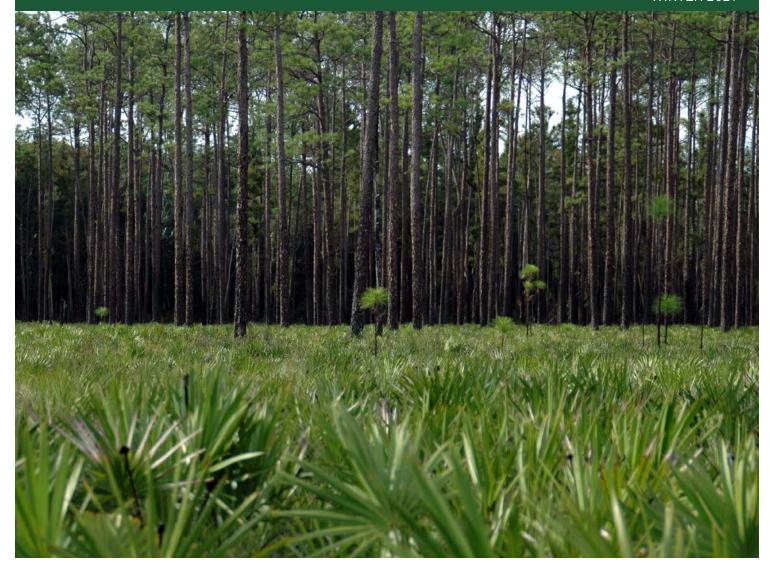
Early Implementation of the US Forest Service's Shared Stewardship Strategy in the Eastern United States

DESTIN KEE, TYLER ALDWORTH, JESSE ABRAMS, CHAD KOOISTRA, COURTNEY SCHULTZ, AND HEIDI HUBER-STEARNS

WINTER 2021



PUBLIC LANDS POLICY GROUP PRACTITIONER PAPER NUMBER 12

ECOSYSTEM WORKFORCE PROGRAM WORKING PAPER NUMBER 110











About this project

Led by the Public Lands Policy Group (PLPG) at Colorado State University, researchers at PLPG, the Ecosystem Workforce Program at University of Oregon, and the University of Georgia are jointly conducting a five-year study to understand Shared Stewardship perspectives from agency leadership, state officials, land managers, and other stakeholders in states where Shared Stewardship partnerships exist.

About the authors

Destin Kee is a Graduate Research Assistant, M.S. Forest Policy and Sustainability student at the Warnell School of Forestry and Natural Resources, University of Georgia.

Tyler Aldworth is a Graduate Research Assistant with the Public Lands Policy Group, and M.S. Forest Sciences student at the Warner College of Natural Resources, Colorado State University.

Dr. Jesse Abrams is an Assistant Professor of Natural Resource Policy and Sustainability at the Warnell School of Forestry and Natural Resources and Savannah River Ecology Laboratory, University of Georgia.

Dr. Chad Kooistra is a Research Associate with the Public Lands Policy Group, Colorado State University.

Dr. Courtney Schultz is the Director of the Colorado State University Public Lands Policy Group and Associate Professor in the Department of Forest and Rangeland Stewardship, Colorado State University.

Dr. Heidi Huber-Stearns is an Associate Research Professor and Director of the Ecosystem Workforce Program and Institute for a Sustainable Environment, University of Oregon.

About the Public Lands Policy Group:

The Public Lands Policy Group (PLPG) at Colorado State University produces original research to inform the practice of natural resource management and advance understanding of policy developments that affect public lands.

More information: http://sites.warnercnr.colostate.edu/courtneyschultz/

About the Ecosystem Workforce Program:

The Ecosystem Workforce Program is a bi-institutional program of University of Oregon's Institute for a Sustainable Environment and the College of Forestry at Oregon State University. We conduct applied social science research and extension services at the interface of people and natural resources. More information: http://ewp.uoregon.edu.

Acknowledgements

This study was made possible with funding from the USDA Forest Service State and Private Forestry and Rocky Mountain Research Station. Many thanks to all of our interviewees for their participation and valuable insights. We thank Casey Davis for updating our existing layout and design. www.caseydavisdesign.com

All photos are public domain courtesy of USDA Forest Service Flickr sites.

For more information please contact:

Courtney Schultz
Department of Forest and Rangeland Stewardship
Colorado State University
Fort Collins, CO 80523-1472
970-491-6556; courtney.schultz@colostate.edu
http://sites.warnercnr.colostate.edu/courtneyschultz/



Table of Contents: —

Executive Summary
Introduction
Research project overview6
Summary of Key Findings from Phase 1
Approach for Phase 2
Part 1 Findings: Main Themes Across States11
Goals for Shared Stewardship11
Cross-boundary efforts that precede Shared Stewardship
Progress to date
Prioritization processes under Shared Stewardship
Opportunities and challenges
Outstanding questions and uncertainties
Discussion and Recommendations
Summary of research questions
Comparing main findings from Phase 1 and Phase 2
Factors affecting future success
References
Part 2 Findings: State-Level Summaries

Common Acronyms: -

CFLRP	Collaborative Forest Landscape Restoration Program		
GNA	Good Neighbor Authority		
JCLRP	Joint Chiefs' Landscape Restoration Partnership		
MOU	Memorandum of Understanding		
NEPA	National Environmental Policy Act		

NGO	Non-governmental organization
NRCS	Natural Resources Conservation Service
SFAP	State Forest Action Plan
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service



Executive Summary Introduction and approach

'n 2018, in response to Congress' calls for a renewed approach to forest management, the LU.S. Forest Service (USFS) announced the Shared Stewardship Strategy - an initiative aimed at increasing the pace and scale of cross-boundary forest management activities (USFS, 2018). In 2019, our team started conducting independent research through semi-structured interviews on the implementation and development of Shared Stewardship efforts in the western U.S. (Phase 1, detailed in Kooistra et al., 2021b). In late 2020, we began investigating states east of the Rocky Mountains (Phase 2), which we refer to herein for ease as "eastern" or "Phase 2" states, although our study included states as far west as Nebraska. This Executive Summary provides an overview of our key findings across Phase 2 states (also see Table A) and our observations on the future of Shared Stewardship.

Key findings

Priority management needs identified by interviewees across the states we studied in Phase 2 included: increasing the pace and scale of management activities, managing invasive species, improving outreach to private landowners, and developing market infrastructure that can help support the unique management needs of each state. Interviewees in all states said they hoped that Shared Stewardship would help address these priorities and build upon past efforts to accomplish more cross-boundary work. Given the

large proportion of private forest ownership in these states, interviewees described the need to effectively engage private landowners to meet landscape-scale management objectives. Interviewees also discussed goals representing the specific context of their states.

At the time of our interviews, participants in most states did not yet report significant changes in the prioritization, planning, or implementation processes for land management that could be specifically tied to Shared Stewardship. Commonly, interviewees described well-established patterns of communicating priorities and plans with other agencies or organizations that they widely considered to be examples of joint prioritization, though final decision-making authority remained an intraagency process. Of the states that were adjusting their prioritization processes, changes were minimal, and it was clear they were still in early stages of development. These changes included new tools facilitating data sharing, new positions, and new committees to help jointly prioritize management activities.

