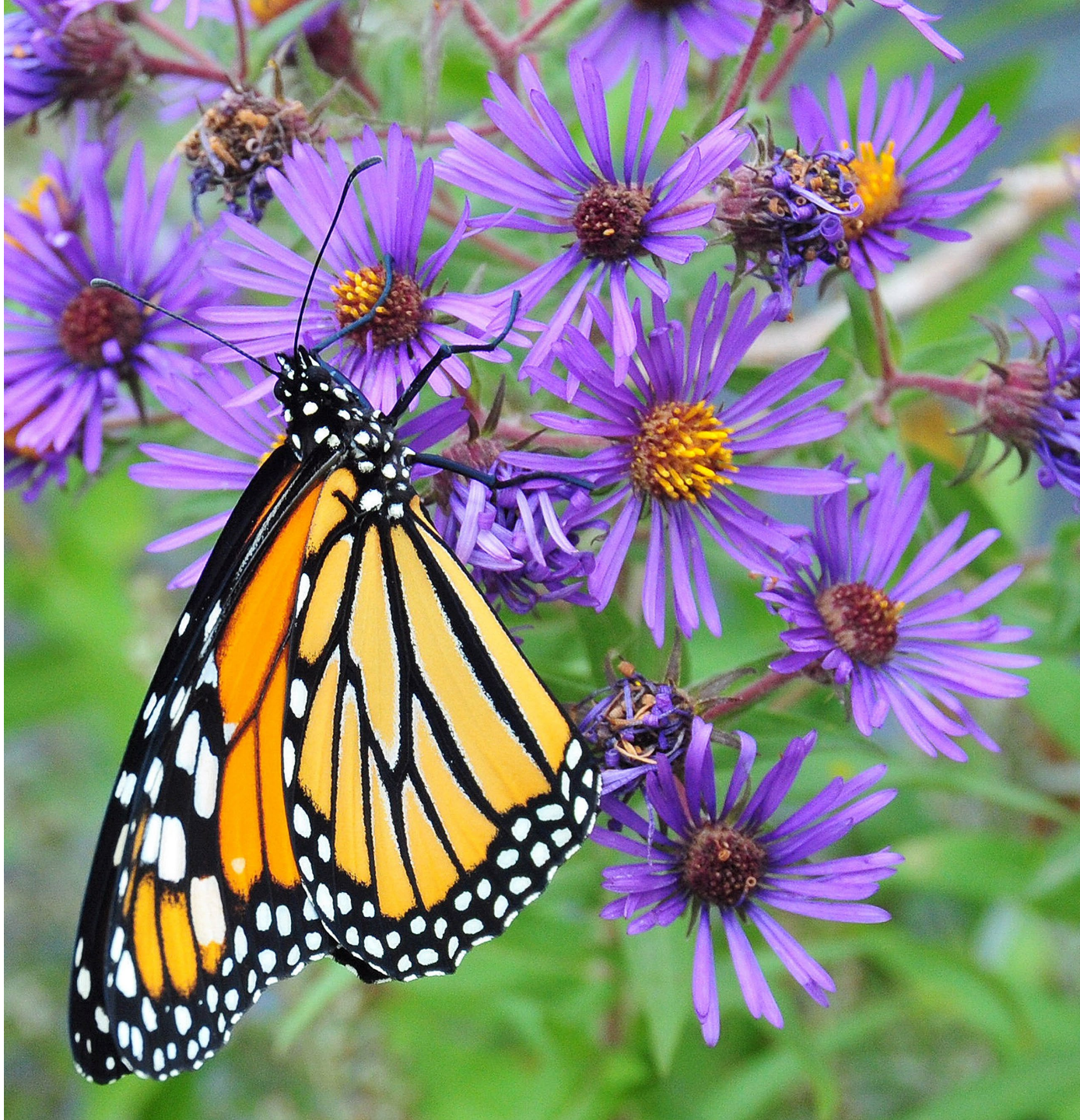
Strategic Plan for the Threatened and Endangered Species Program, 2022-2027

T&E Program Strategic Plan

- Proactive conservation efforts
- Landscape/ecosystem management
- Multi-species, multi-state
- On-the-ground conservation
- Bureau sensitive plants and animals
- Telling our story

Strategic Plan for Pollinator Conservation

This strategic plan supports pollinator conservation by identifying and directing implementation of conservation actions that will improve overall pollinator habitats, diversity, health, population viability, and abundance



