Ecological Site Applications on U.S. Military Installations:

A Case Study from Northern Utah

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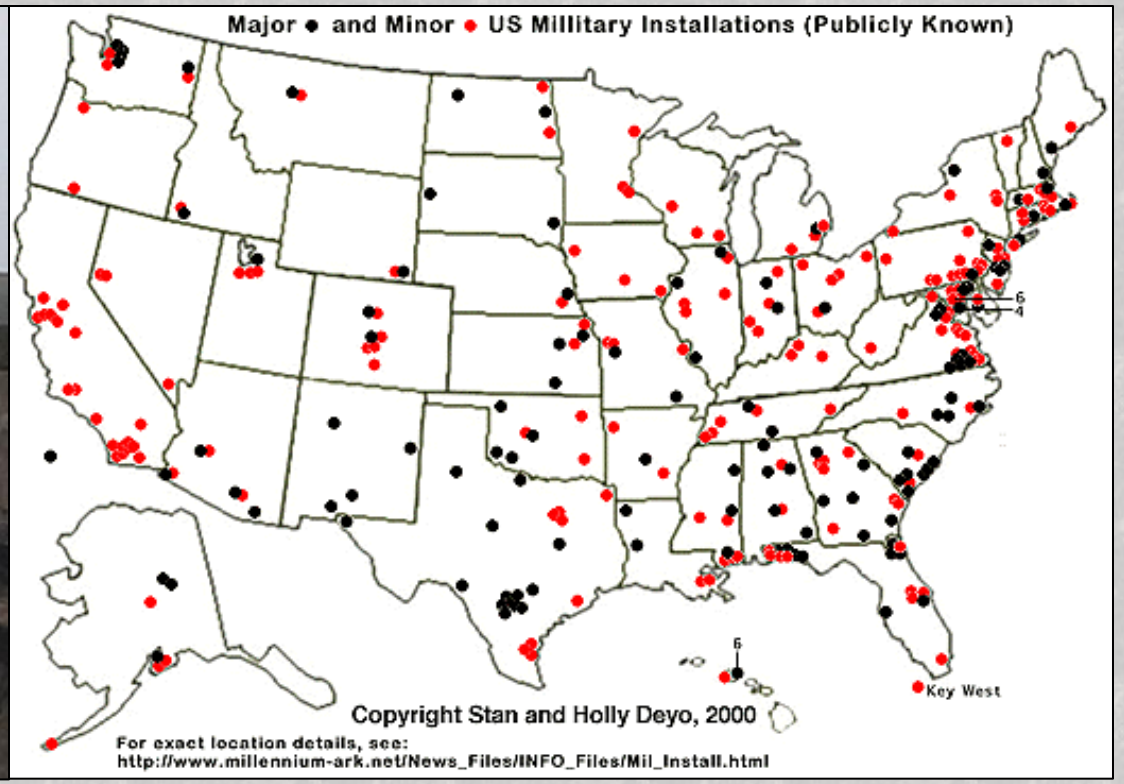
Military Training Facilities

- There are hundreds of training facilities
- Thousands of acres of range and forest land



