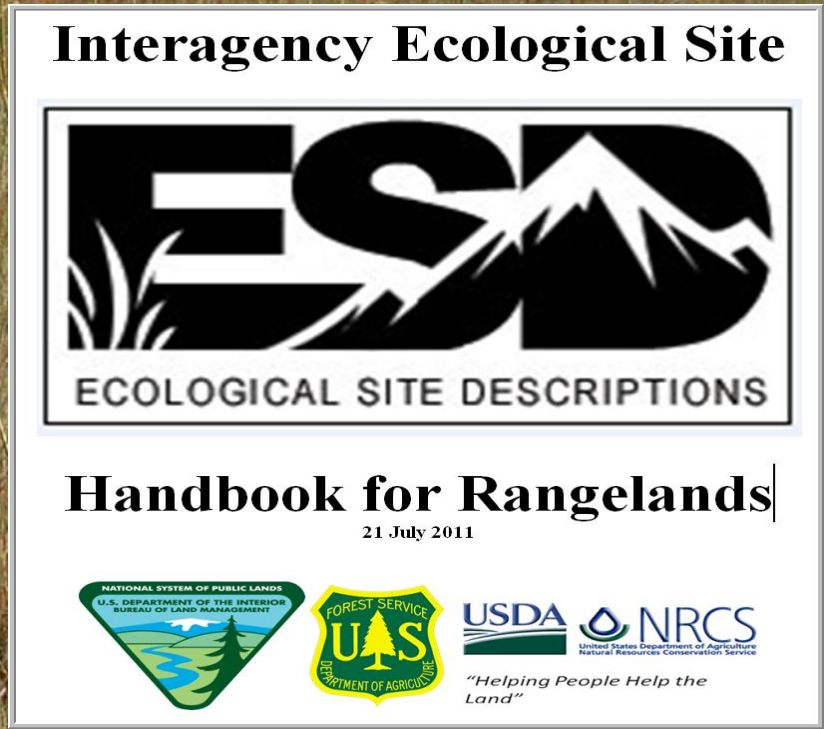
Ecological Site Concepts

Homer Sanchez
Range Management Specialist
National Grazing Lands Team
Fort Worth, TX
USDA-NRCS

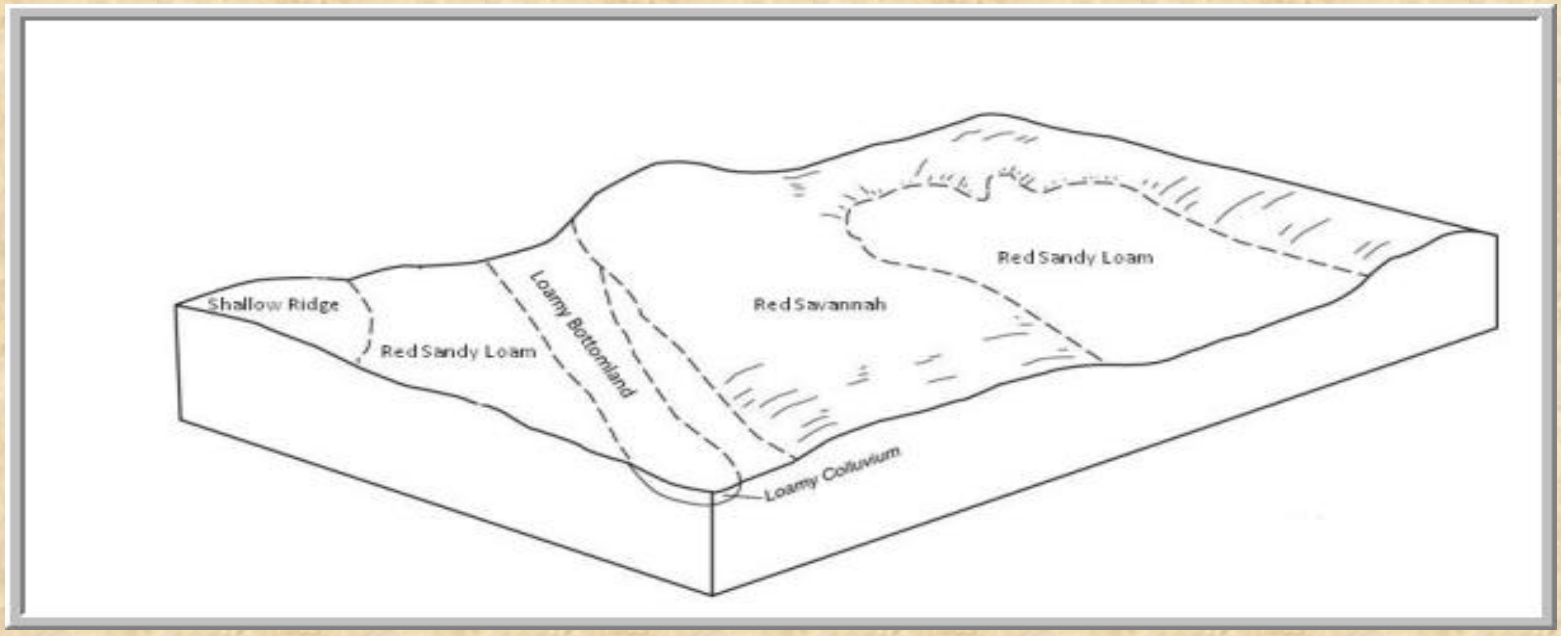


Current Ecological Site Definition

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

New Interagency Definition

An **Ecological Site (ES)** is a conceptual division of the landscape that is defined as a distinctive kind of land based on recurring soil, landform, geological, and climate characteristics that differs from other kinds of land in its ability to produce distinctive kinds and amounts of vegetation and in its ability to respond similarly to management actions and natural disturbances.



Each Ecological Site is the product of all the Environmental Factors responsible for its development.

Climate

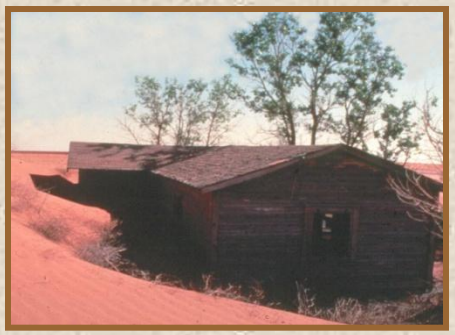
Geomorphology

Soils

These abiotic factors interact to govern how plant species are distributed along environmental gradients, and how they respond to other factors such as disturbances and management:

Fire

Herbivory

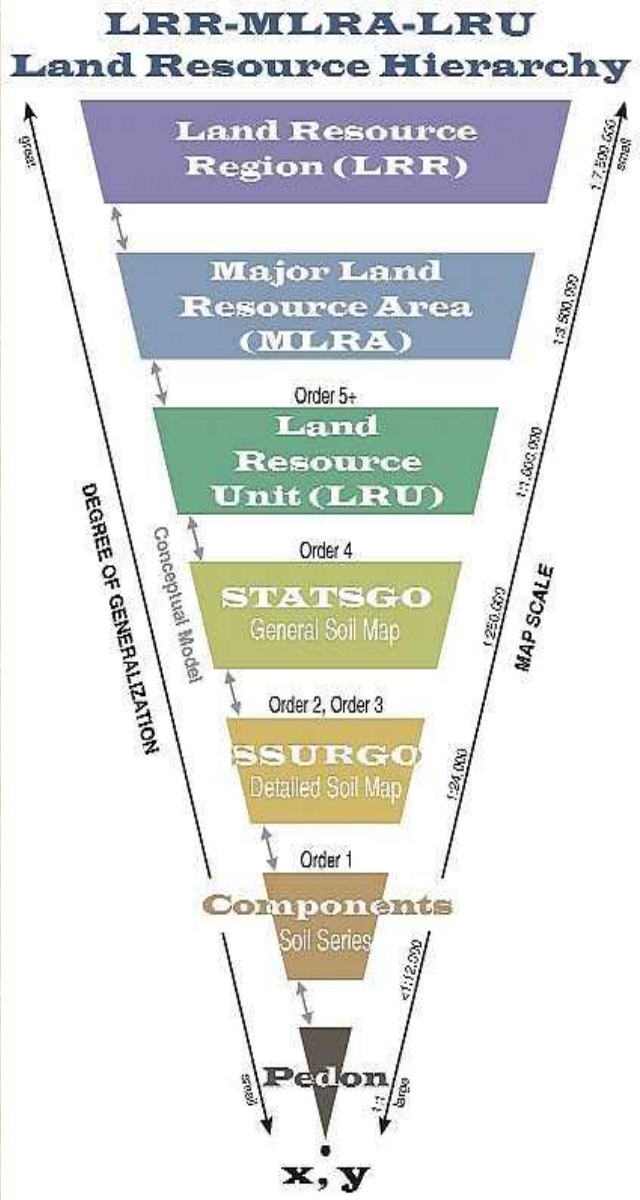


Drought

Defining the Site Concept

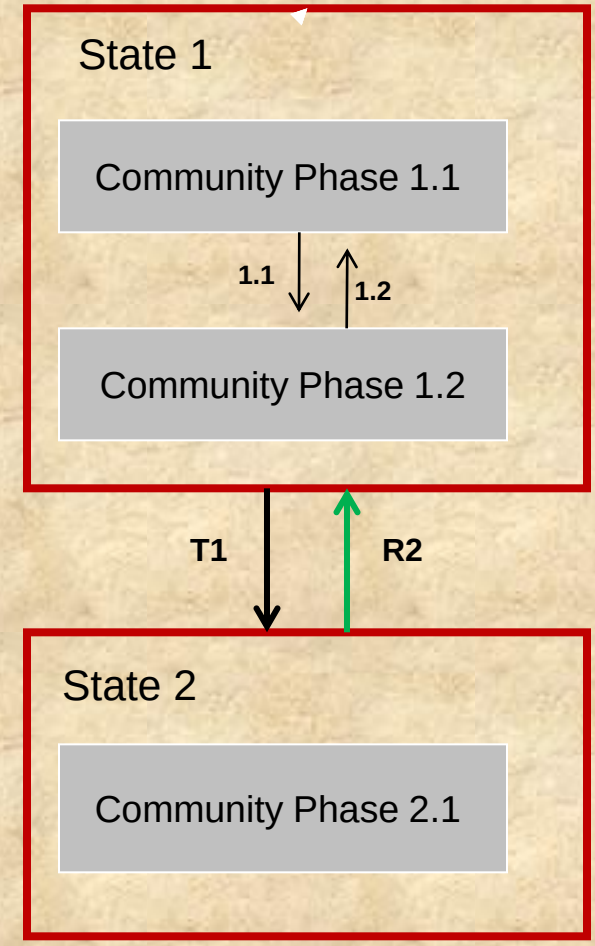
- The composition, structure, and function of plant communities are governed by energy, moisture, and nutrient gradients, as well as disturbance regimes.

- In decreasing order of scale, these gradients vary due to differences in macroclimate, geology, lithology, topography (elevation, slope, aspect, and landform position), and soil physical and chemical characteristics.



- The ecological site concept is defined based on reference conditions representing natural states, with state changes and transitions subsequently estimated based on our understanding of succession and ecological thresholds.
- Reference states and their component community phases represent the historical range of variability due to successional dynamics following disturbances. Within this natural, historical, or reference state, the community phase used to define an ecological site is termed the reference community phase.
- The reference community phase is identified as that community phase which exhibits the characteristics of the reference state, and contains the full complement of plant species that historically occupied the site (Bestelmeyer et al. 2010, Briske et al. 2008).

Standard State and Transition Diagram



- States
- Communities phases
- Transitions
- Restoration Pathways

Ecological Sites

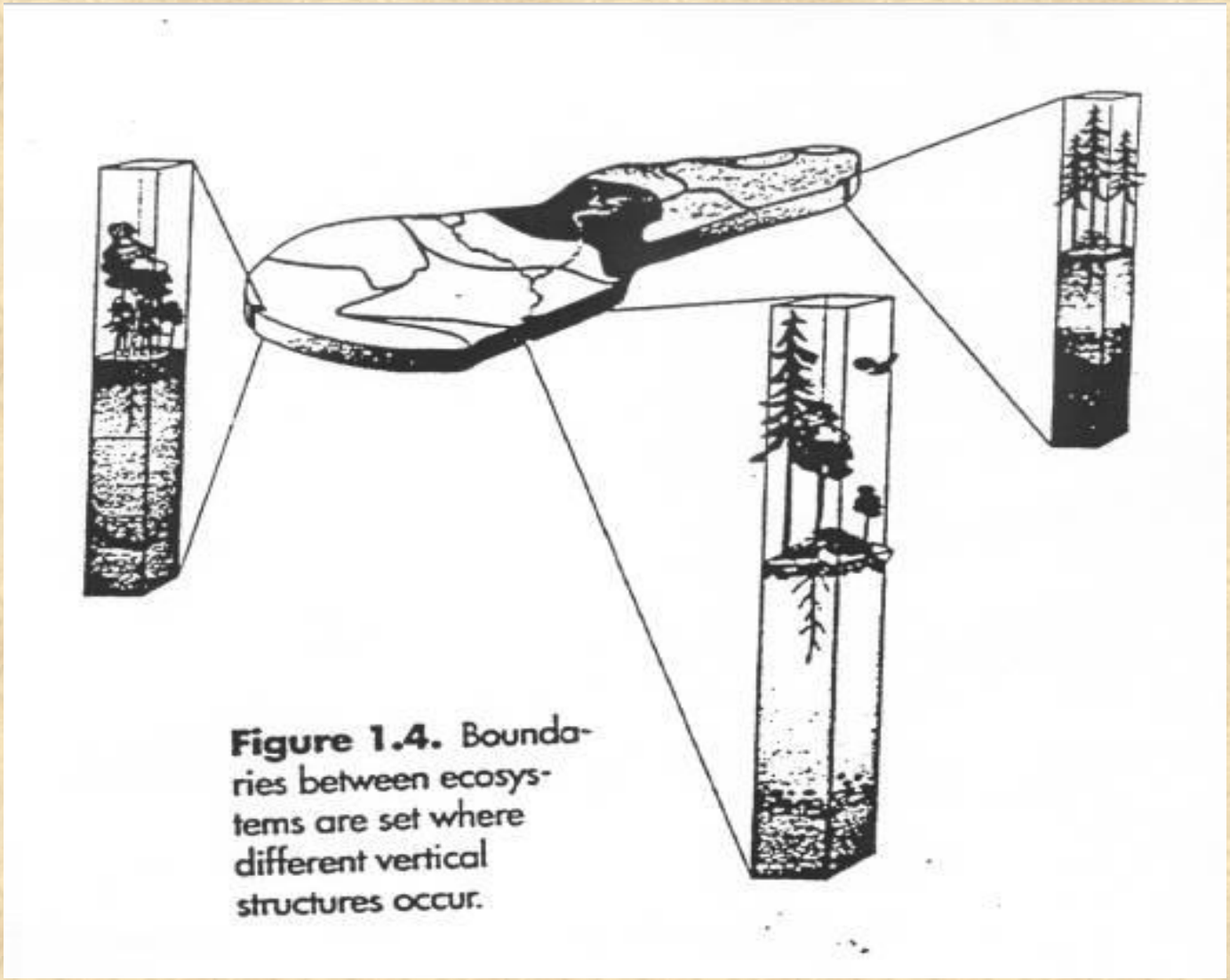
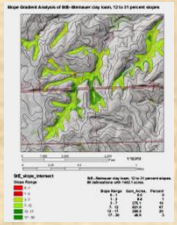


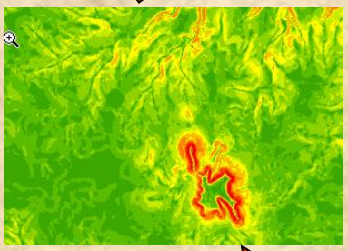
Figure 1.4. Boundaries between ecosystems are set where different vertical structures occur.