BLM T & E Strategy

MISSION:

*Conserve and recover special status species by **collaborating** across programs and with our partners, implementing **proactive**, science-based ecosystem-level **conservation**, and **communicating** Threatened and Endangered Species Program successes within the BLM and to our partners and the public.*

Threatened and Endangered Species Program Priorities

- Focus on ecosystem management, multi-species, and multi-state conservation efforts
- Increase on-the-ground conservation efforts to help achieve recovery or preclude listing
- Strategically direct an emphasis toward priority species and habitats
- Conserve BLM sensitive species

Prioritization

BLM will focus project funding on priority species, habitats, or geographic areas as appropriate to maximize conservation and recovery successes.

Prioritization of conservation and recovery efforts for special status species, habitats, or geographic areas is important so that:

- a) available resources are targeted to species and habitats that will most benefit from immediate conservation and

- b) meaningful conservation and recovery efforts can be completed that result in substantial improvements to habitat conditions and species status.

Partner: NatureServe

T & E species on BLM

485 T&E “species” with habitat on BLM surface lands (366 in west, 130 in ES)

3190 BLM Special Status Species (SSS)

BLM manages 10% of the surface land in the US, but manages habitat for 29% of the ESA species (485 of 1682 total species – Nature Serve)

Factors to consider:

BLM has substantial management responsibility

BLM conservation actions readily implementable & high likelihood of success or durability

Existing partnerships & opportunities for collaborative conservation

Penstemon gibbensii

BLM – selected species conservation updates

22ND RARE PLANT SYMPOSIUM

Monitoring

Astragalus debequaeus (G2/S2, BLM sensitive)

Astragalus microcymbus (G1G2/S1S2, BLM sensitive)

Astragalus naturitensis (G3/S3, BLM sensitive)

Astragalus osterhoutii (G2/S2, ESA Endangered)*

Eriogonum brandegeei (G2/S2, BLM sensitive)

Eriogonum pelinophilum (G1G2/S1S2, ESA Endangered)*

Eutrema penlandii (G2/S2, ESA Threatened)*

Lupinus crassus (G2/S2, BLM sensitive)

Oenothera acutissima (G2/S2, BLM sensitive)

Oreocarya revealii (G2G3/S2S3, BLM sensitive)

Penstemon albifluvis (G4T1/S1, BLM sensitive)

Penstemon debilis (G1/S1, ESA Threatened)*

Penstemon degeneri (G2G3/S2S3, BLM sensitive)

Penstemon gibbensii (G1G2/S1, BLM sensitive)

Penstemon grahamii (G2G3/S1, BLM sensitive)

Penstemon harringtonii (G3/S3, BLM sensitive)

