



Forest Stewardship Program Newsletter

October 2022 | Forest Stewardship Program Newsletter

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FY22 Forest Stewardship Accomplishments

Huge thanks and recognition for all your work in FY22!

We appreciate the work done by all those who make the Forest Stewardship Program a success including the service foresters working directly with landowners, the data and GIS analysts, the state coordinators, the regional managers and so many more!

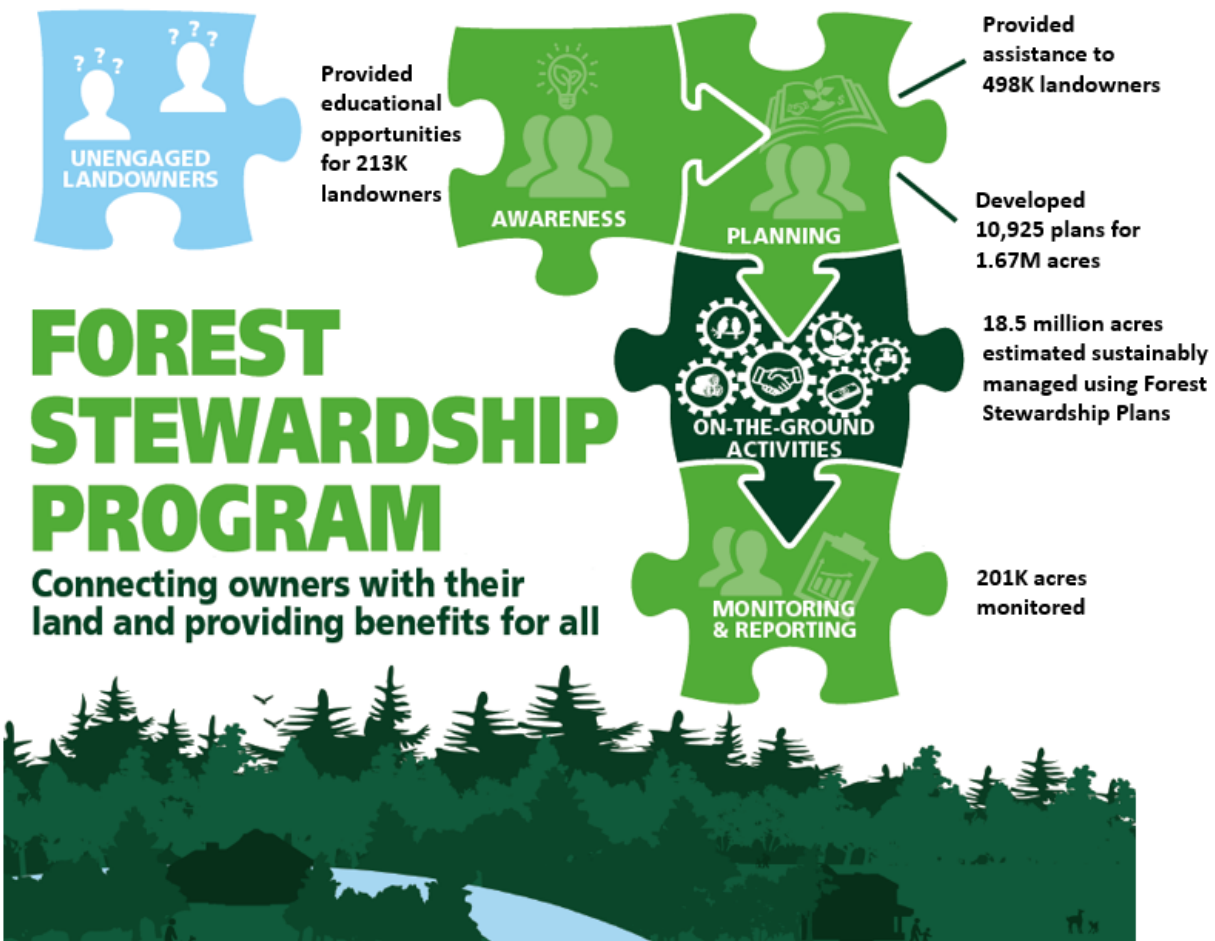
Looking at the FY22 accomplishment numbers, it was a great year.