Many interviewees saw Shared Stewardship as an opportunity to continue to improve and expand partnerships, share decision-making space, and enhance coordination. Interviewees in most states noted the importance of expanding existing partnerships to reflect the diverse suite of interests under the broader goals of Shared Stewardship. Additionally, interviewees relayed the importance of having state-level positions that could coordinate collaboration and communication among partners. They also felt that it was necessary to create a shared culture

of collaboration between the USFS and state agencies to successfully implement the Strategy.

Interviewees emphasized the need for clear direction to ensure the longevity of Shared Stewardship. This included communicating clear expectations about what Shared Stewardship means in practice and how agencies and partners should interact moving forward. Interviewees in many states said that developing and tracking performance measures should be a collaborative process to clarify expectations and goals among partners.

Comparing findings from Phase 1 (western) and Phase 2 (eastern) states

Interviewees in both phases expressed that collaboration and cross-boundary work are needed, and they believed the Strategy helped formalize and frame existing efforts that set the foundation for Shared Stewardship in each state. There was also a clear need for more leadership direction, increased communication between partners and other stakeholders, specific guidelines and expectations for the implementation of the Strategy moving forward, and increased funding and staff positions to support Shared Stewardship.

Eastern state interviewees primarily discussed already having well-established communication and relationships across agencies and other landowners, as necessitated by the context of more private lands and intermixed land ownership compared to much of the West. As a result, in eastern states, interviewees generally expected prioritization processes to remain internal to individual agencies and organizations, but they described intentions to enhance communication about priorities across agencies. Interviewees in western states anticipated pursuing more fundamental changes to joint prioritization efforts and more interaction among the states, federal government, and other partners throughout planning and implementation processes.

The future of Shared Stewardship

Participants in both phases of our research identified many consistent themes that are likely to determine the future success of Shared Stewardship across the United States.

- Clear direction and support from leadership in agencies and partner organizations are needed to provide structure and incentives to personnel and stakeholders to effectively pursue Shared Stewardship using existing mechanisms and any new resources available.
- Identifying and supporting key knowledge brokers (e.g., coordinators and liaisons) is necessary to coordinate across agencies, expand partnerships, and align Shared Stewardship efforts across local, state, regional, and national levels.
- Understanding and building on the history of collaboration across a state, including existing programs, plans, and relationships that facilitate cross-boundary coordination and multipartner collaboration, will be key to supporting the unique development of Shared Stewardship in each state.
- Persistent challenges will affect the success of Shared Stewardship and other initiatives that promote collaborative approaches to increasing the scale of forest management. Perceived challenges include inadequate funding levels, capacity (e.g., a lack of staff and trained personnel), and other resources for planning and doing projects. Staff turnover also presents challenges to developing and maintaining collaborative structures and relationships.
- There is a substantial need to continue and expand outreach and work with private landowners and other partners or stakeholders to meet landscape-scale objectives.
- Regardless of the longevity of the Shared Stewardship Strategy, there is strong agreement that developing and using effective partnerships across agencies and jurisdictions will continue to be essential regardless of changes in politics and policies.

Table A Phase 2 Research Summary

State	MOU date	Signatories	Key findings*	Goals
Arkansas	9/4/2019	USDA, Governor of Arkansas, Arkansas State Game and Fish	Shared Stewardship is viewed as a "next step" in better forest management to use resources more efficently; this formalizes the long history of collaboration for forest management.	Leverage resources to accomplish more work compared to previous efforts through additional partners and aligned objectives.
Florida	08/18/2020	USFS (Regional and statewide), Florida Forest Service, Florida Fish and Wildlife Conservation Commission, NRCS, and USDA Farm Service Agency	Shared Stewardship is still in its early stages, but there has been progress. New efforts build off previous management efforts and projects. There is a new Shared Stewardship position funded by the FL Fish & Wildlife Commission and the USFS.	Increase scale of forest management by including more partners and leveraging resources on projects where objectives align.
Georgia	11/23/2019	USDA, Governor of Georgia	Shared Stewardship is viewed as a formal, new name for the land stewardship work and partnerships that exist in the state already.	Foster communication among partners to identify overlapping objectives in forest plans and areas for increased partnership efforts and resource sharing.
Massachusetts	11/21/2019	USFS, Massachusetts Department of Energy and Environmental Affairs	Shared Stewardship in Massachusetts is centered on Mohawk Trail Woodlands Partnership. The Shared Stewardship MOU did not noticeably alter discussions or practices that were already occuring, according to our interviews.	Increase federal role in west- ern Massachusetts; formalize relationship of USFS to State of Massachusetts.
Nebraska	9/4/2020	USDA, Governor of Nebraska	Shared Stewardship has led to the creation of a steering committee consisting of USFS and Nebraska State Forest Service representatives. Interviewees highlighted how outreach with private landowners will be critically important to accomplishing landscape-scale objectives in the state.	Facilitate cross-boundary pri- oritization and communication; facilitate capacity building and resource sharing.
North Carolina	9/26/2019	USDA, North Carolina Department of Agriculture and Consumer Services, North Carolina Forest Service, and North Carolina Wildlife Resource Commission	Shared Stewardship represents the next step to address the current management challanges with the increasing threats to forest health in the state.	Increase coordination be- tween agencies and partners when identifying priority needs in the state.
Texas	7/17/2020	USDA, Governor of Texas	Texas Shared Stewardship embodies the col- laborative work of the existing Texas Forestry Council. Shared Stewardship is not expected to change any structures or practices across the state because coordination across agen- cies and partners is engrained in existing approaches.	Foster further collaborative opportunities; showcase the work Texas has been doing for a decade.

^{*}Each USFS Region has a USFS Shared Stewardship Coordinator position. See Part 2 in the report for more detailed findings from interviews in each state.



Introduction

In 2018, in response to calls from members of Congress for a renewed approach to forest management, the U.S. Forest Service (USFS) announced the Shared Stewardship Strategy (the Strategy) as a means of increasing the pace and scale of cross-boundary forest management activities (USFS, 2018). The Strategy encouraged expanded partnerships with states, tribes, and other federal and non-federal entities to reduce wildfire hazard and enhance forest resilience at landscape scales across jurisdictions. In particular, the Strategy promoted:

- Working with states to set spatial and management priorities to share in the ownership of risks presented by fire and coordinate planning and action, particularly through State Forest Action Plans (SFAPs);
- 2) Using a suite of scientific tools to model and map fire risk, largely through Scenario Investment

- Planning processes (Ager et al. 2019), to identify strategic places to invest in forest management;
- 3) Utilizing tools such as the Good Neighbor Authority (GNA), stewardship contracts, and categorical exclusions under the National Environmental Policy Act (NEPA) to facilitate and accelerate forest management work; and
- 4) Pursuing related goals, such as working with stakeholders to develop outcome-based performance indicators, streamline internal agency processes, and expand the use of risk management principles in fire management.

