United States Department of Agriculture

Office of Sustainability and Climate Change

Fiscal Year 2015 Accomplishment Report

Providing Benefits & Services for the Greater Good

Forest Service Washington Office February 2016

Contents

Message from Leadership: Cultivating Change through Collaboration 1

Setting up the Office of Sustainability and Climate Change 2

The Climate Change Performance Scorecard 2

- Scorecard Success Stories 4
- The Future of the Scorecard 6
- Climate Change Accomplishments with Tribal Communities 6

Team Accomplishments 8

- Corporate Priority Action Items (CPAI) 8
- Field Teams 8

Local Successes 10

Climate Change Scorecard Element 10 Summary for FY15 11

- FY15 Footprint Area Trends by Region 11

Greenhouse Gas Report for FY15 12

Take Action 13

Message from Leadership: Cultivating Change through Collaboration

Mary Wagner,
Associate Chief

Jane Cottrell Henifin,
Associate Deputy Chief,
Business Operations

Cynthia West,
Executive Director,
OSCC

Anna Jones-Crabtree,
Deputy Director of
Operations, OSCC

FY15 was a year of transition and collaboration for sustainability in the U.S. Forest Service. The organizational realignment of the Sustainable Operations Collective and the Climate Change Advisor's Office into the **Office of Sustainability and Climate Change (OSCC)** was approved at the end of the third quarter and the shift into this new structure was initiated. The OSCC provides a new platform for developing responses to climate change and for support of place-based actions to strengthen the resilience of our organization, our lands, and our planet. It is truly exciting to have the organizational ability to bring together new partners and build on those alliances already formed. We empower every employee to take meaningful action toward a sustainable future.

As a combined national office, we are now positioned to lead the federal government in implementing climate change adaptation and mitigation projects on the ground, while simultaneously reducing the agency's carbon emissions and resource use. Nurturing the discoveries and connections between resources and operations positions us to work in our new collaborative network, and creates a foundation for a sustainable future.

The OSCC expands the grassroots organization created by the Sustainable Operations Collective—new voices and minds will be drawn to new issues and ideas. Region, Station, and Area coordinators will be able to involve field employees in ideas beyond their particular location, and augment with new connections with climate change information. The OSCC symbiosis creates a greater inclusive conduit for communication between the Climate Change Advisor's Office and the various tiers of the Forest Service, broadening the audience and opening new ways to utilize research and data.

Together, we are putting into motion the staffing and programmatic framework for FY16. The OSCC will capitalize on the enthusiasm and expertise of its two preceding offices, and it will equip the Forest Service with a holistic approach for addressing climate change. We recognize that meeting our goals will require continued commitment from leadership, and there must be a constant flow of new ideas and different approaches.

A special **thank you** goes out to those who helped maintain the momentum of an ongoing program of work while also cultivating the new space for OSCC to thrive. There are too many of you to name individually, but know that we are proud of your work that moved us forward. We embrace a new year of exploring those critical connections between the resources we use and resilient, thriving ecosystems.

Setting up the Office of Sustainability and Climate Change

Continuing the evolution of Sustainable Operations, in FY15 we started the move from a nationwide Sustainable Operations Collective (as defined by the Nationwide Agreement) into a national office—the **Office of Sustainability and Climate Change (OSCC)**. In FY16, the Sustainable Operations Collective is the **OSCC Operations,** and the Climate Change Advisor's Office is now the **OSCC Resource** group. Joining these two offices will provide new opportunities to connect our consumption with our resource management to help achieve the Forest Service mission.

By the end of the fiscal year, a core transition team with members from the Sustainable Operations Collective and the Climate Change Advisor's Office had finalized many of the position descriptions for the new office and outreached some of those positions. The goal is to have most—if not all—positions filled by the end of the 2016 calendar year. We continue to define roles and responsibilities for positions in the OSCC and will be finalizing the Standard Operating Procedures.

The Climate Change Performance Scorecard

The Forest Service is continuing development of a strategic framework for responding to climate change. In order to connect field units with the strategy, the agency developed the **Climate Change Performance Scorecard** and the **National Roadmap for Responding to Climate Change** (2011) as assessment tools.

The Roadmap outlined the agency's approach to assess, engage, and manage National Forest lands in the face of a changing climate. To maintain accountability and to measure progress towards the Roadmap goals, the Forest Service created the Climate Change Performance Scorecard *(the Scorecard)*.