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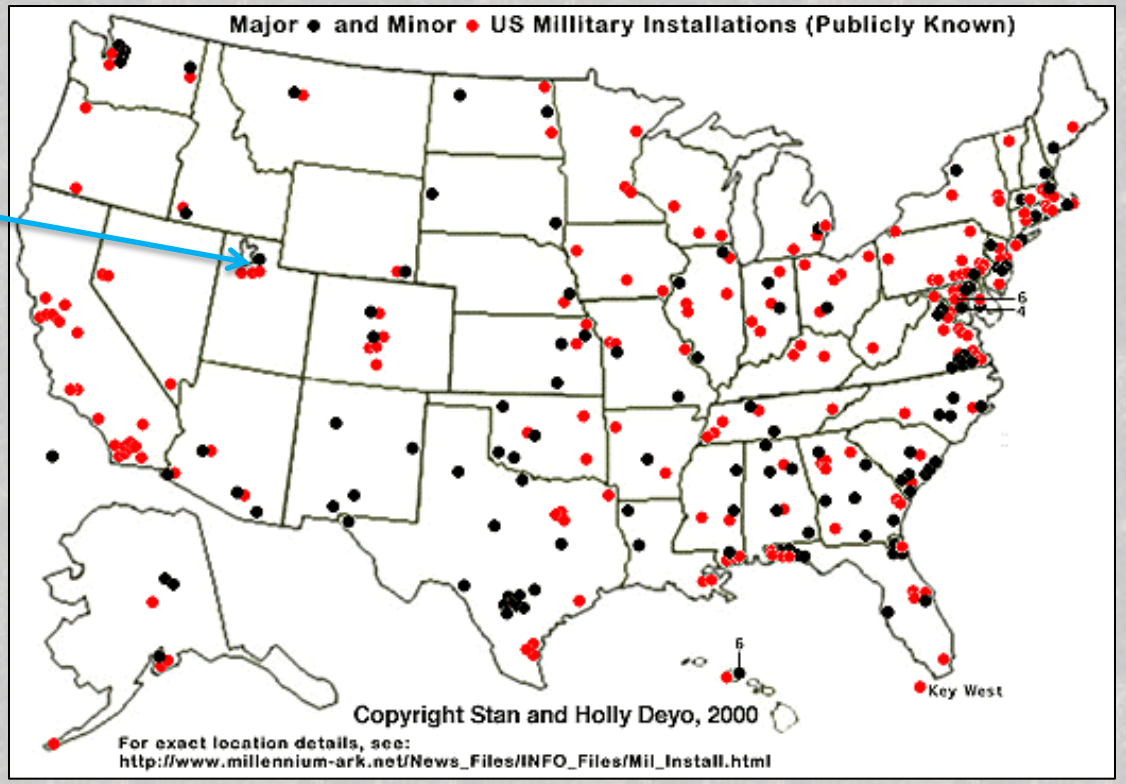
Camp Williams

*13 ecological sites on Camp Williams alone



Environmental Security Mandate

The military is required to:

- Comply with environmental laws
- Protect training resources
- Conserve natural resources

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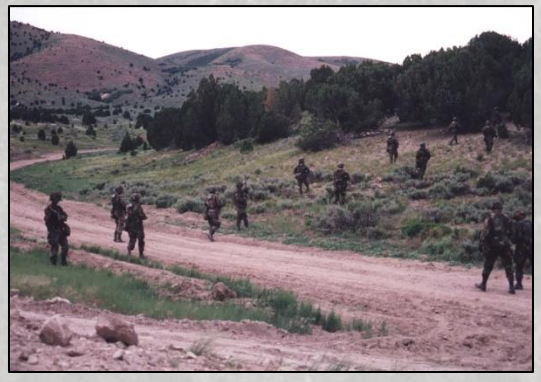
The military is also required to:

- Train troops on the ground
- Maneuver heavy equipment
- Fire live ammunition, etc



Military Training Impacts

Integrated Training Area Management (ITAM)—Objectives

- *Determine the capacity of the land* to sustain training and testing.
- Sustain natural and cultural resources conditions by changing type, frequency, duration, or intensity of use, or by applying adjusted levels of repair and maintenance.
- Monitor land and natural resources conditions and determine trends in those conditions.
- Identify the risks and costs associated with exceeding the capacity of the land.
- *Establish a defined land condition baseline* for natural and cultural resources that will be maintained through ITAM and is relevant to the installation environmental setting and mission activity.

Ecological Sites and ITAM

- There is potential to meet the ITAM objectives using ESDs and STMs.
- There is potential for ESDs to be improved with monitoring data collected through ITAM.

