Data Considerations for Managing Wild Horses and Burros in an Uncertain Future

Part of Drought, Wild Horses and Burros Discussion



Presented by Dr. Matt Reeves; USDA, Forest Service, Rocky Mountain Research Station, Missoula, MT June, 29 2023





Overview



- Discuss key resilience factors
- Approaches in the USFS
- Looking at climate change



Consistent approaches to evaluating past and future trends

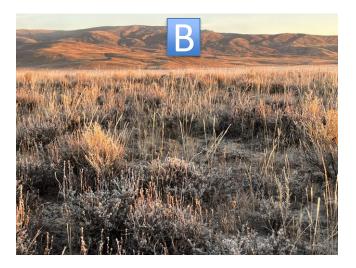




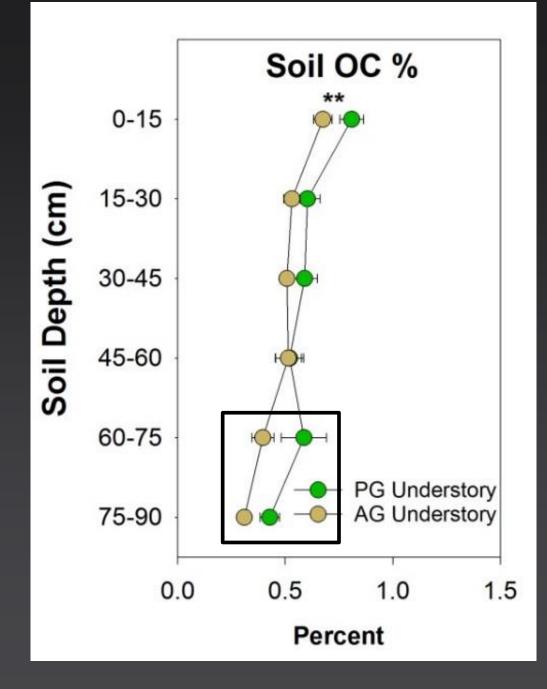
Resilience?

- Which site will be more resilient to drought
 - Why?





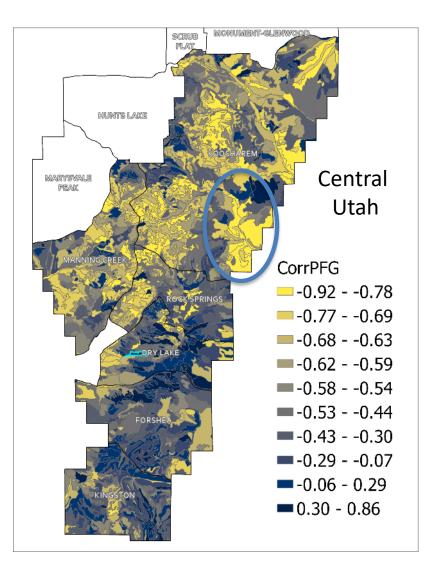




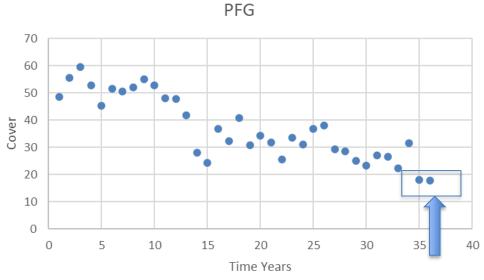
SOC = resiliency

Courtesy: Ben Rau

Resilience?

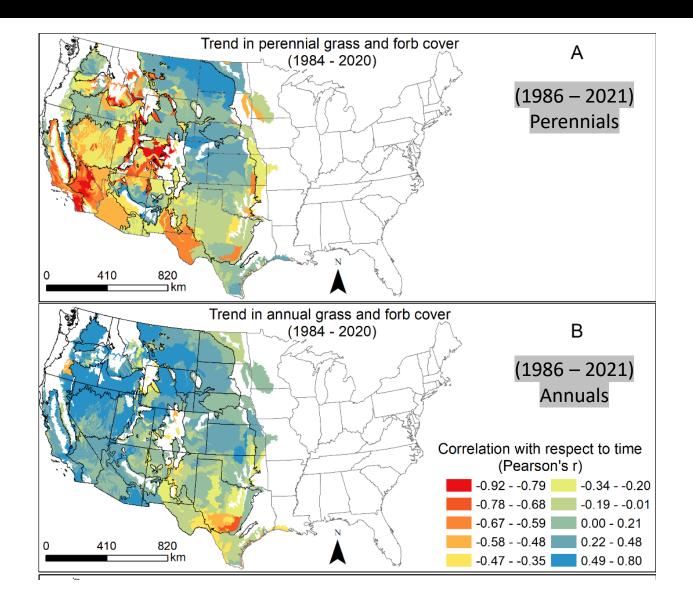


Trend in perennial forb and grass cover Why?





Where have we been?



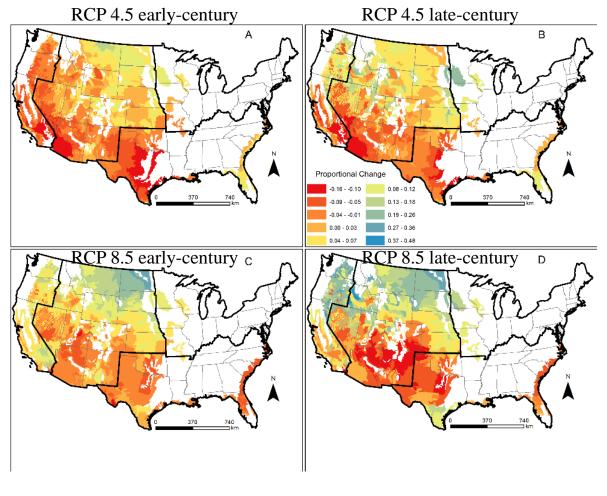
Life forms (1986 – 2021)



Where are we headed?



