

**Southern Regional Cooperative Soil
Survey Conference
College Station, Texas
July 13, 2010**



AN OVERVIEW OF THE SOIL AND WATERSHED IMPROVEMENT PROGRAMS

**USDA-FOREST SERVICE
SOUTHERN REGION
EMANUEL HUDSON, REGIONAL SOIL &
WATERSHED IMPROVEMENT MANAGER**

Vision – Knowledge of soils and their properties, distribution, and behavior are recognized as essential to understanding ecosystem (watershed) composition, structure and function.

Mission – Integrate scientifically based soil information into management decisions and practices to sustain healthy, diverse, and productive ecosystems (watersheds) to meet the needs of present and future generations.



Program Components

Inventory

Monitoring

Assessments

Support Services

Water Resource Management

Riparian and Wetland

Management

Restoration/Improvements



Program Components

Inventory



National Forest	State	County	MO	MLRA	SRI Type	NF's Acreage	Acres Plan (Date)	Acres Accom (Date)	Acres Remaining
NF's in AL	Alabama					667,274			
		Winston		AL133	Update	89,474	20,000 FY-10	50,000	19,474
		Bibb		AL007	Update	60,697	60,697 FY 01-07	60,697 FY-2008	0
El Yunque NF						28,002	28,002 FY 00-02	28,002 FY-02	0
Chatt/Oc NF's	Georgia					864,424			
		Dade &walker	MO 18	128 & 129	On-going	18,844	0	FS- completed	0
		Greene	MO 14	133	On-going	26,659	Completed 1986	FS completed	0
		and		GA648	Update	62,645	62,645 FY- 2002-2007	62,645 FY- 2008	0
Cherokee NF	Tennessee					636,797			
		Unicoi			Digitized Cherokee NF's	56,897	56,897 FY-2008	56,897 FY-09	0
DB NF	Kentucky					557,789			
		Menifee			Update	13,000			

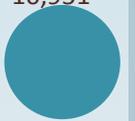
National Forest	State	County	MO	MLRA	SRI Type	NF's Acreage	Acres Plan (Date)	Acres Accom (Date)	Acres Remaining
DBNF's continues		McCreary			Update	1,099			
		Whitley			Update	9815			
		Pulaski			Update	37,41			
					Update	62,428			
		Rockcastle			Update	14,793			
NF's FL	Florida					1,112,489			
		Liberty		FL077	Updated FY-08	267,298	267,298 FY-2007	267,298 FY-08/09	0
Ocala NF	FL	,Marion & Putnam		FL609	Update	383,595	30,000 FY-2010		353,595
							30,000 FY-2011		312,700
							50,000 FY-2012		262,700



National Forest	State	County	MO	MLRA	SRI Type	NF'S Acreage	Acres Plan	Acres Accom	Acres Remaining
FMS NF's	South Carolina					623,724			
Sumter NFs		Newberry			Digitize Updates using LiDAR Technology with field verification	58,974	300 ac. FY- 09		58,974
					Update Newly Acquired Lands	2,379			2,379
		Union			Digitize Updates using LiDAR Technology with field verification	62,313	1700 ac. FY-09		62,313
					Update Newly Acquired Lands	1,560			1,560
		McCormick			Digitize Updates using LiDAR Technology with field verification	51, 235			51, 235
					Update Newly Acquired Lands	2, 052			2,052



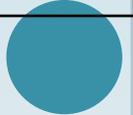
National Forest	State	County	MO	MLRA	SRI Type	NF'S Acreage	Acres Plan	Acres Accom (Date)	Acres Remaining
		Abbeville			Digitize Updates using LiDAR Technology with field verification	23,349			23,349
					Update Newly Acquired Lands	85			85
		Oconee			Digitize Updates using LiDAR Technology with field verification	84,574			84,574
					Update Newly Acquired Lands	4,000			4,000
		Edgefield			Digitize Updates using LiDAR Technology with field verification	31,113			31,113
		Greenwood			Digitize Updates using LiDAR Technology with field verification	10,951			10,951



National Forest	State	County	MO	MLRA	SRI Type	NF'S Acreage	Acres Plan	Acres Accom (Date)	Acres Remaining
		Laurens			Digitize Updates using LiDAR Technology with field verification	20,941			20,941
		Saluda			Digitize Updates using LiDAR Technology with field verification	4,480			4,480
		Chester			Digitize Updates using LiDAR Technology with field verification	12,647			12,647
		Fairfield			Digitize Updates using LiDAR Technology with field verification	11,080			11,080
Francis Marion	SC	Berkeley			Ongoing Field Updates	193,982	8,000 FY-10	36,000 FY-05-10	157,982
					Digitize Updates using LiDAR Technology with field verification	193,982	Top Priority as funds become available		193,982