The Strategy was a continuation of previous efforts to expand the scale of planning, coordination, and forest management, and focus investments on locations and at scales large enough to affect ecosystem-level processes (Table 1).

https://www.usda.gov/media/press-releases/2018/03/23/secretary-perdue-applauds-fire-funding-fix-omnibus

² https://sipp-usfs.opendata.arcgis.com/

Table 1 Examples of key policies, strategies, and mechanisms to support collaborative, cross-boundary work prior to Shared Stewardship

Policies and strategies	Explanation		
State Forest Action Plan (SFAP) requirement in the Farm Bill	The 2008 Farm Bill required states to complete a SFAP to be eligible to receive funding from the State and Private Forestry division of the USFS. The SFAPs are intended to outline forest management priorities and plans across jurisdictions and landscapes.		
Collaborative Forest Landscape Restoration Program (CFLRP)	The CFLRP was established in 2010 and provides up to 10 years of funding for collaboratively developed projects on fire-adapted, federally owned landscapes; projects are chosen through a competitive application process (Kooistra et al., 2021a; Schultz et al., 2012, 2018).		
Joint Chiefs' Landscape Restoration Partnership (JCLRP)	The JCLRP was established in 2013 and funds work on both private and public lands; it was an internal agency initiative but in late 2021 it was congressionally authorized for two years in the bipartisan Infrastructure Investment and Jobs Act (Sec. 40808 of the Act, Cyphers and Schultz, 2019).		
Good Neighbor Authority (GNA)	The GNA was permanently authorized in 2014 and allows state agencies, Tribes or counties to enter into cooperative agreements to perform forest management activities on federal lands, thereby increasing the capacity for federal land management" (Bertone-Riggs et al., 2018; Cowan and Bertone-Riggs, 2021).		
National Cohesive Wildfire Management Strategy	The National Cohesive Wildfire Management Strategy, which was finalized in 2014, calls for increased communication and coordination across jurisdictional boundaries to address and prepare for the threats posed by wildland fire (WFEC, 2014).		

Research Project Overview

In 2019, Colorado State University entered into a challenge cost-share agreement with the USFS State and Private Forestry deputy area to conduct independent research on the implementation and development of Shared Stewardship efforts. The principal investigator for this effort is Dr. Courtney Schultz; Drs. Heidi Huber-Stearns at the University of Oregon and Jesse Abrams at the University of Georgia are co-principal investigators. Our research to date has consisted of three phases. Phase 1 explored initial perspectives on the Strategy across state-level agencies and other key partners in states with Shared Stewardship agreements in the western United States. Phase 2 research (reported upon herein) explored perspectives among similar agencies and actors in states east of the Rocky Mountains with Shared Stewardship agreements. Phase 3 is in-progress and involves conducting case studies of projects implemented in the spirit of Shared Stewardship to understand how partnerships are developing on the ground and how different funding sources and mechanisms or policies are being used to do multijurisdictional work.

The following research questions guide our project:

- 1. How is the Strategy playing out in different states, and what factors are driving choices about strategic partnerships and directions?
- 2. What opportunities and challenges are associated with implementing the Strategy?
- 3. How is the Strategy leading to changes in prioritization strategies, collaborative efforts and partnerships, cross-boundary planning, and project implementation, compared with business as usual?
- 4. How are priorities being set under the Strategy? In other words, what approaches, including different authorities, collaborative forums, and scientific tools, are being used?
- 5. What institutional and organizational changes, including new kinds of capacities, policies, incentives, and measurement approaches, are needed to successfully move forward with principles of Shared Stewardship?
- 6. What political opportunities and challenges will arise with increased state-level engagement?

Summary of key findings from Phase 1: Interviews in western states in 2020

The first phase of our work took place in 2020 and explored state-level perspectives from key USFS and state leaders and other partners on how Shared Stewardship efforts were developing in western states (Kooistra et al., 2021b). The following key findings from our Phase 1 research in western states provide a useful comparison to our findings from the eastern states (Phase 2) presented later in this report:

Goals for Shared Stewardship

- A key priority was to increase the pace and scale of work on the ground to reduce fire hazard, enhance forest and watershed health, and promote forest ecosystem resilience. Increasing agency capacity, supporting and growing the forest products industry and restoration workforce, and supporting local economies were also priorities.
- Many interviewees viewed Shared Stewardship as an opportunity to embrace a more collaborative mindset, jointly identify cross-boundary priorities, expand partnerships, leverage capacities, and share risks across state and federal agencies.

Cross-boundary efforts that precede Shared Stewardship

- Shared Stewardship efforts in each state formalized and built upon histories of partnerships, mechanisms and programs (e.g., GNA, CFLRP, JCLRP, and state-level initiatives), forest health assessments, and plans that encouraged collaboration and cross-boundary management.
- Existing state-level funding mechanisms for supporting cross-boundary work were also key in supporting Shared Stewardship efforts.

Progress to date

 Several positions in state and federal agencies were created at the state, regional, and national levels to support Shared Stewardship through enhanced coordination and liaison activities between agencies, partners, and other potential stakeholders.



- A few states also created multi-stakeholder advisory committees or groups to guide Shared Stewardship efforts. Other states relied on existing committees, some with expanded membership to better represent the diversity of partners in the state.
- Most states were still conceptualizing Shared Stewardship at the state level and specific directions or changes had generally not occurred yet at the field level. Utah was the only state that designated new funding for Shared Stewardship, which was being distributed through an existing program to support cross-boundary forest management projects.

Prioritization processes under Shared Stewardship

- Joint prioritization was viewed as key to enhancing shared decision making between agencies.
 Many states operationalized this aspect of Shared Stewardship through updating their State Forest Action Plans with key partners to assess risks and set goals across all jurisdictions statewide.
- Some states used the USFS Scenario Investment Planning approach to assist with prioritization, others used local or state-level processes and datasets to set priorities.
- Interviewees recognized that transparent, science-based, collaborative processes would help ensure that diverse perspectives and different landscapes were considered in future joint prioritization efforts to pursue Shared Stewardship.

Opportunities and challenges

- Interviewees said that strong leadership and clear expectations for agency personnel, field staff, and partner organizations were needed for the development, implementation, and longevity of Shared Stewardship.
- They sought clarification about how to integrate new processes with existing programs and plans, and whether Shared Stewardship will drive funding allocations.
- Interviewees expressed a need for more training on how to use the existing mechanisms and funding options across scales to do cross-boundary work, rather than needing new policies.
- Increased funding and capacity, particularly more positions in coordinating or liaison roles, were seen key to successfully implementing the Strategy.

Approach for Phase 2

For the second phase of our project, we conducted research in states east of the Rocky Mountains similar to our research in the western states in Phase 1 (see Figure 1). The prevalence of private land in these primarily eastern states and the relatively smaller footprint of federal lands create different opportunities and challenges relevant to Shared Stewardship goals compared to in western states. A combination of private forestland ownership and productive growing conditions has tended to allow for the persistence of a timber industry that is well-distributed across most of our Phase 2 study states, except for Nebraska and Massachusetts. This presence helps provide economic utilization opportunities for timber removed from restoration and other management projects. Intermixed land ownership has also fostered a longstanding emphasis on cross-boundary and cooperative management initiatives in Phase 2 states. On the other hand, this ownership fragmentation can present challenges to landscape-scale coordination of planning and management, and several Phase 2 states have been identified as hotspots of forest parcelization and conversion (Stein et al., 2009).



