

Ecological Site Descriptions (ESD): A National Perspective on Coordination and Implementation

____ Ronald C. Williams, Director ____
Central National Technology Support Center
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Outline of Topics Discussed Today

- Acceleration of ESDs
- Importance and Benefits of ESDs and FSGDs
- Ecological Site Responsibilities
- ESD Development
- Science and Technology (S&T) Support
- National Technology Support Centers (NTSC) Roles
- Soil Survey and Ecological Sciences Divisions Coordination
- Future Actions



Acceleration of Ecological Site Descriptions (ESD)

- Chief White approved a Decision Memo in November 2009 and in January 2010 by teleconference to State Conservationists he announced that the agency was accelerating ESD Development.
- A National Bulletin was signed by both Deputy Chiefs for Soil Survey and Resource Assessment (SSRA) and Science and Technology (S&T) that provided additional guidance that ESD acceleration will be a cooperative effort.
- Rangeland Interagency Ecological Site Manual (BLM, FS, & NRCS) has been signed by all three agencies as of June 14, 2010.

What is an Ecological Site?

A distinctive kind of land with specific physical characteristics that differs from other kinds of land in its ability to produce a distinctive kind and amount of vegetation and its response to management (NRPH 1997).



Importance of ESD and FSGDs

Today, land managers are challenged with synthesizing an overwhelming amount of scientific information concerning soils, hydrology, ecology, management, etc.

Importance of ESD and FSGDs

- Ecological Site Descriptions (ESD) will enhance NRCS conservation planning operations on all rangeland, forest land, pastureland, hayland, and grazed cropland by providing information describing the interactions among soils, vegetation, and land management.
- ESDs and Forage Suitability Group Descriptions (FSGD) provide a common framework for communication of natural resource information among disciplines (forestry, range, biology, etc.), agencies, third party vendors, conservation partners, and land managers.

Importance of ESDs and FSGDs

- ESDs and FSGDs provide a foundation to assess the condition of current resources, monitor changes, assess management opportunities and predict outcome of management decisions.
- Web Soil Survey linkage allows the user to obtain current ecological site description data for the soils on their operating unit through a geospatial interface.

Additional ESD Benefits

- ESDs capture and present the corporate and scientific knowledge.
- ESDs provide valuable information for credit trading networks, restoring landscapes invaded by exotic/invasive species, and reducing wildfire risks.
- ESDs have broad acceptance by agencies, partners, NGOs, and others.

Ecological Site Responsibilities

- SSRA
 - Inventory & Development
 - DSP Data Collection Handbook
 - National Soil Survey Handbook
- S&T
 - Technology Transfer
 - Technical Team Members
 - Programs - Policy
 - Conservation Planning Tools
 - Models
 - Technical Guide III-IV-V
 - Training
- SSRA and S&T “Joint Responsibility”
 - ESD Inventory Policy
 - Data Mart - Technical Guide Sec II

ESD Development

- Collection of Ecological Site Data
 - SSO Vegetation Specialists
 - FO, AO, State or NTSC Staff
 - Partners
 - Contractors or others
- Development of ESD/STM
 - SSO Vegetation Specialists
 - FO, AO, State or NTSC Staff
 - Partners
 - Contractors or others

ESD Development

A

Big

Job!

ESD Development

Current estimates are that approximately

- 4000 Rangeland ESDs
- 4000 Forest Land ESDs
- 5000 Forage Suitability Group Descriptions

need to be developed nationally.

ESD Development Requires a Collaborative Multi-Disciplinary Effort

- ESDs are not just a rangeland or forest issue.
- ESDs require a multi-disciplinary approach and effort to include:
 - Vegetation (range and forest)
 - Soils
 - Biology (wildlife)
 - Hydrology
 - Agronomy
 - Soil ecology (including dynamic soil property)
 - Others

Science & Technology (S&T) Support

- Evaluating ESD Support Needs:
 - Staffing (Current vs. Needed)
 - Tools
 - Policy
 - Technology Development
 - Interagency Coordination
- NHQ – Ecological Sciences Discipline Leaders will continue to provide national guidance.
- NTSC – Discipline specialists will provide technology transfer and training support for ESDs.
- States – State Resource Conservationists will certify correlated ESDs for use in their State.



National Technology Support Centers (NTSC) Roles

- Technology transfer and training
- Direct on-site technical assistance
- Assist with interstate coordination
- Continued development of ESD theory and concepts

Soil Survey and Ecological Sciences Divisions Coordination

- Both Divisions met February 3, 2010, to build on the current ESD work and begin mapping out future cooperative roles and responsibilities .
- Two teams were established to guide acceleration of ESD development
 - Business Work Flow Team
 - Soil Vegetation Point Data Business Requirement Team

Business Workflow Team

- Team leads:
 - Dennis Thompson - Ecological Sciences Division
 - Joel Brown - Soil Survey Division
- Team members:
 - Pat Shaver, Homer Sanchez, Bruce Wight, George Peacock, Curtis Talbot, Craig Ditzler, Chad McGrath, Mike Sucik, Kendra Moseley, Eva Muller
- Map the ESD Inventory and Development Processes
 - How is the job done
 - Who does what
 - Roles and responsibilities

Soil and Vegetation Point Data Business Requirements Team

- Team lead
 - Jim Fortner, NSSC
- Team members:
 - George Chavez, Chad Ellis, Steve Campbell, Ray Stoner, Tom Ward, Wendell Gilgert, Steve Woodruff, Cathy McGuire, Ken Spaeth
- Describes business requirement needed for development of an integrated information system

Future Actions

Based on the work from these two teams and the original implementation teams :

- Complete an overall Ecological Site Description Implementation Plan
- Develop a communication plan:
 - Teleconferences/webinars with states
- Develop a training plan to include both:
 - Training for Inventory & Development
 - Training for Technology Transfer



Questions?