Bailey, R.G., 1996 Ecosystem Geography

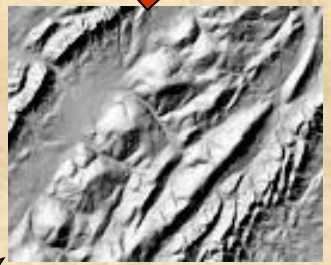
So, how are ecological sites modeled?

Modeling

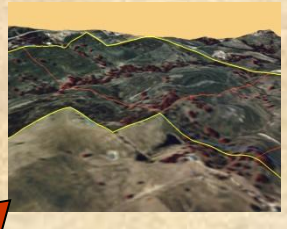




Analysis

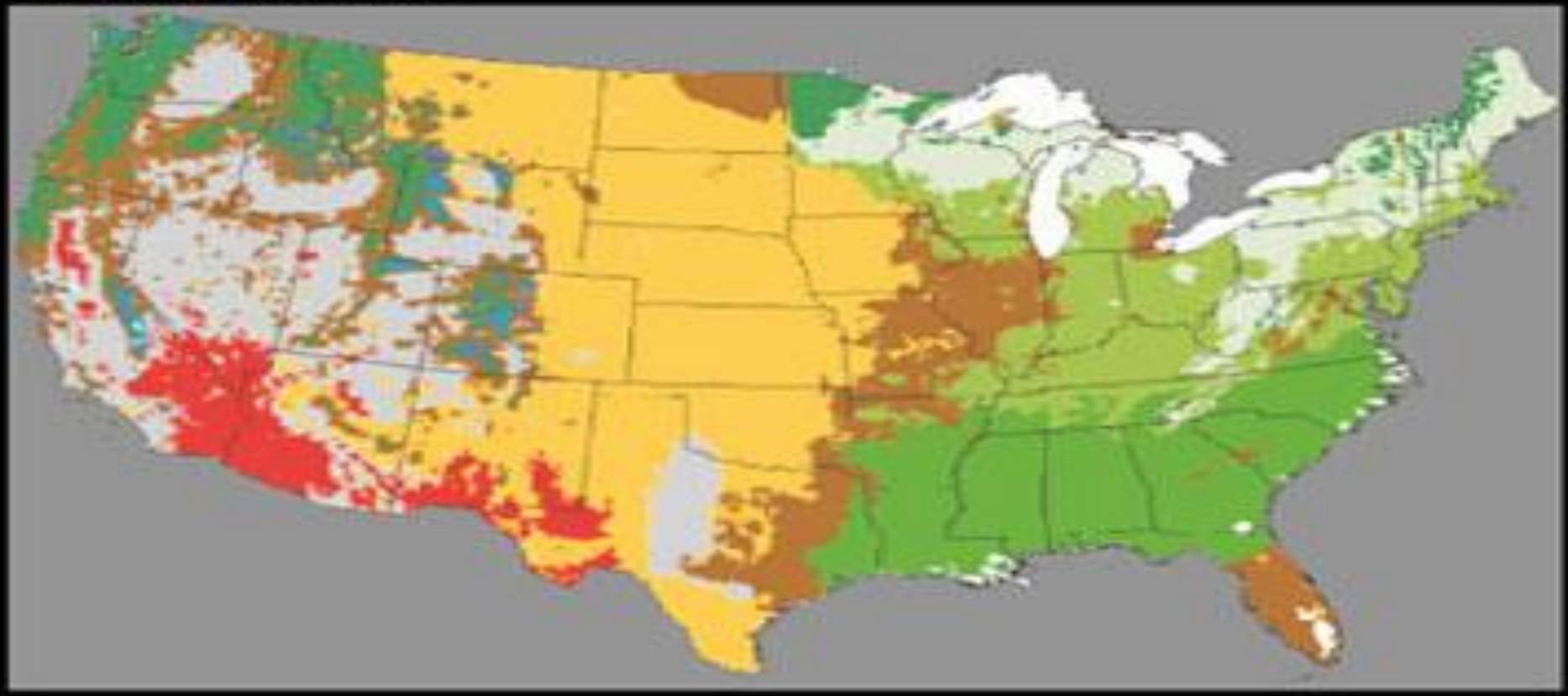


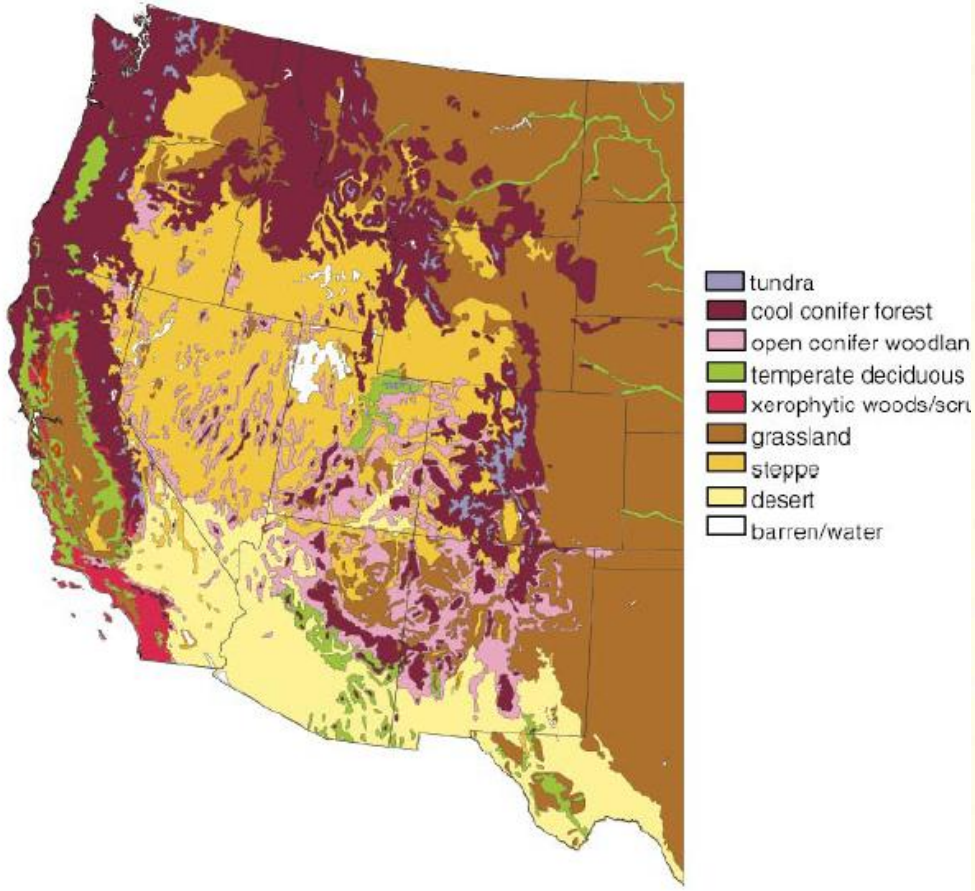
Visualization



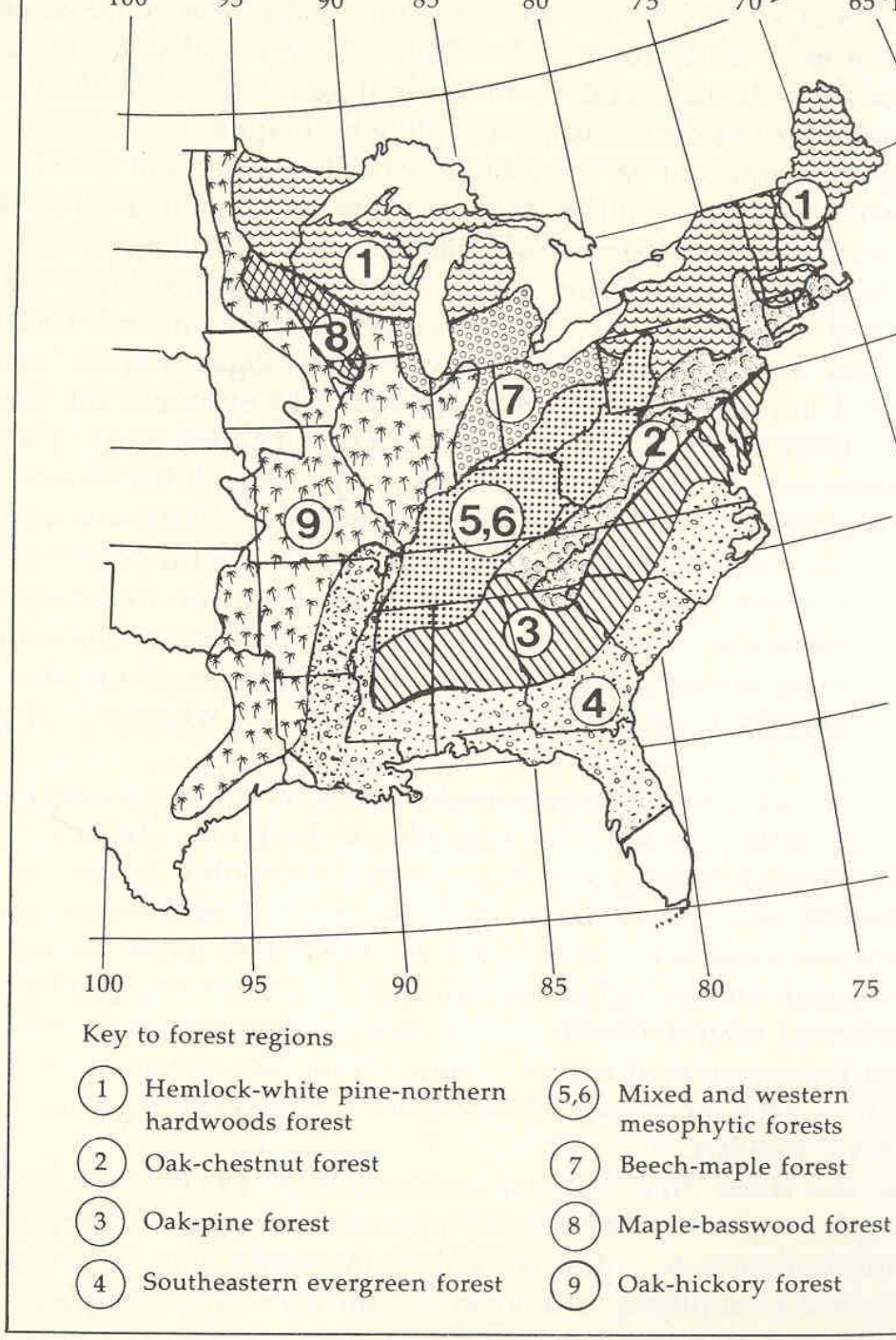
Ecosystem Models

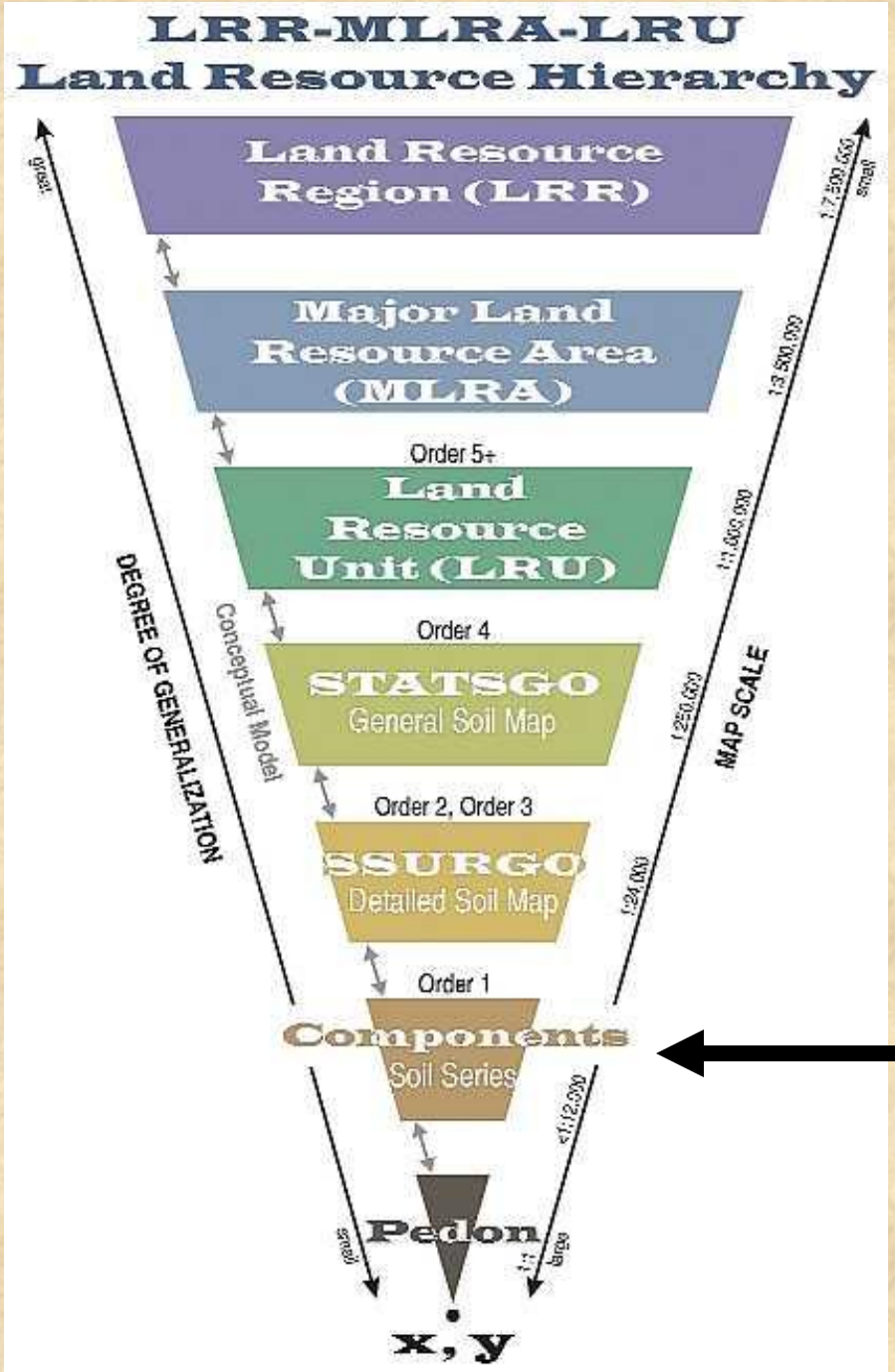
Current Ecosystems





egetation of the western United States based on the Küchler (1964) map of potential natural vegetation. The categ
been grouped to approximate the biomes used by Prentice *et al.* (1996) and this paper (with the exception of the
egories, which can be differentiated here but are more difficult to discriminate in pollen and macrofossil data).