The Scorecard guides National Forests and Grasslands' work on strategies to prepare for

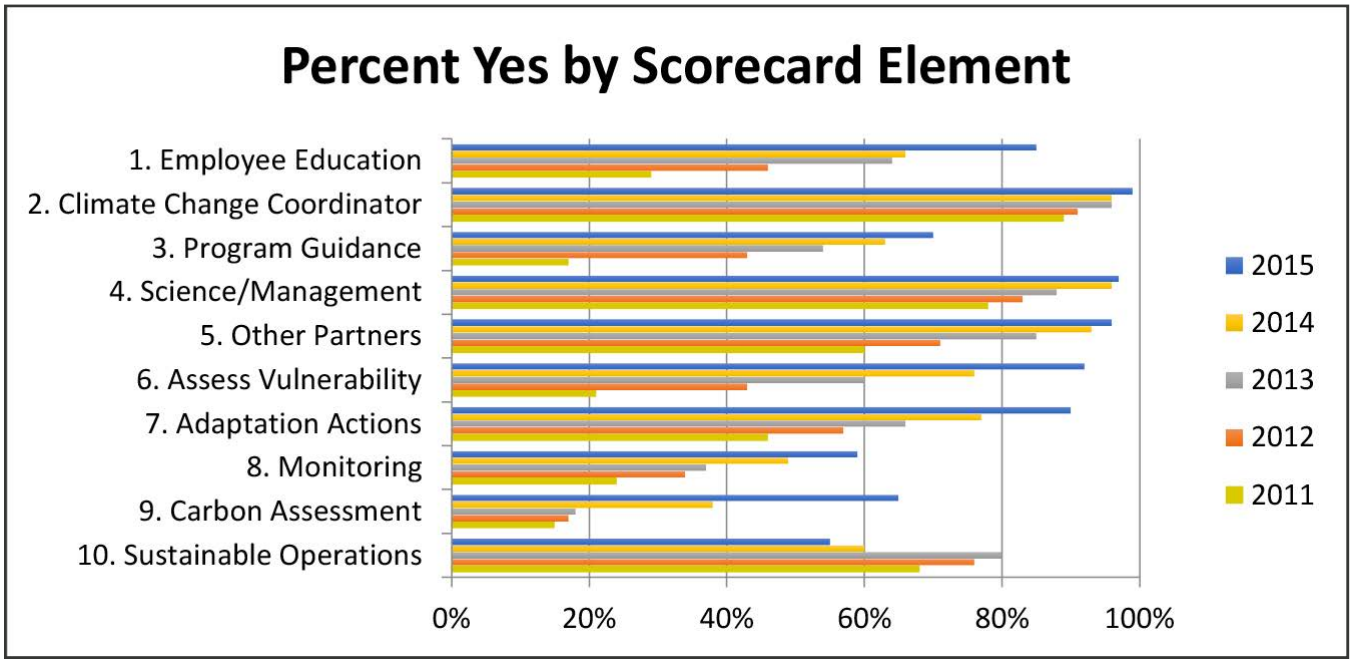
The Forest Service Climate Change Performance Scorecard, 2011 (version 1.3)
To be completed annually by each National Forest or Grassland (Unit).

Scorecard Element	Unit Name	Yes/No
Organizational Capacity		
1. Employee Education	Are all employees provided with training on the basics of climate change, impacts on forests and grasslands, and the Forest Service response? Are resource specialists made aware of the potential contribution of their own work to climate change response?	
2. Designated Climate Change Coordinators	Is at least one employee assigned to coordinate climate change activities and be a resource for climate change questions and issues? Is this employee provided with the training, time, and resources to make his/her assignment successful?	
3. Program Guidance	Does the Unit have written guidance for progressively integrating climate change considerations and activities into Unit-level operations?	
Engagement		
4. Science and Management Partnerships	Does the Unit actively engage with scientists and scientific organizations to improve its ability to respond to climate change?	
5. Other Partnerships	Have climate change related considerations and activities been incorporated into existing or new partnerships (other than science partnerships)?	
Adaptation		
6. Assessing Vulnerability	Has the Unit engaged in developing relevant information about the vulnerability of key resources, such as human communities and ecosystem elements, to the impacts of climate change?	
7. Adaptation Actions	Does the Unit conduct management actions that reduce the vulnerability of resources and places to climate change?	
8. Monitoring	Is monitoring being conducted to track climate change impacts and the effectiveness of adaptation activities?	
Mitigation and Sustainable Consumption		
9. Carbon Assessment and Stewardship	Does the Unit have a baseline assessment of carbon stocks and an assessment of the influence of disturbance and management activities on these stocks? Is the Unit integrating carbon stewardship with the management of other benefits being provided by the Unit?	
10. Sustainable Operations	Is progress being made toward achieving sustainable operations requirements to reduce the environmental footprint of the Agency?	

new conditions created by changing climates, and reduce greenhouse gas emissions. The intent of the Scorecard is to create a balanced approach to climate change. The Scorecard helps units adapt to change, mitigate climate change, build partnerships across boundaries, educate employees, and apply emerging science.

The Scorecard is an assessment tool that consists of ten yes or no questions, or elements. It is intended to track progress toward the Roadmap's goals across four dimensions: **Organizational Capacity, Engagement, Adaptation, and Mitigation**. The agency's goal is to enable each National Forest System unit to answer "Yes" to seven of the ten elements by FY16, including at least one in each Roadmap dimension.