Throughout 2021, we conducted 64 semi-structured and confidential interviews across seven states that had signed Shared Stewardship MOUs before the end of 2020 (Table 2). We interviewed key actors and agency leaders who worked in these states, including those who work in forest management or policy for federal or state government agencies, in partnership or collaboration with the USFS, represent conservation interests, or work in the forest or wood products industry at a regional or state level (Table 3). Five of the states we included are in USFS Region 8, one is in USFS Region 2, and one is in USFS Region 9.3

On average, we conducted fewer interviews per state in Phase 2 than we did in Phase 1 because we found that development and implementation of the Strategy had generally progressed further in the western states compared to these states at the time of the respective data collection efforts. This meant that relatively fewer people were involved or could provide a state-level perspective about Shared Stewardship – a fact that resulted in a smaller sample size. Interview questions focused on: how the Strategy was developing; perceived challenges and opportunities; new approaches to prioritization, partnerships, and implementation; and institutions (i.e., processes, forums, positions, capacities, policies, or measurement approaches) that support or complicate Shared Stewardship goals.

<u>https://www.fs.usda.gov/about-agency/contact-us/regional-offices</u>

Figure 1 States included in Research Phases 1 and 2



 Table 2
 Number of interviews, interview dates, and MOU signing date

National or state-level	Number of interviews ^a	Interview dates	MOU signing date
Arkansas	10	October 2020-April 2021	September 4, 2019
Florida	8	June 2021-July 2021	August 18, 2020
Georgia	10	June 2021-July 2021	November 23, 2019
Massachusetts	10	November 2020-March 2021	November 21, 2019
Nebraska	7	March- May 2021	September 4, 2020
North Carolina	10	April-June 2021	September 25, 2019
Texas	9	February-April 2021	July 16, 2020
TOTAL	64		

^a We did not investigate Shared Stewardship in Ohio, which had an MOU by the end of 2020, to avoid overlap with efforts by other researchers.

Table 3 Number of interviewees by category

Category of interviewees	Number of interviews	Number of interviewees ^a
Federal agencies	20	22
State agencies	20	20
NGOs, collaborative groups, other partners not associated with the forest products industry ^b	19	19
Partners associated with the forest products industry °	5	6
TOTAL	64	67

^a Some interviews were conducted with multiple interviewees present.

^b We did not interview anyone about perspectives from a specific tribe, although we and many interviewees acknowledge their crucial roles in stewardship of land. No Tribe was a signatory to an MOU for this stage of our research, and none of our referrals were to Tribal representatives.

^c Forest products industry partners included non-agency individuals in the forest, timber, or wood products industry, as well as representatives of the industry who serve on state or national councils, associations, or advisory groups. Interviewees from NGOs or collaborative groups who focused primarily on forest products were placed in the forest products industry partner category.



Part 1 Findings: Main Themes Across States

Here, we present overall findings synthesized from all 64 interviews in the seven states we studied in Phase 2. State-specific examples are included to help demonstrate the range of themes we identified; however, these examples are not exhaustive. More details on individual states can be found in Part 2 of this report beginning on page 22.

Goals for Shared Stewardship

Interviewees identified the primary challenges to forest management as: the loss and fragmentation of forestland resulting from urban development; changes to forest composition due to invasive species; and the effects to forest health from a changing climate, worsening fire seasons, and forest pests and diseases. Interviewees highlighted a general need to increase forest management activities to address these challenges. They also described a need to develop a more robust market infrastructure for the timber industry, stressing that greater industrial capacity could assist land managers with restoration objectives.

Interviewees across all states agreed that there was a need to expand outreach to private forest landowners to meet landscape-level objectives and ensure a consistent supply of wood products. The diversity in private landowners' management objectives presents a challenge for effective coor-

dination and implementation of landscape-level management activities. As a result, interviewees acknowledged the need to perform substantial outreach to plan, coordinate, and achieve objectives at meaningful spatial extents.

There was some variability in participants' perspectives on priority needs in different states. For instance, Massachusetts interviewees focused more on the need for community and economic stability around forest ecosystems given the lower priority of hazardous fuel and wildfire risk reduction compared to other states. Nebraska interviewees did not discuss challenges related to land conversion and urban growth. Interviewees in Nebraska and Massachusetts expressed a need to build timber and forest product markets, in contrast to southeastern states where there are established markets but a need for stronger alignment between supply and demand.

Interviewees consistently said that Shared Stewardship would largely serve to formalize and expand cross-boundary efforts that predated Shared Stewardship, including increased coordination with private landowners. They described how established partnerships or relationships among agencies, NGOs, and other stakeholders were already being used to share capacity across boundaries. For example, interviewees in Texas described

the common practice of sharing burn crews for prescribed fire operations on state and federal land. Many interviewees also hoped that Shared Stewardship would increase the amount of cross-boundary management and collaboration in places where it might not exist, particularly by more outreach and engagement with private landowners.

Interviewees believed Shared Stewardship would provide a greater impetus to work with partners to leverage capacity to achieve land management objectives. Most interviewees agreed that there was a lack of sufficient capacity within the USFS, and to a lesser extent in state agencies, to plan, coordinate, fund, and implement management activities. They hoped these capacity challenges could be overcome or minimized through enhanced coordination.

Interviewees in Massachusetts described an additional set of goals for the Strategy that reflected the state's unique context. Because the USFS does not manage land within the state, and because Shared Stewardship in Massachusetts focuses exclusively on the Mohawk Trail Woodlands Partnership (MTWP) - an emerging collaborative governance effort - rather than statewide management concerns, interviewees oriented their responses toward this existing partnership. Interviewees said their goals for the MTWP, and thus for Shared Stewardship, included passing federal legislation designating a special management zone for the USFS in the area that would allow it to act as a formal stakeholder in MTWP discussions. Most Massachusetts interviewees said they hoped that Shared Stewardship and greater USFS involvement would eventually result in a small research forest and tourism center in western Massachusetts that could host experiments with localized silvicultural treatments and serve as a venue to communicate general forest management principles to the public.

Cross-boundary efforts that precede Shared Stewardship

Interviewees described how established partnerships or relationships among federal, state, and local agencies and NGOs were being used to share capacity across boundaries. Current coordination efforts and collaborative partnerships at the state level provided a foundation for Shared Stewardship. For instance:

- The Longleaf Alliance is an effort spanning across the Southeast with the purpose of coordinating a partnership among private landowners, forest industry, state and federal agencies, and conservation organizations interested in managing and restoring longleaf pine forests for their ecological and economic benefits.
- The Western North Carolina All Lands Strategy is an initiative collaboratively developed by the All Lands Working Group that is composed of local, state, and federal government agencies, conservation interests, and local stakeholders to coordinate priorities and actions across all lands in Western North Carolina.
- The Texas Forestry Council provides a platform for public agencies to address forest management issues and communicate goals and objectives among agencies.

"[Agencies] have different objectives, but we all come together through these councils and committees and talk about what we're doing, talk about how each different organization might be able to help the other meeting their program objectives." (Texas)

Key partners and stakeholders have historically worked together to ensure that federal and state resources are being focused on landscapes with the greatest opportunity to achieve shared management priorities through collaborative management plans. For instance, in states located in USFS Region 8, existing agency staff positions, strategic plans, and various multi-partner groups or committees have been in place for years to support coordination across agencies and jurisdictions, and interviewees expected these roles to continue under the formal umbrella of Shared Stewardship. Region 8 interviewees also discussed integrating future restoration strategies under Shared Stewardship with elements of the National Cohesive

Strategy for Wildland Fire Management Southeast Regional Action Plan, State Forest and Wildlife Action Plans, the Keeping Forests in Forests Partnership, and National Forest Land Management Plans to leverage resources for collective landscape-level impact. Many of the key partners for these initiatives and plans are the same partners involved with discussions about progressing Shared Stewardship.

