

Ecological Site Description Development Workshop

Local organizers:

Brandon Bestelmeyer, John Tunberg, Arlene Tugel, Laura Burkett,
Kris Havstad, Joel Brown, Bernice Gamboa

A brief rationale for this workshop

Geared to training a few new range cons and contractors in NM and TX on development of ESDs where MLRA responsibilities were shared, and

Development of training materials, formats, and possible trainers for future workshops

But there was broader interest....

And this leads to several issues

- 1) Best practice standards are still being developed
- 2) Different states and agencies do things differently
- 3) The integration of the range and soil parts of ESDs is under development
- 4) The science behind ESDs is not very mature

Objectives and non-objectives of this workshop

Objectives

- 1) Introduce fundamental concepts and issues behind ESDs to those who will write them and review them
- 2) Provide a strong foundation in soil science and soil survey
- 3) Emphasize data-driven ESD development
- 4) Identify best practices where there seems to be consensus
- 5) Create controversy and discussion where there is no consensus
- 6) Review tools and approaches used by real live range cons
- 7) Introduce some new tools that can aid in ESD development

Objectives and non-objectives of this workshop

Non-objectives

- 1) Provide a cookbook approach to ESD development
- 2) Address every part and detail of the ESD
- 3) Establish comprehensive standard protocols for the NRCS, BLM, and USFS

Organization of this workshop

Morning evaluations of the previous day's presentations

The "parking lot"

Morning lectures/discussions moderated by Brown, Havstad, Tunberg

Lunch provided

Afternoon Field Trips (no field trip and half day Friday)

Organization of this workshop

Today's goal: *Overview of ESD development and use*

Peacock: Parts of the ESD

Alexander, Yanoff, and Tunberg: Why ESDs are important and how folks are using them, including the BLM, The Nature Conservancy, and NRCS.

Robinett: How an experienced range con develops ESDs

Field trip: A review of ecological sites and states on the Jornada Experimental Range, emphasizing the soil landscape *in an area of uniform climate*.

Organization of this workshop

Wednesday's goal: *Connect ESDs to Soil Survey concepts*

Monger: The process of soil development and change

Tugel: How soil processes and maps are connected to ESDs

Robbie: How the USFS TEUI is related to ESDs and might eventually be linked

Field trip: A review of Land Resource Units on White Sands Missile Range, emphasizing the effects of climate variation on soils and states within an area *of similar parent materials and a similar class of ecological site.*

Organization of this workshop

Thursday's goal: *Understand and communicate about vegetation and surface soil dynamics (and rangeland health) within ESDs*

Brown: Background, issues, and development of state-and-transition models

Tugel: How surface soil processes and their indicators are used in state-and-transition models

Burkett/Bestelmeyer: Data used to develop ESDs and a database to house them

Bestelmeyer/Robinett: Strategies for data collection

Field trip: Field demonstration/discussion of sampling at the Corralitos Ranch

Organization of this workshop

Fridays's goal: *Describe some additional approaches used in ESD writing and get your feedback*

[Chavez et al](#): How to conduct a state-and-transition model development workshop

[Sanchez/Tugel/Smith](#): How to develop and Ecological Reference Sheet

[Bestelmeyer](#): Where to find soils data, climate data, and literature

[Break-out groups](#): Improve the workshop format for the next group