In FY 2015, National Forests and Grasslands completed their fifth annual Climate Change Performance Scorecard Assessments.



Overall Scorecard Results

- 89 percent (100 of 113) of national forest management units responded affirmatively to 7 or more elements. This is a 24 percent improvement on FY14 responses (73 of 113).
- 80 percent of units (90 of 113) achieved their targets by responding "Yes" to 7 or more elements including at least one element in each Roadmap Dimension (up from 61 of113 in FY14).
- Every element except Sustainable Operations (Element 10) saw an increased number of affirmative responses in FY15.[1]

The first five years of Scorecard responses demonstrate sustained progress in each Roadmap Dimension across the National Forest System. The Scorecard program has enhanced organizational awareness of climate change effects on forests and grasslands, and on the communities that rely on products and services generated from those ecosystems.

[1] *As explained below, the Leadership in Sustainable Operations (LISO) database for Element 10 reporting was implemented in FY13 and affected the rate of affirmative responses to that element in FYs 2014 and 2015.*

Scorecard Success Stories

ORGANIZATIONAL CAPACITY SUCCESS

Eastern Region: The release of the education modules and instructional package through the *Climate Change Resource Center* helped increase the number of employees achieving a "Yes" answer in FY15. The **Allegheny NF** employees used the package to complete the individual, self-paced online learning template, and then receive a Certificate of Recognition.

Alaska Region: Climate Change Program Guidance across the Alaska Region has focused on interpretation and stream restoration missions. The **Chugach National Forest** Plan Revision has included a substantial climate change emphasis and a specific focus on future conditions. The **Tongass National Forest** is engaged in a significant Forest Plan Revision that contains specific direction and analyses based on in-depth climate change projections.

Troubleshooting Organizational Capacity

There were initial deficiencies in Element 1, Employee Education. In order to overcome this, the Office of Sustainability and Climate Change (OSCC) developed a training guide and modules for climate change education. Live workshops were also added to the offerings, and there has been a 55 percent improvement in reporting from FY11 to FY15.

Element 3, Program Guidance, continues to show improvement—up over 40 percent from 2011—and,with more top-down guidance, field units will continue to improve this number. The OSCC is working with regional and national personnel to develop explicit climate change language to enhance and inform guidance at the local level.

ENGAGEMENT SUCCESS

Pacific Southwest Region: One particularly strong example of success on Element 5 (Partnerships) stems from the Truckee Ranger District on the Tahoe National Forest. In FY15, the District partnered with the Truckee River Watershed Council and Trout Unlimited to implement two fisheries enhancement projects. The projects will improve stream habitat by introducing large woody debris into Prosser Creek and the Little Truckee River. The added structure to the streams will increase scour and pool depth to the channels. Under current drought conditions stream flows are less than optimal. The project will provide cover and cooler waters for the fish to be more resilient during periods of low stream flows and high temperatures.

Alaska Region: Region 10 is engaged across the state and internationally with science partners to investigate the ecological, economic, and cultural implications of our changing environment, and how we might best act to support sustainable ecological systems, rural communities, and traditional cultures. Examples include:

- ***Pacific Northwest (PNW) Research Station*** – PNW has been on the cutting edge of research on climate change impacts to stream, fisheries, and forest ecology and have been exceptional partners in developing our understanding of future conditions in the Alaska Region. PNW has been crafting adaptation strategies to enable us to continue managing our resources in a sustainable manner.

- ***University of Alaska*** – The University system in Alaska is an essential partner in our understanding of glacial dynamics on National Forest System lands, and have provided significant assistance in our management of glacial retreat and glacial outwash flooding.

ADAPTATION SUCCESS

Rocky Mountain Region: Region 2 developed a Climate Change Intranet Site that houses various assessments that pertain to climate change and natural resource management in the Interior West. Summaries provided in these assessments are particularly useful when describing the existing condition and environmental baseline during the NEPA process. Although this nuance does not show up in the Scorecard, the Rocky Mountain Region has started to use vulnerability assessments to make their analysis more robust and decisions more defensible. Recent Forest Plan Revisions and landscape-scale project analyses have also incorporated information from climate change vulnerability assessments. The Region is also proud of an infrastructure vulnerability assessment that was completed in FY15.

Troubleshooting Adaptation

There was initial confusion about the sequence of completing Element 6, Assessing Vulnerability, prior to completing Element 7, Adaptation Actions. There wasn't a clear understanding of the Assess/Adapt/Monitor sequence intended through the order of the Roadmap Dimensions (i.e. units cannot develop well-reasoned adaptation plans without first understanding their climate-related vulnerabilities). Direct assistance from applied scientists was provided and both Elements are over 90 percent affirmative as of FY15.

Element 8, Monitoring, has improved since FY11 but field units have asked the OSCC to clarify expectations and provide additional tools and support mechanisms to help them carry out these activities.