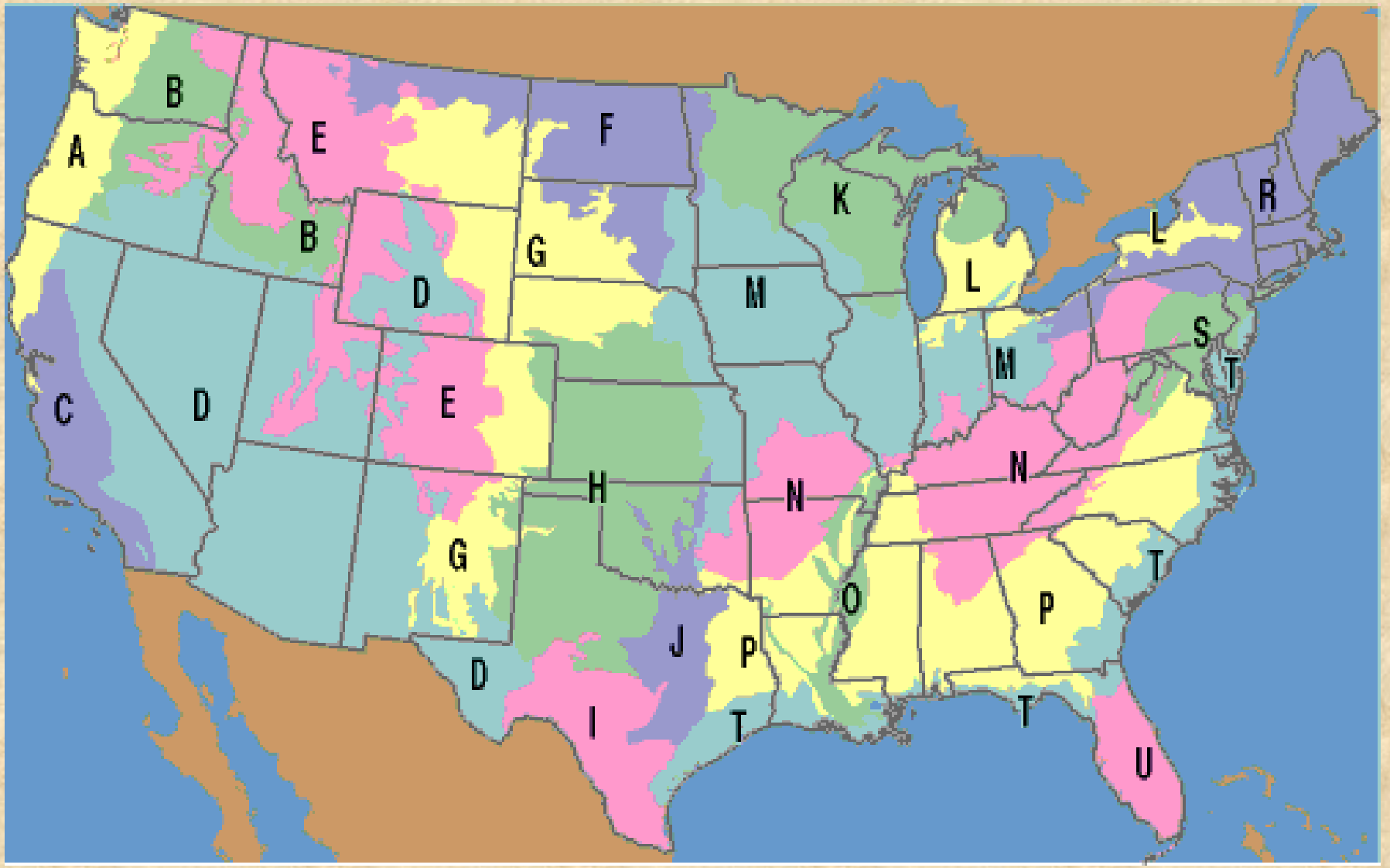


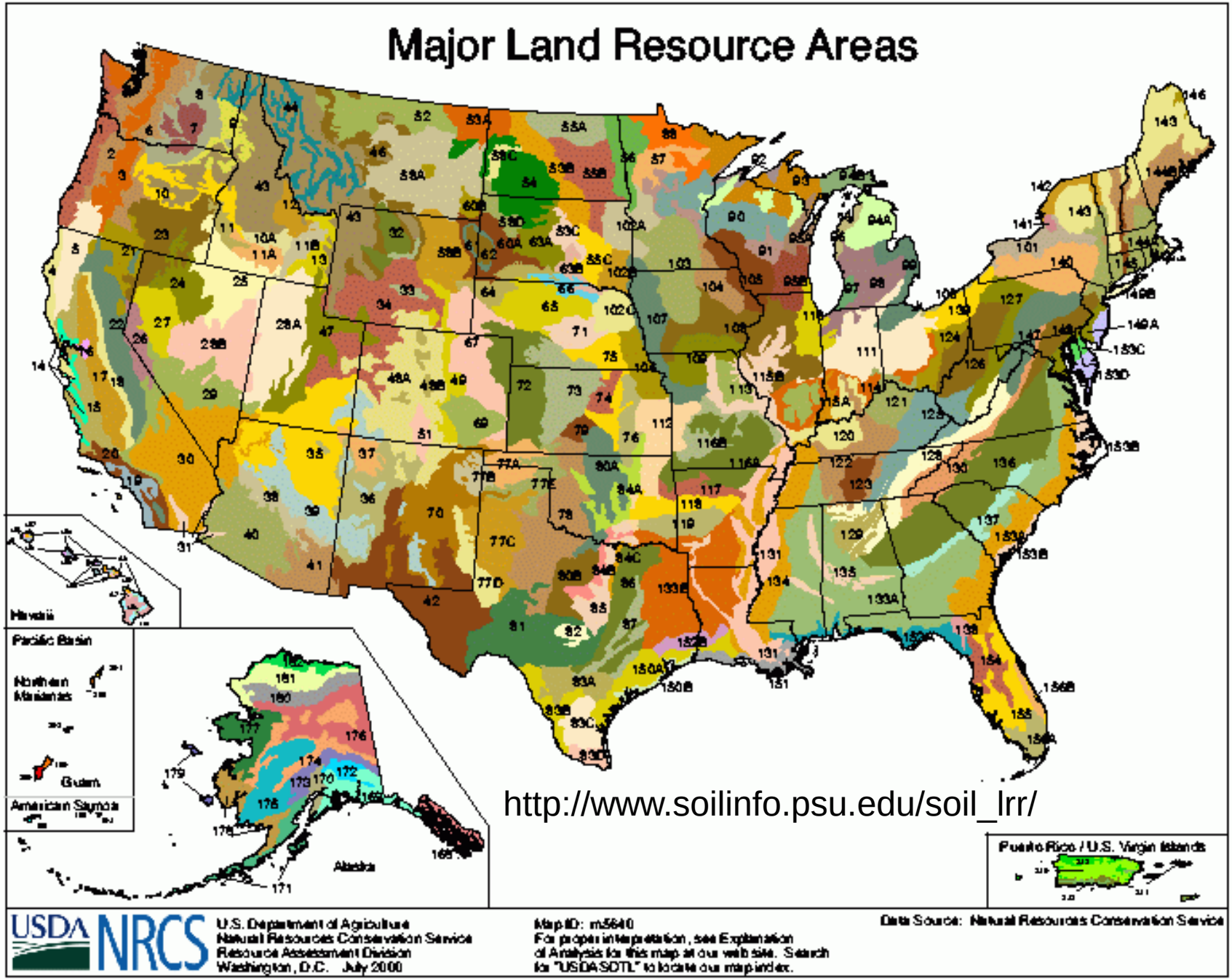


- Ecological sites are characterized and ESDs are developed utilizing the NRCS Land Resource Hierarchical System

- ESD – developed at the soil component level

Land resource regions (LRR) are geographically associated groups of major land resource areas and consist mainly of areas that have very broadly related patterns of soil, climate, water resources, and land use.



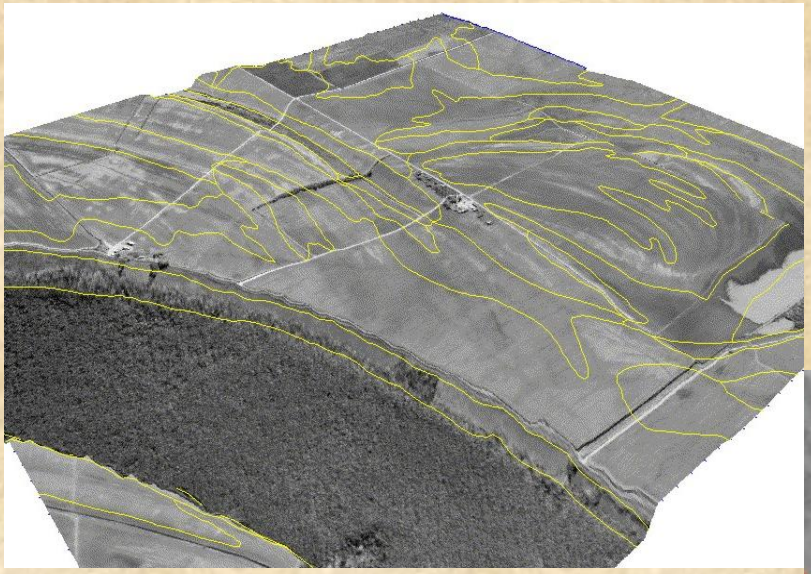

Major Land Resource Areas
Hawaii
Pacific Basin
Northern Marianas
Guam
American Samoa
Alaska
Puerto Rico / U.S. Virgin Islands
http://www.soilinfo.psu.edu/soil_lrr/
USDA NRCS
U.S. Department of Agriculture
Natural Resources Conservation Service
Resource Assessment Division
Washington, D.C. July 2000
Map ID: m5640
For proper interpretation, see Explanation of Analysis for this map at our web site. Search for "USDA SOTL" to locate our map index.
Data Source: Natural Resources Conservation Service

Landscapes

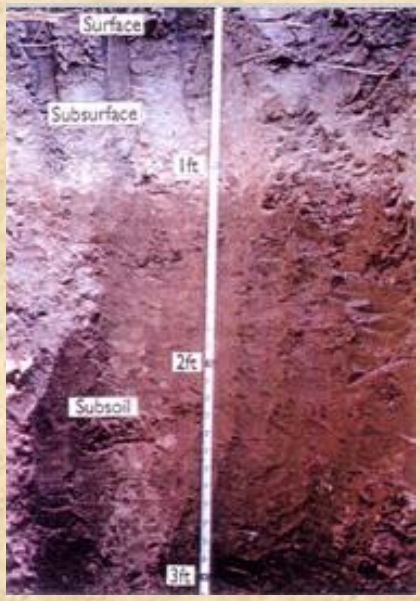

Rosalie
Onawa
Turin
Bancroft
Thurston
Decatur
Monona
Lyons
Blencoe
Moorhea
Cuming
Nebraska
Iowa
West Point
Oakland
Burt
Pisgah
River Sioux
Craig
Tekamah
Harrison
Uehling
Mondamin
Dodge
Herman
Scribner
Washington
18
51
175
37
9
32
29
183
91
127
0
8.7m