"The partners that we have within our Shared Stewardship agreement are partners that are key to assisting landowners, of any type, with management practices and focusing on the critical needs that are determined by our state. And some of those critical needs have been determined through our State Forest Action Plan, the State Wildlife Action Plans and other plans that we look to for direction going forward." (Florida)

In Massachusetts and Nebraska, interviewees described the history of cross-boundary management between federal and state agencies as being less extensive. However, in Massachusetts interviewees also hoped that Shared Stewardship would support existing efforts with the Mohawk Trail Woodlands Partnership. In Nebraska, interviewees explained that cross-boundary efforts started after the 2006 Spotted Tail and 2012 West Ash Fires, describing how the Pine Ridge Landscape Restoration Project brought together many partners to work across boundaries to address undesirable conditions and reduce the threat of future wildfires.

Interviewees described the use of existing federal authorities and programs (e.g., GNA, stewardship agreements, JCLRP, CFLRP) as being important for accomplishing their Shared Stewardship goals. These mechanisms continue to facilitate communication among agencies and partners and enhance their ability to leverage resources to accomplish work at larger scales. The Forest Stewardship Program and Forest Legacy Program remain central to the cross-boundary efforts outlined in all the eastern states' Forest Action Plans. State forestry agencies use these programs to facilitate stewardship by working across landscapes and land own-

erships to address key resource issues.

"Before Shared Stewardship, there was the Good Neighbor [agreement], and there have been a number of projects in North Carolina tied to the Good Neighbor Authority. There's opportunity under Shared Stewardship, but there were also some things that were already in the works under the Good Neighbor Authority." (North Carolina)

Progress to date

In general, interviewees did not yet report significant changes to prioritization, planning, or implementation processes for land management tied to Shared Stewardship in their states. Across many of the states, several interviewees said "we've been doing Shared Stewardship for years." They did not expect to see specific changes result from the Strategy because they believed they already practiced its main approaches. Interviewees in other states who did perceive Shared Stewardship to include new processes pointed to an absence of leadership direction, a lack of Shared Stewardship-specific funding opportunities, staff turnover, or the CO-VID-19 pandemic as factors influencing the slow rate of progress.

"The next logical step was to go and sign on with the US Forest Service...There's a lot of overlap and duplication, and anything that we can do to avoid duplication and overlap is a good thing. Since we've signed it, there's not really anything that's different than the way that we're doing any of these things...It just seemed like a better way to collaborate." (Florida)

Of the states that were adjusting processes, changes were still in the early stages of development:

- Massachusetts interviewees said that the Strategy had helped convince members of the State Legislature to pass a bill recognizing the MTWP footprint as a specially designated conservation area.
- Florida interviewees pointed to a new Shared Stewardship position funded by the state that would work with the USFS on the Osceola National Forest to coordinate management activities.

• Nebraska interviewees discussed the new joint USFS and Nebraska Forest Service (state) Shared Stewardship steering committee working to prioritize cross-boundary strategies and management actions across the state.

"We're kind of at the stage where we're trying to bring the experts together and have these conversations, broader conversations about priorities. I know what our priorities are in the state. We have a 200-page Forest Action Plan that does a pretty good job, I think, of outlining what those priorities are. So, how do we then blend together the different groups to meet those priorities within our state?" (Nebraska)

Prioritization processes under Shared Stewardship

Many interviewees said they believed they had been practicing joint prioritization for years through longstanding practices of interagency and partner communication. Most commonly, these practices occurred after state agencies produced their statewide plans such as State Forest Action Plans, State Wildlife Plans, and State Conservation Action Plans, although interviewees said that agencies often shared plans before they were finalized to solicit input from their partners. An example of this was the Texas Forestry Council, a group of land management agencies that has met quarterly for the past decade to discuss planned management actions and share capacity where feasible. State agencies and partners are not expecting a change to prioritization and anticipate using existing channels to continue to accomplish work on priority areas.

In Massachusetts, interviewees gave the example of the MTWP, which utilized a voluntary, consensus process to make decisions that predated Shared Stewardship and involved representatives from communities within the partnership's footprint, agencies, collaboratives, and NGOs to prioritize activities. In Nebraska, interviewees discussed the new steering committee created in response to Shared Stewardship made up of USFS and Nebraska Forest Service (state) personnel as a new attempt at joint prioritization. Interviewees said this committee's goal was to

outline priority needs for the state and develop plans to meet those needs. At the time of our interviews, the committee had determined primary action areas but had not yet determined the next steps.

"It was through the advisory committee and the advisory committee then morphed into the partnership board...[but] the communities are free to do whatever they want. Now they're not bound by any of that...hopefully they will align with the goals of the partnership, but...they're not beholden to do anything." (Massachusetts)

In some states, new open-access tools are coming online that could allow agencies and partners to better share information to inform prioritization. In both North Carolina and Georgia, some interviewees pointed to the North Carolina Data Basin project as a mapping tool that could allow actors in agencies and partner organizations to better determine priority areas through shared data. Interviewees in North Carolina described how the "All Lands" project in the western portion of the state had already successfully made use of this tool. At the time of our interviews, the tool had not yet been rolled out in Georgia, but interviewees in the state said they were optimistic about its potential and highlighted it as a working example of potential future data sharing among federal and state partners under Shared Stewardship.

Opportunities and challenges

Many interviewees saw Shared Stewardship as an opportunity to improve partnerships between agencies and private landowners to include more perspectives in the decision-making space and work at larger scales across jurisdictional boundaries. Although interviewees in Massachusetts focused more on opportunities to enhance partnerships between the USFS and non-federal entities, interviewees in the other states emphasized opportunities to work more with private landowners to achieve landscape-level objectives. Interviewees also saw potential to leverage resources more efficiently to increase the pace and scale of forest management and increase economic activity to support the timber and forest products industry.

"Like it, or not, the world runs on relationships, and Shared Stewardship is a little more formal way to build relationships and trust. The only way you can build relationships and trust is to do stuff together, do projects together. And that's the important piece... And that's the beauty of the Shared Stewardship agreement. It gives us a vehicle to do stuff together." (Arkansas)

Shared Stewardship was also believed by interviewees to be a means to better align federal and state objectives to achieve goals that have been challenging in the past, such as working together to focus on complementary priorities. Many interviewees said that it was necessary to create a shared culture of collaboration between the USFS and state agencies. Interviewees from Region 8 felt that, although federal and state agencies have a history of working together, there are still areas where agencies work primarily independently.

"There's this intent to make sure that the Forest Service tries to get work done on their property, while we are trying to get the work done on state land holdings. Each agency has a different--they operate differently. So, it's kind of like mixing oil and water. And sometimes that doesn't mix... I think some of it's just from years of having operated that way, kind of more of a vacuum that it's a little harder to mingle a little bit and work together on certain things." (North Carolina)

Interviewees overwhelmingly said that they needed clear direction from agency leaders and partners about their expectations for Shared Stewardship to ensure its longevity. They had various ideas about the intent of the Strategy and many expressed confusion as to the intent; it was often unclear to them how the Strategy might impact state and federal agencies. State-level interviewees wanted to know if higher-level goals would impact their existing programs and resources and desired more guidance about what activities are considered to fall under Shared Stewardship.

