



Sustainable Operations



US Forest Service

Creating Habits Today, Conserving Resources for Tomorrow

Wednesday, October 29th

The focus of Sustainable Operations is to reduce the environmental footprint of the Forest Service and be a leading example of a green organization. There are two goals:

- Forest Service leaders are international models for the best sustainable practices.
 - Model sustainable practices throughout all aspects of Forest Service program management and service delivery.
 - **Lead:** WO Ecosystems Coordination
 - **ENVIRONMENTAL MANAGEMENT SYSTEMS:** Implement EMS at all appropriate organizational levels to ensure use of EMS as the primary management approach for addressing environmental aspects of agency operations and activities (how we do everything that we do).
 - <http://www.fs.fed.us/sustainableoperations/ems.shtml>
 - Create an informed citizenry by advancing environmental literacy.
 - **Lead:** State and Private Forestry
- Forest Service operations and business practices exceed green standards in fleet and transportation, energy, watershed, purchasing, and waste management.
 - Achieve zero emissions in fleet and transportation by 2015.
 - **Lead:** WO Engineering
 - **VEHICLES:** Increase purchase of alternative fuel, hybrid, and plug-in hybrid electric vehicles when commercially available.
 - **PETROLEUM CONSERVATION:** Reduce petroleum consumption in fleet vehicles by 2% annually through 2015.
 - **ALTERNATIVE FUEL USE:** Increase alternative fuel consumption at least 10% annually.
 - Become an energy neutral Agency by 2020; 25% by 2012; 50% by 2016; and 100% by 2020.
 - **Lead:** WO Engineering
 - **ENERGY EFFICIENCY:** Reduce energy intensity by 3 % annually through 2015 or by 30% by 2015.



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- **GREENHOUSE GASES:** By reducing energy intensity by 3% annually or 30% by 2015, reduce greenhouse gas emissions.
- **RENEWABLE POWER:** At least 50% of current renewable energy purchases must come from new renewable sources (in service after January 1, 1999).
- **BUILDING PERFORMANCE:** Construct or renovate buildings in accordance with sustainability strategies, including resource conservation, reduction, and use; siting; and indoor environmental quality.
- **ELECTRONICS MANAGEMENT:** Annually, 95% of electronic products purchased must meet Electronic Product Environmental Assessment Tool standards where applicable; enable Energy Star® features on 100% of computers and monitors; and reuse, donate, sell, or recycle 100% of electronic products using environmentally sound management practices.
- Become the world leader for water conservation and water source protection by 2020.
 - **Lead:** WO Watershed, Fish, Wildlife, Air, and Rare Plants
 - **WATER CONSERVATION:** Reduce water consumption intensity by 2% annually through 2015.
 - **WATER CONSERVATION/EFFICIENCY/EVALUATIONS:** Complete water conservation/efficiency evaluations at 25% of facilities per year.
- All purchased goods and services and the performance of our suppliers, contractors, and partners exceed green standards in production, packaging, storage, supply chain and delivery.
 - **Lead:** WO Acquisitions Management
 - **PROCUREMENT:** Expand purchases of environmentally-sound goods and services, including biobased products.
- Achieve 40% waste diversion by 2010 and exceed sustainable waste prevention and recycling business practices throughout all Forest Service program activities.
 - **Lead:** WO Acquisitions Management
 - **POLLUTION PREVENTION:** Reduce use of chemicals and toxic materials and purchase lower risk chemicals and toxic materials from top priority list.

Institutionalizing Sustainable Operations

It is not about new work, it is about doing our work differently.



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Policy

Strategic Plan - Created a companion document for the Strategic Plan to describe the relationship between climate change and the goals and measures in the plan.

Programs and Budget Allocation – Guidance was provided in the initial FY 2009 PBA responding to climate change and sustainable operations. Final due December 31, 2008.

Manual/Handbook Direction – FSM 1300 Management; a sustainable operations directive has been developed for issuance this winter. FSM 6400 Property Management; a waste prevention, recycling, acquisition and green purchasing directive has been developed for issuance this spring 2009. FSH 6509.19 Asset Financial Management; a recycling, reuse, salvage, waster reduction, pollution prevention, and energy rebate directive has been developed for issuance summer 2009.

