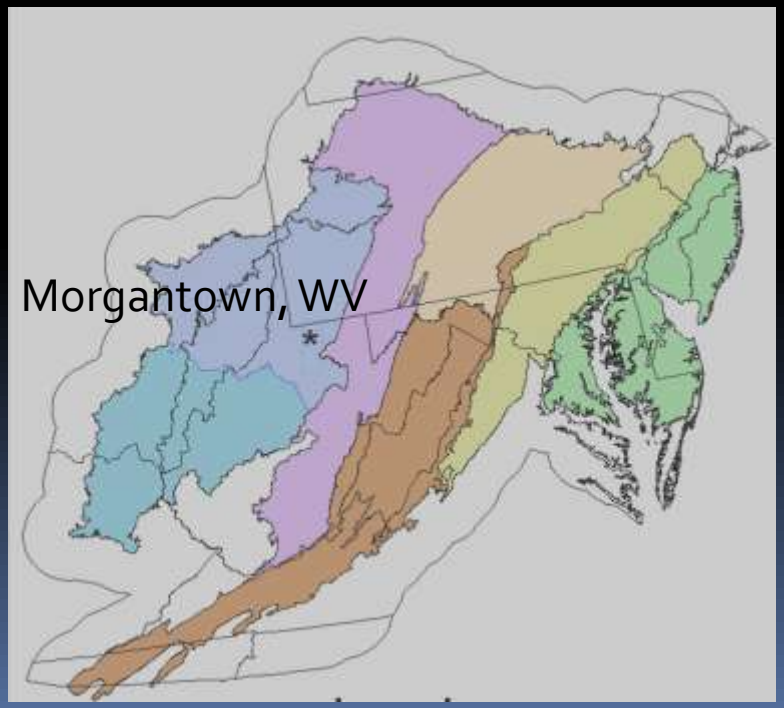
MO-13 Report

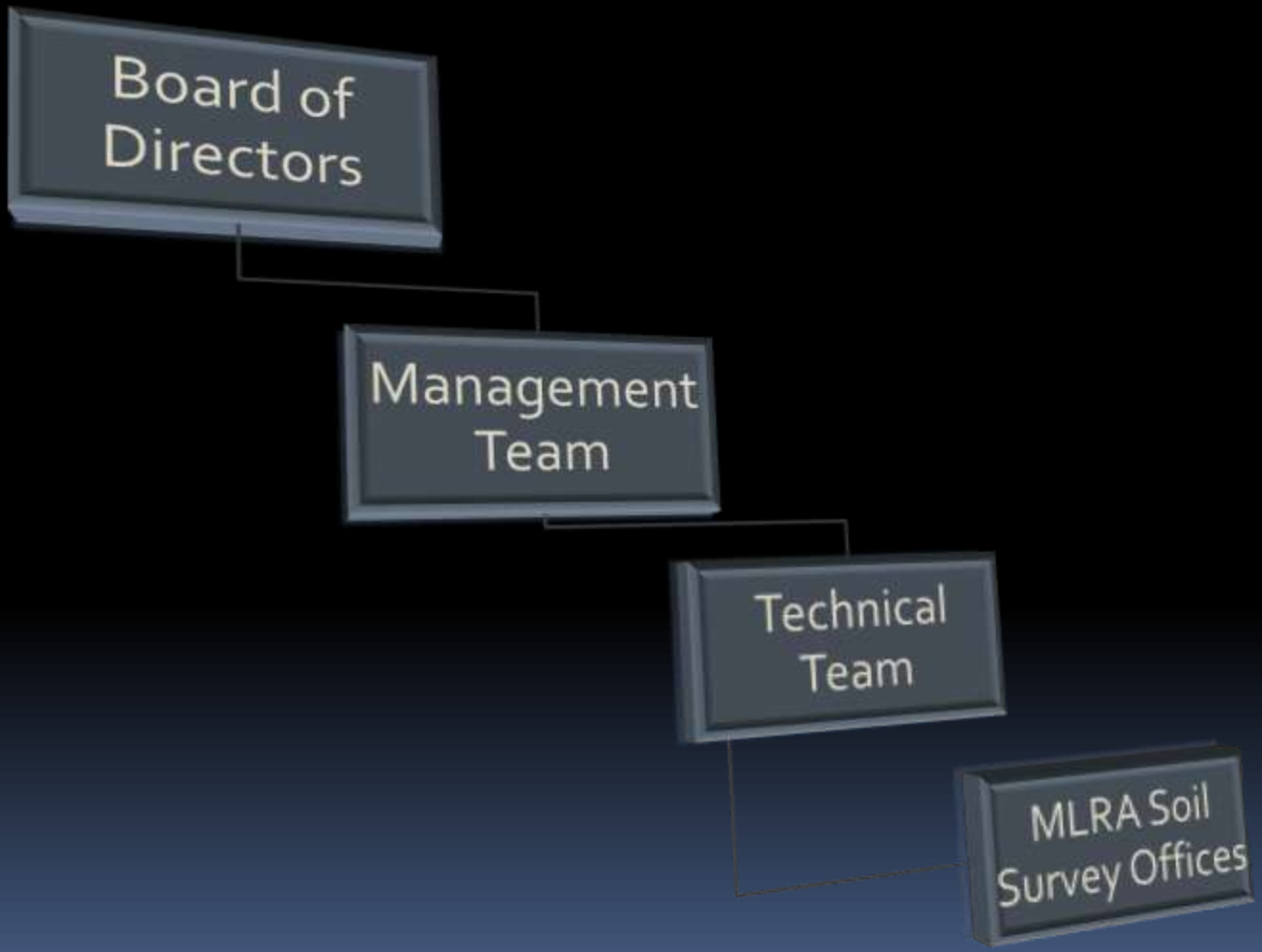
Appalachian Interior and Plateaus and Mid-Atlantic Coastal Plain Soil Survey Region