ITAM Data for ESD Development

- LCTA data
  - 1990's—2000's
  - 100 m Line-point
  - Photographs
  - Visited each year

- Potential for identifying states
- Could be re-visited for transitions
- Contact individual bases for data availability

- RTLA data
  - 2000's—Today
  - Project specific methods
  - Photographs
  - Duration of project

- Little potential to use this data for ESD development

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Useful, but discontinued

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Current, but hard to use

Camp Williams – Military Training Facility

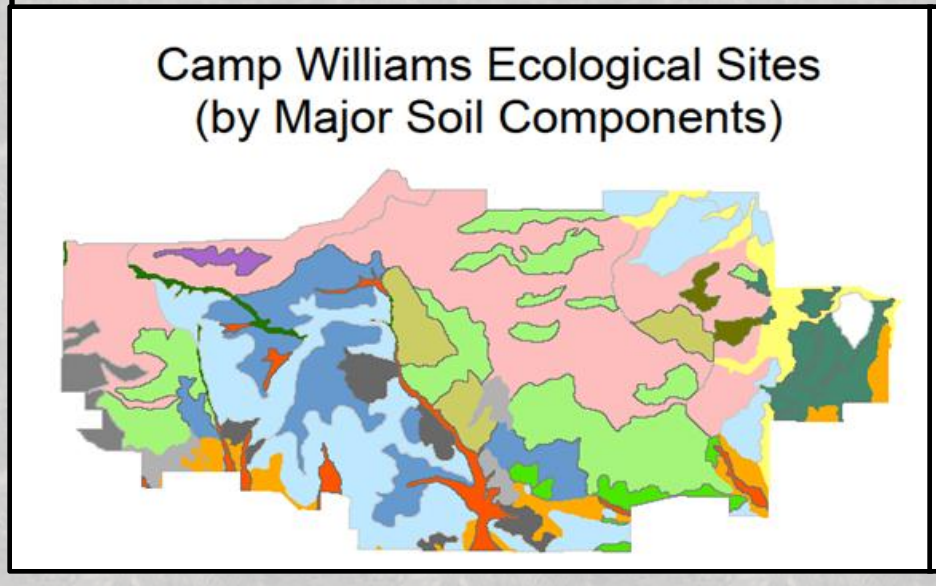
Management Concerns

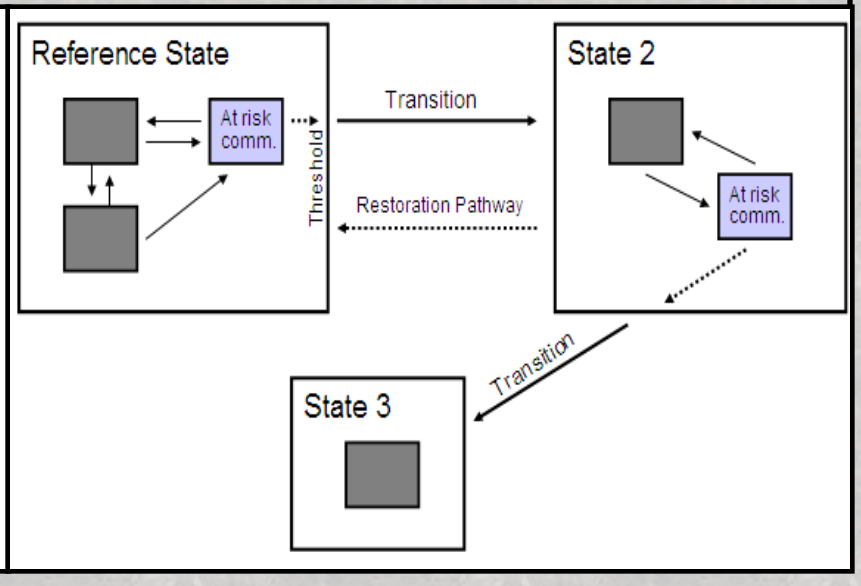
- Localized training sites – foot traffic
- Wildfires
- Tracked vehicle use
- Noxious weeds

Camp Williams – Requested Research

Camp Williams asked for:

1) Updated descriptions of 12 ecological sites
2) STMs for selected ecological sites