Legislative Activity

Accountability

Sustainable Operations Measures were included into the Agency's performance Accountability System (PAS) for FY 2008. The performance indicators are:

	<u>FY 2007</u>	<u>FY 1-3Qtr 2008</u>	
• Total Forest Service vehicle fuel consumption	\$11,257,427	\$7,247,828	64.4% of 07
• Miles driven by passenger carrying vehicles	0	83,681,569	
• Dollars cost of electricity	\$17,495,739	\$13,018,695	74.4% of 07
• Dollars cost of fuel oil	\$828,907	\$919,342	110.9% of 07
• Dollars cost of natural gas	\$2,612,801	\$2,620,356	100.3% of 07
• Number of facilities that hold LEED certification	Not Tracked	3	
• EMS Audits completed/facility	Not Tracked	(Planned)12	

Although this data will not be complete until early November, here are the top 10 Units for reduced vehicle fuel use and energy cost reductions:

<u>Reduced Fuel Use</u>	<u>FY 2007</u>	<u>FY 1-3Qtr 2008</u>	
• Pacific Northwest Research Station	277	56	20% of 2007
• Forest Products Lab	2,644	1,363	51.6% of 2007
• Region 4	1,115,328	596,233	53.5% of 2007



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• Region 10	55,613	30,465	54.8% of 2007
• Region 1	957,852	538,957	56.3% of 2007
Energy Cost Reductions			
	FY 2007	FY 1-3Qtr 2008	
Region 1	1,031,287.0	82,848.0	75.9%
Region 2	866,289.0	611,519.0	70.6%
Region 3	753,670.0	554,146.0	73.5%
Region 4	698,833.0	508,942.0	72.8%
Region 5	3,659,030.0	2,505,001.0	68.5%
Region 6	2,064,991.0	1,625,476.0	78.7%
Region	0.0	9,585.0	0.0
Region 8	2,297,058.0	1,583,251.0	68.9%
Region 9	876,048.0	636,044.0	72.6%
Region 10	410,219.0	298,218.0	72.7%
Forest Products Lab	432,260.0	235,999.0	54.6%
International Forestry	142,625.0	84,153.0	59.0%
Washington Office	148,474.0	141,215.0	95.1%
Interfund Transfers	44,183.0	19,145.0	43.3%
Job Corps	2,432,043.0	2,100,776.0	86.4%
Rocky Mnt. RS	287,374.0	195,413.0	68.0%
North Central RS	410,082.0	324,936.0	79.2%
North Eastern RS	23,774.0	163,261.0	686.7%
Business Process Reengineering	149,706.0	119,175.0	79.6%
Pacific Northwest RS	238,609.0	188,561.0	79.0%
Pacific Southwest RS	492,650.0	301,361.0	61.2%
Northeastern Area	36,534.0	29,670.0	81.2%

There has been some concern expressed about using cost information as a progress indicator. Organizational costs will continue to be included in a suite of indicators to determine necessary actions and progress toward goals. As the Agency's EMS becomes more robust, it will serve as the primary management tool to establish baselines, data standards and sources, and performance or service metrics.

For most of these measures, data are available at the national, R/S/A, and individual unit level. The reports show data for both FY 2007 and 2008 for all except the miles driven, LEED, and EMA Audits measure in the Sustainable Operations report, where only FY 2008 data are displayed. These reports are updated on a quarterly basis through the Agency's Performance Accountability System (PAS), with data for the full fiscal year available in early November. You can access PAS (through E-Authentication)



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[Performance Accountability System \(PAS\)](#). A number of other financial and information management systems will be modified to capture, assess, report and display data associated with each of the focus areas as EMS is implemented.