FY22 highlights include

- Outreach to 711,179 landowners (through education and assistance), that is a 68% increase from last year.
- 1,675,638 Forest Stewardship plan acres (from 10,925 plans) were added this year, a 15% increase.
- The cumulative acres of FSP plans are 21,564,432, a 6% increase.
- This year's monitoring verified that 86% of the plans were being implemented.
- 33,950,848 acres were reported with either a practice plan or other management plan (new this year, we separated practice plans and other management plans).
- With the growing focus on reforestation, our state partners are an important part of that strategy:
 - Producing or distributing 97,640,258 seedlings, an increase of 4% from last year
 - Collecting/producing 117,144 pounds of seed, an increase of 20%

FY22 Accomplishment graphic



[Updated SMART FAQ Resource](#)

Given the updated measures within SMARTar (Measures 12a, 12b, 13a and 13b), the FAQ on how SMART data is imported in SMARTar has also been updated. Access to the [FAQ](#) will be archived in the External Forest Stewardship Program shared drive in the SMART and SMARTar folder.

Highlights from the Region

International Institute of Tropical Forestry

US Virgin Islands Forestry Working Group—The US Forest Service, in collaboration with NRCS, created a forestry working group for the US Virgin Islands in August 2022 to build on existing collaborations related to vegetation management. The US Virgin Islands Forestry Working Group serves as a forum to exchange information and identify needs and opportunities related to the islands' forests. The working group meets monthly and is nested under the US Virgin Islands NRCS State Technical Committee, where it benefits from the strong relationships and large partner network forged throughout the years in the islands. The group includes members from the University of the Virgin Islands, VI Department of Agriculture, VI Department of Planning and Natural Resources, VI Fire Service, St. Croix Environmental Association, St. George Village Botanical Garden, University of Puerto Rico, USDA Caribbean Climate Hub, NRCS, and US Forest Service. The group is open to the public and new members can join meetings at any time. If you are interested in learning more about our working group, please contact Maya Quiñones, US Caribbean Forest Stewardship Program Manager at maya.quinones@usda.gov.

Hurricane Fiona impacts Puerto Rico—From September 18 to September 20, 2022, Hurricane Fiona made landfall in Puerto Rico, leaving whole communities underwater, destroying infrastructure and agriculture, and leaving the entire island without power. The greatest hazards and impacts were caused by the extreme rainfall that triggered historic floods and widespread mudslides. The National Weather Service reported between 16 and 24 inches of rainfall in some places during the storm. Widespread flooding was reported, mostly in southern and central Puerto Rico and numerous mudslides were reported in areas of steep terrain across the entire island. The US Forest Service is working with local collaborators and other government agencies to assess damages and needs to the island's forests and identify how to best assist private forest landowners restore their forest lands and agroforestry systems.

Pacific Southwest (5) Region

The Republic of the Marshall Islands Ministry of Natural Resources and Commerce requested the University of Hawaii at Hilo (UHH, Dr. Ryan Perroy) and the Marshall Islands Conservation Society (MICS) to support community-based planning for agroforestry by providing data on coconut tree distribution and height. Perroy and his Micronesian students provided training polygons to enable automated recognition of coconut trees (as well as pandanus trees, and tentatively, breadfruit trees) in imagery gathered by Unmanned Aerial Vehicles (UAV, drones). Perroy then provided additional training to MICS staff to improve their gathering and mosaicking of imagery captured by UAV. The common presumption is that taller, older coconut groves are losing productivity for copra (dried coconut meat), an important cash crop in the Marshalls. Data sheets will help the Marshalls' forestry program to prioritize which island



communities to engage in consultations to consider replacement of older coconut stands with younger coconut trees of improved varieties. Simple posters of the mosaicked imagery are also useful tools in participatory rural assessment and planning for agroforestry, mitigation of coastal hazards, and other issues.