Penstemon penlandii (G1/S1, ESA Endangered)*

Phacelia formosula (G2/S2, ESA Endangered/PDL)*

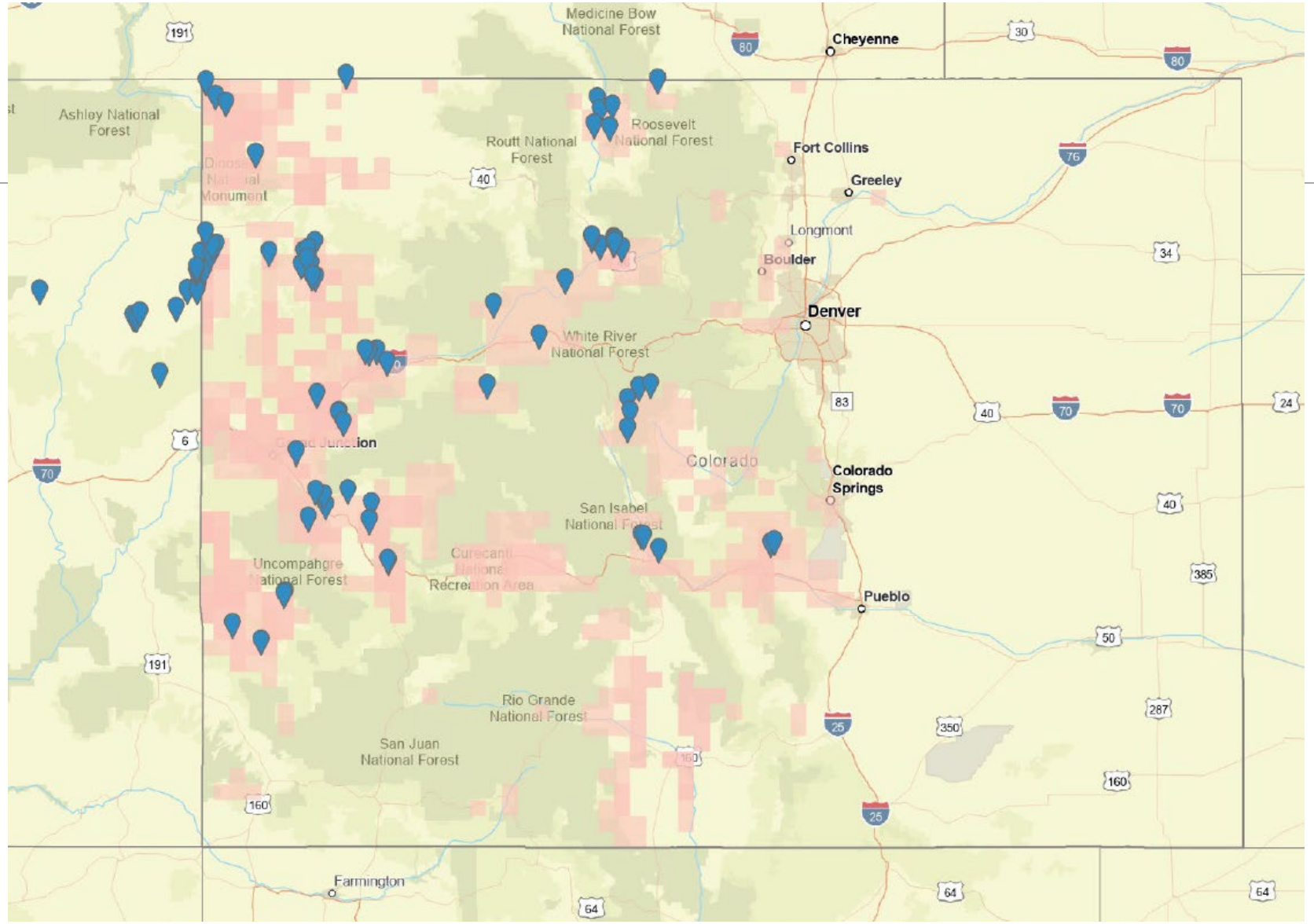