Landscape contains Multiple Landforms

Landform units delineated as soil map unit



Single Map Unit delineation contains Single or Multiple Components



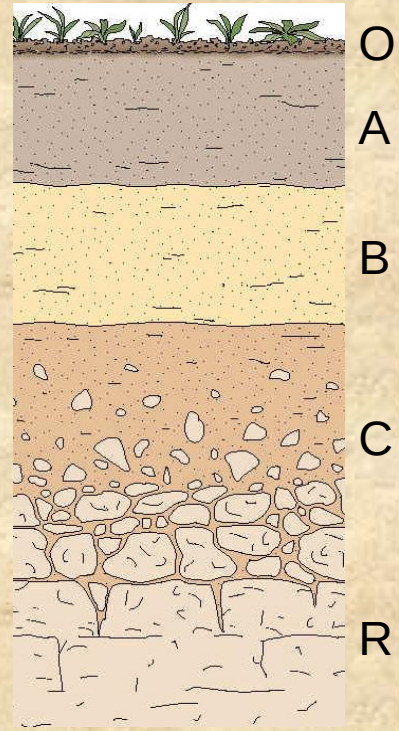
Spatial Data Structure

- Landscape
- Map Unit
- Component

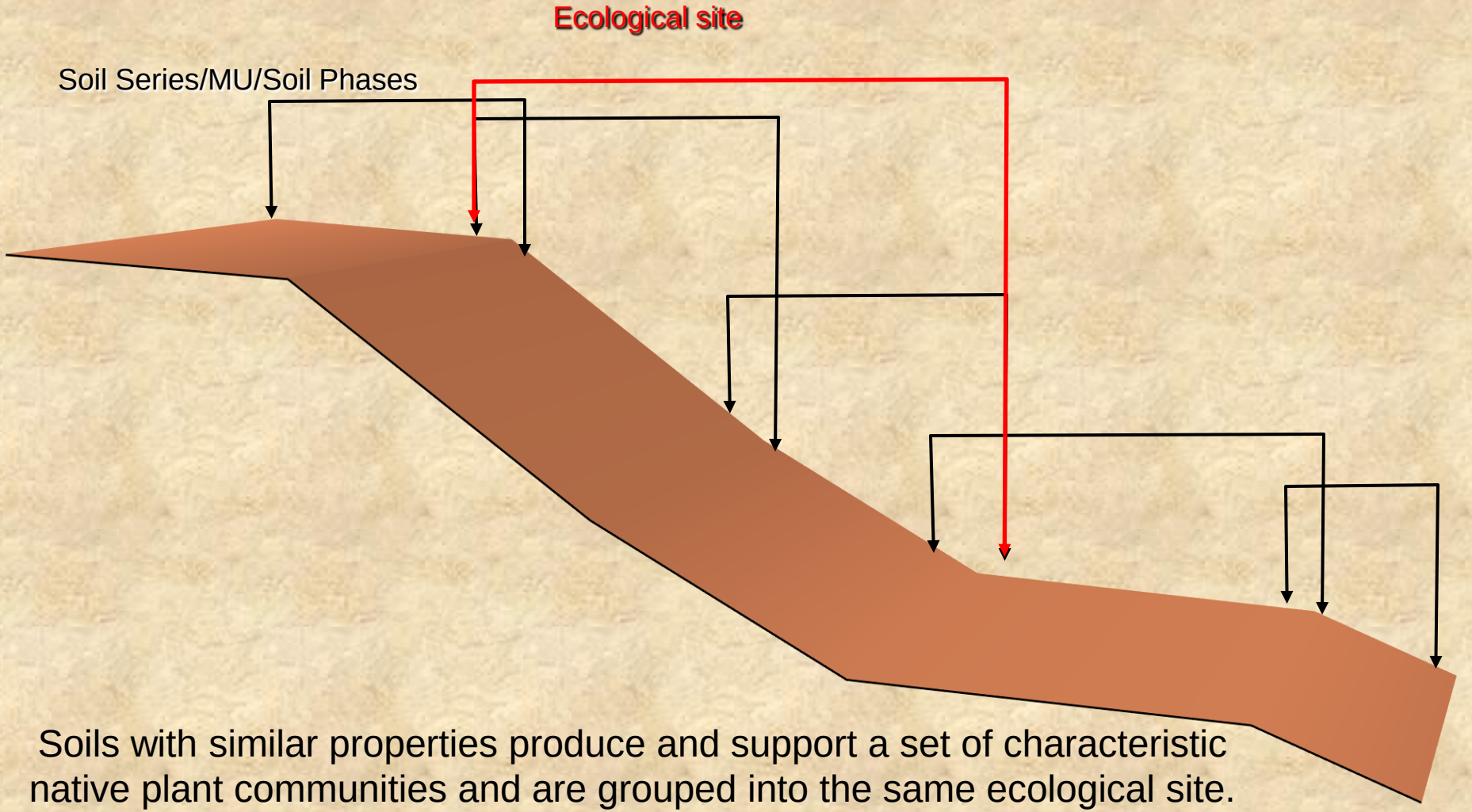
Utilize the National Cooperative Soil Survey/NASIS as the framework

- A good soil survey complements the site concept effort
- Soil properties effectively explain significant variations in vegetation.
- Select the most <u>essential soil properties</u> that have significant influence on vegetation. For Example;

1) **Landform**
2) **Parent Materials**
3) **Root Restriction**
4) **Base Saturation**
5) **Drainage**
6) **Texture**
7) **Flooding**
8) **Ponding**

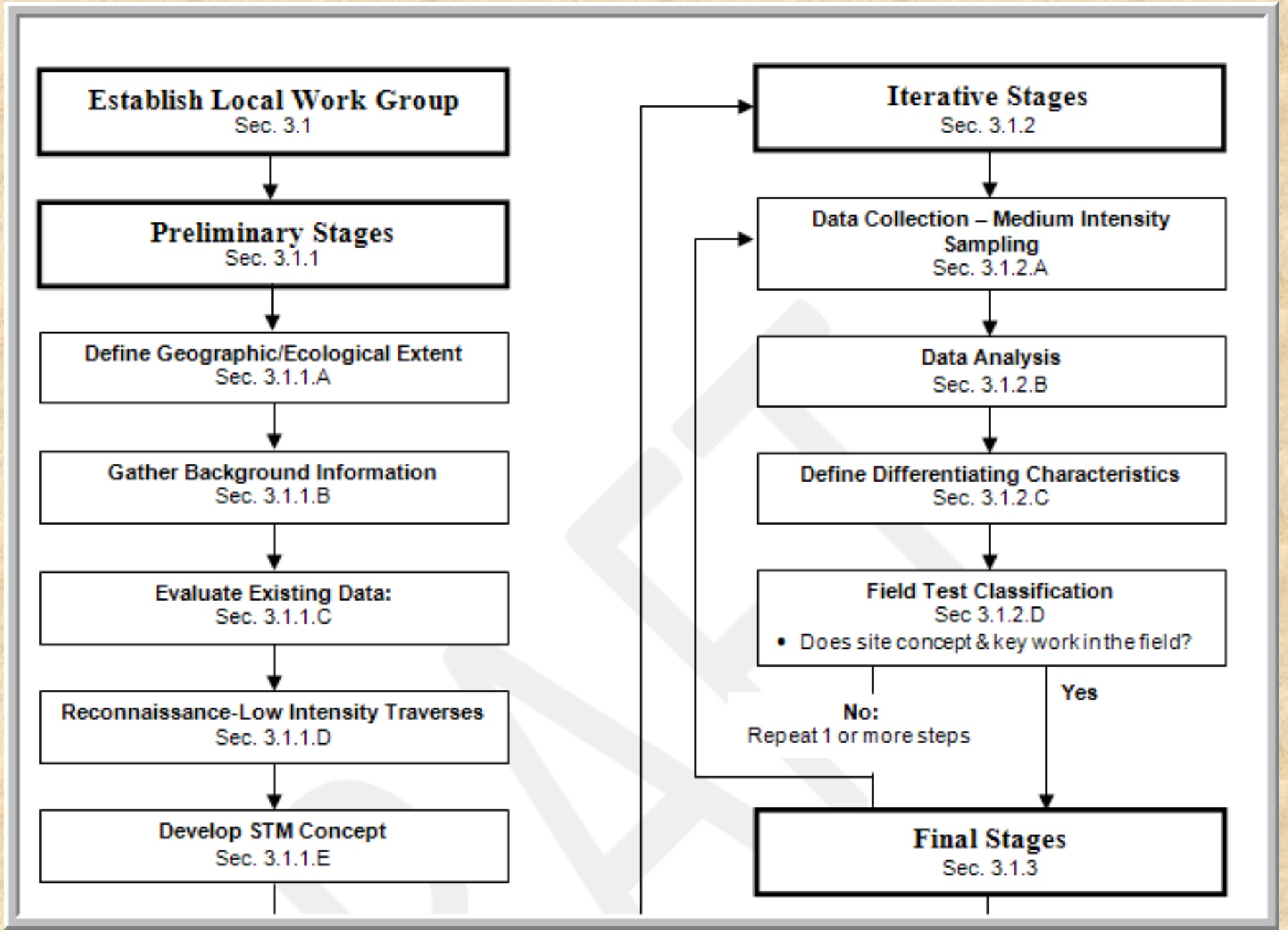


A MONUMENTAL EFFORT!



Soils with similar properties produce and support a set of characteristic native plant communities and are grouped into the same ecological site.

Ecological Site Classification and Development Process



Establishing the preliminary principles for ecological sites based on;

- Referenced Literature
  - Historical Records
  - University Press
  - Scientific Journals
- Vegetation Classification Systems and Floristic Assessment Methods and review point or plot data from sources such as
  - Nature Conservancy
  - Department of Natural Resources
  - Forest Service, BLM
  - Nature Conservancy - NatureServe
  - State Department of Natural Resources
  - Forest Service, BLM
  - NRCS

1. Coordinate ESD efforts through locally-lead workshops involving all partners.
2. Create the initial Ecological Site concepts based on literature reviews, and existing data.
3. Sort soils based on key soil and physiographic features and/or develop a spatial hierarchy for sampling
4. Conduct extensive, low intensity traverses (Tier 1) to refine initial concepts and to plan inventory procedures

(Tier 1) Conduct extensive, low intensity traverses to refine initial concepts and to plan inventory procedures

- Review existing GIS layers where possible
- Target relic areas, potential reference areas
- Dig shallow soil pits, classify the soil pedon
- Take digital Photos, GPS, do ocular estimates
- Concept is to cover broad areas within the MLRA
- Sampling occurs across the extent of the area
- Confirm and validate

(Tier 2). Medium intensity transects across broad extents with large number of samples

- Designed to investigate interrelationships of ecological sites, states and communities
- Data provides the bulk of quantitative data used to test the concepts for the site and state differentiation, as well as defining the mapping unit,
- Simple soil pedon descriptions distinguish key characteristics (e.g., soil horizons, soil structure, rock fragments)
- Should be conducted by soils and vegetation specialist

- At the local scale, soil temperature, moisture, and nutrient regimes are characterized based on key soil physical and chemical properties that are used as differentiating criteria in defining an ecological site.

Key soil properties are identified using direct measures of edaphic conditions including soil morphology, depth, texture, water holding capacity, pH, and so forth.

(Tier 3) High-intensity characterization and monitoring of states.

- Conducted once the site concepts are well established
- Intensive measurements to understand how states function by quantifying feedback mechanisms
- Inventory techniques to measure

Basal Cover Canopy Cover

Production Soil Stability

What are the Benifits?

Hands-on Training Workshops by MLRA/eco-region

Landscapes are Divided Into Ecological Sites for the Purposes of :

- Inventory
- Evaluation
- Management

Potential Uses for ESDs

- Standard reference for natural resource information for all federal agencies and other interested groups/organizations

- Training tool and information source

- Tool to assess lands for potential
  or resource specific concerns
  - wildlife habitat
  - carbon sinks
  - vulnerability to loss or degradatio
  - Site restoration

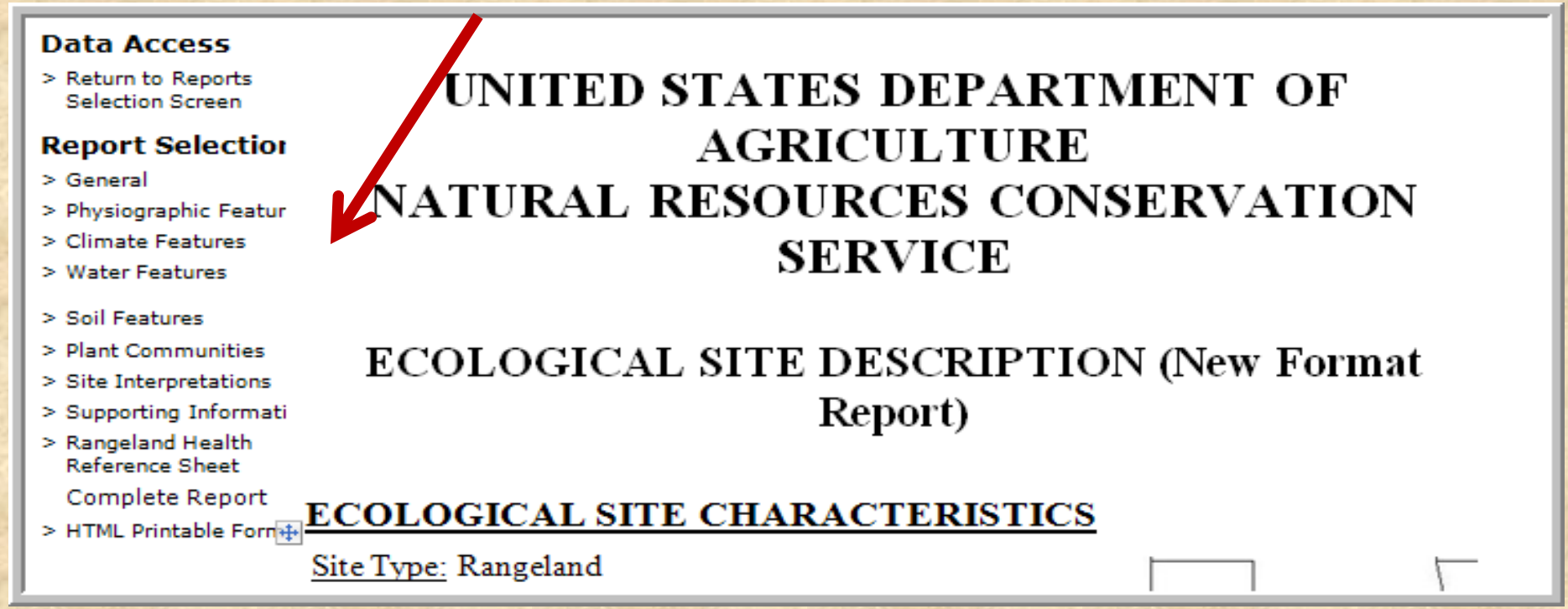
- Tool to prioritize and target limited program dollars

What are the Products?