Like most of the states, the Commonwealth of the Northern Mariana Islands (CNMI) needed updated and more transparent information about the extent of forest in private land parcels of various sizes. A private contractor in the CNMI, Robbie Greene, undertook analysis overlaying geospatial parcel data, now available for all three inhabited islands of the CNMI, with forest extent, drawing from USFS, USF&WS, and NOAA definitions and maps. 4060 acres of forest falls into the category of NIPF owners with parcels including at least 10 acres of forest, the category commonly used by Forest Stewardship as an indicator of program potential and estimated by the National Woodland Owner Survey in the 50 states. However, twice as much forest is found within parcels in fragments of 1-10 acres. This size parcel is considered “rural” in the CNMI and has value or potential value for fruit and cultural species, charcoal, wildlife habitat, and interrupting grassy fuels in the landscape. No data was available for “highly erodible agricultural lands” as is used in the formula for states. However, the CNMI Forest Action Plan had already identified areas prioritized for reforestation, and this acreage was considered along with forested acres in a workshop to delineate Federal Investment Areas with commitment from forestry staff and partners.

Upcoming Events and Deadlines

November 2: [Addressing Equity and Environmental Justice in the Forest Service’s Wildfire Crisis Strategy webinar](#). The U.S. Forest Service’s Wildfire Crisis Strategy, and the Bipartisan Infrastructure Law that is funding the agency’s initial investments to reduce wildfire risk under the Strategy, both call for considering equity and environmental justice when implementing projects. This webinar will share practical applications of research on the environmental justice implications of hazardous fuels reduction, including new tools, that help address this need. Presented by: Susan Charnley & Mark Adams; US Forest Service Pacific Northwest Research Station

November 10: [Northeast Midwest LSR Proposals](#) due

November 11: [Nominations for NASF Wildfire Mitigation Award](#) due. The National Association of State Foresters (NASF) is accepting nominations for the 2023 Wildfire Mitigation Awards. The Wildfire Mitigation Awards are the highest national honor one can receive for outstanding work and significant program impact in wildfire preparedness and mitigation. The program was established in 2014 in response to an overwhelming number of great wildfire mitigation program efforts happening throughout the United States. Awards will be presented at the Wildland Urban-Interface Conference in March 2023. Awards include the National Mitigation Hero, Wildfire Mitigation Legacy, and National Wildfire Mitigation. (From SREF)

November 18th: [Southern LSR Proposals](#) due



Forest Service Staffing Updates

- Dennis McDougall and Peter Beringer are filling in as the acting Eastern Region Forest Stewardship Program Manager until a new detail staff is announced. They will support the three Field Offices (St. Paul, MN; Morgantown, WV; Durham, NH) and the 20 states in the region.

FSP Question of the Month

I'm looking for tree seedlings and/or native plant materials, where can I go to find help?

The [Reforestation, Nurseries and Genetic Resources \(RNGR\) program](#) includes technical specialist whose mission is to supply people who grow forest and conservation seedlings with the very latest technical information, and to provide links to other organizations and individuals with similar interests.

Their website offers a suite of tools, resources and other relevant information including a [National Nursery and Seed Directory](#). Using this directory, you can search states, products (plants, seeds, or service) and nursery type (federal, forest industry, not-for-profit, private, state, tribal). You can view results in a list or on a map.

If interested in connecting more with RNGR, consider [subscribing to their Tree Planter's Notes](#) which is dedicated to technology transfer and publication of research information relating to nursery production and outplanting of trees, shrubs, and native plants for reforestation, conservation, and restoration.

(shout out to Aaron Lumley for the question suggestions!)

RNGR REFORESTATION, NURSERIES,
& GENETIC RESOURCES



Interesting Research, News, and Tools

[New Research reveals how critical forests are to drinking water supply](#): Record heat waves and drought are not only leading to more frequent and intense wildfires but are also putting one of life's most valuable resources at risk: the water we drink. [Quantifying the Role of National Forest System and Other Forested Lands in Providing Surface Drinking Water Supply for the Conterminous United States \(GTR-WO-100\)](#), a new Forest Service research report, describes how extensively public drinking water systems rely on national forests and grasslands.

