

# Soil Management

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

# NRIS-Terra/NASIS Database Integration

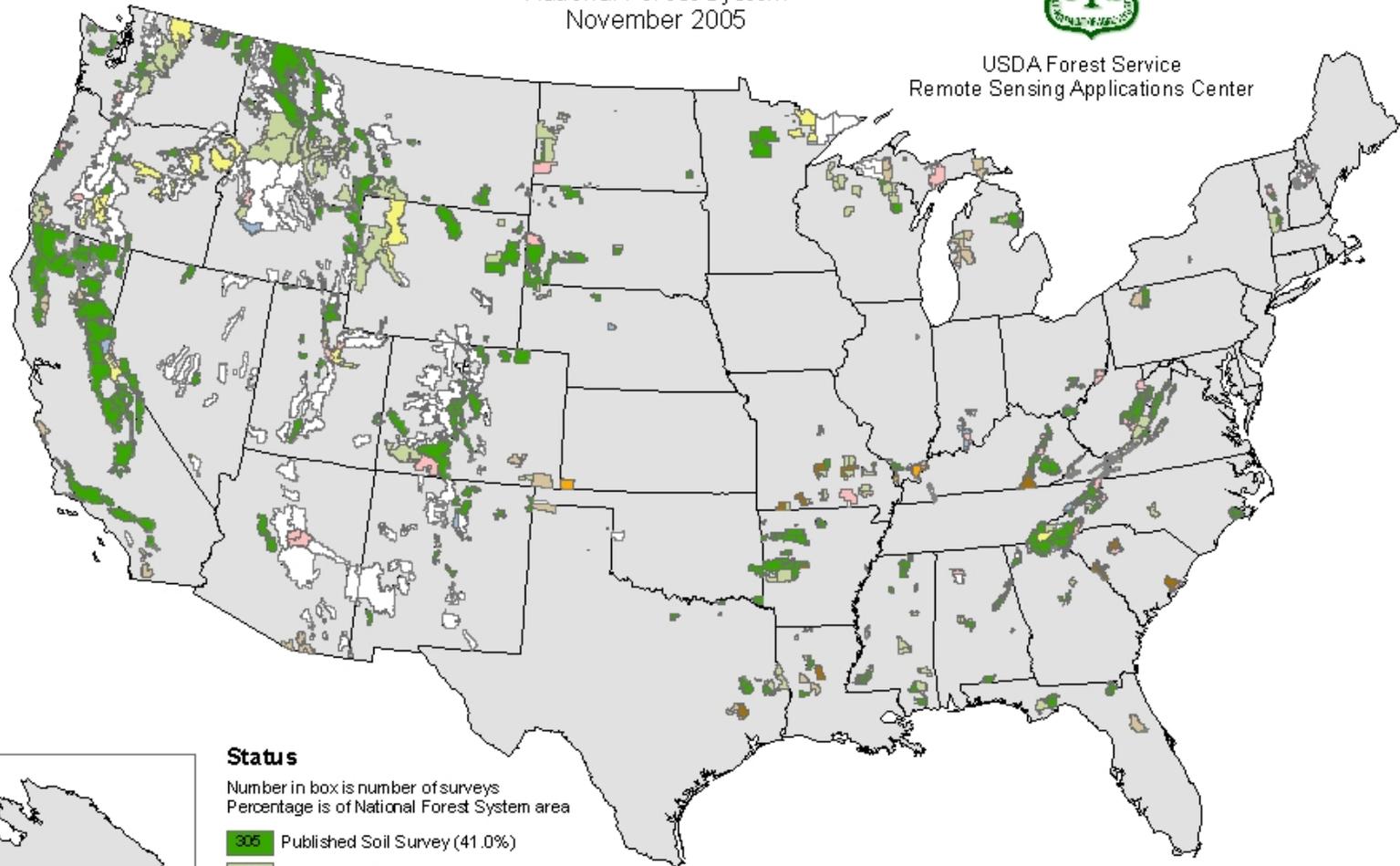
- ❖ Forest Service Natural Resource Information System (NRIS)-Terra uses soil map unit data and interpretations down-loaded from NASIS.
- ❖ Integration will reduce redundant data and improve data sharing between the NRCS and the Forest Service.
- ❖ A pilot database interaction project has been recently 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.

# STATUS OF SOIL SURVEYS

National Forest System  
November 2005



USDA Forest Service  
Remote Sensing Applications Center



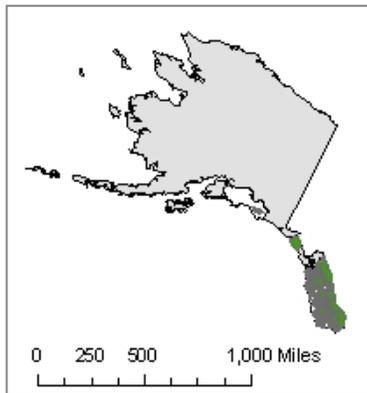
## Status

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

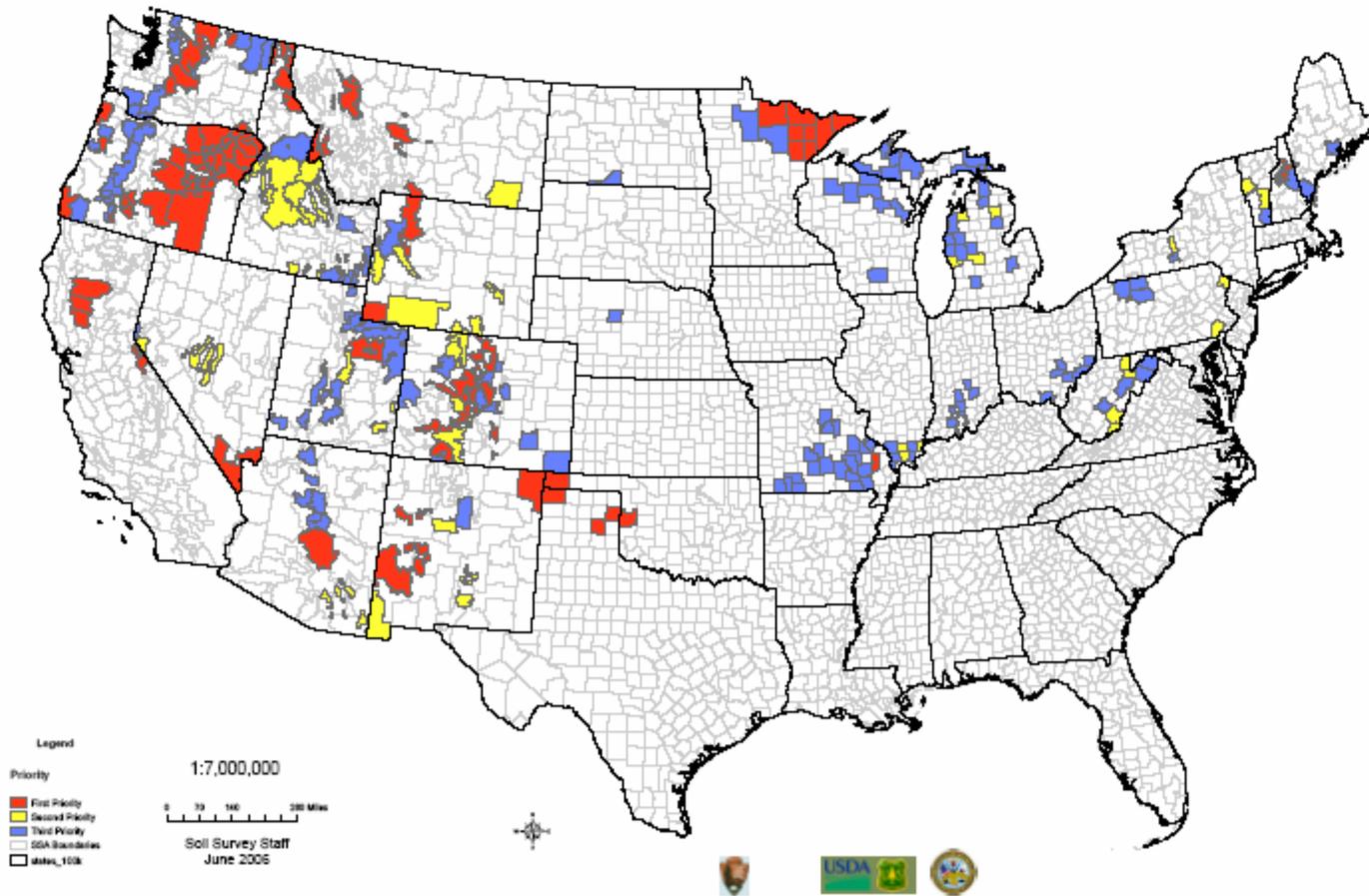
306	Published Soil Survey (41.0%)
109	Initial Mapping Complete (13.7%)
22	Initial Mapping in Progress (5.0%)
6	Update Field Work Complete (0.3%)
22	Update Field Work in Progress (0.8%)
60	Out of Date Publication (3.6%)
62	Maintenance Needed (4.0%)
37	Maintenance (1.5%)
70	Non Project (30.1%)

Sources:  
USDA Natural Resources Conservation Service  
USDA Forest Service

Projection: Albers Conical Equal Area



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



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

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

## State of Idaho Analysis of USFS SRI Workload

			Year of Survey				
			Acres Produced				
Forest	USFS Region	Idaho Acres	Year 1	Year 2	Year 3	Year 4	Year 5
			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)				

# 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.

## 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/m<sup>3</sup> 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**