1. Ecological Site Descriptions

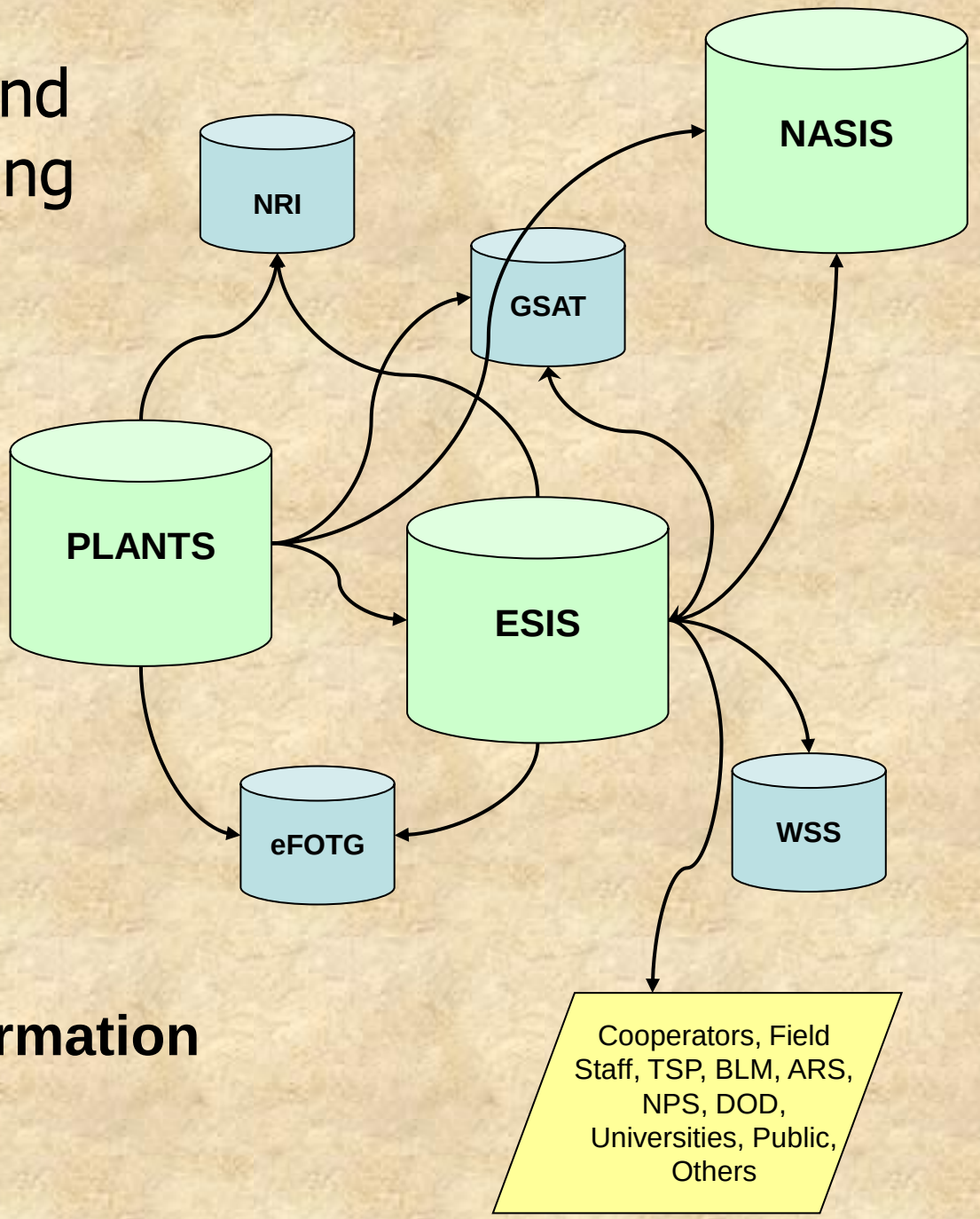
2. Web Soil Survey Mapping with hyperlinks to ELT/ESD Description

The characteristics differentiating ecological sites and their abiotic and biotic features are documented in ecological site descriptions (ESD).



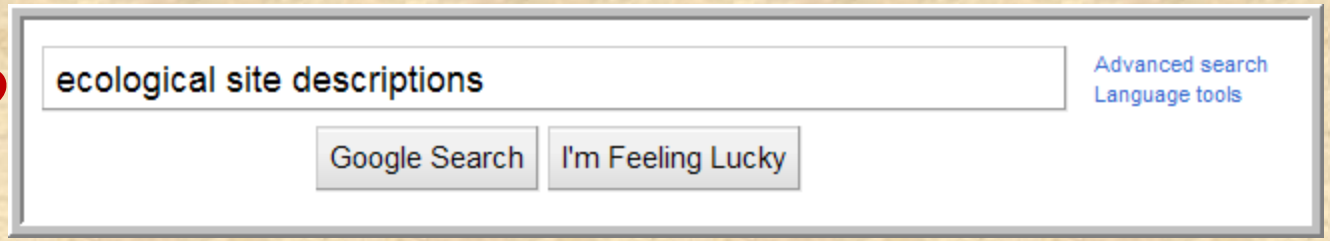
An ESD provides interpretations about the land uses and ecosystem services that a particular ecological site can support and management alternatives for achieving land management objectives.

Where are ESDs and how does everything link together?



Ecological Site Information (ESIS) Flow Chart

Access



Google

ecological site descriptions Search

About 1,650,000 results Advanced search

Everything
Images
Videos
News
Shopping
More

Show search tools

ESD - Ecological Site Description System
The **Ecological Site Description** (ESD) application provides the capability to enter, edit, and view reports of rangeland and forest land **ecological site descriptions** ...
esis.sc.egov.usda.gov/Welcome/pgESDWelcome.aspx - Cached - Similar

Ecological Site Information System
ESIS is the NRCS repository for **ecological site descriptions** and for ...
esis.sc.egov.usda.gov/ - Cached - Similar

Approved ESD Reports - **Ecological Site Description** System
Anyone may view reports of approved **Ecological Site Descriptions**. To view ...
esis.sc.egov.usda.gov/Welcome/pgReportLocation.aspx?type=ESD - Cached - Similar

Ecological Site Descriptions | Montana NRCS
Jun 16, 2005 ... Montana's **Ecological Site Descriptions** are in the process ...
www.mt.nrcs.usda.gov/technical/ecs/range/ecol**sites**/ - Cached - Similar

Ecological Sites
What is an **Ecological Site Description**? By Tracey Jean Wolfe. SRM Certified Professional in Rangeland Management. During the first part of the century farms ...
nevada.rangelands.org/.../2008-10%20What%20is%20an%20**Ecological**%20**Site**%20**Description**.pdf - Cached - Similar

Ecological Site Descriptions | The Jornada
This page provides some definitions for **ecological site descriptions** (ESDs) and provides tools and literature pertaining to their development. A comprehensive ...
jornada.nmsu.edu/esd - Cached - Similar

USDA United States Department of Agriculture
Natural Resources Conservation Service
NRCS
my.NRCS Employee Intranet

In The News
- Energy Estimator: Tillage
- Web Soil Survey

Program Delivery
- Environmental Easements
- Land Evaluation Site Assessment (LESA)
- CSP Self-Assessment

Operations
- SCIMS Link Manager (customers)
- Affiliates Affiliates has been redesigned. Information about the changes to this application may be found in the Affiliates Help system.
- USDA Service Center Forms
- Service Center Agencies Online Services
- Office Information Profile (OIP)

USDA eAuthentication

- ProTracts — Cost-Share Agreements
- Fund Mgr — Fund Manager
- PRS — Performance
- Points — Program Tracking
- WebTCAS — Time and Attendance
- eFOTG — Field Office Technical Guide
- CSG — Conservation System Guides
- CPS — Conservation Practice Standards
- Gateway — Resource Data
- SCIMS — Customers

Support
- Support — Customer Service Toolkit Permissions
- Customer Service Toolkit Home
- ProTracts Support Site

Related Links
- NRCS Information Technology Center

Downloads
- Hydraulic — Hydraulic Formula Program (National Bulletin 210-3-5)
- Soil Data Viewer CCE Download *(Team Services login required)*
- Survey Engineering Tool (SET)
- Pond Design (WinPond)
- Nutrient Management Planning (AFO Pro)

Accountability
- TechReg — Technical Service Providers
- TechPRS — TSP Performance
  As of **June 21, 2005**, TSP accomplishments will be reported in PRS. For more information, see Make the Switch to PRS.
- Workload Analysis (WLA)
- FSA Compliance Reviews

Resource Information
- PLANTS Database
- Ecological Sites (ESIS)
- Soil Data Viewer
- Soil Survey
- Vegetative Planning and Design (VegSpec)

Resource Analysis
- Economic Tools by Landuse
- Manure Master
- Energy Calculator
- Soil Tillage Intensity Rating (STIR)

Welcome to the PLANTS Database | USDA PLANTS - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Links

Address http://plants.usda.gov/ Go

USDA United States Department of Agriculture
Natural Resources Conservation Service

NRCS

PLANTS Database

Home | About PLANTS | Team | Partners | What's New | NPDC | Help | Contact Us

Image Gallery
- 30,000+ Plant Images
- Submit Your Images to PLANTS

Download
- Complete PLANTS Checklist
- State PLANTS Checklist
- Symbols for Unknown Plants
- State PLANTS GSAT Lists
- PLANTS Posters

Related Tools
- Crop Nutrient Tool
- Ecological Site Information System
- Plant Materials Web Site
- Other NRCS Tech Resources
- VegSpec

Plant Links
- PLANTS Links

county distribution data for 48 states!

Web Site Modernization
We are modernizing PLANTS to fit the new USDA Web standard, which is part of a broader USDA initiative called Web Site Development and Maintenance. To date the PLANTS home page, Name Search results page, Classification Report, State Search and PLANTS Profiles have been updated, with the rest to follow.

Submit Your Photos
Contribute your photos to PLANTS! We are looking for accurately identified submissions of 100 or more images, preferably with supporting information including date and location.

PLANTS Posters
Dress up your home or office with PLANTS Posters featuring lovely plants such as small-whorled pogonia (*Isotria medeoloides*) and red columbine (*Aquilegia canadensis*). Our seven printer-friendly posters can be downloaded in two formats (8.5" x 11" or 11" x 17"), and printed at home or at your local print shop.

NPDC Product Catalog (PDF; 702KB)
This publication highlights the National Plant Data Center's products and information, and provides information on future products under development. Requires Adobe Reader.

conservation purposes

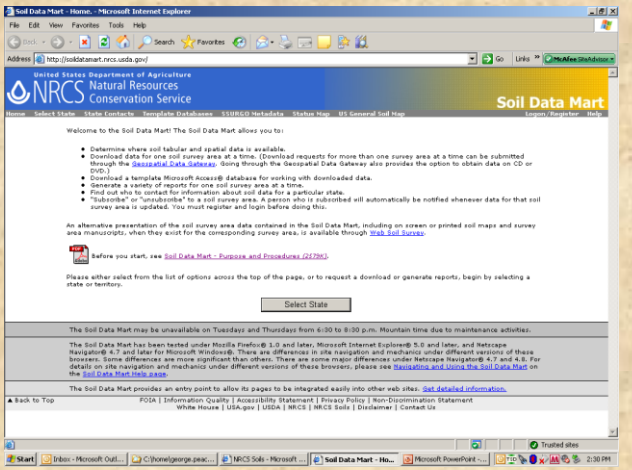
I Want Help
- Introduction to PLANTS
- Frequently Asked Questions
- Citing the PLANTS Database
- Intellectual Property Statement
- Contribute Your Photos to PLANTS
- Update PLANTS Distribution Maps

Trusted sites

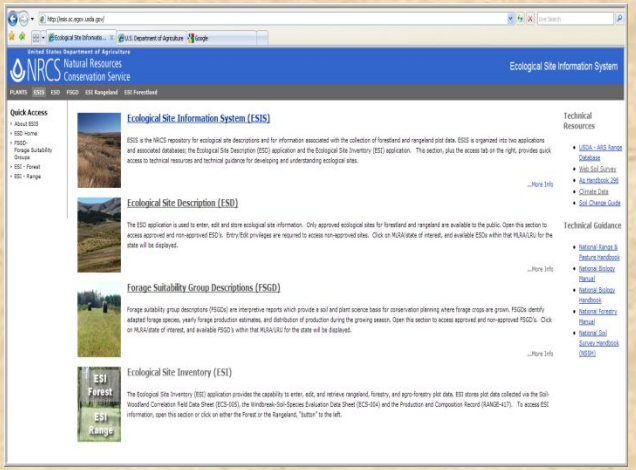
start | C:\Documents and Se... | Inbox - Microsoft Out... | Microsoft PowerPoint ... | Welcome to the PLAN... | 12:46 PM

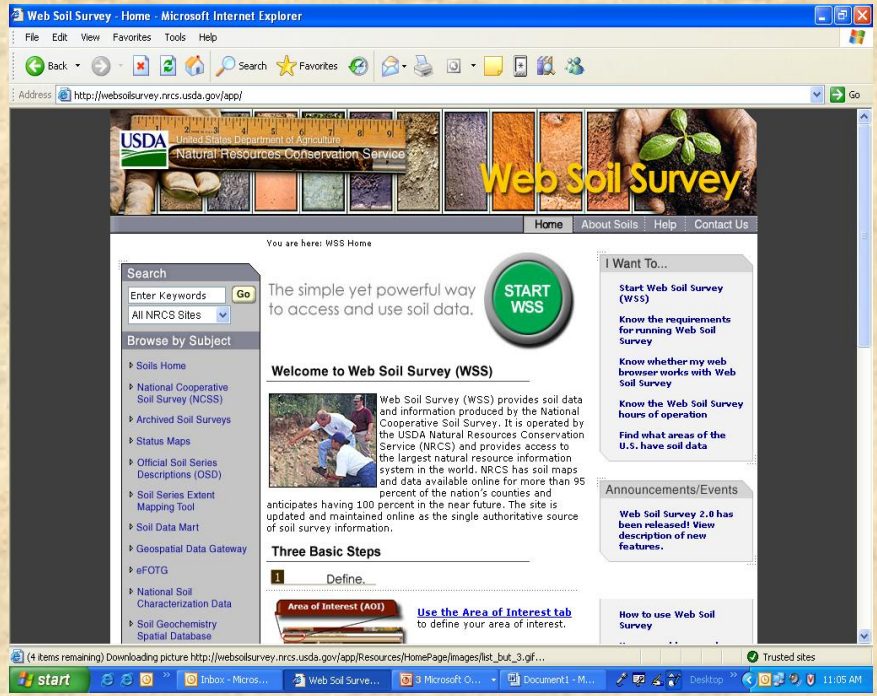
Accessing ecological sites through WSS

Soil Data Mart



Ecological Site Information System (ESIS)





Web Soil Survey

Web Soil Survey - Home - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites

Address http://websoilsurvey.nrcs.usda.gov/app/ Go

USDA United States Department of Agriculture
Natural Resources Conservation Service

Web Soil Survey

Home | About Soils | Help | Contact Us

You are here: WSS Home

Search

Enter Keywords Go

All NRCS Sites

Browse by Subject

- Soils Home
- National Cooperative Soil Survey (NCSS)
- Archived Soil Surveys
- Status Maps
- Official Soil Series Descriptions (OSD)
- Soil Series Extent Mapping Tool
- Soil Data Mart
- Geospatial Data Gateway
- eFOTG
- National Soil Characterization Data
- Soil Geochemistry Spatial Database

The simple yet powerful way to access and use soil data.