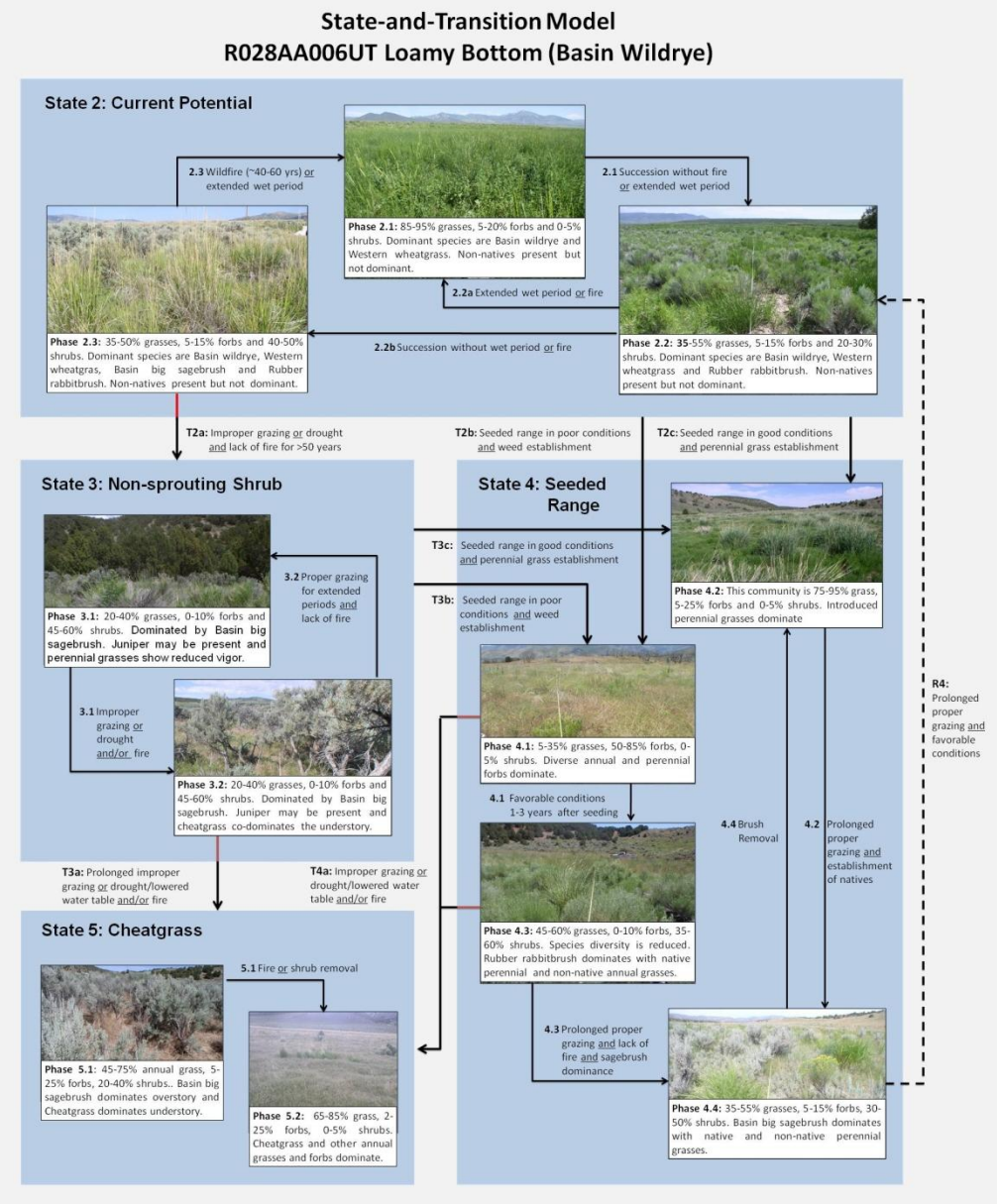


Partners

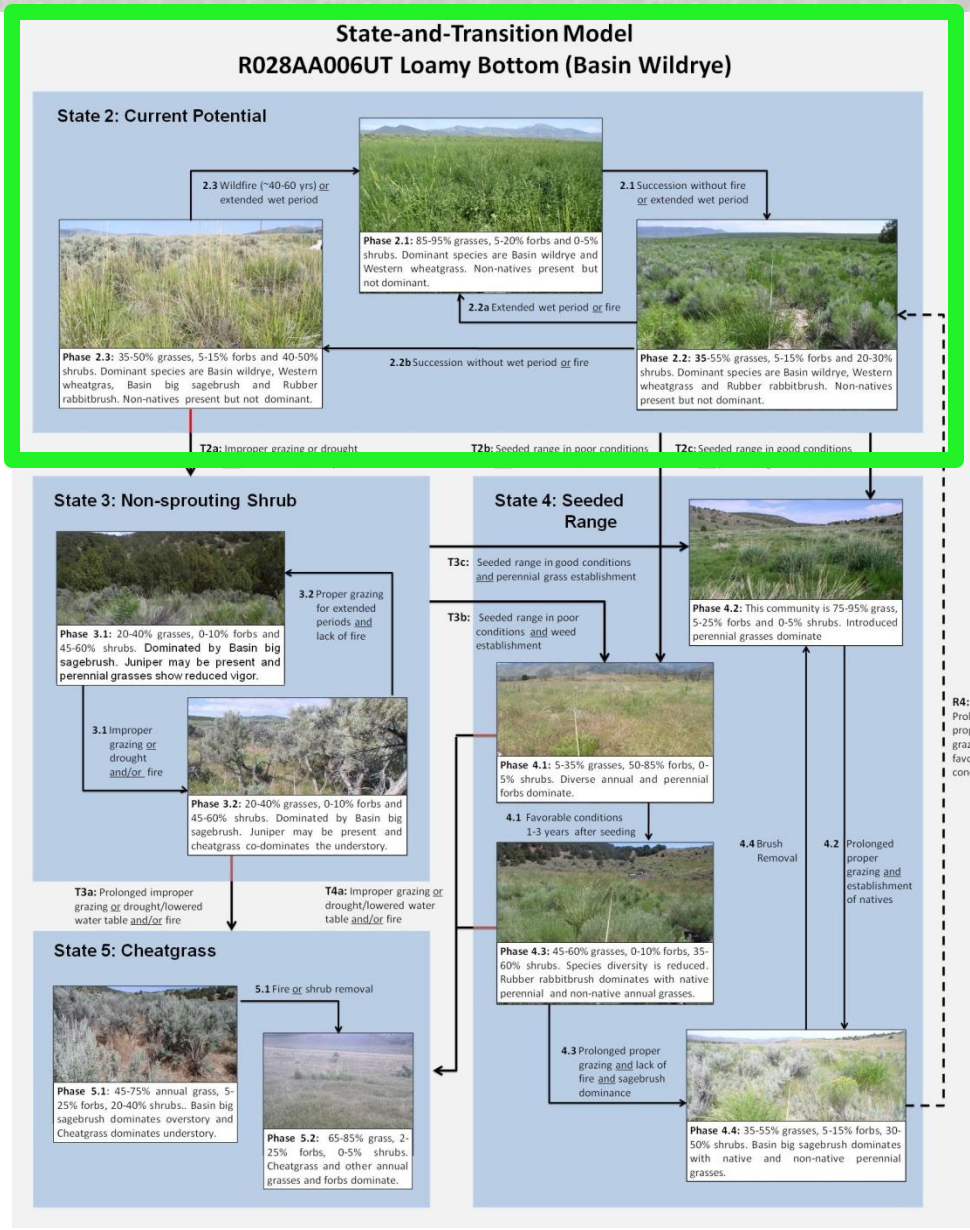
- Camp Williams – Utah National Guard
- Utah State University – Wildland Resources Department and Soils Lab
- Natural Resources Conservation Service (NRCS)
- Agricultural Research Service – Forage and Range Research Lab

ESD for Training Site Assessment

- Use STM for site assessment
- Guide Land Rehabilitation And Maintenance: reseeding or other restoration
- Add military uses specific to installation to Ecological Site Interpretations.



STMs can fit the Green, Amber, and Red assessment commonly used in military reporting.