MITIGATION AND SUSTAINABLE CONSUMPTION SUCCESS

Southwestern Region: Detailed carbon stock assessments are under development by the Southwestern Regional Office for each Forest engaged in Forest Plan Revision, with three reports completed recently and two more forthcoming.

Pacific Southwest Region: Forests continue to undertake environmental footprint reductions, such as: installing programmable thermostats and solar power; installing low flow faucets and toilets; purchasing hybrid fleet vehicles; reducing junk mail; purchasing green products; and rewarding employees for sustainable practices. The 36 R5 Sustainable Operations Microgrant Projects implemented in FY15 will have a payback of less than 2 years with a 391 percent return on investment of 5 years.

Troubleshooting Mitigation and Sustainable Consumption

Element 9, Carbon Assessments, has doubled the affirmative responses from FY14 to FY15, due primarily to the OSCC's completion of regional carbon assessments. There was also clarification on what justified a "Yes" response for this element.

Element 10, Sustainable Operations, continues to make substantial progress despite a slightly declining rate of affirmative responses to Element 10 in FY14 and FY15. This is because implementation of the Leadership in Sustainable Operations (LISO) reporting database in FY13 meant that units had to satisfy a higher bar to respond "Yes" to Element 10. Evidence of the continued progress can be found in the increasing rate of completion for Sustainable Operations action items included within Element 10.

The Future of the Scorecard

- Each national forest and grassland will again be asked to respond to the Climate Change Performance Scorecard in FY16.
- Elements 1 through 9 will remain the same, while a preliminary assessment is conducted using a revised Element 10 (version 2.0).
- The OSCC is conducting extensive outreach to obtain feedback on the original Scorecard and solicit input for the next iteration.
- Development of the next Scorecard will continue throughout FY16, and implementation is set for FY17.

Climate Change Accomplishments with Tribal Communities

The U.S. Forest Service has charted a path for **assisting tribal communities** in preparing for and recovering from the impacts of climate change. We are also enhancing outreach to, and partnerships with, tribal Nations on climate change adaptation. Eight partnerships are in progress or have been identified that integrate traditional tribal knowledge with scientific information into actions that build ecological, social, and economic resilience.

These partnerships will leverage additional resources from other agencies, intertribal organizations, academic, and Non-Governmental Organizations (NGOs) to help build durable capacities for landscape scale adaptation. By design, these partnerships seek to meet a range of criteria that focus on relationship-building, leverage and linkages, commitment, and assessment of climate vulnerabilities.

Regions, Stations, and Areas

R1/Rocky Mountain Research Station: The Northern Region Adaptation Partnership (NRAP), between science and management, was initiated in 2015 to continually assess climate change science and its social and ecological implications. Vulnerability assessments and adaptation strategies are being developed to provide the scientific foundation for planning, restoration, and project management. The Confederated Salish and Kootenai Tribes (CSKT) participated in the NRAP workshops and each tribe hosted an NRAP presentation. In FY16, tribes will coordinate shared adaptation strategies and NRAP products.

R2/Rocky Mountain Research Station: With ice and snow receding in the Greater Yellowstone Ecosystem, stone and perishable artifacts are being uncovered. Dr. Craig Lee (University of Colorado's Institute of Arctic and Alpine Research) is working with the Shoshone National Forest, Custer-Gallatin National Forest, and area National Park units to gather and identify the artifacts. The Confederated Salish and Kootenai Blackfeet Tribes are particularly interested in the work. The Rocky Mountain Region and the Shoshone National Forest will likely reach out to the Shoshone Tribes and others for further collaboration.

R4/Rocky Mountain Research Station: The Intermountain Adaptation Partnership (IAP) is developing a regional vulnerability assessment and adaptation strategy to meet Scorecard Elements 6 and 7. The Intermountain Region held preliminary discussions with the Shoshone-Bannock Tribes regarding development of the adaptation partnership.

R5/Pacific Southwest Research Station: The Western Klamath Restoration Project is a community-driven watershed project involving the Forest Service, Pacific Southwest Research Station, Natural Resource Conservation Service, the Karuk Tribe, and other partners. This partnership is leveraged by the Mid-Klamath River Communities Project, funded by the Joint Chiefs Project/ Regional Conservation Partnership, and integrates science and traditional knowledge in land management.

R6/Pacific Northwest Research Station: The Regional Office contracted with the Intertribal Timber Council for a feasibility study of the landscape-scale Anchor Forest concept in Eastern Washington. Region 6 is modeling tribal partnerships on the Tapash Collaborative Forest Landscape Restoration Proposal.

R8/Southern Research Station: In order to manage culturally significant plants, in the Southern Appalachians, an interagency Memorandum of Understanding was initiated by the Southern Research Station, Nantahala and Pisgah National Forests, and the Eastern Band of Cherokee Indians.