[Collaborative Climate Forestry Work in New England](#): "Few people may realize the complexity of these [New England] landscapes, intricate patchworks of private and public



ownership where more than 75% of forests are privately owned by family forest owners and companies in the forest products sector. . . How do we sustain the health of forest landscapes across so many different ownerships? And how do we help the millions of family forest owners ensure their #forests can adapt to changing conditions?" This is an excerpt from the latest U.S. Forest Service feature story, entitled "Partnerships help private landowners tackle effects of climate change," and authored by NIACS Acting Director, Maria Janowiak. The story highlights several new initiatives to support climate adaptation in New England developed by NIACS, the USDA Forest Service, and a variety of regional partners including the Massachusetts Department of Conservation and Recreation, Mass Audubon, and the New England Forestry Foundation. (From NIACS)

[A Quick Guide to Adaptation Planning for Natural Resources Professionals and A Quick Guide to Adaptation Planning for Land Trusts:](#) Created by NIACS and the USDA Northern Forests Climate Hub, these Quick Guides were developed as an entry point to climate adaptation planning.

[Buy Local Initiatives to Support Forests & Forest Products and Services:](#) Buy local has been a common tagline and marketing strategy in local or regional farmers' markets and other consumer products for many decades. As transportation and other economic and social changes have facilitated wider trade, goods from outside the local or regional area have become accessible. While the imported goods might have advantages, e.g., lower price or better quality, they compete with local goods and can undermine labor markets, manufacturing, and supply chains. The competition results in lower or halted local production, unemployment, and reduced multiplier benefits. These impacts have motivated many markets to promote buy-local options. (From Dovetail Partners)

[Tools for Sustainably Managing your Hardwoods Wrapping up the Year of the Hardwood:](#) By Jennifer Gagnon, Virginia Tech. Over the past year, the Virginia Forest Landowner Update has featured articles outlining the history of exploitation and recovery of Virginia's hardwood forests, the current state of the resource, and the many challenges it faces. This article will wrap up the series with a review and a discussion of the tools and resources available to help private woodland owners improve the health and productivity of their hardwood forests. (from VA Forest Landowner e-Update)

[Research about fire effects to birds:](#) A new RMRS study confirmed that prescribed fires limited wildfire burn severity, but the reduction in burn severity didn't change patterns of bird responses to wildfire. Results suggest managers can employ prescribed fire to reduce fire severity without necessarily altering the ecological importance of wildfire to birds. (From RMRS)

[FIRE-BIRD, A GIS tool for applying habitat suitability models to inform planning:](#) RMRS scientists developed FIRE-BIRD, an ArcGIS toolbox, to map habitat suitability for disturbance-associated woodpeckers of conservation concern to help inform locations for management activities in predominantly burned forests of the Inland Northwest and Northern Sierras.



[Finding the Frontier for Biodiversity Finance](#): Biodiversity finance is a growing thematic area of sustainable investment. But what does the world's biggest asset manager consider investible, and what hurdles does it face in deploying capital? This transcript from a fireside chat with BlackRock and the 2022 Conservation Finance Conference sets readers up to contemplate institutional opportunities and obstacles with biodiversity finance.

[The Inflation Reduction Act](#): A Closer Look at Natural Climate Solutions and Environmental Justice Provisions: the passage of the United States' Inflation Reduction Act dedicates billions to a vision of a thriving carbon-safe economy. Highstead summarize the Act's provisions for natural climate solutions and equity for communities.

[Fire in Eastern Oak Forests - A Primer](#): Fire plays a critical role in restoring, managing, and sustaining Eastern oak forests, woodlands and savannas and is essential for oak ecosystem health, productivity, diversity, and resilience. Research demonstrates how fire-maintained woodlands and savannas are occupied by plant and wildlife species that require more open conditions than that in closed canopy forests – in short, fire is essential in maintaining all types of oak ecosystems. Dive into this new Primer, developed by researchers with the University of Missouri, Northern Research Station, Joint Fire Science Program Oak Woodlands & Forest Fire Consortium, and University of Tennessee, to learn more on fire's role in oak forests, the history of fire in the east, and why fire is essential to sustain these systems. (From NRS)