Sustainable Operations Measures in 2009 will be expanded to include facility energy audits completed; ESPCs in place; number of alternate fuel vehicles; alternative fuel use; number of hybrids; number of plug-in hybrid vehicles; waste management costs; recycling revenue; EPEAT standards for all laptops, computers, monitors, servers, cell phones, and radios; greenhouse gas inventories completed; energy, fuels, natural gas consumption and costs; % biobased products purchased; % green meetings, conferences, and events standards met, and water conservation/efficiency evaluations completed; and, water consumption and costs indicators.

A Sustainable Operations performance standard was implemented for all supervisory and managerial position performance plans in FY 2008. An audit of measures to determine effectiveness will be completed during FY 2009 with results provided to the Executive Leadership Team.

The FY 2008 Executive Priorities for SES Performance included climate change and sustainable operations goals - February 25, 2008. Associate Chief has taken the lead in developing metrics for FY 2009.

Scorecards for EMS, Energy Management and Transportation management are in place and integrated into the Agency's performance accountability system.

Recognition

The Agency's national recognition program includes Sustainable Operations recognitions in 3 categories:

Closing the Circle Award - The Office of the Federal Environmental Executive (OFEE) is part of the White House Council on Environmental Quality and the sponsor of the Closing the Circle (CTC) Awards. Recognitions focus on innovative, cost-effective contributions in increasing the purchase of recycled content, biobased, and environmentally preferable products and services; reducing the generation of wastes; incorporating energy and environmental considerations into building design; establishing highly effective environmental management systems at Federal facilities; using alternative fuel vehicles and reducing the fleet fuel consumption; and promoting Federal electronics stewardship efforts. Beginning in FY 2009, the Forest Service will participate in this award program and seek Agency nominations.

Federal Energy Management Program Awards - The Federal Energy Management Program at the Department of Energy recognizes individuals, organizations, and agencies for their energy savings contributions. Beginning in FY 2009, the Forest Service will participate in this award program and seek Agency nominations for the Presidential Awards for Leadership in Federal Energy Management. This award honors Federal employees for their support, leadership, and efforts in promoting and improving Federal energy management.



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Reducing the Environmental Footprint Award - This award recognizes Forest Service individuals, work units or groups that have demonstrated innovative and creative approaches to planning and successful implementation of projects or programs that enhance or create adaptation, mitigation, bio-energy, and sustainable operations opportunities on National Forest System lands and programs. This Award includes monetary recognition and has four levels: Individual (\$5000), Group (\$7500), Unit (\$20,000), and Cooperator (\$10,000).

Employee Training and Development

- Ag-Learn
 - EMS
 - Climate Change (Summer 2009)
 - Sustainable Operations (Summer 2009)
- Senior Leaders Program Component
 - Annual sponsorship of a climate change/sustainable operations work team
- Management Policy Seminar Module
- New Employee Orientation Component
- National Leadership Council Agendas
- Sustainable Operations Quarterly Webinar Series
- Conferences and Symposiums
 - Office of the Federal Environmental Executive (OFEE) Symposiums (East and West)
 - Climate Leaders Conference

Communications and Engagement

The official Sustainable Operations internet website can be found here:

www.fs.fed.us/sustainableoperations - US Forest Service. Program manager and employee information and engagement opportunities include Open Mic; Webinar Series; FS Today; People, Places, and Things; National Environmental Footprint Report, National Energy Report, Sustainable Ops Highlights (newsletter), Sustainable Ops Fact Sheet. On-going input for the "Big Screen Monitors" (water, fleet and transportation, green purchasing, sustainability leadership, waste prevention and recycling, energy). Internal news articles and external publications schedule.

Green Technologies Initiative – Advancing the practice of sustainability through the use of "green" technologies, products, and solutions.

- Solar powered trash compactors with integrated recycling units for WO Headquarters; ASC B&F and HCM, Talledega NF, Kisatchie NF, Munford Elementary School, Bailey's Elementary School, District of Columbia Parks and Recreation, and Southern A&M University; and USDA Headquarters.



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- Battery Recycling Partnership with Rechargeable Battery Recycling Corporation (RBRC) for all recyclable batteries.
- Energy Misers for vending equipment.
- Watt Stopper or Eco-Cords are motion sensor electrical cords that automatically reduce the draw of vampire or phantom electricity for facility use.
- Non-petroleum bio-based water bottles for employees encouraging pollution prevention and sustainable practices.