R9/Northern Research Station/Northern Area: The Eastern Region, Northern Research Station, and Northeastern Area State and Private Forestry, have partnered with universities and non-profits to create the Northern Institute of Applied Climate Science (NIACS). NIACS will help both public and private land managers incorporate climate change considerations into their management activities. NIACS is engaged in adaptation partnerships with nine tribes and bands throughout the Great Lakes region. Current projects include: the Zaagkii Project, collecting and preserving native seed sources, and Native Citizen Science in a Time of Climate Change, which seeks to adapt the USA Phenology Network design to meet the needs of indigenous peoples.

R10/Pacific Northwest: The Tongass National Forest supports subsistence activities and traditional lifestyles for Tlingit, Haida, and Tsimshian Alaska Natives. The Forest Service is engaging local residents to validate a summary of current and future shoreline geomorphic-biotic relationships. The tribes of Yakutat, Hoonah, Angoon, Kake, Klawock, and Kasaan are working with the Forest Service, Sitka Conservation Society, and the University of Alaska-Southeast. Eight students from six communities surveyed 70 families on subsistence foods collected, characteristic harvest environments, and perceived threats to resources. These conversations integrate traditional knowledge with scientific research that enhances vulnerability assessment.

Team Accomplishments

Corporate Priority Action Items (CPAI)

POWER-IT-DOWN (PID) CPAI

- Power reduced by 580,468 kWh; full participation across all units could realize a savings of 31,250,000 kWh/year.
- $48,596 in savings between 12/13-9/15
- Reduced CO2 emissions = to 42,951 gallons of gasoline

Power-IT-Down embodies the agency's priority to change habits and behaviors. As of June 2015, PID had successfully reached every agency employee and encouraged them to regularly shutdown their computers and IT (Information Technology) peripherals. Beyond the impact of influencing individual behaviors, PID saved money and energy, and reduced CO_2 emissions.

UTILITY BILL CLEANUP (UBC) CPAI

- Some units have seen a cost savings of up to 15 percent on annual utility bills
- Nationwide cleanup could yield savings of up to $4 million

Utility Bill Cleanup is an agency-wide effort to thoroughly review and properly identify all utility accounts on a unit. In FY13, the agency spent over $20 million on utilities (electricity, propane, water, and gas). Units are beginning to see real results from this initiative.

Field Teams

COMMUNICATIONS

- Manages the popular @GoGreenFS Twitter account
- Bi-monthly SusOps newsletters, Green Tip Flyers, Net Zero Guides, Annual Accomplishment Report
- Internal and external presentations

The **Communications Team** is the hub that connects all of the SusOps Teams to each other, agency personnel, and the public. A virtual village of writers, Public Information Officers (PIOs), graphic artists, and editors work to ground the flow of ideas in various media. Currently, the Team is working with Purdue University to gauge the levels of sustainability and climate change integration into day-to-day Forest Service work (results expected Spring 2016).

CLIMATE CHANGE SCORECARD-GETTING TO YES

- 6 bi-monthly Peer Learning Webinars; average attendance of 60 each
- Finished market research and established pilot locations for FY16 CPAI Green Offices with 7 criteria
- A sub-team hosted a training for 42 people on audits, IAS, and other requirements

The **Element 10 Team** focuses on monitoring and assistance for integration of OSCC practices within Forest Service units. The Team refined language in the Element 10 action items and FAQs. This helps local units more effectively gauge success for sustainable operations implementation. The Element 10 guidance and the LISO database were both updated to align with *EO 13693, Federal Sustainability in the Next Decade*. The **Sustainable Acquisition Sub-team** created guidance and hosted a training for local units to understand the many ways to support sustainable businesses through calculated purchasing.

ECO-ORIENTED FLEET AND DRIVERS

» Assisted with Net Zero guides
» Provided vehicle replacement recommendations
» Completed testing of the existing fleet reservation systems
» Presented the *No Idling Policy* to WO Fleet Managers

The Forest Service is heavily dependent on large fleets of vehicles, and the **Eco-Oriented Fleet and Drivers Team** is heavily focused on finding ways to "green" that dependence. The Team provided recommendations for the Net Zero guides through a variety of presentations and recommendations. They also promote the *Vehicle Idling Policy* and fleet education, both of which will reduce resource consumption and save money in the long run.

GREEN EVENTS TOOLKIT

» Promotes Toolkit on FS website
» Encourages virtual events
» Created the Green Events Feedback Forum

The **Green Events Toolkit Team** focuses on facilitating more sustainable meetings and events in the Forest Service. The Team puts forth the tools necessary for making agency events less consumptive and more in alignment with sustainability goals.

GREENING FIRE

» Developed a 5-Year Strategy and Communications Plan
» Promotes the reduction of bottled water in fire camps
» Visits fire camps and works with Incident Management Teams and Fire Leadership to green fire

The **Greening Fire Team** is dedicated to making sustainability inroads wherever possible with the interagency firefighting community. They developed a plan to integrate sustainability that accounts for interagency complexities and organizational structures. The Team is poised to seize any and all opportunities for greening fire wherever they emerge.