National Forest	State	County	MO	MLRA	SRI Type	NF'S Acreage	Acres Plan	Acres Accom (Date)	Acres Remaining
Francis Marion continues		Berkeley			Update Newly Acquired Lands	55			55
		Charleston			Ongoing Field Updates	64,960		12,000 FY05-08	52,960
					Digitize Updates using LiDAR Technology with field verification	64,960	Top Priority as funds become available		64,960
					Update Newly Acquired Lands	317			317
GW NF	Virginia					960,303			Mapping meets NRCS Std.
Jeff NF's	Virginia					704,572			Mapping meets NRCS Std.
GW NF	West Virginia					105,099			Mapping meets NRCS Std.
Jeff NF's	West Virginia					18,530			Mapping meets NRCS Std.



National Forest	State	County	MO	MLRA	SRI Type	NF'S Acreage	Acres Plan	Acres Accom (Date)	Acres Remaining
GW/Jeff NF's Total	Virginia					1,664,071			Mapping meets NRCS Std
GW/Jeff NF's Total	West Virginia					123,629			Mapping meets NRCS Std
		Dickerson			Update	8,000	FY-07		Final Correlation pending
Kisatchie	Louisiana					603,393			Mapping meets NRCS Std
NF's in Miss	Mississippi					1,170,816			
		Jasper			On-going	85,299			
		Green			On-going	10,000			
					Un-pub	22,974			
		Perry			Un-pub	162,821			
		Smith			Unpub	72,676			
		Sharkey			1960 pub.	60,215			
		Wayne			On-going	90,146			

National Forest	State	County	MO	MLRA	SRI Type	NF'S Acreage	Acres Plan	Acres Accom (Date)	Acres Remaining
NF's in MS continues		Stone			Un-pub	54,919			
					Digitize Needed	95,596			
		Wilkinson			Un-pub	22,803			
		Winston			Un-pub	28,586			
NF's in NC	North Carolina					1,254,876			
				NC089	Update	17,295			Completed
		Cherokee		NC039	On-going	93,058			Completed
		Caldwell		NC027	Extensive Revision	49,416			
		McDowell		NC111	Extension Revision	73,640			
		Jones		NC103	Extension Revision	39,987			
Ouachita	Arkansas					1,423,591			
		Yell			Update	110,000			



National Forest	State	County	MO	MLRA	SRI Type	NF'S Acreage	Acres Plan	Acres Accom (Date)	Acres Remaining
Ouachita NF continues		Perry				90,000			
Oz/St Francis NF's	Arkansas					1,138,176			
				AR143	Update	21,681			
NF's in Texas	Texas								
				TX419	Update	67,792			
				TX471	Update	54,074			
		Dallam		TX111	Update	77,463			
		Gray		TX179	Update	1,124			
		Hemphill		TX211	Update	576			
		Montague		TX337	Update	61			
LBL	Kentucky					106,458			
		Lyon				45,692			



National Forest	State	County	MO	MLRA	SRI Type	NF'S Acreage	Acres Plan	Acres Accom (Date)	Acres Remaining
LBL continues	Kentucky	Trigg				60,766			
	Tennessee	Stewart			On-going	63,852	35,000		



o Program Components

- Inventory
- **Monitoring**



o Program Components

- Inventory
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- **Assessments**



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- **Support Services**



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- Inventory
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- **Water Resource Management**



Program Components

- Inventory
- Monitoring
- Assessments
- Support Services
- Water Resource Management
- **Riparian and Wetland Management**



National Soils Program Strategy for Soil Sustainability



National Soils Program Strategy for Soil Sustainability

Goals:

Ensure sustainable ecosystems through quality soil management
Ensure that budgets, skills and performance lead to quality land stewardship



National Soils Program Strategy for Soil Sustainability

Objectives:

- **Ensure that soil quality objectives are included as a component of ecosystem health and sustainability assessments**
- **Institutionalize NASIS as the National Hierarchy for conducting soil surveys, and provide for the spatial delineation and collaborative sharing of data at multiple-scales by various agencies**



National Soils Program Strategy for Soil Sustainability

Objectives:

-Ensure that soils staffing and skills are tied to program emphasis areas and legal mandates to achieve quality land stewardship and be responsive to changing agency needs



USDA STRATEGIC PLAN 2010-2015

Strategic Goal 2: Ensure Our National Forests and Private Working Lands Are Conserved, Restored, and Made More Resilient to Climate Change, While Enhancing Our Water Resources



OBJECTIVE 2.1 – RESTORE AND CONSERVE THE NATION’S FORESTS, FARMS, RANCHES, AND GRASSLANDS

- Restoring declining ecosystems and protecting healthy ones will ensure the Nation’s lands are resilient to threats and impacts from a changing climate.
- It will also provide ecosystem benefits, food, fiber, and timber and non-timber products in a sustainable way. USDA will use the restoration of watershed and forest health as a core management objective of the National Forests and Grasslands.



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- USDA will use the restoration of watershed and forest health as a core management objective of the National Forests and Grasslands.





OBJECTIVE 2.3 – PROTECT AND ENHANCE AMERICA’S WATER RESOURCES

- Protecting America’s supply of clean and abundant water is among the most crucial environmental challenges of the 21st century. Water is essential for life.
 - This precious resource is the foundation for healthy ecosystems, sustainable agricultural and forest production, livable communities, and viable industry.
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- **As water flows from forested headwater streams, through wetlands, over rural agricultural lands and urban watersheds to estuaries and oceans, USDA will strategically invest its resources to prioritize and accelerate the protection of water resources.**



OBJECTIVE 2.4 – REDUCE RISK FROM CATASTROPHIC WILDFIRE AND RESTORE FIRE TO ITS APPROPRIATE PLACE ON THE LANDSCAPE

- Wildfires have a natural role on our landscape. Many forests, rangelands, and grasslands are actually dependant on fire for ecological health and sustainability.



- Impacts from climate change, drought, and the accumulation of flammable vegetation, combined with the increasing development in fire-prone areas, are causing more severe fires on the landscape and potentially increased damage to communities.



- Preventing catastrophic wildfires is also important for ecological and watershed health. At the same time, restoring fire to natural areas that are fire-dependant ecosystems will help reduce fuel loads, lessen the risk of damaging fires, enhance wildlife habitats, and restore ecological and watershed function and resiliency.



NATIONAL FOREST FOCUS AREAS:

- Watershed Condition
- Climate Change
- Ecosystem Sustainability
- Fuel Management



Region 8 Existing Staffing Level (July 13, 2010)

National Forest	# Soil Scientist Positions	Hydrologist Positions	# Current SCSEP	# Trainee
NF's AL	1 (<3yrs. retirement eligible)	1	0	0
El Yunque		0.25	0	0
Chatt/Oconee NF's	1 (<3yrs. retirement eligible)	1	1- Soil Scientist (Hudson Vann)	0
Cherokee NF's		0	0	0
Daniel Boone NF	1	1 (<3yrs. retirement eligible)	0	0
NF's in FL	0	1 (<3yrs. retirement eligible)	0	0
FM&S NF's	1	1 (<3yrs. retirement eligible)	0	0
3W/Jeff NF's	1 (<3yrs. retirement eligible)	1 (<3yrs. retirement eligible)	0	0
Kisatchie NF	0	1 (<3yrs. retirement eligible)	0	0
NF's in MS	2	1 (<3yrs. retirement eligible)	0	0
NF's IN NC	0	1	0	0

Region 8 Existing Staffing Level (July 13, 2010)

National Forest	# Soil Scientist Positions	Hydrologist Positions	# Current SCSEP	# Trainee
Ouachita NF	1	1	0	0
Ozark ST. Francis NF's	1 (<3yrs. retirement eligible)	1	0	1-Mason
NFGT	1	0	0	1-Jasper
LBL	1	0	0	0



CHALLENGES

- **Maintaining Skills and Providing Career Opportunities.**
- **Conducting proper soil resource effects analysis, developing landscape or Forest-level plans**
- **Developing watershed restoration projects, and assessing soil quality at current organizational**
- **Difficulty to employ entry-level soil scientists to adequate maintain an adequate skill pool into the future. It also must develop career ladders for scientists within their specialty so that it can recruit and retain highly qualified and motivated staff.**



- Transitioning to an “All Lands, Seamless Boundary” management concept
- Keeping SRI relevant because of land acquisition
- Funding issues on “Augmentation of Federal Funds (EWP)”
- Retirement Attrition
- Execution of unfunded mandates
- Meeting Critical Operational Functions with current workforce



OPPORTUNITIES

- Enhancement of partnership opportunities with expanded Wyden Authority
- Cross-Training through NRCS Technical Training Centers
- Migration of OSDs into Pedon-PC
- Weeks Act of 1911 100th Celebration



- Recognition of YLT Land Utilization Project between NRCS and FS
- Continuation of the excellent working relationship with our partner - NRCS



○ THANKS NRCS FOR OVER 60 YEARS
OF NCSS COLLABORATIVE
PARTNERSHIP

○ QUESTIONS??