[Reducing Post-fire Erosion in an Intensifying Fire Environment](#): A suite of tools allows managers to predict hillslope erosion, watershed peak flows, and sediment yields from wildfires, prescribed fires, and forest management activities. (From RMRS)

[What Determines How Fast Wood Will Decay?](#): Site temperature and moisture are key for determining wood decay rates, but there is no universal model that explains this phenomenon. (From RMRS)

[Moving beyond landscape resistance, Considerations for the future of connectivity modelling and conservation science](#): Landscape connectivity, the extent to which a landscape facilitates the flow of ecological processes such as organism movement, has emerged as a central focus of landscape ecology and conservation science. Connectivity modelling now encompasses an enormous body of work across ecological theory and application.

[Climate Change Vulnerability Assessments](#): Climate change vulnerability assessments help inform sustainable resource management on national forests and reduce the negative effects of climate change. Often, these assessments are produced by a team that includes both scientists and resource managers. By synthesizing the best-available science and outlining potential mitigation approaches, these reports directly address specific management concerns at each location. **[Browse the current lineup](#)** of climate change vulnerability assessments. (From PNWRS)

[Efficient, cost-effective sampling protocol supports remote sensing for carbon monitoring](#): State-of-the-art remote sensing technologies and advanced spatial analysis techniques are increasingly being used to support carbon monitoring systems around the world. These LiDAR (light detection and ranging)-based, remote sensing methods increase precision and reduce the costs associated with traditional estimations of greenhouse gas emissions. (From PNWRS)



Updated Web-based tools help natural resource managers find seed sources adapted to future climate:

A successful seedling needs to survive current conditions when planted, but also be adapted to conditions that may develop in 40 to 50 years. Two Web-based tools help natural resource managers select seed sources likely to be successful now and in the future for a given location. (From PNWRS)

Estimating the value of carbon sequestration by U.S. forests through 2050: Forests provide many critical ecosystem services, including the sequestration of carbon from the atmosphere. Forest carbon storage capacity can be directly impacted by climate change mitigation policies based on existing ecosystem service valuations. (From PNWRS)

Climate change likely to alter postfire forest restoration patterns: Wildfires are a regular occurrence for many western forests but increases in the size and severity of recent wildfires have led to concerns about long-term forest recovery. It can take decades to centuries for forests to fully recover from a severe fire, but most studies focus on short-term regeneration outcomes. (From PNWRS)

Planting Trees to Mitigate Climate Change: Policy Incentives Could Lead to Increased Carbon Sequestration: The 741 million acres of forestland in the United States play a role in mitigating the effects of climate change by sequestering nearly 16 percent of the atmospheric carbon dioxide emissions produced annually in our country. (From PNWRS)

Six Forestry Projects including Southern States Receive Funding from USDA

Climate-Smart Commodities Funding Pool: The United States Department of Agriculture (USDA) is investing up to \$2.8 billion across 70 projects in the first round of awarded grants. Of those funded projects, 11 include some component of forest products, or agroforestry and six of these include locations in the South. There are five other funded forestry projects that do not include any states from the South. This funding comes from the Climate-Smart Commodities funding pool, which has multiple proposals ranging from \$5 million to \$100 million. Projects that are focused primarily on forestry and include states in the South are: 1. Engaging Family Forests to Improve Climate-Smart Commodities (lead by American Forest Foundation), 2. Expanding Agroforestry Production and Markets (lead by the Nature Conservancy) and 3. TRACT Program: Traceable Reforestation for America's Carbon and Timber (lead by Oregon Climate Trust). Two southern land grant universities were the leads for projects that were combined agriculture and forestry, including the Texas Climate-Smart Initiative (lead by Texas A&M Agrilife) and Building Partnerships for Climate-Smart Commodities in South Carolina (lead by Clemson university). (From SREF)

USDA Disaster Assistance Discovery Tool: The United States Department of Agriculture (USDA) has many disasters assistance programs. However, not all programs are easy to find, and landowners may not know what programs are available to them. The USDA Disaster Assistance Discovery Tool is a way for landowners to find a program that is relevant to them. After answering a short series of questions about their damages and when they occurred, the tool will recommend relevant USDA assistance programs. Both landowners and natural resource professionals may find this tool beneficial. (From SREF)