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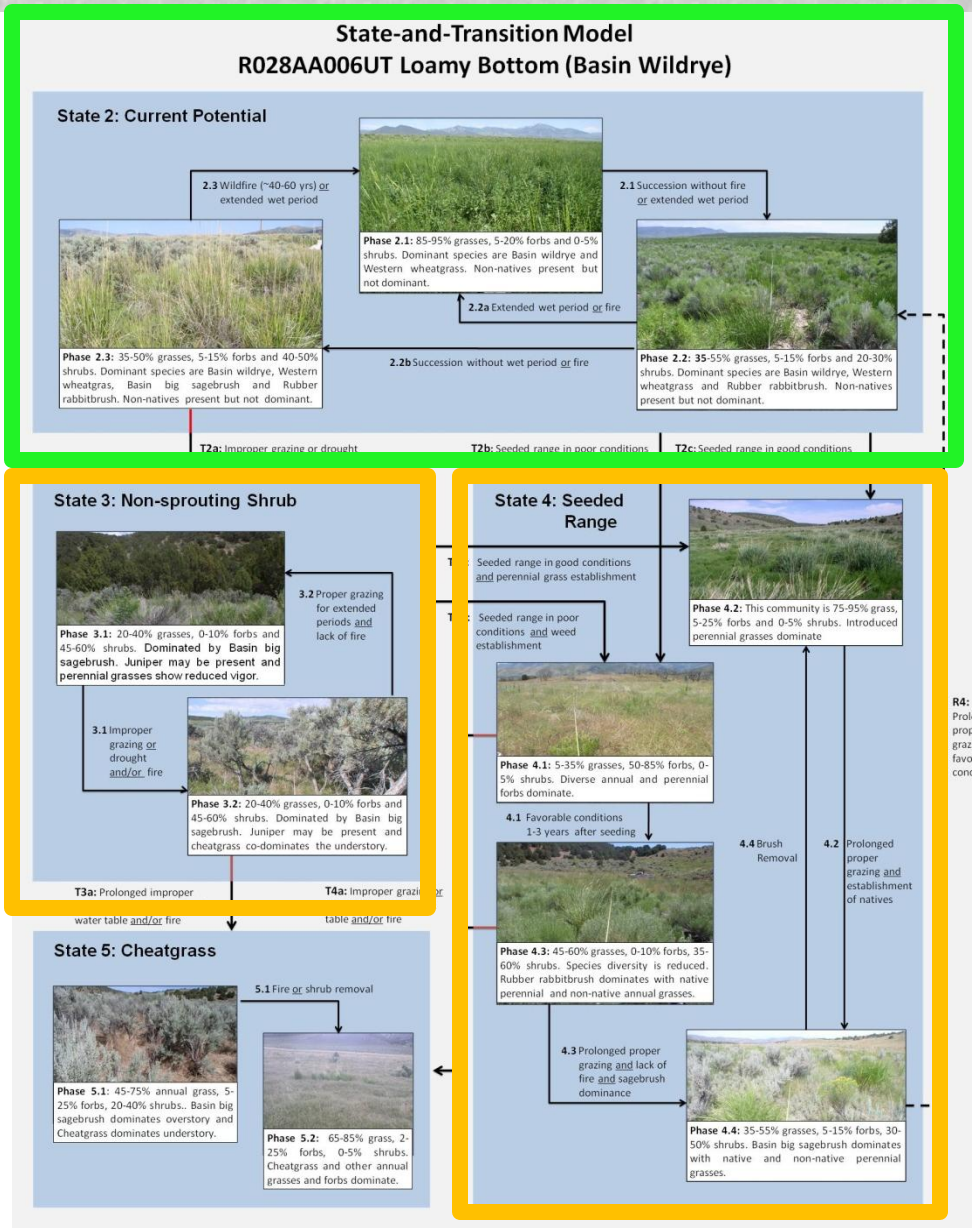