Physaria congesta (G1/S1, ESA Threatened)*

Physaria obcordata (G1G2/S1S2, ESA Threatened)*

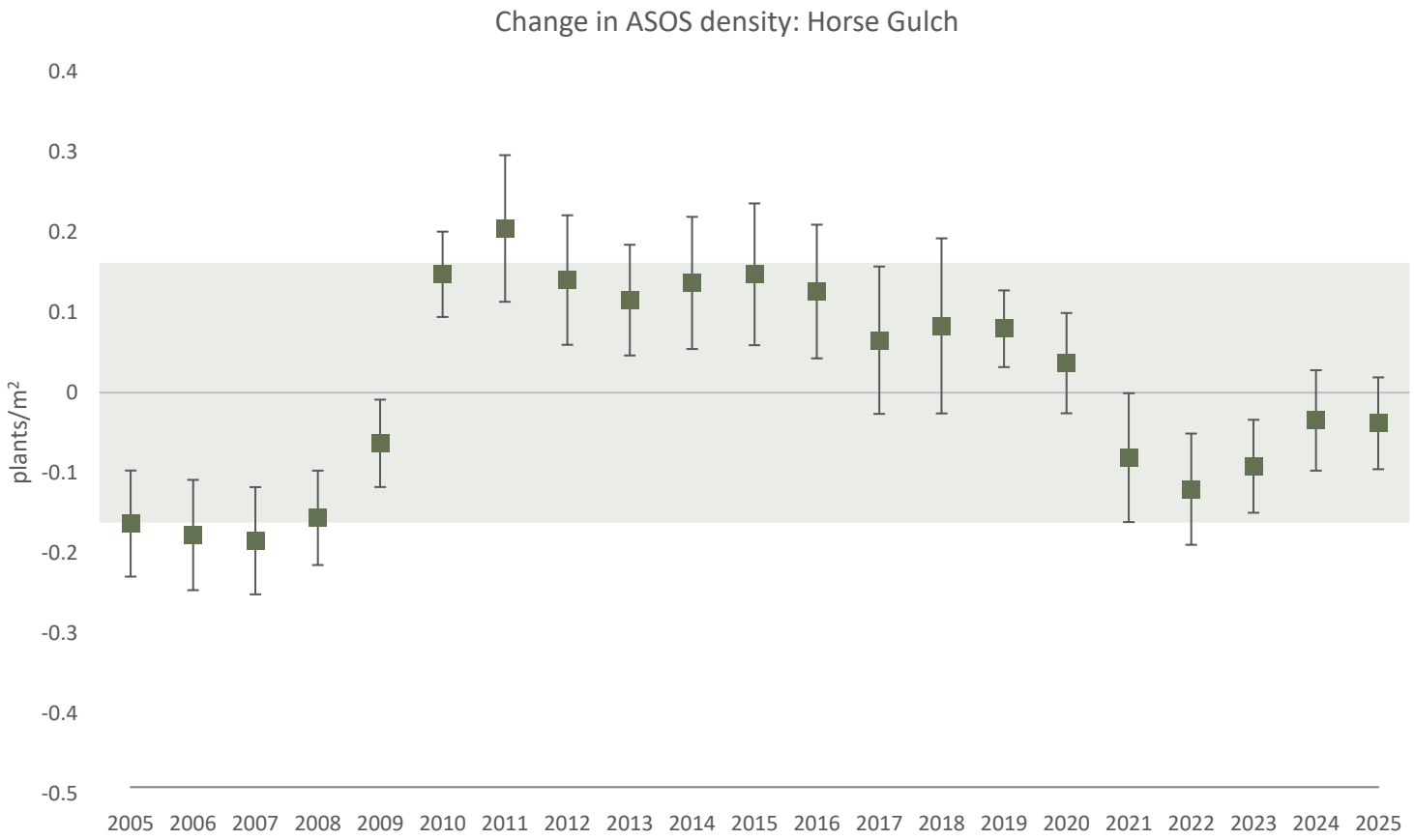
Sclerocactus dawsoniae *(*BLM sensitive)

