Coordinating an ESD Development Effort

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Ecological Site Description Progress

- An overview of where are we today
  - Estimated ESD Workload to date
    - Credits to nearly 10 years of dedicated efforts
    - 7800 +/- Ecological sites correlated in ESIS/NASIS
    - 2400 Range & Forest ESDs approved in ESIS-ESD
    - 22 States have ESDs approved in ESIS-ESD
    - 18,000 +/- potential ESDs nationally
  - Thus, only 12% are complete to standard
Deputy Chiefs for S&T and for Soils formed two national teams to coordinate the national acceleration effort

- Business Work Flow Team
- Soil and Vegetation Point Data Business Requirement Team
Business Workflow Team

- Team Leaders Dennis Thompson, Joel Brown
  - Team membership representation from:
    - All S&T disciplines
    - Soils division
    - Interagency Partners

- TASK: Map the ESD Inventory and Development Processes, i.e. who, what, how, and when
  - Identify national workload
  - Develop an ESD Workflow Process
  - Identify Who does what task
  - Identify Roles and Responsibilities
  - Develop Training Program
  - Develop Common Standards and Policy
Soil and Vegetation Point Data Business Requirements Team

- Team lead
  - Jim Fortner, NSSC
- TASK: Describes business requirement needed for development of an integrated information system that
  - Allows for common collection methods
  - Allows for common storage protocols
  - Eliminates duplicity
  - Allows for better data management and data sharing between agencies and partners
Proposed ESD Workflow Schema
Proposed Strategy for ESD Sampling

1. **(Tier 1/Low Intensity)/Level 1, Reconnaissance** Rapid survey of map units across LRU
2. How do map units differ, how many community types?
3. Use ARC GIS to locate all representatives of key map units from digital soil survey
4. Rapid survey of map unit delineations

5. **(Tier 2/Medium Intensity/Level 2)** "Transect" a subset of map unit delineations with different communities (at least 3 replicates/community/map unit), id map unit component
6. Evaluate data: important community differences and....
   a) no soil differences= different states
   b) associated with unique soil or climate properties= different LRU and/or sites

7. **(Tier 3/High Intensity/Level 3)** Select representatives of states within an Ecological Site for intensive measurement.
High intensity characterization

- Line-point intercept, production
- Dynamic soil properties/indicators
- Monitoring of selected attributes
- Soil pit
  (1 day per point and possibly revisits)

Medium intensity inventory (transecting or stratified)

- Ocular estimates or step/line-point intercept
- Soil surface indicators
- Soil profile properties/mini-pit
  (1-2 hours per point)

Low intensity inventory (traverse)

- Rapid plant community characterization
- Soil surface indicators
- General soil types/soil taxa/ecological sites
  (15-30 minutes per point)

Focused data collection at reference locations (ideally gathered in the reference community phase)

Targeted data collection stratified using ecological site concepts

Numerous data points to capture full range of site variation
Ecological Site and Soil Survey Inventory

MLRA Long Range Plan – Project Plan – Annual Plan
- Include Correlation of ESD’s - Planned and Existing
- Include Benchmark and Other Important soils
- Include Collection of Dynamic Soil Properties
Ecological Site and Soil Survey Inventory

**Management** (existing MLRA structure)

- Board of Directors
- Management Team
- Technical Team
Ecological Site and Soil Survey Inventory

Management (existing MLRA structure)
- Board of Directors
- Management Team (Advisory/Recommendations)
- Technical Team
  - MLRA Soil Survey Leader provides coordination of team
  - Members Include
    - State and Area Vegetation and Soil Specialists
    - NTSC Vegetation and Soil Specialists
    - MLRA SSO staffs
    - MO-SDQS, VDQS
    - District Conservationist and staff
    - Other Partners
  - Prepares initial long range and project plans
  - Local input with knowledge of conditions & ecological states
Ecological Site and Soil Survey Inventory

Management (existing MLRA structure)

- Board of Directors
- Management Team (Advisory/Recommendations)
  - MO Region Leader provides coordination of team
  - Members include
    - Soil Survey & DSP – State Soil Scientist’s,
    - ESD’s – State Resource Conservationist’s,
  - Expert knowledge of policy/standards/handbooks - Advisory
  - Team determines which soils and ESD’s identified by Technical Team are to be collected and prioritized for BOD approval
  - Review of ESD data on field reviews - Makes Recommendations
- Technical Team
Ecological Site and Soil Survey Inventory

Management (existing MLRA structure)

- Board of Directors
  - State Conservationists
    - Grouped by 18 MLRA Region Offices
    - Approves: Budgets, Staffing, Project Plans
- Management Team
- Technical Team
ESD Development & QA/QC

- Collection of Ecological Site Data (QC by SSO)
  - SSO Vegetation Specialists
  - FO, AO, State or NTSC Staff
  - Interagency Partners
  - NGO Partners
  - Contractors or others

- Development of ESD, STM (QA by MO)
  - SSO Vegetation Specialists
  - FO, AO, State or NTSC Staff
  - Interagency Partners
  - NGO Partners
  - Contractors or others
Interagency ESD Efforts

- Interagency ESD Handbook states that:
  - Standardized methods will be utilized by BLM, USFS, and NRCS
  - A **national interagency workgroup**, to provide leadership in the implementation of the interagency ecological site policy and handbook.
  - This includes coordination and oversight for development and maintenance of ecological site descriptions.
  - A State and Regional level **interdisciplinary working group** will be established under the direction of the NRCS State Conservationist, USFS Regional Forester, and BLM State Director to coordinate the local development of ESDs.
  - The working group will also identify local resource interpretations and cooperatively prioritize ESD development in interagency work plans.
Future Action Items

• Complete an overall Ecological Site Description Implementation Plan (Action Plan - Who, What, When)
  • Finalize Workflow Plan
  • Develop National workload Analysis
  • Develop a communication plan
    • Start with teleconferences/webinars with states
  • Develop one National Standard for ecological sites
    • ESD manual
    • ESD Handbook
    • Taxonomy Handbook
    • Interim Guidance, and
    • FSGD and Cropland Standards
Questions?

Thank YOU