

## Situation

Ecological Site Descriptions (ESDs) contain information characterizing a distinct type of area (ecological site) on the landscape. The biotic and abiotic (e.g., climate, soil characteristics, plant communities, etc.) features of an ecological site are identified to differentiate one site from another, as well as ecological dynamics. In other words, how disturbance processes (e.g., drought) and management can affect a site. A state-and-transition model (STM) accompanied by a written narrative is included in an ESD to illustrate and explain these complex relationships.

ESDs enable land managers and owners, scientists, policy makers, and educators make informed rangeland management decisions. Agencies are starting to develop ESDs for other ecosystems such as forests and riparian systems. The need for ESD outreach and education will continue.

The Society for Range Management (SRM) led a national effort to train individuals about ESDs, including highlighting current research. Due to limited resources, there is a need to offer similar trainings at a more local level – particularly in a state such as Wyoming, in which approximately 85 percent of the land is

classified as rangelands. The University of Wyoming Extension (UWE), Natural Resources Conservation Service (NRCS), Wyoming State Lands, and the conservation districts of Sweetwater and Sublette counties collaborated with the Wyoming Section of the SRM (WY-SRM) to offer a workshop to address this need.

The first half of the workshop was classroom based. West Area educator Windy Kelley provided a brief overview of ESDs, their history, and how the workshop came to be. Karen Clause and Bryan Christensen, both with NRCS, introduced participants to ESDs, soil correlation, and STMs. The second half

of the workshop was field-based. Participantswere split into two groups and rotated through three different ecological sites. They got their hands dirty texturing soil and identifying each ecological site among themselves. Mike Henn (Wyoming State Lands) led the group in a discussion about management history and implications. NRCS and Sublette County Conservation District employees provided additional instruction.

Forty-eight people attended the workshop from Laramie, Albany, Sweetwater, Fremont, Sublette, Lincoln, and Uinta counties.



## **Impacts**

A survey assessed pre- and postworkshop knowledge about ESDs and STMS and participants' abilities to access and use the management tools.

Knowledge increased for all of the key points in the pre- and post-selfassessment of those who completed and submitted the workshop evaluation.

The four key points participants reported their knowledge increased the most on a scale of 1 (low) to 5 (high) were:

- Ability to define an ecological site: Pre- 2.82; Post- 4.14
- Know how to access ESDs and soil survey information: Pre- 3; Post-4.27
- Understand the relationship between soil survey and ecological sites: Pre-3.05; Post- 4.18

 Know what STMs are and how to use them to make informed land management decisions: Pre- 2.86; Post- 4.

Respondents reported the field portion of the workshop helped them better understand ESDs (average 3.25 on a scale of 1 to 5, with 1 being strongly disagree to 5 being strongly agree). They reported being satisfied to very satisfied with the workshop structure (average 3.55) and materials (3.55) (scale of 1 to 4, with 1 being very dissatisfied and 4 being very satisfied).

Participants received a binder of materials including a copy of the Interagency Ecological Site Handbook for Rangelands (January 2013) and a number of handouts. Several individuals unable to attend requested a copy of the workshop materials. The materials, including presentations, were compiled and posted

on the WY–SRM website to make accessible to interested individuals and/or groups.

The field portion of the workshop was filmed. The film is being edited and created into three short videos to post on-line for individuals who want to learn more about ESDs and STMs.



## Windy Kelley

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