Partnerships/Outreach

Adopt-A-School Program - Creating a more environmentally literate society through an Adopt-A-School Program, working with Bailey's Elementary School in Fairfax County, VA and Munford Elementary, Middle and High Schools in Talladega, AL, the Forest Service is fostering life-long learning and understanding of natural processes through specific activities that connect kids, parents and teachers to the natural environment. The expansion of this unique partnership into diverse communities will help us ensure a more sustainable future for all.

Sister Schools Program - Creating a more environmentally literate society through linking our Adopt-A-School participants with each other to share resources, information, and encourage the use of technologies. (Talladega and Fairfax County School Districts)

Educator Exchange Program (Teachers/Principals) is an effort to provide teachers and principals with exposure to Federal sector agency mission and programs in order to more effectively partner in advancing natural resource education and stewardship. It provides the Agency with a heightened awareness about the dynamics of 21st century learning and teaching concepts in K-12 educational systems in order to influence curriculum development and engagement activities. (Talladega, Fairfax, Albuquerque, Rio Rancho, and the District of Columbia School Districts)

Green Campus Initiative works to empower students to lead initiatives on their campuses focused on sustainability issues, pollution prevention and recycling. (National Urban League and Southern University)

Green Jobs is a partnership with the Agency's Job Corp Program to ensure green technologies are integrated into the program curriculum; provide trainee opportunities while addressing Agency energy efficiency and sustainable facility and infrastructure goals; and, to contribute to the trained workforce for emerging green industries.

Green Tots is an effort to introduce toddlers to "green" through an eco-healthy childcare program by supporting/encouraging centers to take measures like buying only nontoxic art supplies and bio-based



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products, restricting aerosol sprays and chlorine bleach, and/or no wall-to-wall carpeting. It is a growing trend among day care centers and addresses increasing parent concerns about different environmental factors, toy recalls, etc. In addition, the effort provides support to centers with courses/tools/experiences/sustainable landscapes that teach the children about their role in the environment and their interaction with different ecosystems. (Bright Horizons)

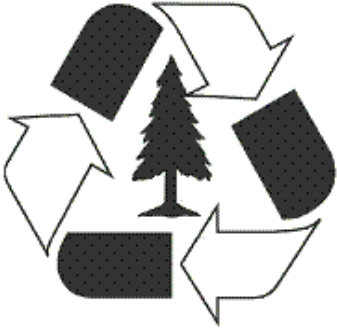
Kids in the Woods is an Agency-wide leveraging program aimed at connecting people, especially youth to the outdoors. The goal of “Kids in the Woods” is to create an enduring impact on young people’s values and attitudes towards nature and their understanding and appreciation for their role in conserving natural resources. The Forest Service has supported and expanded efforts that engage urban, rural and a diversity of communities in experiential, outdoor learning opportunities, better informing past and present generations of their impacts on the health and sustainability of natural resources as well as the benefits of their conservation habits.

National Get Outdoors Day is an annual multiple-agency event to encourage first time visitors, especially children under the age of 14, to enjoy and explore public lands. The first national Get Outdoors Day was held on June 14, 2008 when over 50 official sites across the nation welcomed thousands of new people to their public lands. National Get Outdoors Day is co-sponsored by the American Recreation Coalition and a number of national nongovernmental groups to encourage opportunities for citizens who have been less involved or unaware of outdoor recreation, especially Hispanic, African, and Asian Americans, and many urban dwellers.