TRACK TO ZERO

In one year, some units have:

» Diverted 55 percent of their landfill waste
» Saved 49 percent in electricity
» Reduced propane by 38 percent

The Track to Zero Team developed four **Net Zero Guides** to help our administrative units achieve Net Zero. The Guides have been field tested by 12 units as part of the Net Zero Fellowship, ranging from District Offices and Visitor Centers, to Research Stations and National Forest Supervisor's Offices.

WATER TEAM

» Identified and implemented *Priority Water Conservation Measures* such as Leak Detection Protocols, Outdoor Water Use SOPs, and Low Flow Fixture Initiatives.
» Developed a Woodsy Owl Leak Detection sticker

The **Water Team** is focused on quantifying Forest Service water use and finding ways to reduce consumption in day-to-day operations. In FY15, the team established a measurable and obtainable baseline for water consumption in the Forest Service *Priority Water Conservation Measures*. In addition, talking points and other employee awareness communications have been developed for many areas of Forest Service water use.

Local Successes

Rocky Mountain Research Station, Priest River EF (PREF) in Moscow, ID used a microgrant to purchase and install 10 thermal window shades to reduce solar radiation and limit automatic air conditioning of the facility. This was a simple fix that **saved electricity, created a more comfortable office climate for personnel, and prolonged the life of the expensive router** that was taking too much direct sunlight.

The Munising RD, on the Hiawatha NF, instituted a policy of utilizing employees who are commuting to the Supervisor's Office to **move trailer loads of recycling** to the active recycling center in that county. The recycling center where the district is located was closed, but the district collectively and creatively figured out a way to continue recycling for the district.

A Munising RD employee at the recycling center

Applause!

The Northeastern Area State and Private Forestry and the Northern Research Station, in Durham, NH, **collaborated to create a high-quality interpretive sign to showcase sustainable landscaping** efforts. The design was done in house by NA Creative Services staff, and the decision was made to have EnviroSigns make the sign because of high quality and attention to sustainability for their products. The sign core is made of 100 percent post-consumer recycled paper, and the frame is ISO 9001-2000 certified and up to 10 percent post-industrial recycled content.

North Fork Compound, Bass Lake RD, Sierra NF, Pacific Southwest Region is replacing urinals with new low flow urinals. This reduces their environmental footprint and **increases water conservation.** The project coincides with replacement of facility features to be low flow.

Fleet – Path to Net Zero

Goals:

5 years (2020) – reduction in CO2e emissions by 20%
10 years (2025)– reduction in CO2e emissions by 50%
15 years (2030) – reduction in CO2e emissions by 75%

	Number of Employees	Number of vehicles	Total Mileage*	Gallons of Fuel Used	CO2e Emissions (metric tons)
Baseline (FY14)	183	100	1,008,867	82,308	750.95
Option A – reduce mileage by 14%	+/-183	100	867,626	66,153	599.35
Option B – increase average fuel efficiency by 2-3 mpg	+/- 183	100	1,008,867	66,185	599.63

* Road Maintenance Equipment, Tractors, and Vehicles up for replacement in FY15 are excluded

Fleet goals for the Cibola NF and NG

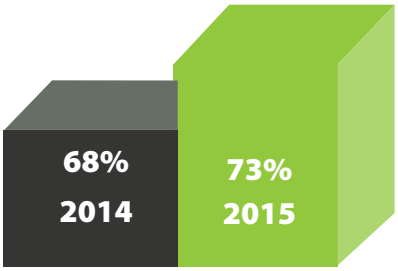
The Cibola National Forest and National Grasslands in New Mexico were accepted as Net Zero fellows for the Fleet to help assist in analyzing inefficiencies and possible cost savings. They **established a baseline, developed short and long term goals, and identified some "low hanging fruit."** The fleet for the forest is approximately 100 vehicles (mostly pickups and SUVs) and drive over 1 million miles a year.

Congratulations!

Well Done!

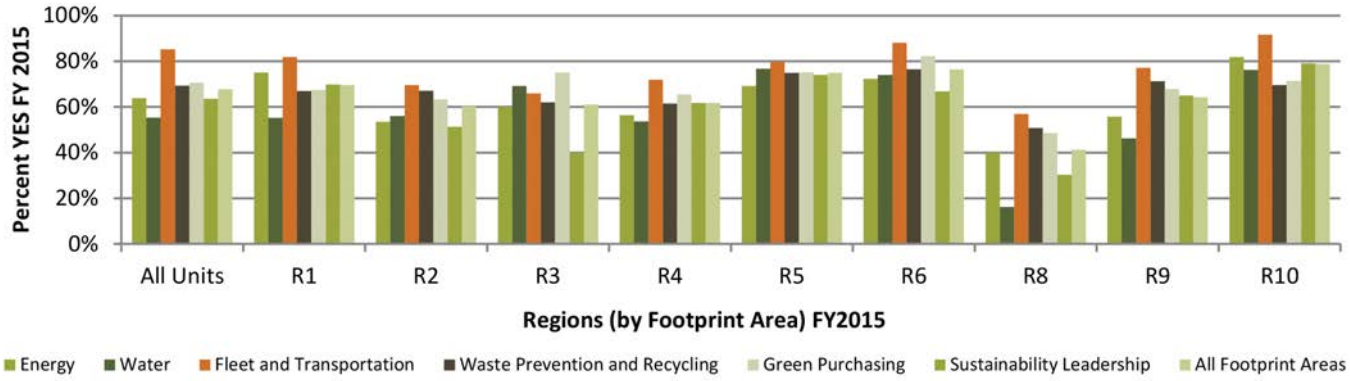
Climate Change Scorecard Element 10 Summary for FY15