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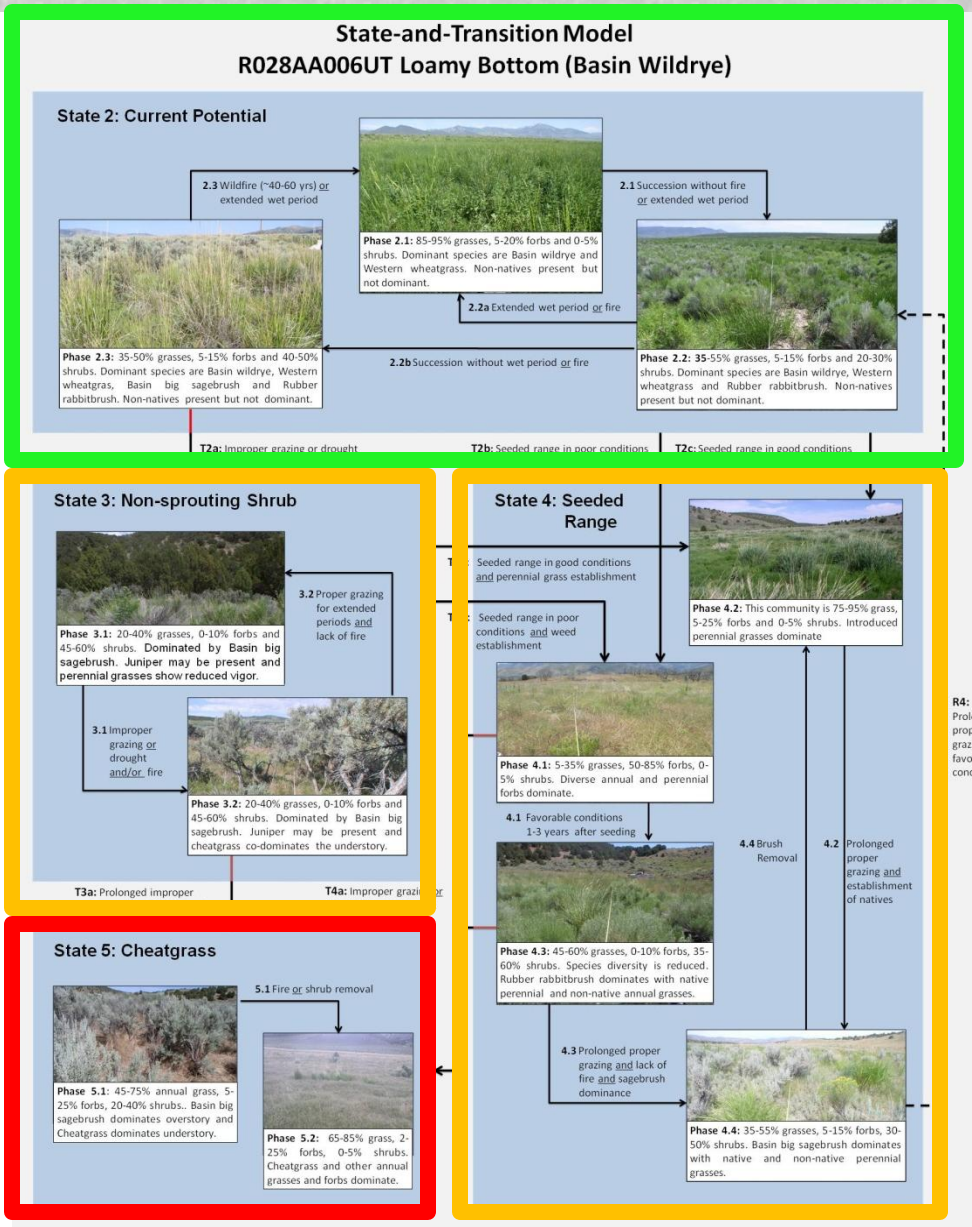

Environmental Management Uses

- Use ESDs as basis for Vegetation Community Planning Level Survey (DODI 4715.03)
- Use ESDs as basis for vegetation community/ecosystem management within Integrated Natural Resource Management Plans (Sikes Act)

Other Uses

- Use Rangeland Health Assessments for ecosystem assessments that are "comparable to outside the fence."

- LCTA plots can be revisited;
  - 100-m point line transect can be re-sampled for comparison of vegetation over time
  - the Health Assessment supplements information for ecosystem management.

Where do we go from here?

- As of right now:
  - Not all military installations are receptive/aware
  - There is no holistic way to access the ITAM data
- Contact your local military base
  - Environmental Management Specialist


Questions?