USFS National Prescribed Fire Program Review Release: The United States Forest Service (USFS) recently released a review of their national prescribed fire program. This review



comes after USFS Chief Randy Moore temporarily paused prescribed burning in National Forest System lands. The USFS ignites an average of 4,500 prescribed fires each year, covering up to 1.3 million acres of land. In this program review, Chief Moore identifies seven immediate actions that will be taken to increase the safety and efficacy of prescribed burns. These actions include the standardization of ignition authorization briefings, having each Forest Service unit review all prescribed fire plans and associated complexity analyses to ensure they reflect current conditions prior to burning, and having burn bosses document whether all elements within the agency administrator's authorization are still valid based on site conditions. (From SREF)

Healthy Forests is Never About Cutting an Individual Tree: Singer-songwriter Carole King's opinion piece in *The New York Times*, "It Costs Nothing to Leave Our Trees as They Are" elevated a national and international conversation about the health of forests, logging, deforestation, and climate change. At the heart of King's essay was her call for legislation to ban commercial logging on public lands. Yale's School of the Environment's Forest School professor of soils and ecosystem ecology, Mark Bradford, and Joseph Orefice, lecturer and director of forest and agriculture operations at Yale Forests, weigh in on what constitutes a healthy forest in this region; what role healthy forests play in climate change mitigation; and how to protect and maintain Northeastern forests in the face of climate change, pests, pathogens, and forest degradation. (From NWOA)

150 years after the Great Chicago Fire, mass timber buildings are making a comeback: Now equipped with fire-resistant technologies, a planned Chicago high-rise is among the latest building projects in the U.S. utilizing the carbon-sequestering building material. (From NWOA)

How a Changing Climate Influences Stream Flow: Changing temperatures, precipitation patterns, and snowpack all affect streamflow, which in turn affects fish, forests, and communities that depend on streams. Forest Service scientists analyzed past measurements to predict future streamflow across the country. A user-guided story map depicts these predicted changes by region and time period, up through the end of the 21st Century. These projected streamflow metrics can assist natural resource managers in forest restoration and conservation planning. (From FS R&D)

International Institute of Tropical Forestry published its latest accomplishment report, which includes how the Institute is developing the best science to promote forest, wildlife, and watershed conservation in Puerto Rico, U.S. Virgin Islands, and the Caribbean. And a **poster gallery** honors the International Institute of Tropical Forestry's 75th anniversary by sharing the latest scientific advances from the Institute. (From FS R&D)

New fact sheet on Management to Improve Forest Resilience and Reduce Wildfire Risk: It gives an overview on how departures from historical norms provide insight for management and restoration and describes the latest advances and tools Forest Service scientists and partners have made to encourage resilient forests. (From FS R&D)

A New Book covers the Latest Advances in Smoke Science: A **new book** by Forest Service scientists and partners synthesizes the latest knowledge from wildfires and prescribed fires on smoke composition, movement and impacts. It explores the social implications of



wildland fire smoke, and reports on new modeling tools to predict smoke movement and concentrations, which will help improve smoke forecasting systems. The book provides a foundation for improving how wildland fire smoke can be managed in the coming decades. Cutting across multiple disciplines related to smoke management, the book provides current scientific knowledge for a range of smoke topics: fuel consumption, fire behavior, smoke emissions and chemistry, plume dynamics, and social impacts. The findings of this book provide a solid baseline on understanding the composition and intensity of wildland fire smoke as a core step in developing effective management solutions. (From FS R&D)

[How Long to Forest Water Recovery After Wildfire?](#) There is limited knowledge on how quickly forest water functions recover after wildfire – and how recovery is defined. A Forest Service scientist and partners synthesized several studies in Mediterranean climates. The research team found that some forests recovered water function within 7 years, but recovery was less likely as the area burned increased. They propose a quantitative definition of post-fire hydrologic recovery that could be applied in future studies, which are needed to inform managers tasked with making post-fire land and water management decisions.