START WSS

Welcome to Web Soil Survey (WSS)

Web Soil Survey (WSS) provides soil data and information produced by the National Cooperative Soil Survey. It is operated by the USDA Natural Resources Conservation Service (NRCS) and provides access to the largest natural resource information system in the world. NRCS has soil maps and data available online for more than 95 percent of the nation's counties and anticipates having 100 percent in the near future. The site is updated and maintained online as the single authoritative source of soil survey information.

Three Basic Steps

1 Define.

Use the Area of Interest tab to define your area of interest.

I Want To...

- Start Web Soil Survey (WSS)
- Know the requirements for running Web Soil Survey
- Know whether my web browser works with Web Soil Survey
- Know the Web Soil Survey hours of operation
- Find what areas of the U.S. have soil data

Announcements/Events

- Web Soil Survey 2.0 has been released! View description of new features.

I Want Help With...

- How to use Web Soil Survey
- Known problems and

Trusted sites

start Web Soil Survey - Ho... 8:27 AM

Web Soil Survey - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites

Address http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx Go Links Cu

USDA United States Department of Agriculture
Natural Resources Conservation Service

Web Soil Survey

Contact Us | Download Soils Data | Archived Soil Surveys | Preferences | Logout | Help

A A A

Area of Interest (AOI) | Soil Map | Soil Data Explorer | Shopping Cart

Quick Navigation

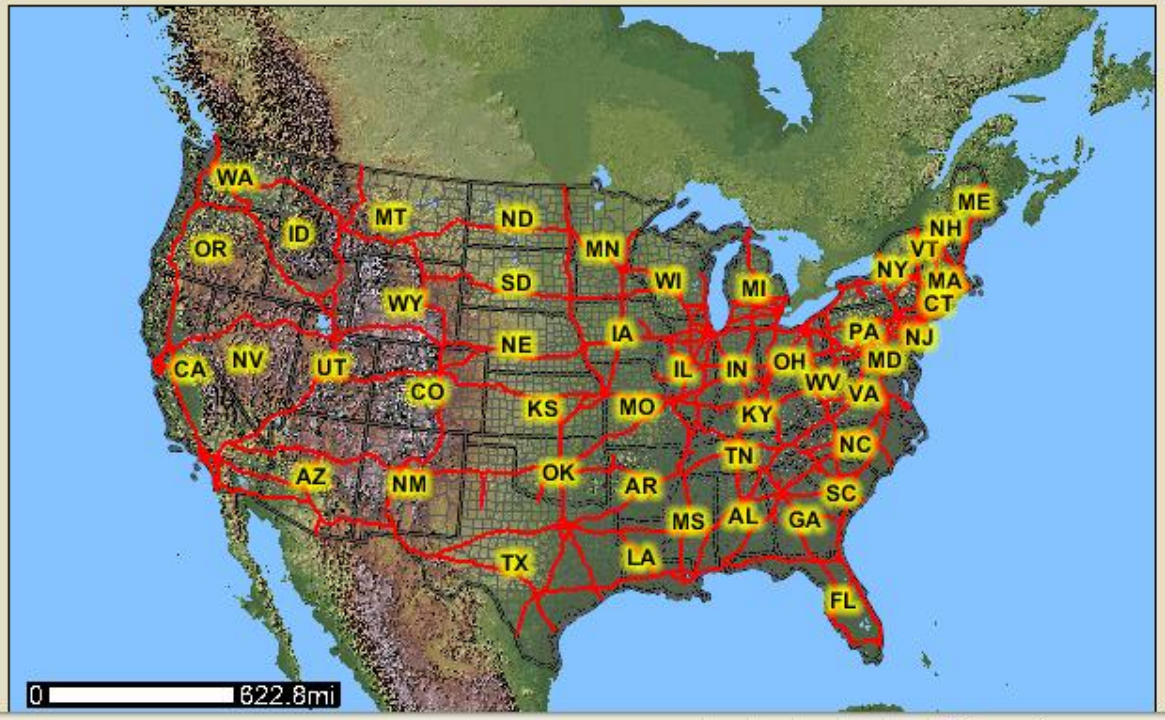
Navigate By...

- Address
- State and County
- Soil Survey Area
- Latitude and Longitude
- PLSS (Section, Township, Range)
- Bureau of Land Management
- Department of Defense
- Forest Service
- National Park Service
- Hydrologic Unit

Area of Interest Interactive Map

Legend

View Extent: Continental U.S. | Scale: 1:26,800,000 | ± 1 %



Done Trusted sites

start Web Soil Survey - Mic... 8:28 AM

Web Soil Survey - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites

Address http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx Go Links Cu

USDA United States Department of Agriculture
Natural Resources Conservation Service

Web Soil Survey

Contact Us | Download Soils Data | Archived Soil Surveys | Preferences | Logout | Help

A A A

Area of Interest (AOI) | Soil Map | Soil Data Explorer | Shopping Cart

Quick Navigation

Navigate By...

- Address
- **State and County**

View

State: Texas

County (optional): Dallam

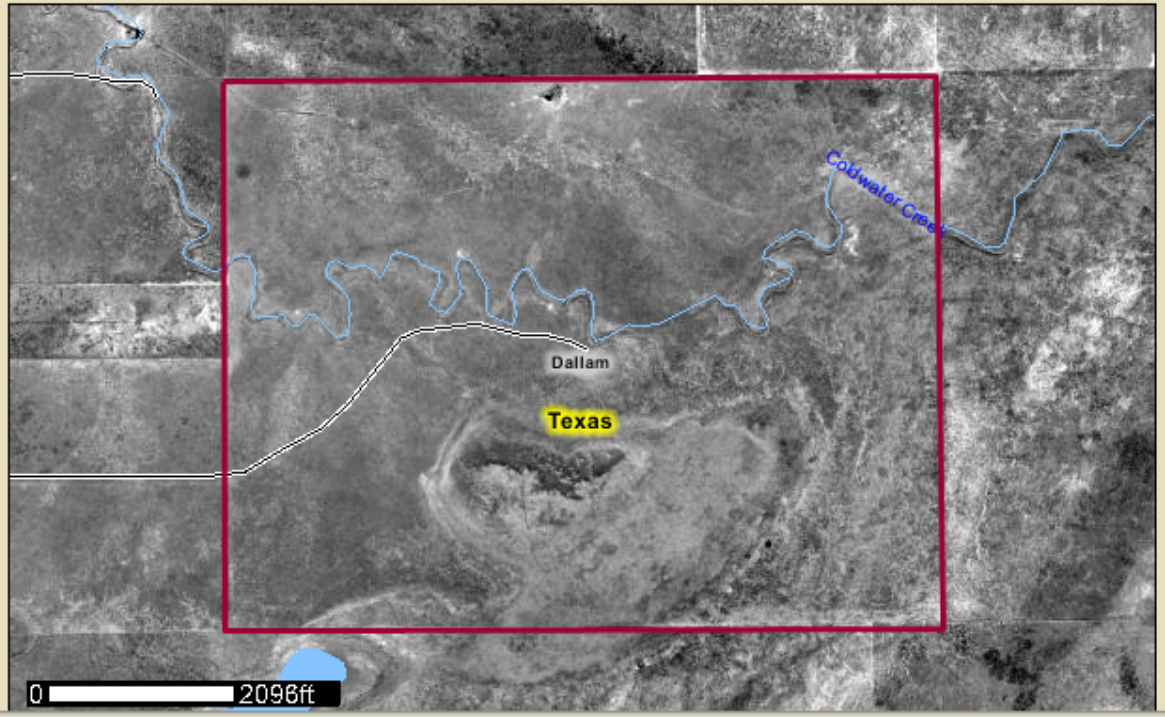
View

- Soil Survey Area
- Latitude and Longitude
- PLSS (Section, Township, Range)
- Bureau of Land Management
- Department of Defense
- Forest Service
- National Park Service
- Hydrologic Unit

Area of Interest Interactive Map

Legend

View Extent: Continental U.S. | Scale: 1:17,100 ± 1 %



Done Trusted sites

start Web Soil Survey - Mic... 8:31 AM

Web Soil Survey - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites

Address http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx Go Links Cu

USDA United States Department of Agriculture
Natural Resources Conservation Service

Web Soil Survey

Contact Us | Download Soils Data | Archived Soil Surveys | Preferences | Logout | Help

A A A

Area of Interest (AOI) | Soil Map | Soil Data Explorer | Shopping Cart

Printable Version | Add to Shopping Cart

Map Unit Legend

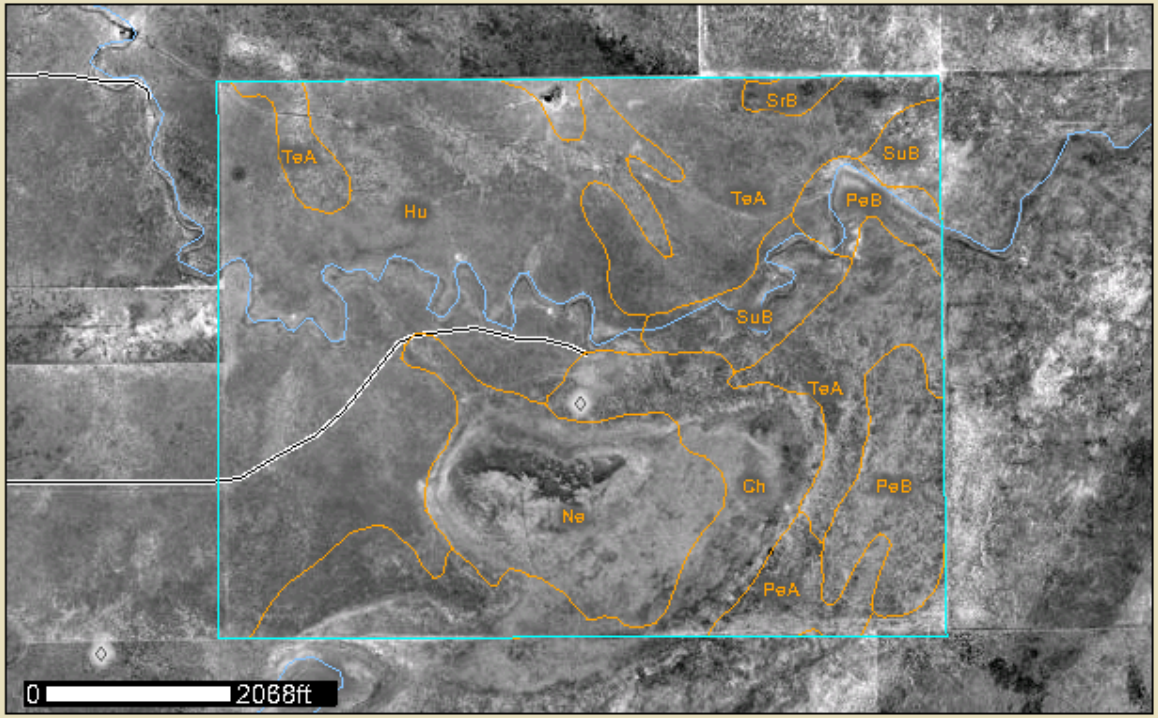
Dallam County, Texas (TX111)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ch	Church soils	159.7	14.2%
Hu	Humbarger loam	427.4	38.0%
Ne	Ness clay	139.5	12.4%
PeA	Perico fine sandy loam, 0 to 1 percent slopes	31.3	2.8%
PeB	Perico fine sandy loam, 1 to 3 percent slopes	86.8	7.7%
SrB	Spurlock soils, hummocky	14.5	1.3%
SuB	Sunray loam, 1 to 3 percent slopes	53.8	4.8%
TeA	Texline loam, 0 to 1 percet slopes	210.4	18.7%
VkE	Valentine-Spurlock complex, 5 to 15 percent slopes	0.3	0.0%
Totals for Area of Interest		**1,123.7**	**100.0%**

Soil Map

Legend

Scale 1:16,900 ± 1 %



Done Trusted sites

start Web Soil Survey - Mic... 8:32 AM

Web Soil Survey - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites

Address http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx Go Links Cu

USDA United States Department of Agriculture
Natural Resources Conservation Service

Web Soil Survey

Contact Us | Download Soils Data | Archived Soil Surveys | Preferences | Logout | Help

A A A

Area of Interest (AOI) | Soil Map | Soil Data Explorer | Shopping Cart

View Soil Information By Use: Rangeland

Printable Version | Add to Shopping Cart

Intro to Rangeland | Suitabilities and Limitations for Use | Soil Properties and Qualities | Ecological Site Assessment | Soil Reports