MO-13 Report

- We cover all or part of 10 states and 9 MLRA's,
  - MLRA – Major Land Resource Area
- Provide leadership for soil survey activities and quality assurance for soil survey information within the region,
- We work with states to assist in management of the soil survey program,
- Maintain OSD's, official soil descriptions,
- Provide a 10% quality assurance review.

MO-13 Report


Board of Directors
Management Team
Technical Team
MLRA Soil Survey Offices

MO-13 Report

- This 4 level approach ensures and encourages customer participation.

MO-13 Report

- Board of Directors
  - State Conservationists of all the states served by the MO with the chair being the host state,
    - Delaware, Kentucky, Maryland, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia
  - Review and approve projects and/or recommend changes.

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- Management Team
  - State Soil Scientists of all the states served with the Chair being the host state, NCSS partners.
  - Prioritize projects and needs

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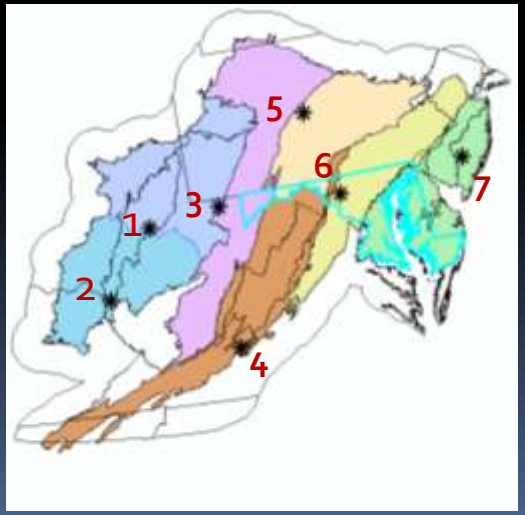
- Technical Team
  - MLRA SS Leader and staff, Resource Soil Scientists, Soil Data Quality Specialist, Universities, Dept. of Natural Resources, USDA Forest Service, … The chair is the MLRA SS Leader,

Soil Survey offices with MLRA SS Leaders are located in;

13-1 Marietta, OH
13-2 Huntington, WV
13-3 Morgantown, WV
13-4 Roanoke, VA
13-5 State College, PA
13-6 Frederick, MD
13-7 Hammonton, NJ



MO-13 Report

- MLRA SS Offices
  - These will be discussed in greater detail with our next speakers

Major Projects and Happenings

- Rapid Carbon Assessment
- Ecological Site Development
- Training on NASIS 6.1

Rapid Carbon Assessment

Rapid Carbon Assessment

- 2 Primary Goals
  - Develop a scientifically-based and statistically valid inventory of soil carbon stocks in the lower 48
  - Evaluate differences in soil carbon associated with differing soil properties, agricultural management systems, ecosystems, and land uses.
    - Basically, comparing a Sassafras Sandy Loam under crop to a Sassafras Sandy Loam forest.

Fact Sheet
Rapid Assessment of U.S. Soil Carbon for Conservation Planning and Modeling

USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

This is a nationwide effort by the USDA-NRCS, Soil Survey Division, to inventory soil carbon stocks.

- Sampled soils are grouped by similar properties, land uses, agricultural management, and ecosystems.
- Carbon data will be used to determine the effects of conservation practices on soil carbon stocks, for global carbon accounting.
- The soil carbon inventory will encompass all lands and include all major ecosystems. Benchmark soils, other extensive soils, and soils that represent important ecosystems (e.g., wetlands and flood plains) will be sampled.
- The sites or locations for measurement have been chosen randomly using USDA-NRCS soil maps and land use data. They will be aggregated to regional scales based on the soil and land use present. No ownership information will be collected or stored. The location of each data point is confidential.
    - Soil pits will be evaluated at five a points within a site.
    - At each location a small pit will be dug and samples collected to measure soil carbon, bulk density and related measures.

Products:

- Improved maps and knowledge about the distribution of U.S. soil carbon stocks
- Scientifically and statistically defensible inventory of the effects of soil properties, agricultural management, land use, and ecosystem properties on soil carbon stocks
- Soil Survey databases, selectable by land use and management, on soil carbon levels and related properties.
- Land use and management based data that will help conservation planning by estimating gains or losses of soil carbon from land use and management changes.
- Publically accessible soil carbon database for model development and validation

For additional information, contact:
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Chris Smith, Soil Survey Division, 202-205-0346, christopherw.smith@wdc.usda.gov.

Major Steps

1. Navigate to RCA Location/point
2. Verify Soil Group and Land Use
3. Plot Layout
4. Document Land Cover/Use
5. Collect Pedon Data and Samples
6. Transport and Store Sample
7. Analyze Moist Sample
8. Process Samples
9. Analyze Air-dry Sample
10. Compile and Upload Data

RaCA Required Samples

	Landuse				
Group	Cropland	Forestland	Pastureland	Wetland	CRP
1					
2	5	5	5		
3		2			
4	5	5	5	5	
5	5	16	6	5	3
6		5		5	
7	8	49	16	5	3
8	5	6	5	5	
9	5	5	5	5	
10	5	6	5	5	
11	5	17	10		
12				5	
13	5	5	5	5	
14	5	38	8	5	3
15	5	8	5		
Federal Land		11			

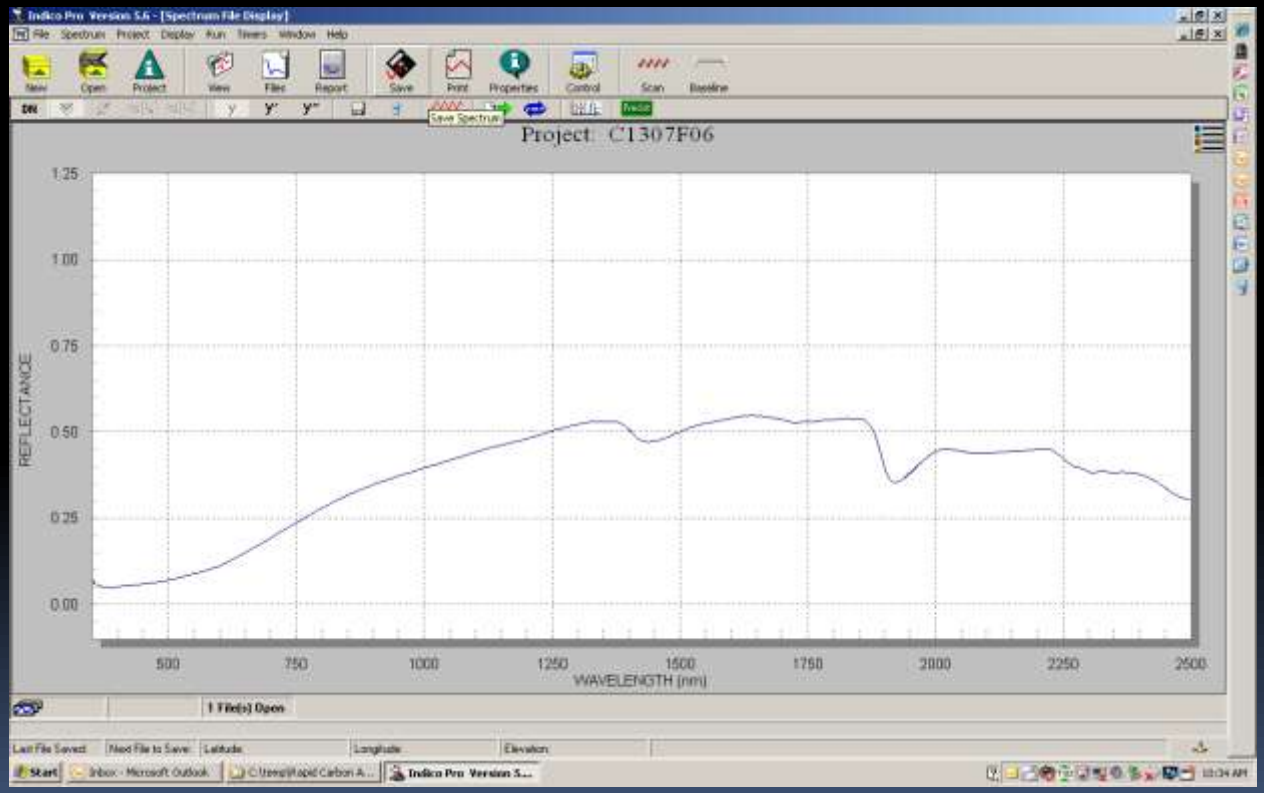
No extra sites available

No sites Available

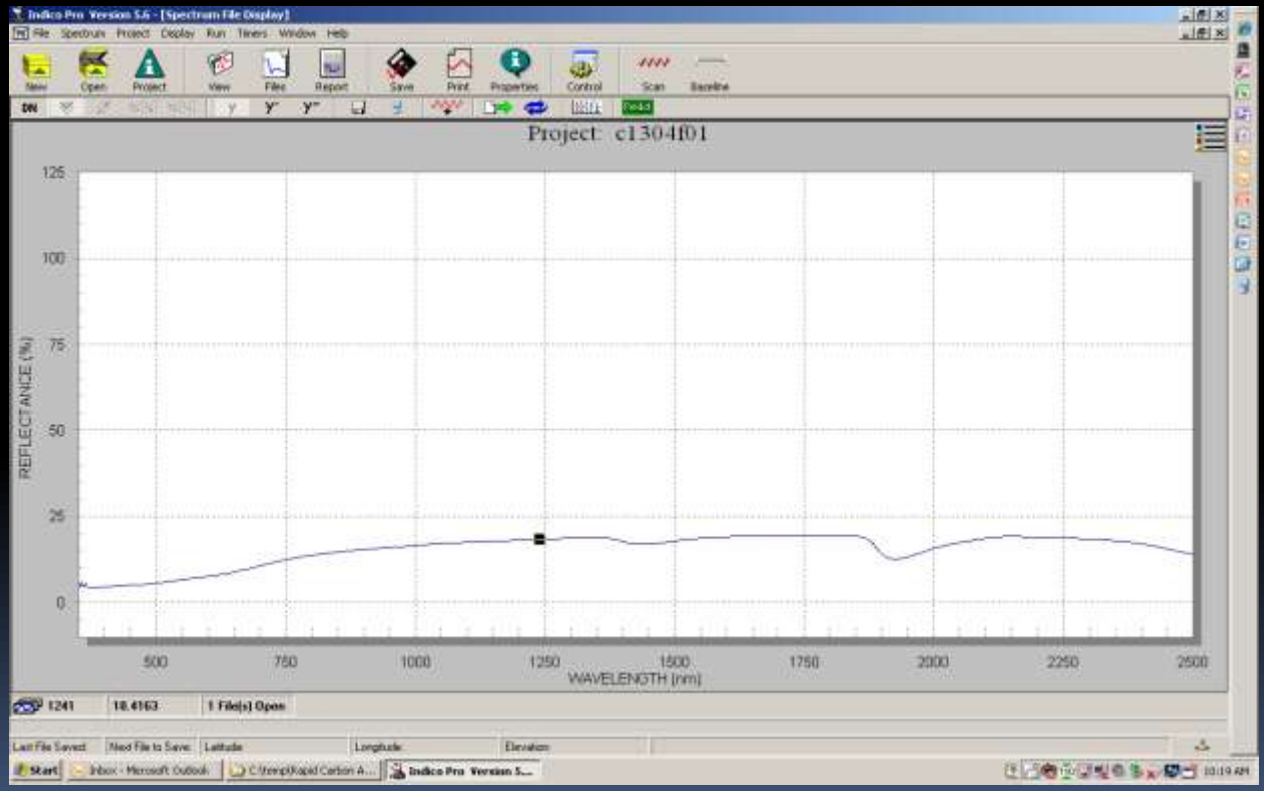
Percent Complete by Group/Land Use Combination

% Sampled				"= NA"		"=No wet soils in sites"
	Landuse					
Group	Cropland	Forestland	Pastureland	Wetland	CRP	
1						
2	80.0%	40.0%	40.0%			
3		50.0%				
4	100.0%	60.0%	0.0%	0.0%		
5	20.0%	12.5%	0.0%	20.0%		
6		80.0%		40.0%		
7	75.0%	26.5%	12.5%	20.0%	0.0%	
8	120.0%	16.7%	20.0%	0.0%		
9	0.0%	20.0%	0.0%	20.0%		
10	40.0%	33.3%	40.0%	40.0%		
11	60.0%	17.6%	30.0%			
12	40.0%					
13	40.0%	40.0%	20.0%	60.0%		
14	80.0%	13.2%	12.5%	0.0%	0.0%	
15	20.0%	37.5%	0.0%			
Federal Land	0.00%	0.00%	0.00%	0.00%	0.00%	
		Updated 3-16-2011				

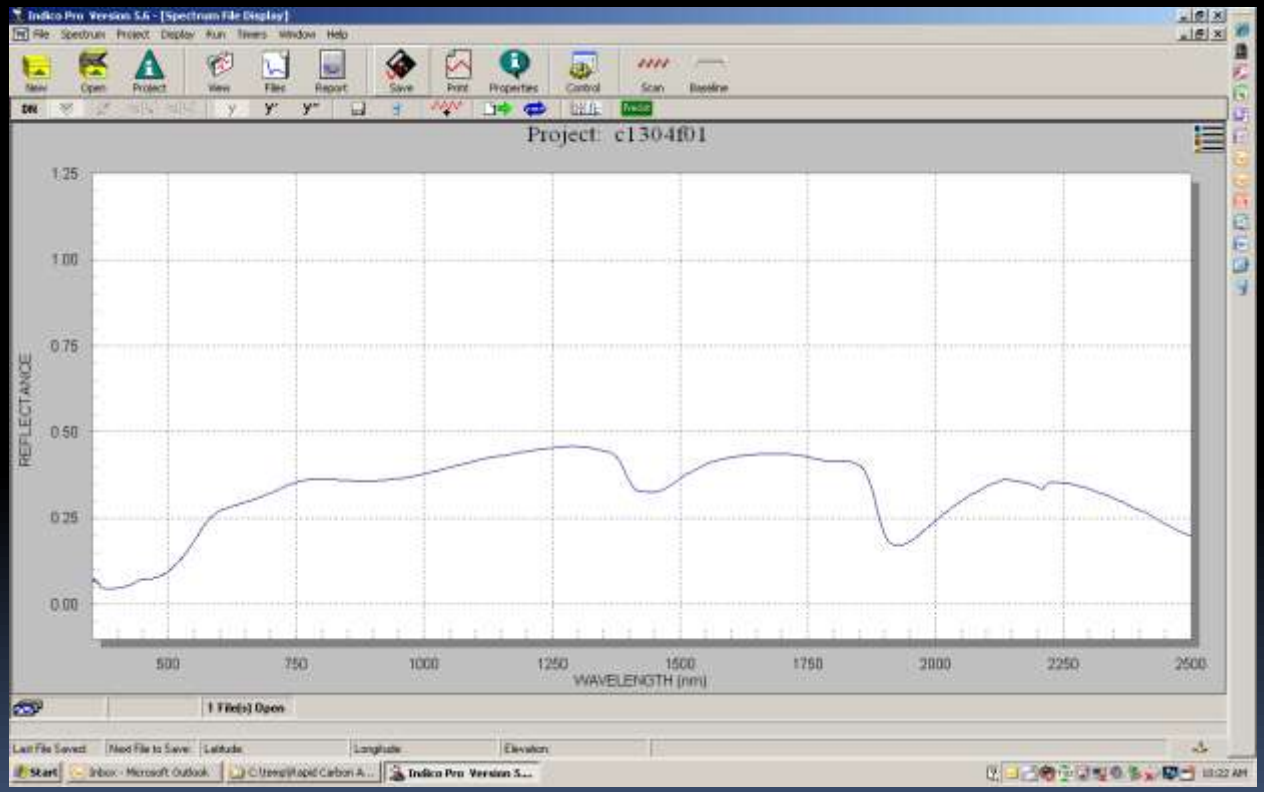
Organic Horizon
Visual and Near Infrared Scan



High Organic Carbon
Mineral Horizon



Low Organic Carbon
Mineral Horizon



Ecological Site Descriptions

- As these are new to the East, there is a steep learning curve and we are undertaking it as time and resources allow.
  - Currently working on a Red Spruce ESD which is a high elevation species that has had its range "threatened" by post European Settlement harvesting and subsequent fire.

- ESD User Guide can be downloaded at; http://esis.sc.egov.usda.gov/Welcome/pgESDWelcome.aspx

NASIS ver. 6.1

NASIS – National Soil Information System

Manage soil survey data throughout all stages of soil survey from collection to publication.

Allows for the creation of reports and interpretations.

Any questions?