

GENERAL MONITORING QUESTIONS, NORTHERN COLORADO PLATEAU NETWORK

Anthropogenic Stressors

- What are the status and trends in the distribution and magnitude (*both in space and in time*) of stressors currently or potentially affecting NCPN resources?
 - Park users
 - Invasive exotic plants
 - Livestock and livestock management activities
 - Adjacent and up-stream land-use activities
 - Air pollutants
 - Water pollutants
 - Night sky, soundscape, and viewshed pollutants

Natural Drivers of Ecosystem Variability and Change

- What are the status and trends in the distribution, frequency, and magnitude (*both in space and in time*) of natural drivers of variability and change in NCPN ecosystems?
 - Seasonal precipitation
 - Climatic episodes
 - Fires
 - Floods and associated geomorphic processes
 - Other episodic disturbances that drive ecosystem change

Resources

Species and Populations of Concern

- What are the status and trends in population attributes of species of concern?
 - Population distribution, size, and structure
 - Reproductive success
 - Behavior
 - Physiological condition
- How do variations in population attributes compare with natural or expected patterns of variability?
- If population attributes deviate from expected patterns of variability, are those deviations attributable to anthropogenic stressors?

Ecosystem Structure and Function

- What are the status and trends (*both in space and in time*) in attributes of key ecosystem components and processes?
 - Air quality
 - Water quality and quantity
 - Soil quality
 - Nutrient cycling
 - Hydrologic functioning
 - Composition and structure of biotic communities
 - Disturbance regimes
 - Resistance and resilience of key components and processes to disturbance
- How do variations in ecosystem attributes compare with natural or expected patterns of variability?
- If ecosystem attributes deviate from expected patterns of variability, are those deviations attributable to anthropogenic stressors?

Landscape Structure and Function

- What are the status and trends (*both in space and in time*) in key landscape attributes both within and surrounding NPS units?
 - Size, distribution and connectivity of ecosystems / habitats
 - Transfers of resources, materials, and organisms among landscape components
- How do variations in landscape attributes compare with natural or expected patterns of variability?
- If landscape attributes deviate from expected patterns of variability, are those deviations attributable to anthropogenic stressors?

Other Natural Resource Values

- What are the status and trends in key condition attributes of other natural resource values such as paleontological resources, night skies and natural soundscapes?