Ecological Sites

Open All | Close All

All Ecological Sites

View All Ecological Sites Info

View Options

Dominant Ecological Site Map ☑

Ecological Sites by Map Unit Component Table ☑

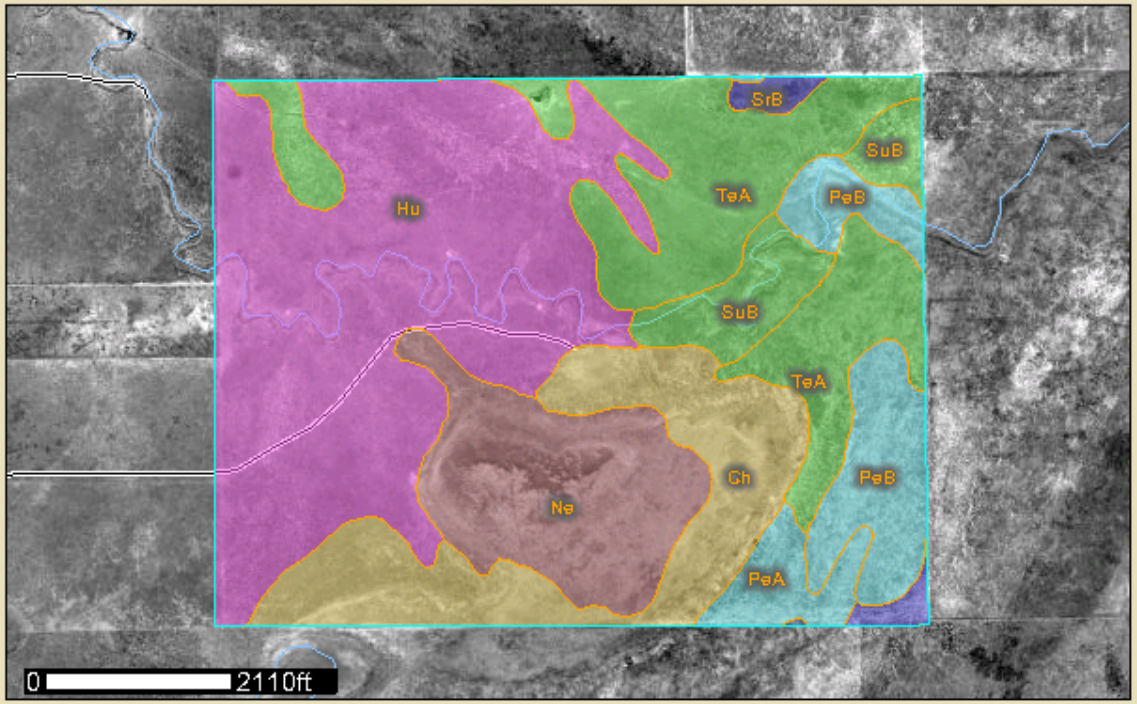
View All Ecological Sites Info

- R077AY005TX — Playa PE 25-36
- R077AY006TX — Limey Upland PE 25-36
- R077AY009TX — MIXEDLAND SLOPES PE 25-36
- R077AY012TX — Sandy Loam PE 25-36
- R077BY011NM — High Lime
- R077BY019TX — MIXEDLAND SLOPES PE 25-36
- R077BY020TX — SAND HILLS PE 25-36
- R077EY058TX — Loamy Bottomland PE 25-36

Legend

Map — Dominant Ecological Site

Scale 1:17,200 ± 1 %



Done Trusted sites

start Web Soil Survey - Mic... TSD 8:33 AM

Web Soil Survey - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites

Address http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx Go Links Cu

USDA United States Department of Agriculture
Natural Resources Conservation Service

Web Soil Survey

Contact Us | Download Soils Data | Archived Soil Surveys | Preferences | Lo | Help

Area of Interest (AOI) | Soil Map | Soil Data Explorer | Shopping Cart

View Soil Information By Use: Rangeland

Printable Version | Add to Shopping Cart

Intro to Rangeland | Suitabilities and Limitations for Use | Soil Properties and Qualities | Ecological Site Assessment | Soil Reports

Ecological Sites

Open All | Close All

All Ecological Sites

R077AY005TX — Playa PE 25-36

R077AY006TX — Limey Upland PE 25-36

R077AY009TX — MIXEDLAND SLOPES PE 25-36

R077AY012TX — Sandy Loam PE 25-36

This Ecological Site

1. Midgrass/Shortgrass/Tallgrass Community

View Plant Community Info

View Options

- Plant Community Photos
- Plant Community Description
- Plant Community Tables
  - Community / Species Composition
  - Annual Production
  - Plant Growth Curve

Plant Community Photos — 1. Midgrass/Shortgrass/Tallgrass Community

1. Midgrass/Shortgrass/Tallgrass Community

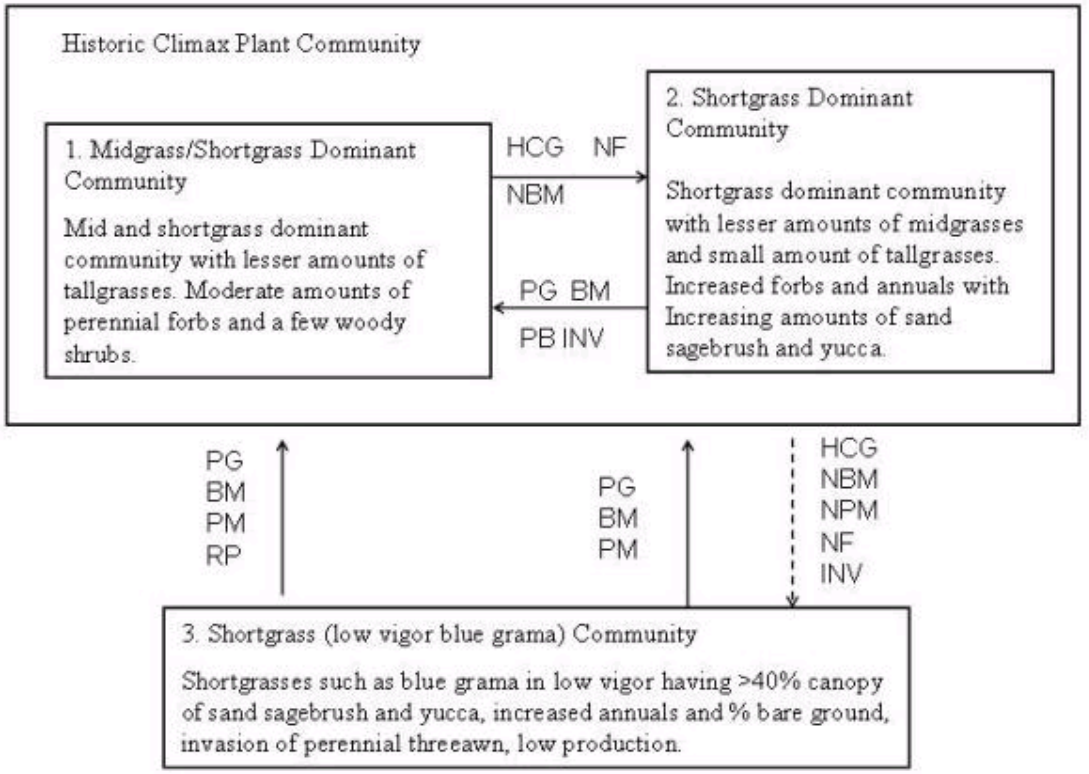
Description — 1. Midgrass/Shortgrass/Tallgrass Community

The interpretive plant community for this site is the assumed historic climax plant community. It is a good mixture of midgrasses, shortgrasses and lesser amounts of tallgrasses make up approximately (90%) of the plant community. Midgrasses tend to dominate over most of the site with sideoats grama being the overall dominant species. Little bluestem is the dominant tallgrass and blue grama is the dominant shortgrass. The cool-season grasses include western wheatgrass, Canada wildrye and needle & thread in lesser amounts. There is a good variety of perennial forbs (see Annual Production below) making up (3 — 5%) of the community with sand sagebrush and yucca making up another (3 — 5%) of

Done Trusted sites

start Web Soil Survey - Mic... 8:34 AM

State Transition Diagram



LEGEND

BM	- Brush Management	HCG	- Heavy Continuous Grazing
PB	- Prescribed Burning	HCPC	- Historic Climax Plant Community
PG	- Prescribed Grazing	PM	- Pest Management
INV	- Brush Invasion	RP	- Range Planting
NBM	- No Brush Management	NF	- No Fire

USDA United States Department of Agriculture

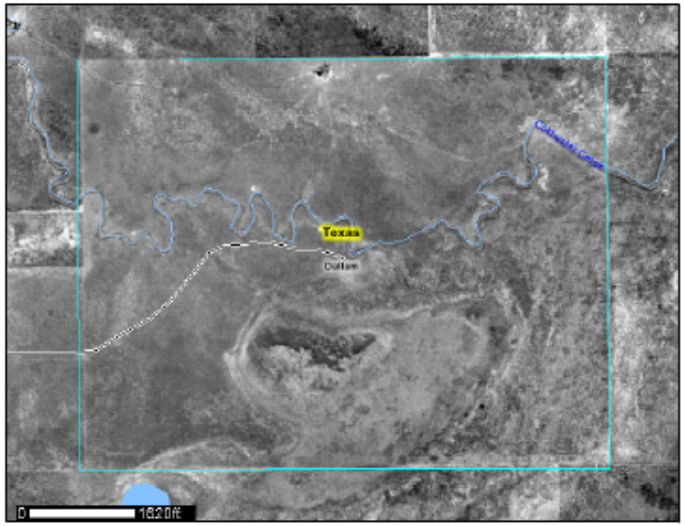
NRCS Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