Environmental Sciences Summer Intern Program focuses on employment opportunities for students pursuing Environmental Science/Management; Biology/Ecology; Outdoor Education/Recreation; Environmental Policy/Political Science; Conservation/History; and/or other fields that promote the value of natural resources and sustainability. Appointments include assignments that extend the Agency’s efforts in connecting youth to nature through conservation education and experiences and/or technology transfer (High School and HACU in WO and R6)

Partnerships and Projects

Internal – Green School partnerships on the Talladega NF with Munford Elementary School and Bailey Elementary School in Fairfax County, VA. Recreation Center P2, sustainable landscape, and storm water runoff partnership with the District of Columbia; Biomass Heating and Alternative Fuel Partnership on the Kisatchie NF, Research and S&PF; Ecosystem Level Greenhouse Gas Inventory for the Greater Yellowstone Coordinating Group (GYCG) including , Climate Leaders Greenhouse Gas Partnership including WO Headquarters, FPL, PSW, R5, R-8 Frances-Marion Sumter NF, R-10 Tongass NF, and GYCG (Fish and Wildlife Service (two National Wildlife Refuges), Park Service (two National Parks), and the Forest Service (six National Forests); Fleet Management BPR for “right-sizing the fleet”; and green



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technologies initiatives at several locations.

External – EPA – greenhouse gas; OFFE – training and education; National Renewable Energy Lab (NREL) – greenhouse gas, and energy; DOE- ESPCs; USDA – SOC and 5 workgroups (environmental management; facilities; transportation; real property; green purchasing); and LMI – greenhouse gas guidance for the Federal sector. District of Columbia – environmental education programs at recreation centers. Talladega and Fairfax County schools districts. Southern University – P2

SUMMARY:

Every program has roles and responsibilities...

- Acquisition Management – Green Contracting, Granting, Leasing, and Purchasing, Recycling, Transportation Subsidy and Worker Protection, Safety and Health, Property Management, Collection and Disposal, Packaging
- Budget and Program Analysis – Funding Strategy and Incentives
- Chief Information Office – Energy, Green Equipment Purchasing, E-cycling (computers, servers, phones, cells, radio, batteries), Data Centers, and Disposal
- Civil Rights – Diverse Representation and Environmental Education
- Ecosystem Management Coordination – EMS Implementation, Monitoring and Reporting
- Engineering Management – Energy, Facilities, Fleet and Fuels, Hazardous Materials, Recycling and Disposal, Landfills, and Property Management
- External Affairs – Internal and External Communications, and Partnerships
- Finance – Travel, Lodging Facilities, Meetings, Conferences and Events Management, Energy, Water, and Waste Management Cost and Usage
- Fire and Aviation Management – Fleet, Fuels, Green Purchasing, Leasing and Contracting, Emergency Response, Disposal and Recycling
- Human Capital Management – Employee Education, Work Environment Assessment
- International Programs – Technology Transfer
- Lands Management – Sustainable Natural Resource Management, Land Acquisition and Exchanges, Special Use Permit Programs
- Minerals and Geology Management – Energy, Mine Sites
- Office of Communications – Community Relations and Local Relevancy
- Policy and Analysis – Legislation and Policy Analysis
- Range Management – Sustainable Natural Resource Management
- Recreation and Heritage Programs – Concession Programs, Tourism and Volunteerism Programs



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- Research and Development – Global Climate Change, Sustainable Natural Resource Management, Social, Bioenergy, and Biomass Research
- Safety and Health – Employee Health and Wellness, Voluntary Protection Programs, Employee Training Programs
- State and Private Forestry – Sustainable Natural Resource Management in Community, Cooperative, and Urban Forestry
- Strategic Planning and Performance Accountability – Performance Indicators, Monitoring, Reporting (OMB Scorecard and PART), and Evaluation
- Watershed, Fish, Wildlife, Air and Rare Plants – Water Conservation, Wetlands Restoration and Protection

Incentives abound for the Agency. As public servants, our goal is to ensure the best value for the American tax payer; and to create an environment where employees are allowed to look critically at our resource consumption habits and create change; regardless of national or local perspective, resources are limited and every effort to ensure that the most funding is available for mission critical work on the ground versus administrative (electricity, water, trash, etc.) costs is imperative.

There are relatively few policy barriers standing in the way of the Forest Service achievements in all of these areas and executive leadership is expecting the existing organizational hierarchy to integrate, review and adjust programs of work to achieve results in these focus areas. Again, it is not about more or new work, it is about doing our work differently.

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Attachment Enclosed: