

Soil Management

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- Outline of this presentation:
 - ◆ NRIS-Terra/NASIS Database Integration
 - ◆ Federal Lands Advisory Group
 - ◆ Forest Service SRI/TEUI Priority Work Areas
 - ◆ Soil Quality Standards and Monitoring Protocols
 - ◆ Long-term Soil Productivity Program

NRIS-Terra/NASIS Database Integration

- ❖ Forest Service Natural Resource Information System (NRIS)-Terra uses soil map unit data and interpretations down-loaded from NASIS.
- ❖ Integration will reduce redundant data and improve data sharing between the NRCS and the Forest Service.
- ❖ A pilot database interaction project has been recently completed and shows that NASIS and NRIS can interact across the two Agencies' firewalls.
- ❖ A business needs analysis for the Forest Service is underway to assist NRCS in its update of NASIS.
- ❖ NRIS Terra is scheduled for a major update in FY2007. NASIS will be released in late 2007.

Federal Lands Advisory Group

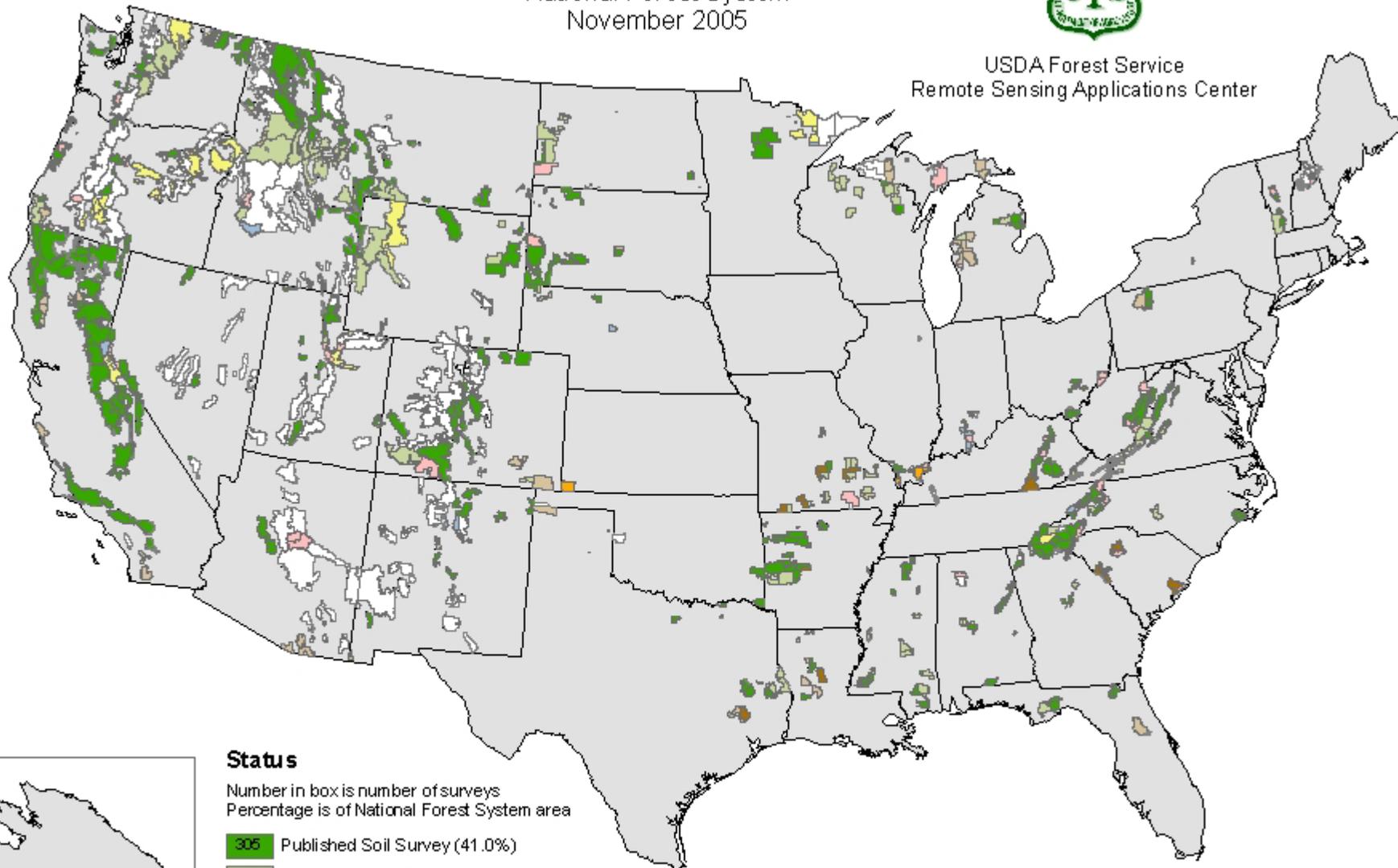
- ❖ The group was established in 2005 and is composed of representatives from the NRCS, BLM, Park Service, Department of Defense, and Forest Service
- ❖ Commissioned by the National Cooperative Soil Survey (NCSS) to develop a cohesive strategy to complete the soil resource and/or terrestrial ecological unit inventory of the United States including:
 - ❖ Identification of priority areas to focus limited funding and staffing,
 - ❖ Identification of potential work sites,
 - ❖ Staffing and funding needed to complete first priority inventory areas in five years.

STATUS OF SOIL SURVEYS

National Forest System
November 2005



USDA Forest Service
Remote Sensing Applications Center



Status

Number in box is number of surveys
Percentage is of National Forest System area

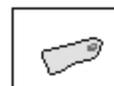
306	Published Soil Survey (41.0%)
109	Initial Mapping Complete (13.7%)
22	Initial Mapping in Progress (5.0%)
6	Update Field Work Complete (0.3%)
22	Update Field Work in Progress (0.8%)
60	Out of Date Publication (3.6%)
62	Maintenance Needed (4.0%)
37	Maintenance (1.5%)

Sources:
USDA Natural Resources Conservation Service
USDA Forest Service

Projection: Albers Conical Equal Area

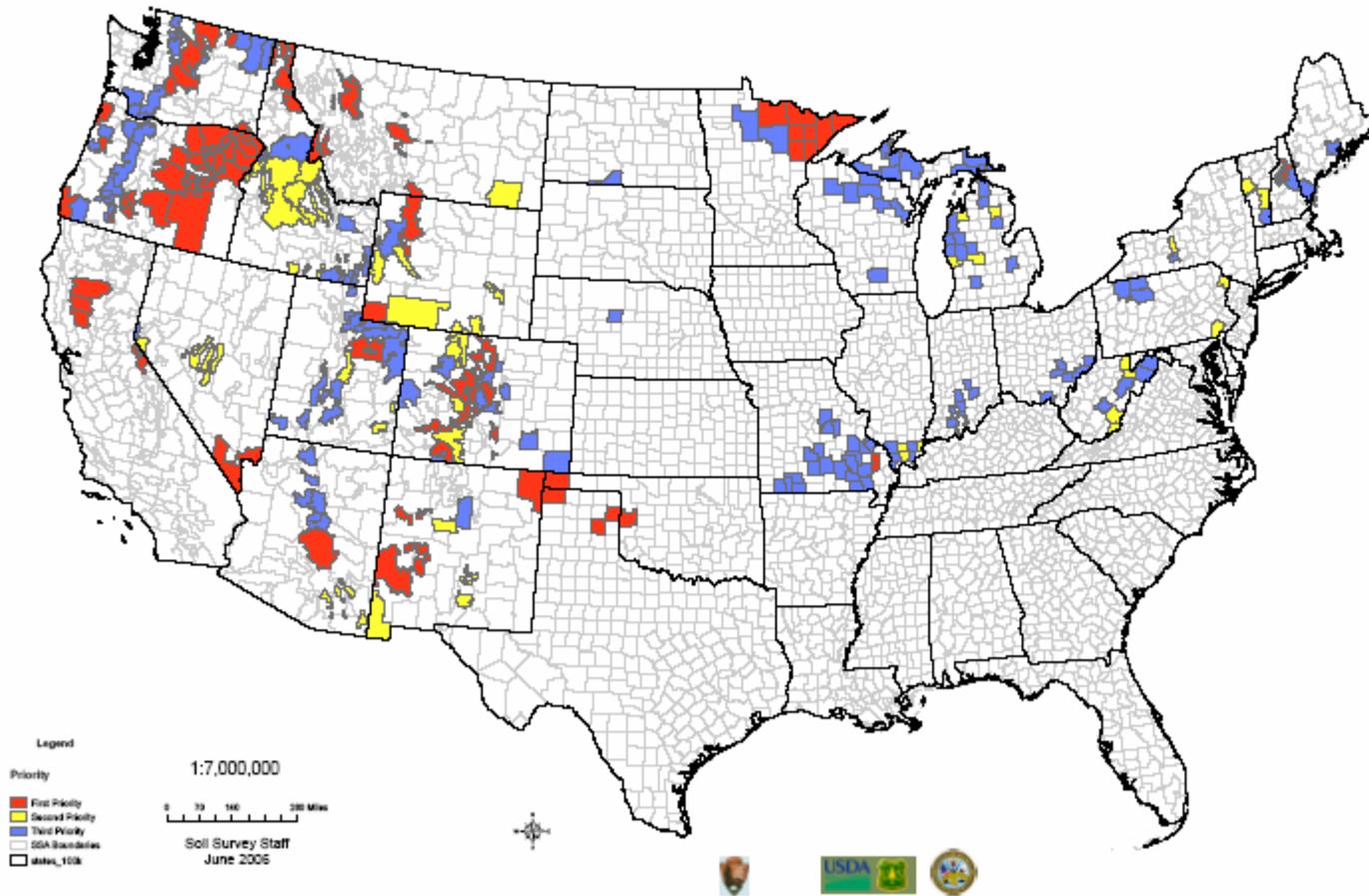
250 500 1,000 Miles

0 250 500 1,000 Miles



Same scale

USDA Forest Service Soil Survey Priorities - (Conterminous U.S.)



Summary of Regional SRI/TEUI Priority 1 and 2 Projects and Acreages

FS Region	No. Projects	Acreage
Northern (1)	7	8,174,800
Rocky Mountain (2)	11	13,031,000
Southwest (3)	11	10,297,000
Intermountain (4)	17	17,251,000
Pacific Southwest (5)	3	647,000
Pacific Northwest (6)	27	13,857,000
Southeastern (8)*	17	785,000
Eastern (9)	26	2,147,000
Alaska (10)	2	439,000
Totals	121	65,860,526
<small>*County SSAs</small>		

State of Idaho Analysis of USFS SRI Workload

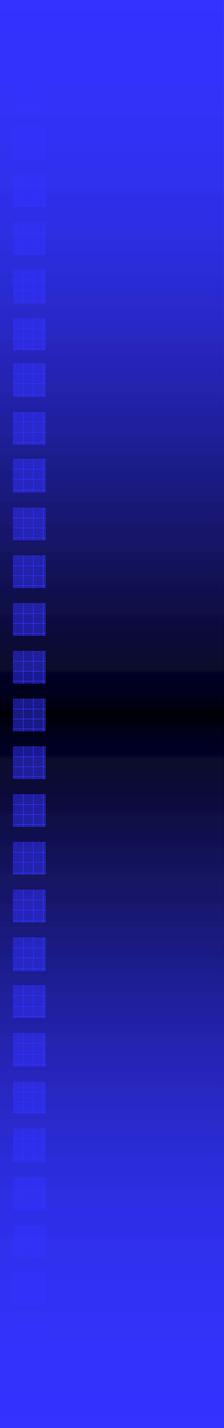
			Year of Survey				
			Acres Produced				
			Year 1	Year 2	Year 3	Year 4	Year 5
Forest	USFS Region	Idaho Acres	0%	25%	25%	25%	25%
Bitterroot NF	1	467,604	(will be mapped in its entirety out of Montana)				
Kaniksu NF	1	897,171	Panhandle National Forest				
Kootenai NF	1	45,108					
St. Joe NF	1	718,402					
Coeur d'Alene NF	1	721,374					
Clearwater NF (Palouse RD)	1	60,524					
Nez Perce NF	1	2,217,366	(correlated and certified)				
Clearwater NF	1	1,753,518	0	438,380	438,380	438,380	438,380
Boise NF	4	2,571,930	0	642,982	642,982	642,982	642,982
Cache NF	4	263,336	(will be mapped in its entirety out of Utah)				
Caribou NF	4	957,256	0	239,314	239,314	239,314	239,314
Challis NF	4	2,461,563	0	615,391	615,391	615,391	615,391
Curlew National Grassland	4	42,917	(mapped as part of the Oneida soil survey)				
Payette NF	4	2,378,751	0	594,688	594,688	594,688	594,688
Salmon NF	4	1,690,160	0	422,540	422,540	422,540	422,540
Sawtooth NF	4	1,720,790	0	430,197	430,197	430,197	430,197
Targhee NF	4	1,283,783	(correlated - not certified)				

Forest Service Soil Quality Standards (SQS) and Monitoring Protocols

- ❖ An interregional work group has been established to develop soil quality standards.
- ❖ Forest Service - Ecosystem Management Coordination is sponsoring this initiative.
- ❖ Forest Service - Northern Region is leading the development of National SQS:
 - ❖ Several recent law suite decisions have focused on soil quality issues.
 - ❖ The Region has convened a team to develop a set of protocols.

Long-term Soil Productivity Program

- The ten year report has been released, notable findings:
 - ◆ Organic matter removal affected soil carbon in the upper 20cm and in some sites affected soil nitrogen.
 - ◆ Management induced increases in soil bulk density had a greater affect on soils with low to moderate initial bulk densities. Soils with bulk densities of 1.4 g/m³ were not affected.
 - ◆ Induced increases in bulk density recover very slowly if at all.
 - ◆ Vegetation growth response varies with soil texture:
 - Sandy soils increased vegetation growth
 - Clayey soils decreased vegetation growth
 - ◆ The national MOU is being reviewed to see what changes are needed to address current land management issues.



Questions?

Discussion