Sclerocactus glaucus (G2G3/S2S3, BLM sensitive)

BLM special status species and monitoring sites

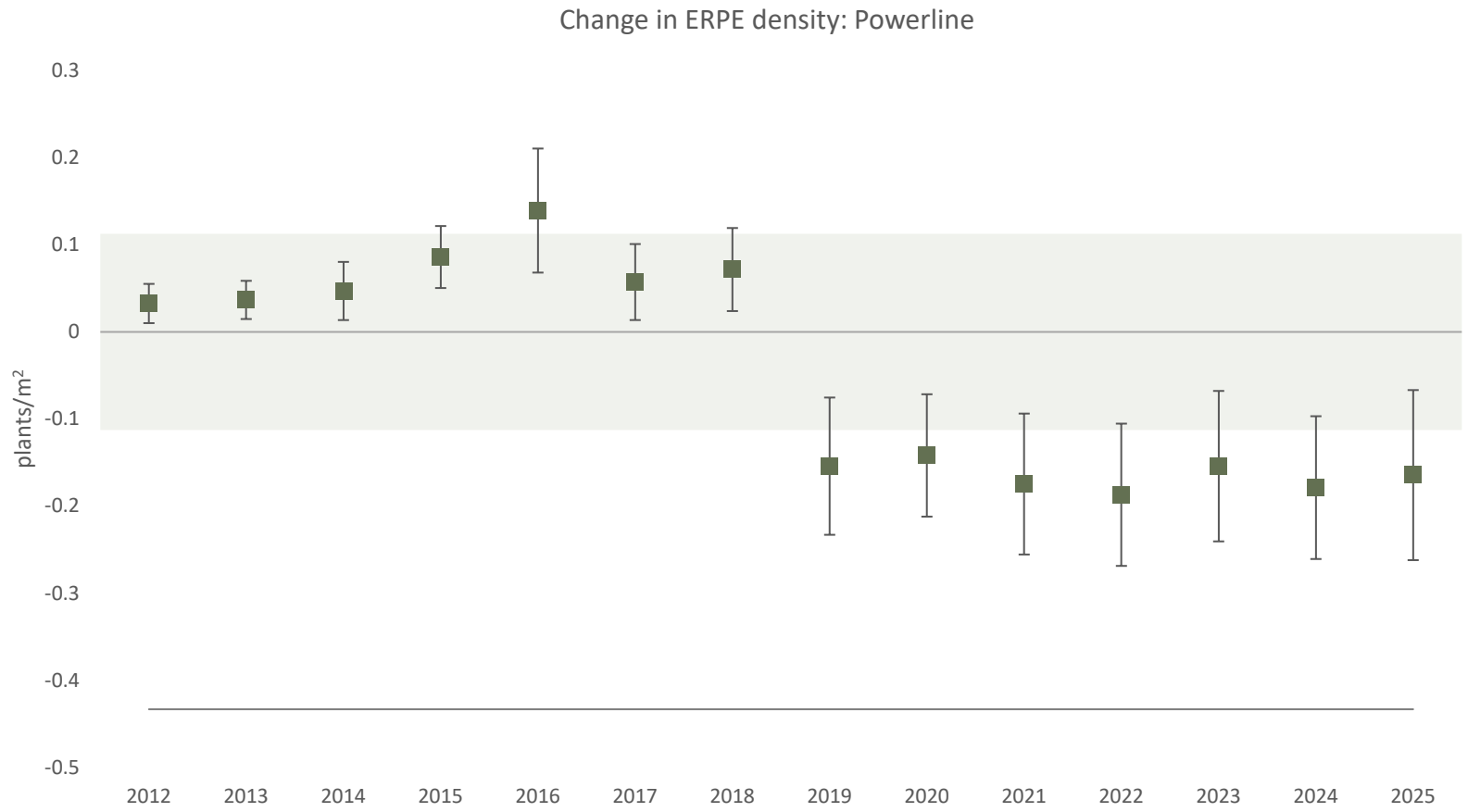


Long term trend monitoring: contextualizing variability

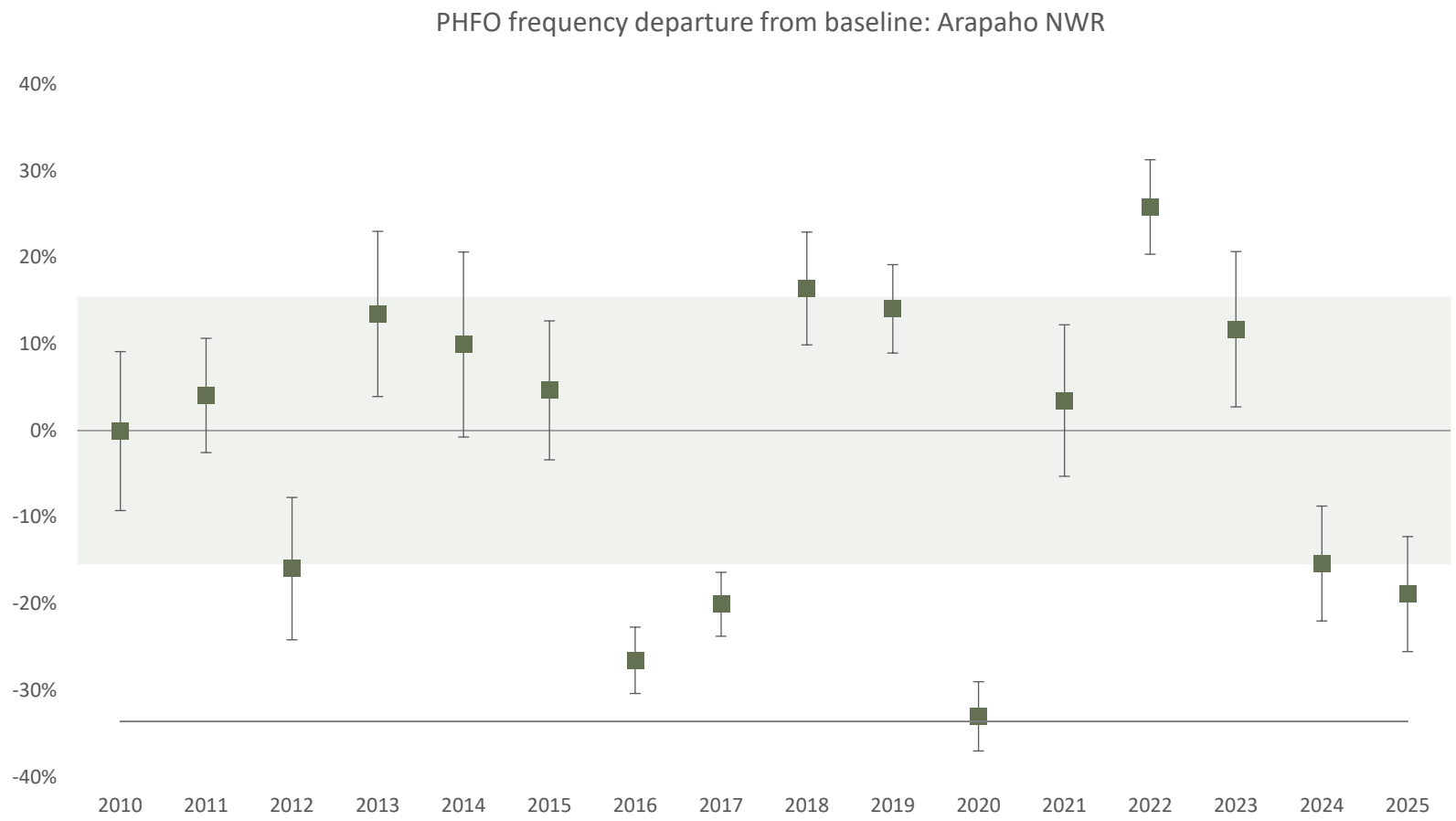


- Reference periods – the avg. of first 10 years as a baseline.
- “Historic range of variability” (+/- 1SD of average)

Long term trend monitoring: contextualizing variability



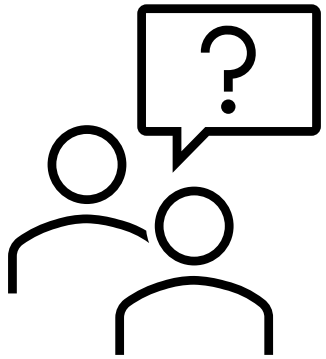
Long term trend monitoring: contextualizing variability



Take aways

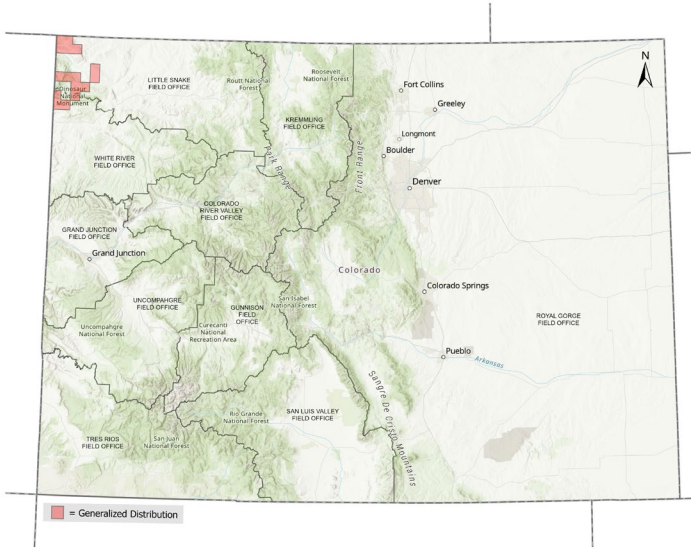
- Populations are inherently variable.
- Contextualizing this variability is critical when determining whether an observed change is ***biologically significant*** and/or cause for concern.
- Reference periods provide more insight than single, year-to-year statistical comparisons

What is the value in short-term or limited datasets?



Oenothera acutissima

- G2/S2, regional endemic to the Flaming Gorge / Dinosaur region in NW CO and adjacent NE Utah
- BLM sensitive



Oenothera acutissima

- Denver Botanic Gardens, 2008- completed several “point-in-time” assessments.
- Point-in-times are single population estimates
- Stuntz Reservoir
- Summit Spring

Oenothera acutissima: 2008 – 2025 resampling

STUNTZ RESERVOIR –

DBG, 2008: **1,427 plants** ± 20% within a 60 × 10 m (600 m²) macroplot.

BLM, 2025: **1,553 plants** (±466) within a 60 × 10 m (600 m²) macroplot.

Oenothera acutissima: 2008 – 2025 resampling

SUMMIT SPRING –

DBG, 2008: 3,897 plants (±20%) within an 80 × 10 m (800 m²) macroplot = **4.87 plants/m²**

BLM, 2025: 1,714 plants within a 36 x 10 m (360 m²) macroplot = **4.76 plants/m²**

Summary –

- Based on limited trend data ~5y and resampling of several point-in-times, *Oenothera acutissima* appears to be stable.
- This method works well when results indicate no change or a potential increase
- If we had instead found drastically lower numbers, we would need to do further evaluation to determine or characterize the change.

Thank you, questions?