Sixty-two units responded YES to Element 10 in FY15. Furthermore, 82 units (73 percent) reported on Element 10 (Sustainable Operations) using Leadership in Sustainable Operations (LISO) compared to 77 units (68 percent) in FY14. The increased use of LISO results in more accurate and consistent reporting across all units and, therefore, a better reflection of actual business operations.[1]



Percent of Units Using LISO

FY15 Footprint Area Trends by Region



By the Numbers

Top 3 Action Items Completed by Units	Bottom 3 Action Items Completed by Units
100 % Using video teleconferencing and webinar technologies as alternatives to meeting travel.	Increasing onsite renewable energy generation to at least 10 percent of the total energy consumed.
98 % Requiring employees to maintain their FS vehicles to maximize fuel efficiency.	Collaborating with other government agencies and entities nearby to aggregate demand for alternative fuel.
97 % Regularly recycling at least three different materials.	Completing a waste stream analysis on at least one facility this year.

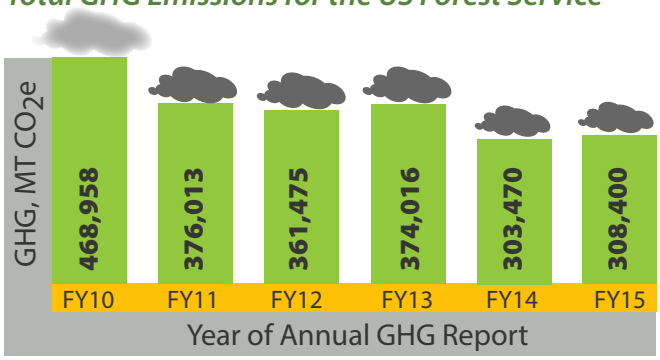
[1]*The increased adoption of the LISO reporting database, starting in FY14, required units to achieve a higher bar to respond "Yes" to Element 10 as compared to those units that continued to submit narrative responses. This caused the number of units achieving "Yes" on Element 10 to decrease over the past two years.*

Greenhouse Gas Report for FY15

The annual Greenhouse Gas (GHG) and Energy Report includes data for greenhouse gas emissions, energy and water consumption, and other information required by laws such as the Energy Independence and Security Act of 2007 and executive order.

As depicted below, the Forest Service's GHG footprint decreased from FY10 to FY15 by approximately 34 percent. Executive Order 13693 GHG emission goals for the USDA are now 43 percent for Scope 1 and 2 emissions and 40 percent for Scope 3—both by FY25—based on FY08 levels. Although we appear to be well on the way to reaching this goal for Scope 1 and 2 emissions, additional reductions may become increasingly difficult as the easiest changes are completed.

Total GHG Emissions for the US Forest Service



The Forest Service's three largest emissions categories remain:

1. **Fleet and Equipment**
2. **Employee Commuting**
3. **Building Energy** *(leased and owned)*

Looking at the distribution of GHG emissions by category can help us prioritize work for the agency in achieving efficiencies.

	FY15 Consumption	FY15 Requirements	Federal Requirements FY16-25 Moving Forward
Energy Intensity	Forest Service facilities consumed 1,210 billion British Thermal Units (BTUs) of energy.	Reduce by 30% (3% annually) by FY15 from FY03 baseline per EISA 2007 and EO 13423.	Annually reduce 2.5% from FY15 to achieve a 55% reduction by FY25 per EO 13693.
Fleet	Forest Service fleet and equipment used 13.3 million gasoline equivalent gallons.	Reduce overall vehicle fuel petroleum use by 30% from FY05 to FY20 (2% annually) per EO 13514, EISA, EO 13423.	Reduce GHG emissions per mile from the fleet, relative to the 2014 baseline; 30% by FY25.
Water	Water intensity reported was 14.3 gallons per gross square foot of building (gal/GSF).	Reduce by 26% (2% annually) by FY20 from FY07 baseline per EO 13514.	Reduce water intensity by 36% by FY25 per EO 13693.
Renewable Energy	2.69 percent of electricity used came from renewable sources, and 1.1 percent meets the EPAct requirements.	0% of annual electricity use in FY15, rising to 20% in FY20, per December 2013 Presidential Memo. EPACT was 7.5% by FY15.	Use 30% renewable energy by FY25 per EO 13693.
New Construction	Of the 111 buildings the Forest Service has started designing since FY07, 87% are at least 30% more efficient than ASHRAE 90.1. The other buildings are listed as "unknown" for life-cycle cost effective efficiency level.	As of FY07, new building designs are required to be 30% more energy efficient.	Starting FY20 all new construction of Federal buildings >5,000 GSF that enter the planning process will be designed to achieve energy net-zero and, where feasible, water or waste net-zero by FY30.