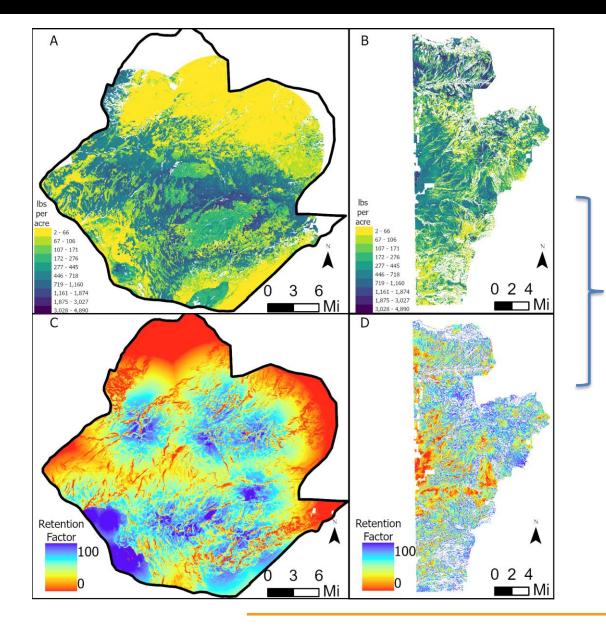








Relationship to WHB?

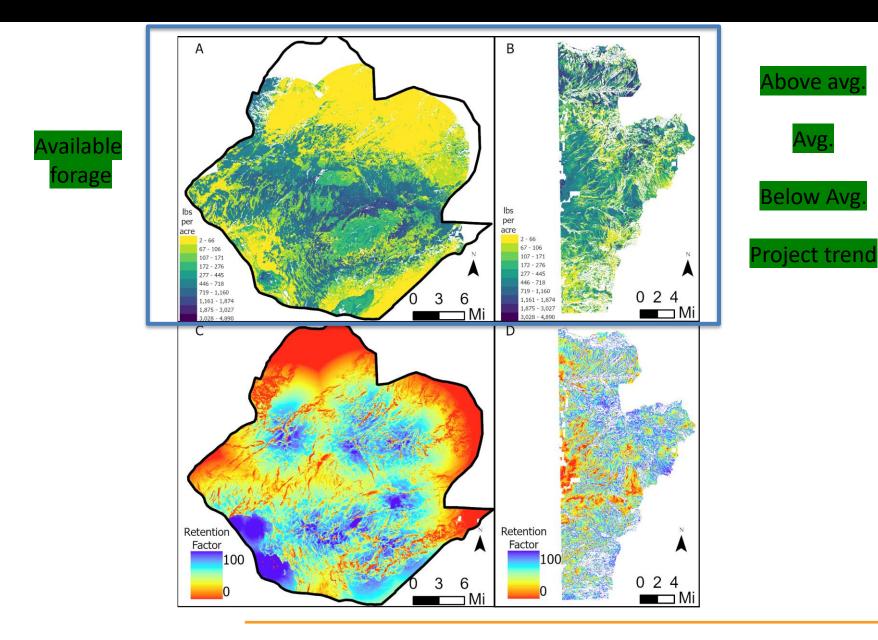


USFS Approach:

- 1) Automated stocking rate/capacity (AML)
- 2) NEPA assessment (change infrastructure: "What if"
- 3) Climate change impacts

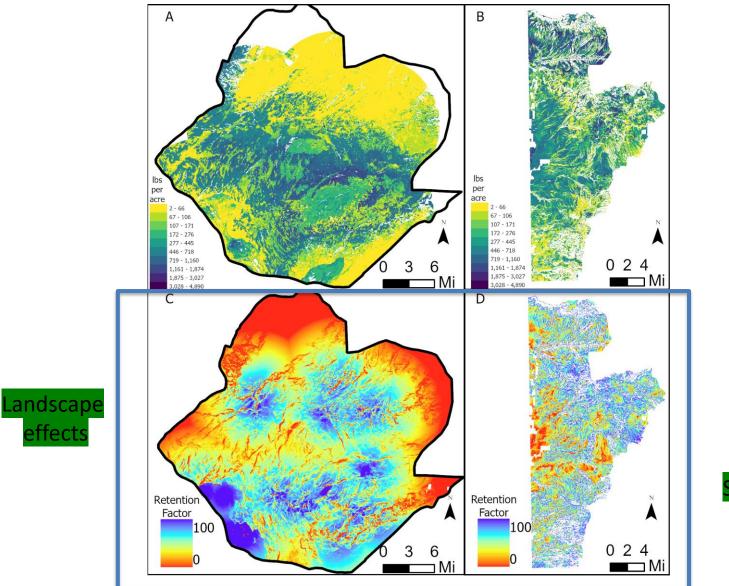


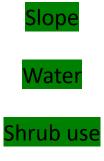
Relationship to WHB?





Relationship to WHB?







Closing thoughts

- Consistent approaches to impacts on forage + AML (quantity + quality);
 - Past
 - Present
 - Future
- Variability and extremes are the best descriptors of climate change expectations:
 - Drought more common, last longer, more intense
- Data we can all agree on helps create better dialogue and improved decision making.