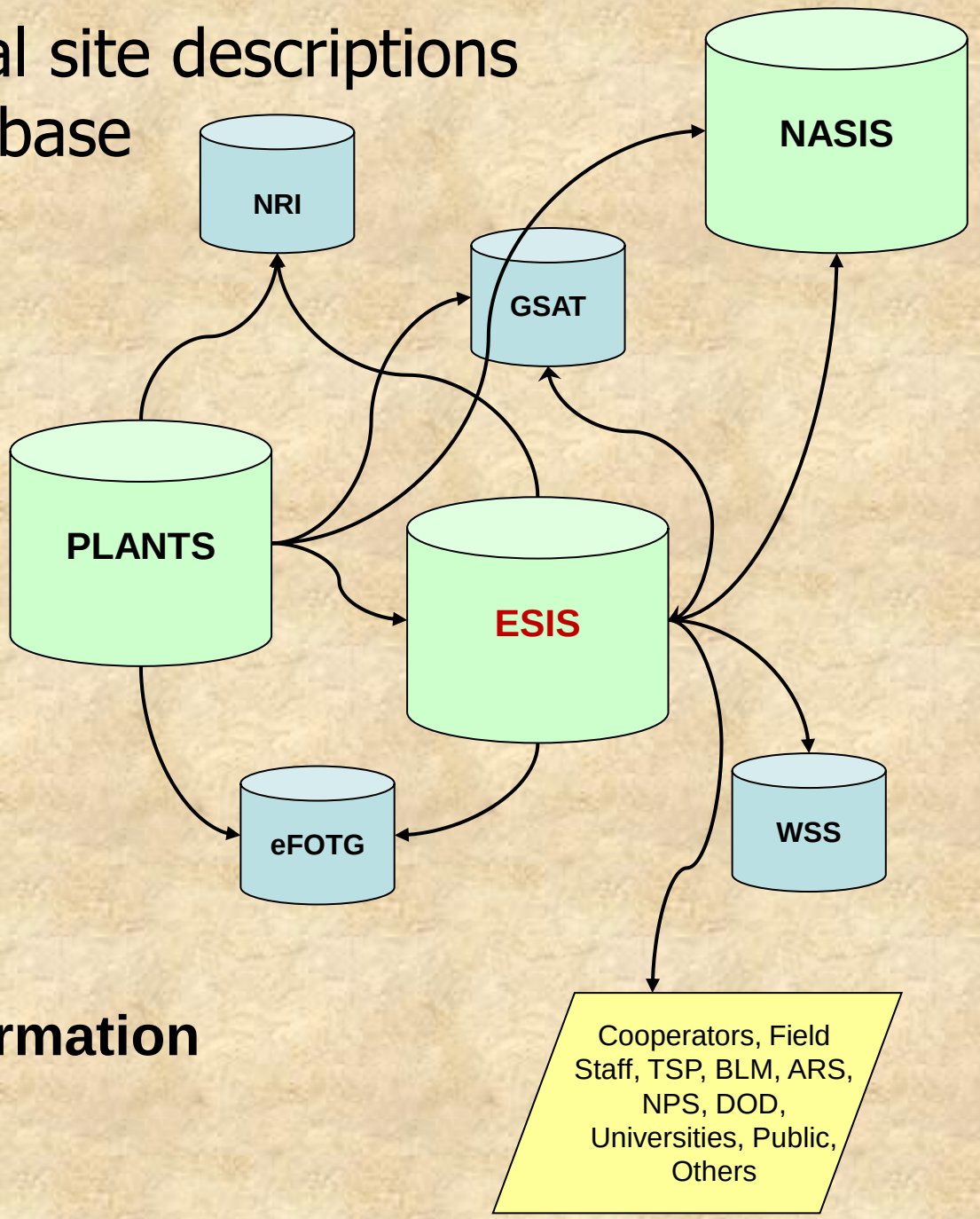
Custom Soil Resource Report for

Dallam County, Texas

My Place

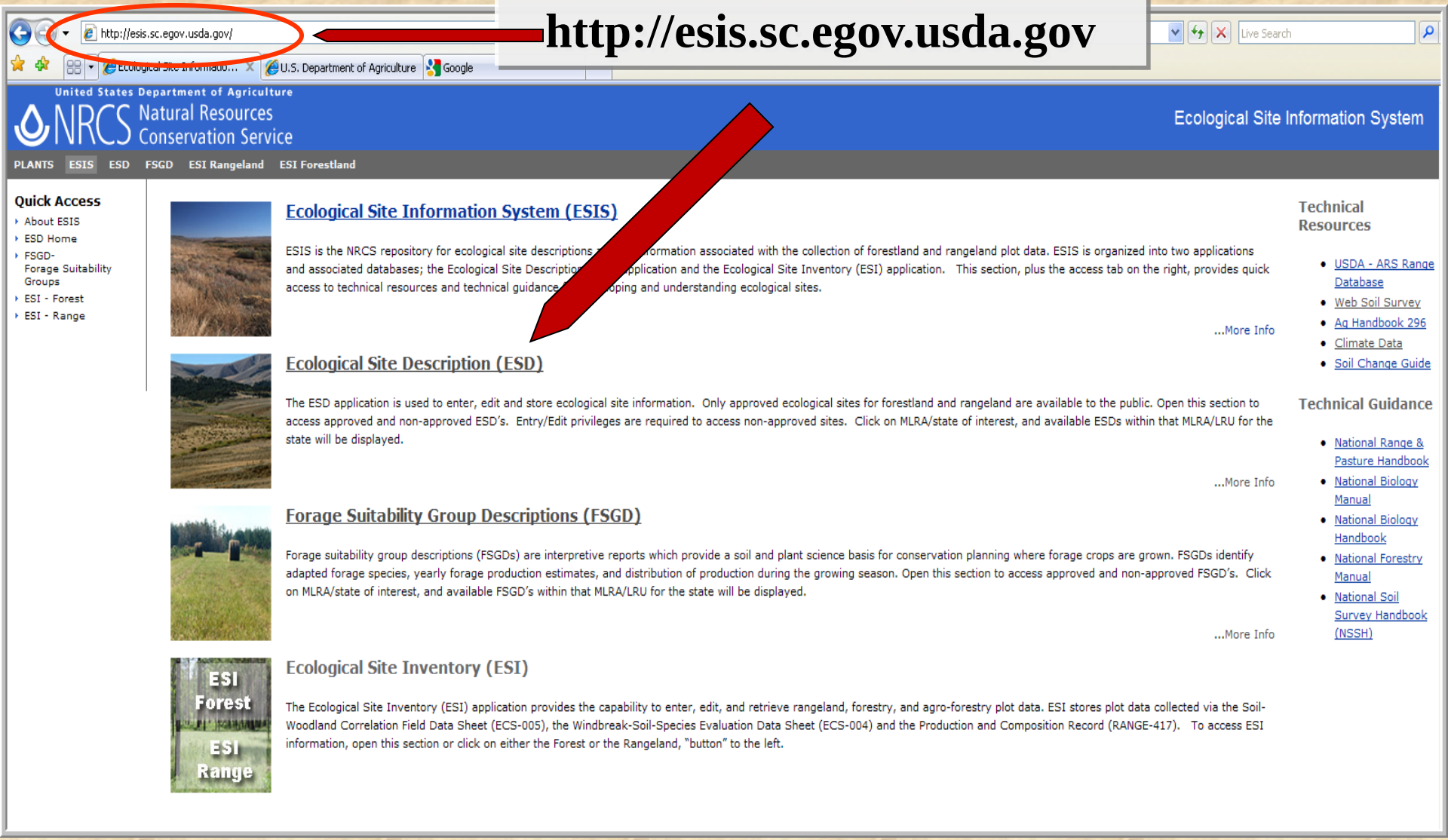


Accessing ecological site descriptions from the ESIS database



Ecological Site Information (ESIS) Flow Chart

ESIS- ESD
Ecological Site Description



Reports
> Approved ESD Reports
> Approved Reference Sheets

Data Access
> Data Edit/Entry, Download, Reports
> GSAT Downloads

Welcome to the Ecological Site Description (ESD) System for Rangeland and Forestland

The Ecological Site Description (ESD) application provides the capability to enter, edit, and view reports of rangeland and forest land ecological site descriptions. Anyone may view reports of approved Ecological Site Descriptions. Data entry, edit, download, and viewing draft reports is for authorized users only.

ESIS User Guide

For questions about this database as a whole, contact:

Rangeland:

Homer Sanchez
Rangeland Management Specialist
National Grazing Lands Team
Central National Technology Support Center
Fort Worth, Texas
Phone: 817-509-3227
Fax: 817-509-3336

Forestland:

Ray Stoner
Forester
Central National Technology Support Center
Fort Worth, Texas
Phone: 817-509-3215
Fax: 817-509-3336

For questions pertaining to an individual state's data, contact:
NRCS State Range Specialist or Forester for that state.

Please address all comments and suggestions about the contents of this Web page to homer.sanchez@ftw.usda.gov

If you are having problems with this Web page, please let us know at plantswebmaster@plants.usda.gov

Updated May 10, 2010

Reports
> Approved ESD Reports
> Approved Reference Sheets

Data Access
> Data Edit/Entry, Download, Reports
> GSAT Downloads

Welcome to the Ecological Site Description (ESD) System for Rangeland and Forestland Data

Anyone may view reports of approved Ecological Site Descriptions. To view the various reports select a State or MLRA or both and Submit. From the subsequent list, select the ESD you wish to view.

Major Land Resource Areas (MLRA) are a portion of the spatial framework utilized by the Natural Resources Conservation Service in the planning, design, implementation, and evaluation of natural resource management activities. MLRA boundaries reflect nearly homogenous areas of landuse, elevation, topography, climate, water resources, potential vegetation, and soils.

If you need assistance in locating the MLRA, click on the MLRA Explorer link below The MLRA Explorer is an interactive map-based application of USDA Agriculture Handbook 296. With the tools in this application, you can:
(1) search for your MLRA by entering your State and County;
(2) search for LRRs and MLRAs using a variety of geographical and textual queries.

MLRA Information

MLRA Explorer

State None Selected **MLRA** None Selected

Submit

NRCS Major Land Resource Areas Explorer

MLRA Explorer

NRCS Natural Resources Conservation Service

MLRA Selection Method

Interactive | LRR/MLRA | State/County | Fed. Lands | Ecoregion | HUC-8 | PLSS

U - Florida Subtropical Fruit, Truck Crop, and Range Region

154 - South-Central Florida Ridge

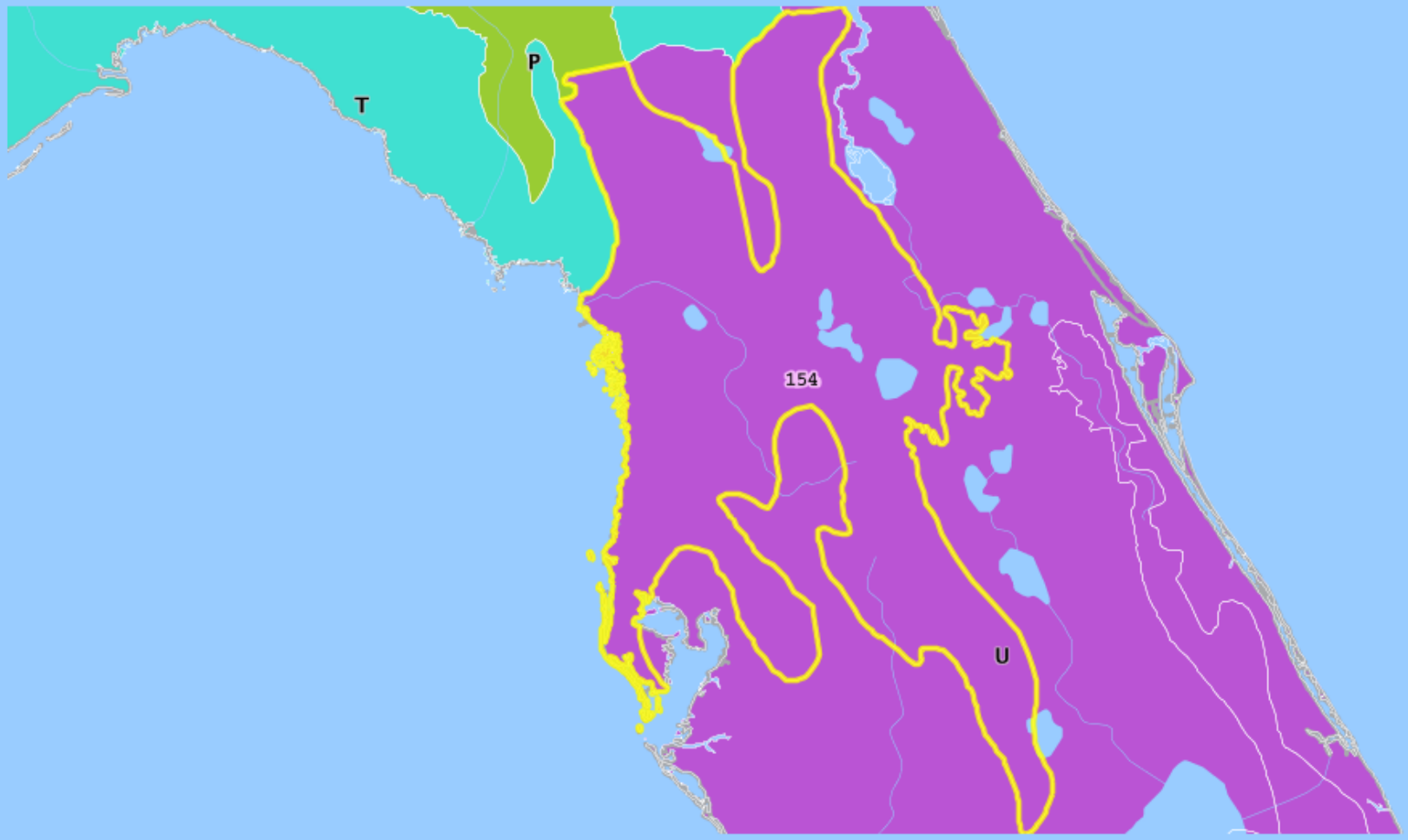
Select MLRAs

Layers | Clear Map | Legend | Continental U.S.

MLRA Report Components

- [x] Check/Clear All
- [x] Physiography
- [x] Climate
- [x] Geology
- [x] Water
- [x] Biology
- [x] Soils
- [x] Land Use
- [ ] LRR Overview

Create report



1 selected MLRA: 154

PENNSTATE CEI

MLRA 154 - South-Central Florida Ridge

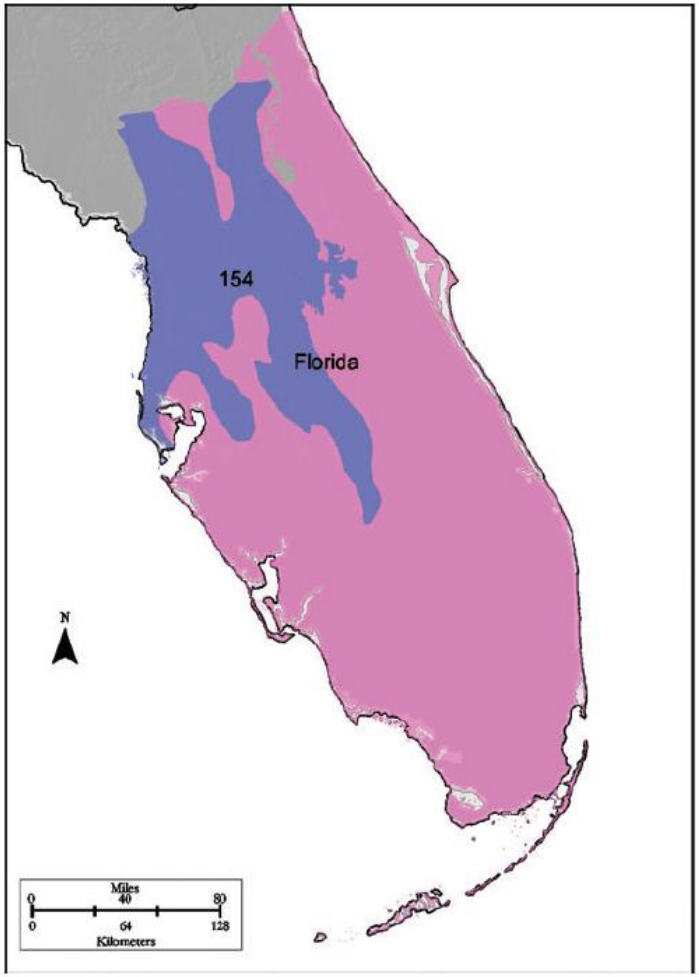


Figure 154-1: Location of MLRA 154 in Land Resource Region U

Introduction

This area is entirely in Florida (fig. 154-1). It makes up about 8,285 square miles (21,470 square kilometers). Parts of the east side of the city of Tampa Bay and the west half of Orlando are in this area. Interstate 75 parallels the north-south axis of the northern half of this MLRA, and Interstate 4 crosses the southern tip. The Ocala National Forest and the Withlacoochee State Forest are in this area.

Ecological Site Description Selection

Select a site to view Report

ID	Type	MLRA	Site Name	Biotic Name
R077DY038TX	R	077D	Clay Loam 12-17" PZ	
R077DY039TX	R	077D	Draw 12-17" PZ	
R077DY040TX	R	077D	High Lime 12-17" PZ	
R077DY041TX	R	077D	Lakebed 12-17" PZ	
R077DY042TX	R	077D	Limy Upland 12-17" PZ	
R077DY045TX	R	077D	Sand Hills 12-17" PZ	
R077DY046TX	R	077D	Sandy 12-17" PZ	
R077DY047TX	R	077D	Sandy Loam 12-17" PZ	
R077DY048TX	R	077D	Shallow 12-17" PZ	
R077DY049TX	R	077D	Very Shallow 12-17" PZ	
R077DY591TX	R	077D	Gyp 12-17" PZ	

For questions about this database as a whole, contact:

Rangeland:

Homer Sanchez
Rangeland Management Specialist
National Grazing Lands Team
Central National Technology Support Center
Fort Worth, Texas
Phone: 817-509-3227

Forestland:

Ray Stoner
Forester

Central National Technology Support Center
Fort Worth, Texas
Phone: 817-509-3215

An Approved ESD Example

Ecological Site Description System - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Links

Address http://esis.sc.egov.usda.gov/esis_report/fsReport.aspx?approved=yes&id=R077AY001TX Go

United States Department of Agriculture
NRCS Natural Resources Conservation Service

Ecological Site Description

Plants | ESIS | ESD | ESI Forestland | ESI Rangeland

Report Selections

- General
- > Physiographic Features
- > Climate Features
- > Water Features
- > Soil Features
- > Plant Communities
- > Site Interpretations
- > Supporting Information
- > Complete Report
- > HTML Printable Format

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

ECOLOGICAL SITE DESCRIPTION

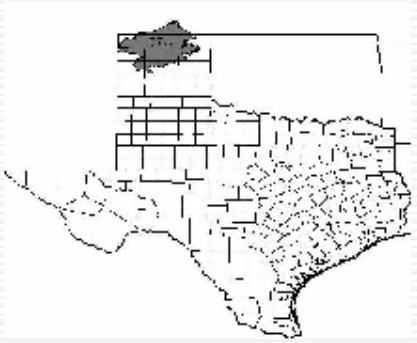
ECOLOGICAL SITE CHARACTERISTICS

Site Type: Rangeland

Site Name: Deep Hardland PE 25-36

Site ID: R077AY001TX

Major Land Resource Area: 077A - Southern High Plains, Northern Part



Questions, Comments, ..Thank you

- The Web Soil Survey: http://websoilsurvey.nrcs.usda.gov/app/
- The Ecological Site Information System (ESIS): http://esis.sc.egov.usda.gov/

I’m done here…thanks