Executive order 13693

Planning for Federal Sustainability in the Next Decade

On March 25, 2015, the President signed Executive Order (EO) 13693, Planning for Federal Sustainability in the Next Decade. This executive order revoked EOs 13423 and 13514, those previously defining sustainable operations goals. EO 13693 offers a more holistic approach for Federal Agencies to lead by example to make the Federal Government's operations more sustainable, efficient, and energy-secure while saving taxpayer dollars. This EO significantly increases targets in reducing GHG emissions from federal operations over previous EOs, and it focuses on federal facility climate preparedness and resilience. It includes goals, such as a reduction of GHG emissions from fleet of 30% by Fiscal Year 2025 based on FY14 levels, that haven't existed before.

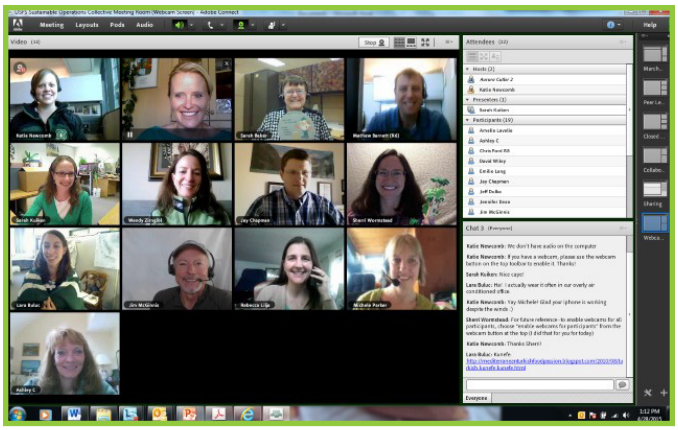
Take Action

It is our belief that each and every Forest Service employee has an important role to play and a responsibility in helping to generate behavioral change. This accomplishment report is a product of that very change; the research, the implementation tactics, and the people who are working together to create and promote an agency that is sustainable in managing its resources and operations.

By bringing people and ideas together, we can continue to make progress on OSCC initiatives throughout our units and in our local communities. We encourage you to get involved by:

- Viewing on-line resources.
- Becoming a member of your local Green Team.
- Join the OSCC Newsletter mailing list, receive Get Your Green On (GYGO) tips, or learn more about upcoming Peer Learning Webinars by sending an email to national_sustainable_operations@fs.fed.us.

If you have specific questions or comments about OSCC or this report, please contact any member of our team or your R/S/A SusOps Coordinator. One employee at a time, one leader at a time, and collectively, we will continue working toward meeting the challenges of a changing climate and advancing the solutions for environmental sustainability.



Team Leads connect virtually with Adobe Connect for monthly meetings.

Team Leads, R/S/A/WO Coordinators, Core Staff, and Board members during their annual meeting (Forest Products lab, Madison, WI)

Non-Discrimination Policy - The U.S. Department of Agriculture (USDA) prohibits discrimination against its customers, employees, and applicants for employment on the bases of race, color, national origin, age, disability, sex, gender identity, religion, reprisal, and where applicable, political beliefs, marital status, familial or parental status, sexual orientation, or all or part of an individual's income is derived from any public assistance program, or protected genetic information in employment or in any program or activity conducted or funded by the Department. (Not all prohibited bases will apply to all programs and/or employment activities.)

To File an Employment Complaint - If you wish to file an employment complaint, you must contact your agency's EEO Counselor (PDF) within 45 days of the date of the alleged discriminatory act, event, or in the case of a personnel action. Additional information can be found online at http://www.ascr.usda.gov/complaint_filing_file.html.

To File a Program Complaint - If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form (PDF), found online at http://www.ascr.usda.gov/complaint_filing_cust.html, or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at program.intake@usda.gov.

Persons with Disabilities - Individuals who are deaf, hard of hearing or have speech disabilities and you wish to file either an EEO or program complaint please contact USDA through the Federal Relay Service at (800) 877-8339 or (800) 845-6136 (in Spanish).

Persons with disabilities who wish to file a program complaint, please see information above on how to contact us by mail directly or by email. If you require alternative means of communication for program information (e.g., Braille, large print, audiotape, etc.) please contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

Cover tree based on graphic by Marish/Bigstock.com
Cover photo © Holbox/Bigstock.com
CO2 graphic based on concept by P. Eggerman/Bigstock.com