Overview of the ESD Development Workflow

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ESD Development Workflow

To improve:

- Efficiency
- Consistency
- Quality
Accomplishing the Task

1. Establish Local Workgroup
Accomplishing the Task

- Multidisciplinary
- Interagency effort
- Involve groups such as university, research, private groups, etc.
Accomplishing the Task

Linking
Scientific Knowledge
with
Local Knowledge
Accomplishing the Task

1. Establish Local Workgroup
2. Creation of initial Ecological Site concepts
   - Reconnaissance
   - Literature review
Data Sources

- Vegetation Transects and Clipping Plots
  - NRCS, NPS, FS, BLM, ARS, DOD, USFWS, State Agencies, Organizations, etc.

- Research Data

- Historical records/accounts/journals
Developing Site Concepts

- Define the geographic extent
- Clearly specify the climatic, topographic, and soil properties that distinguish the site from others
- Initial site concepts represent a hypothesis that can be tested
Accomplishing the Task

1. Establish Local Workgroup
2. Creation of initial Ecological Site concepts
3. Draft initial State and Transition Model
Involve experts from the area and other interested parties
Accomplishing the Task

1. Establish Local Workgroup
2. Creation of initial Ecological Site concepts
3. Draft initial State and Transition Model
4. Testing Concepts-data collection & analysis
   - Primary objective to cover as much area as rapidly as possible
   - Visit all state and community phases
   - New states or communities may be identified
Accomplishing the Task

1. Establish Local Workgroup
2. Creation of initial Ecological Site concepts
3. Draft initial State and Transition Model
4. Testing Concepts-data collection & analysis
5. Refine State and Transition Model and Ecological Site concept (if needed)
6. High intensity data collection
   - Provide quantitative data to communicate state concepts
Accomplishing the Task

- **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 (traverse 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

Moseley et al., 2010
Accomplishing the Task

1. Establish Local Workgroup
2. Creation of initial Ecological Site concepts
3. Draft initial State and Transition Model
4. Testing Concepts-data collection & analysis
5. Refine State and Transition Model and Ecological Site concept (if needed)
6. High intensity data collection
7. Develop management interpretations
8. Draft Ecological Site Description
Accomplishing the Task

Quality Control and Assurance

- Ensure technically sound documents
- Quality control done at the lowest levels and throughout the development process
- Quality assurance completed to ensure products meet standards

Certification
ESD Development Workflow

Data and Documentation Collection

- Available data
- Expert knowledge
- Local knowledge
- Published literature

Draft STM Developed → Test & Refine site concepts and STMs (Medium Intensity Sampling) → Type Location data (High Intensity Sampling) → Draft Site Characteristics → Draft ESD

Low Intensity Sampling Reconnaissance

Review of literature and data → Local Knowledge input → Ecological Site Concepts Developed

Quality Control

Quality Assurance Review → Certification
Project Planning

1. Project Plan Developed
   - SSO (Technical Team)

2. Project Plan Reviewed
   - MO (Management Team)

3. Project Plan Approved
   - BOD
Project Planning

Identify scope of Project
Project Management

Technical Team consists of an interdisciplinary group of technical specialists.

- **Agency Specialists** (BLM, DoD, FS, NRCS, NPS, etc.)
  - (EX: NRCS – State and Area Specialists, District Conservationists and staff, MLRA Specialists, etc)

- **Universities**

- **NGOs**

- **Partners or others**
Project Management

Technical Team

- Develop Project Plans

- Project Plan identifies individuals with appropriate knowledge, skills, and abilities to complete tasks

- Accomplishes planned projects
Project Management

Management Team

- **Agency Specialists** (BLM, DoD, FS, NRCS, NPS, etc.)
  - (EX: NRCS – MO Leaders, State Resource Conservationists, State Soil Scientist, etc)
Project Management

Management Team

- Review Project Plans
- Prioritize Project Plans for presentation to Board of Directors
- Reviews completed ESDs for technical content
- MO Leader certifies that the ESD has been reviewed and meets quality assurance criteria
Project Management

Board of Directors

- Agency State Leadership (BLM, DoD, FS, NRCS, NPS, etc.)
  - (EX: NRCS – State Conservationist)
Project Management

Board Of Directors

- Approves Project Plans
- Approves certified ESDs for public release
Certification and Approval

- **Quality Control:**
  - Primarily responsibility of first-line supervisor in the field
  - For NRCS, certified by the SSO Leader
    - Quality control review completed by MRLA ESI specialist and other technical specialists identified in Project Plan
Certification and Approval

Quality Assurance:
- Primarily responsibility of second-line supervisor with oversight responsibilities
- For NRCS, certified by the MO Leader
  - Quality assurance review completed by MO ESI specialist and technical content reviewed and concurred by State Resource Conservationist and State Soil Scientist
Certification and Approval

- Approval for use in state:
  - State leadership concurs that ESD is ready for public release.
  - If not approved, returned to Management Team for corrective actions.
  - For NRCS, approved by State Conservationist
ESD Development Workflow

To improve:

- Efficiency
- Consistency
- Quality
Questions