FSP Resources

External Forest Stewardship Program Folder: Includes FSP state coordinator and regional manager contacts, Communication Materials (FSP theme art and style guide, sign ordering information, infographics); FSP Modernization (FSP plan monitoring protocol, allocation recommendations, guidelines memo, modernization recommendations, FSP potential acres by State data); Monitoring Folder (Survey 123 Reference Guide, Plan Monitoring Data Specifications, list of fields and dropdown lists and the excel format for those not using Survey 123 to submit their data); FSP Standards and Guidelines (Includes the FSP Standards and Guidelines, Minimum Standards Checklist, and Plan Elements guidance) and the FSP Strategic Plan. If you're a new state coordinator, you'll need to be granted permission to access the folder. Contact your ForMAP HELP Desk for assistance.

FSP Federal Investment Areas Web Map Viewer: View your state's Federal Investment Area. This Web Map Viewer allows you to change the basemap, print, draw on, measure, and add your own spatial data.

PRISM: Online tool that allows you to see FSP program accomplishment data (number of plans, acres covered by plans, acres in priority areas with plans, percent of priority acres with plans) mapped by region, state, county, congressional district, or watershed.

ForMAP User Guides and Webinars

ForMAP Home (SMART, LaSR): Log in for the SMART and LaSR tools

NIC Portal for SMARTar: Log in for the SMARTar (annual accomplishment reporting)

Principal Authorities for Cooperative Forestry Programs

Survey 123: An updated FY22 form is needed for this year's monitoring. The reference guide is available as is the annual Survey 123 Monitoring webinar.



Infographic of the Month

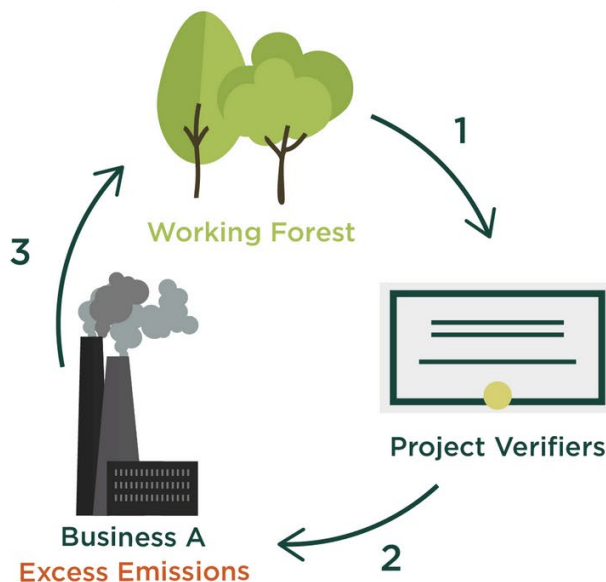
Shout out to Jen Hensiek (R1/R4 Manager) for sharing the [Forest Carbon and Climate Program infographics](#) developed by Michigan State. We'll be highlighting these infographics these over the next few months as they are very relevant for the new Infrastructure Reduction Act programs, focusing on climate mitigation and forest resilience.

Carbon Offset Cycle



Forest Carbon and Climate Program
Department of Forestry
MICHIGAN STATE UNIVERSITY

Offsets represent emission reductions that have been achieved outside of the capped sector.



- 1** | A forest owner seeks additional income or climate change mitigation management activities.
- 2** | The working forest is measured and verified for carbon storage/sequestration capabilities. The amount of carbon stored/sequestered is sold as carbon credits* to the carbon market.
- 3** | Business A, who is in excess of its emissions cap, can now purchase carbon credits equal to the excess amount of emissions in order to meet its allowance cap.

*one carbon credit = one metric ton of greenhouse gas emission reductions

From MSU

Creating a Forest Carbon Credit: Offset credits may be developed under voluntary market standards or compliance market standards, each of which has specific carbon accounting and eligibility rules.

Please send FSP Newsletter ideas to Caroline Kuebler, caroline.kuebler@usda.gov

Cover Photo: Hoosier NF Indiana, by Ian Terrell