Many interviewees from state agencies and NGOs expressed concern with the Strategy due to past experiences where collaborative agreements with USFS have not delivered the results they expected



to see when they signed agreements. Many interviewees felt hesitant to increase work with the USFS beyond the current levels of collaboration due to the "red tape" involved with working on federal land. Some state-level interviewees, particularly in Region 8, felt they were not truly trusted as a partner by the USFS because they were only allowed to assist on federal land but not to take an equal or lead role in management activities. They noted that efforts to engage the USFS as a partner were met with mixed reactions; some thought the USFS should allow them to have more of a say and do more to embrace the opportunity to work with partners to conduct more work on federal land.

Interviewees said it was important to have more funding for implementing Shared Stewardship, more state-level positions dedicated to advancing collaboration and communication among partners, and collaboratively developed performance measures to track and support the long-term success of Shared Stewardship. Interviewees in USFS regions with existing regional Shared Stewardship Coordinators described their instrumental role in developing the MOU and setting up any new steering committees (e.g., in Nebraska). Many felt that progress could be advanced and sustained with the help of a new state-level coordinator for each state and at the USFS regional offices. Regularly communicating progress with the public and other stakeholders to highlight economic success and ecological outcomes was seen as essential for maintaining public support and engagement from diverse partners.



Outstanding questions and uncertainties

Some interviewees wondered about the implementation and longevity of Shared Stewardship, particularly how it would be integrated with other existing initiatives and programs and whether Shared Stewardship as a strategy would result in substantive changes. Some interviewees were concerned that this was an agreement with no action behind it, or that this initiative could disappear, at least in name, if direction for implementation were not provided soon. Some of the lack of action was felt by interviewees to be due to the lack of initiative from USFS leadership, at all levels, to begin steps towards implementation. Although it was unclear how state and federal administration changes would affect Shared Stewardship, most interviewees felt optimistic that the basic framework would remain.

"I hope it will elevate the priority...That's where you need to move beyond just the agreement if we're going to work together towards this thing. We need an actual roadmap." (Georgia)

Most interviewees did not generally perceive Shared Stewardship as an attempt to shift management responsibility for federal lands to the states. In most cases they did not see any indications that Shared Stewardship would cause major shifts in power dynamics. However, in Massachusetts, interviewees said that entering a formal partnership with USFS for the MTWP would be an increase in federal involvement.

Lastly, we consistently heard that COVID-19 slowed the progress of Shared Stewardship. Agency and partner organizations shifted their resources and priorities to address the pandemic. Many planned in-person meetings or forums were postponed or canceled and many planning processes, including updating the SFAPs, were delayed. Interviewees also mentioned changes in budgets for management activities, especially for NGOs that depend on fundraising arising from in-person interaction.

Discussion and Recommendations

Our research aimed to characterize expectations for Shared Stewardship efforts and how these efforts were developing in states east of the Rocky Mountains (Phase 2 of our research project). In this section, we first present Table 4 to summarize our Phase 2 research findings related to each research question. Then we compare key findings across research Phases 1 and 2. Lastly, we discuss key factors that emerged from our interviews and from relevant literature that are most likely to affect the success of future Shared Stewardship efforts.

Summary of research questions for Phase 2 states

Table 4 Key Year 2 Findings By Research Question

How is the Strategy playing out in different states, and what factors are driving choices about strategic partnerships and directions?

Research question

Key findings

- Shared Stewardship will play out differently in each state due to differing priorities and unique existing structures and relationships.
- Leadership is important in each state to move forward with implementation.
- Interviewees said that new inter-organizational partnerships as well as relationships with private landowners would allow them to identify shared priorities, better leverage resources, and coordinate management actions at a larger scale.

What opportunities and challenges are associated with the Strategy's implementation?

- Interviewees thought that Shared Stewardship added formality to existing collaboration between agencies and partners to address priority needs of forest management.
- There is a need for consistent leadership and clear communication about Shared Stewardship expectations (e.g., if there will be new resources or directives to do Shared Stewardship).
- There were noted shortages in capacity (e.g., staff) and resources (e.g., funding, equipment) to accomplish more cross-boundary work.
- Interviewees questioned the longevity of Shared Stewardship, and most interviewees were not sure that the Strategy would lead to significant changes.

How is the Strategy leading to changes in prioritization strategies, collaborative efforts and partnerships, crossboundary planning, and project implementation, compared with business as usual?

- Prioritization processes were generally expected to remain internal to individual agencies. However, interviewees expected continued and increased communication and coordination among agencies and other partners to identify overlapping priorities and opportunities for joint efforts.
- Interviewees hoped Shared Stewardship would provide a way to fill existing capacity gaps through enhanced coordination, sharing and leveraging resources, and perhaps additional staff positions.

How are priorities being set under the Strategy? What approaches, including different authorities, collaborative forums, and scientific tools, are being used?

- Priorities were informed by agency plans (e.g., State Forest/Wildlife/Conservation Action Plans) with increased attention on future opportunities and intentions to identify overlapping priorities across plans and agencies to better align efforts and leverage resources in the future.
- Interviewees used existing datasets and scientific tools to help inform Shared Stewardship planning.
 Interviewees in Region 8 discussed the use of the North Carolina Data Basin, a tool with some similarities to the USFS Scenario Investment Planning tool.
- Interviewees planned to use existing authorities, policies, and mechanisms to accomplish their work.

What institutional and organizational changes, including new kinds of capacities, policies, incentives, and measurement approaches, are needed to successfully move forward with principles of Shared Stewardship?

- Interviewees said they needed clear communication about expectations for Shared Stewardship and support from leadership to pursue any new developments, approaches, or projects under Shared Stewardship.
- Existing regional positions in the USFS were important for getting MOUs signed, but new state-level Shared Stewardship positions were thought to be increasingly important for advancing Shared Stewardship.
- There is a perceived need for more funding and staff to support Shared Stewardship efforts, as well as a need to incentivize field-level managers to implement changes if extensive alterations to current practices are desired.

What political opportunities and challenges will arise with increased state-level engagement?

- Most interviewees did not expect Shared Stewardship to bring any significant shift in power dynamics for decision-making.
- They anticipated that the principles of Shared Stewardship (e.g., jointly identifying shared priorities and coordinating efforts) would continue to be operationalized through existing collaborative efforts and forums and that existing roles would be formalized by the Strategy.



Comparing main findings from Phase 1 and Phase 2 states

There were some key similarities in our findings across all states in the first two phases of our research:

- In general, there was a recognized need for more active forest management to enhance forest and watershed health through mitigating wildfire hazard, managing invasive species, and restoring more resilient ecological conditions.
- There was a consensus that some individual agencies lacked the funding and agency capacity to accomplish large-scale forest management without leveraging resources through partnerships.
- People welcomed the formality and framework that Shared Stewardship provided. Shared Stewardship was seen as a continuation of existing collaborative, cross-boundary work and coordination but also as an effort that increased formality and attention to partnerships.
- Strong leadership and clear communication within agencies and across partners will be essential for effective coordination and to create similar expectations about roles, timelines, and other efforts to pursue Shared Stewardship.

The main differences in findings across the two phases of our research reflected different contexts, histories, and available tools and resources for doing Shared Stewardship:

- The prevalence of federal and other public lands in the West, compared to more private lands in the East, has led to unique approaches and histories that affect how interviewees expected Shared Stewardship to develop.
- Interviewees in western (Phase 1) states felt that there was a need for Shared Stewardship to promote a more collaborative mindset, risk sharing, and joint prioritization to identify shared goals and leverage resources to do more cross-boundary work.
- Interviewees in the eastern (Phase 2) states highlighted a long history of partnerships focused on achieving goals across multiple ownerships. They used examples of non-federal programs and initiatives, especially those that engaged private landowners, to illustrate why they expected minimal changes resulting from Shared Stewardship.
- Phase 1 interviewees expressed an opportunity to increase transparency, coordination, and cross-boundary work by jointly setting priorities through new, collaborative processes that considered needs and goals across landscapes and jurisdictions. Many western states worked on joint prioritization in the 2020 SFAP revision process.
- Phase 2 interviewees felt that existing approaches to prioritization were effective and mostly included communicating with other partners after engaging in internal agency prioritization and planning processes.
- Phase 1 interviewees showed interest in having more guidance and training from agency leadership on how to collaborate effectively, whereas Phase 2 interviewees mainly expressed that they were already equipped for collaboration and did not need additional guidance for collaboration.

Factors affecting future success

Many factors affect the success of agency initiatives like Shared Stewardship, and collaborative, cross-boundary land management efforts in general. Here, we focus our discussion of recommendations and insights about supporting Shared Stewardship efforts based on findings from our research in Phase 2 states. This discussion generally applies to the findings from our Phase 1 research as well (see Kooistra et al., 2021b).

People consistently discussed the importance of leadership in multiple agencies and spoke highly of instances where central knowledge brokers (e.g., coordinators and liaisons) worked to bring separate organizations together. Creating and utilizing these positions would likely increase the amount of cross-boundary collaboration and hasten the development and implementation of both prioritization plans and management activities that transcend property lines.

Past collaborative history is an important factor influencing the Strategy's form in different locations and will shape how the Strategy develops in the future. Understanding past collaborative efforts and existing foundations will help land managers and high-level decision makers better understand the form and capacity of Shared Stewardship efforts in specific contexts.

Interagency and partner relationships are important, particularly in light of turnover and its impacts on collaboration. Minimizing the effects of staff turnover in agencies and other partner organizations is key to increasing the pace at which cross-boundary proposals develop, as it reduces the amount of time needed to build and maintain relationships between relevant actors compared to situations where turnover is high.

People repeatedly identified insufficient staff capacity of the USFS as a barrier to increasing the pace and scale of management. While Shared Stewardship undoubtedly works to address these types of capacity gaps through leveraging the power of partnerships, it is worth noting that the Strategy



alone is not enough to overcome the general capacity shortage these gaps expose. Increasing the capacity of the USFS in areas like grants and agreements staff may be necessary to successfully implement the Strategy.

Land managers recognized a substantial need for outreach to private landowners to meet landscape-level objectives. Interviewees in all states highlighted the need for continued education and outreach to landowners about land management techniques and opportunities. Land managers consistently noted the limits of managing only public lands in both Phase 1 and Phase 2 states. Phase 2 interviewees discussed the need for work with private landowners relatively more, although engaging more with private landowners was also a common goal for future Shared Stewardship efforts in Phase 1 states as well.

Many interviewees raised doubts about the longevity of the Shared Stewardship initiative. However, they agreed that building effective partnerships across agencies and ownership boundaries would continue to be essential in the coming years, regardless of changes in politics and policies. Nearly all interviewees recognized that pressing concerns cannot be addressed by any one agency or landowner working in isolation, and that achieving landscape-level conservation will require fundamental shifts in relationships and operating procedures, as well as support from federal- and state-level policies and continued investments in science, planning, and implementation capacity.

References

Ager, A.A., Houtman, R.M., Day, M.A., Ringo, C., & Palaiologou, P. (2019). Tradeoffs between US national forest harvest targets and fuel management to reduce wildfire transmission to the wildland urban interface. *Forest Ecology and Management*, 434, 99–109.

Bertone-Riggs, T., Cyphers, L.A., Davis, E.J., & Hardigg, K. (2018). Understanding Good Neighbor Authority: Case Studies from Across the West. Rural Voices for Conservation Coalition Report. Available at https://www.ruralvoicescoalition.org/s/RVC-GNA-2018 web .pdf

Cowen, E. & Bertone-Riggs, T. (2021). Use of Good Neighbor Authority Across the West. Rural Voices for Conservation Coalition Report. Available at www.ruralvoicescoalition.org/s/RVCC-GNA-2021 FINAL WEB 8-18-21.pdf

Cyphers, L.A., & Schultz, C.A. (2019). Policy design to support cross-boundary land management: the example of the Joint Chiefs Landscape Restoration Partnership. Land Use Policy, 80, 362–369.

Kooistra, C., Schultz, C., Huber-Stearns, H., Abrams, J., Greiner, M., & Sinkular, E. (2021b). Assessment of early implementation of the US Forest Service's Shared Stewardship Strategy. Public Lands Policy Group Practitioner Paper no. 10. Colorado State University, Fort Collins, Colorado.

Kooistra, C., Sinkular, E., & Schultz, C. (2021a). Characterizing the context and demand for the U.S. Forest Service's Collaborative Forest Landscape Restoration Program in 2020. Journal of Forestry. Published online August 9.

Schultz, C.A., Jedd, T., & Beam, R.D. (2012). The Collaborative Forest Landscape Restoration Program: a history and overview of the first projects. Journal of Forestry, 110(7), 381–391.

Schultz, C. A., McIntyre, K. B., Cyphers, L., Kooistra, C., Ellison, A., & Moseley, C. (2018). Policy design to support forest restoration: the value of focused investment and collaboration. Forests, 9(9), 512.

Stein, S. M., McRoberts, R. E., Mahal, L. G., Carr, M. A., Alig, R. J., Comas, S. J., Theobald, D. M., and Cundiff, A. (2009). Private forests, public benefits: Increased housing density and other pressures on private forest contributions. General Technical Report PNW-GTR-795. Portland, OR: US Department of Agriculture Forest Service, Pacific Northwest Research Station.

USFS [US Forest Service]. (2018). Toward Shared Stewardship Across Landscapes: An Outcome Based Investment Strategy. Available at https://www.fs.usda.gov/sites/default/files/toward-shared-stewardship.pdf

WFEC (Wildland Fire Executive Council). (2014). The national strategy: the final phase in the development of the National Cohesive Wildland Fire Management Strategy. Washington, D.C. Available online at https://www.forestsandrangelands.gov/documents/strategy/strategy/CSPhaseIIINationalStrategyApr2014.pdf



Part 2 Findings: State-Level Summaries

In this section, we present summaries of our findings from our state-level interviews. Summarizing the information in this way allowed us to clearly identify prominent themes for each state and to track how they played out across states. A few considerations are important to note. First, the summaries reflect a snapshot of perspectives about Shared Stewardship at a particular time. Each state was at a different stage in Shared Stewardship efforts when we conducted interviews, and each state has since moved forward in different ways. Second, these summaries are an overview of high-level findings and do not reflect every detail or perspective that we heard. Interviewees were given the opportunity to review their respective state-level summaries to ensure that we captured the main themes from their perspective during our data collection timeframe for that state and they could provide key updates that we added to these summaries. Third, we interviewed an average of nine people in each state about Shared Stewardship. While those individuals were intended to represent the key actors, organizations, and interests involved with Shared Stewardship, we recognize that other perspectives or nuances may not have emerged in our interviews.

The national forest footprint we identify at the top of each state summary includes all National Forest System lands in that state (national forests, grasslands, etc). Footprint data are from the Congressional Research Service. The number of national forests in each state is from the National Forest Foundation and includes administratively combined units.



ARKANSAS

Shared Stewardship agreement: MOU signed 9/4/19 by the U.S. Department of Agriculture, the Governor of Arkansas, and the Arkansas Fish and Game Commission.

Interviewees: 10 people between October 2020 - April 2021

National forest footprint: ~3 million acres across two forests in

Region 8

History and context

Interviewees described priority needs across the state involving: increasing the pace and scale of active forest management, continued support of the forestry industry, and outreach to private landowners. There is a continued need statewide for thinning, prescribed burning, and invasive species control. Many Arkansas forests are overstocked, and some interviewees reported that the state currently has more trees per acre than any time in its history. They stressed that thinning is important to prevent a future forest health crisis such as an outbreak of southern pine beetles or red oak borers. Interviewees from state agencies said that there is more timber being produced than can be taken by mills. Interviewees representing state agencies noted the need to increase capacity within state forestry agencies to support the forest products industry and maintain local timber economies. Interviewees also said that it was important to expand beyond forest management goals and address the risk of land conversion to non-forest uses. Interviewees identified the need for managers to engage private landowners in order to achieve landscape-level objectives.

The majority of the state's land coverage is forested, with hardwood stand types making up the majority of forests and followed, closely, by plantation pine stands. About one-fourth of Arkansas' forest acreage is owned by corporate owners. The largest proportion of forested land is owned by individual families. Arkansas contains the largest national forest area in the South with 2.5 million acres within the Ozark-St Francis and Ouachita National Forests.

The presence of large private land holdings and the longstanding culture of collaboration are important contexts in Arkansas for Shared Stewardship, which builds upon existing efforts under the Good Neighbor Authority, Collaborative Forest Landscape Restoration Program, and the Joint Chiefs' Landscape Restoration Partnership. Most interviewees believed that Shared Stewardship will not fundamentally change forest management efforts because of the existing culture of working together on projects at a landscape level. Interviewees said that the unique state history with collaborative forest management practices, government structure, and strong partnerships set the stage for this effort. Interviewees also mentioned that NRCS houses two Arkansas Forestry Commission positions, and the mix of employers has made past collaboration successful in the state.

This Shared Stewardship agreement here kind of almost seemed redundant because the agencies and NGOs and all the interested parties already worked very well together to do this and had been [doing so] for quite a while. So, it just seemed like it was a signing ceremony just to kind of put it on paper and make it official.

Progress since agreement signing

Interviewees believed that Shared Stewardship adds formality to the efforts that were already taking place but that it has not significantly changed forest management in Arkansas. They described it as a way to formally define how partners are going to work together, improve existing relationships, and effectively respond to increasing ecological challenges in Arkansas. There are currently no formal projects underway that are labeled as "Shared Stewardship." Interviewees highlighted existing state plans, like the State Forest Action Plan, as being key guides to continued prioritization but state agencies and partners are not expecting a change to prioritization. They anticipated using existing efforts with planning processes to continue to accomplish work on priority areas.

Primary opportunities and challenges

Most felt Shared Stewardship simply formalized successful cross-boundary practices already in operation, while increasing the possibility for future cross-boundary opportunities. Interviewees hoped that Shared Stewardship would formally encourage partners to share resources and find other ways to work together efficiently to ease the challenges that all entities face regarding budgets, capacity, and resources. Many interviewees saw Shared Stewardship as providing opportunities for increased timber harvest, which they said would generate funding for other restoration work and support for market infrastructure.

Many interviewees mentioned the partner-centric principle of Shared Stewardship being greatly affected by the pandemic. Discussions about the implementation of Shared Stewardship had to be put on hold as state priorities shifted to pandemic relief rather than new land management opportunities. Interviewees said that many NGOs saw decreases in their available funding resulting from a lack of annual fundraising opportunities.

Interviewees stressed the need for flexibility in their approach to Shared Stewardship but said that: clearer communication; support for risk taking; and strong leadership across the USFS state agencies, and partner organizations all are needed to align expectations and enable new approaches. Some interviewees expressed concerns about federal initiatives becoming



too bureaucratic and undermining the current relationship-based approach, explaining that their concerns stemmed from previous collaborative efforts that were hindered because of communication barriers between agency leadership and the staff implementing work on the ground. They felt people and policies needed to stay in place long enough to facilitate long-term relationships and support land-scape-level projects. There was no mention of needs for more direction, policies, or tools to support Shared Stewardship. Instead, people identified the need for more long-term planning and coordination around utilizing existing mechanisms.

Research takeaways

Forest managers in Arkansas face growing challenges with forest land conversion, timber markets, and the need to increase active management. Shared Stewardship is still in its early days in Arkansas. There are not yet examples of projects that can be tied directly to Shared Stewardship, but there is an existing culture of collaboration and a history of projects under past collaborative initiatives. Progress has been made with building the infrastructure for integrating the ideas behind Shared Stewardship into landscape-level management documents like the State Forest Action Plan.

Key websites for more information:

Region 8 Shared Stewardship

Arkansas State Forest Action Plan

Arkansas State Wildlife Action Plan



FLORIDA

Shared Stewardship agreement: MOU signed 8/18/20 by U.S. Forest Service (Region 8 and National Forests in Florida), Natural Resources Conservation Service, U.S. Department of Agriculture Farm Service Agency, Florida Forest Service, and Florida Fish and Wildlife Conservation Commission

Interviewees: 8 people between June - July 2021

National forest footprint: ~1.2 million acres across three forests in Region 8

History and context

Interviewees said the priority needs across the state are to: increase active forest management, control invasive species, restore longleaf pine, and increase private landowner outreach. Increasing the scale and pace of active forest management is important to decrease the likelihood of forest heath crises. Interviewees noted that public perception and population growth are challenging their ability to use prescribed fire, which many described as the best management tool they have. To address these challenges, interviewees noted the need to increase communication with partners and landowners to coordinate management activities on a landscape level. Additionally, interviewees expressed concern about rapid population growth that is leading to forest conversion to urbanized uses. Consequences identified by interviewees included a decline in forest product markets and an increase in land value for other uses.

Forests cover about half of Florida's land area. There are more than 17 million acres of forests, and the majority are managed for timber production. Florida has more pine plantations as a percentage of forestland base then any other southern state. The majority of the forested land is owned by private landowners and the small remaining percentage of forestland is held by federal and state agencies. The National Forests in Florida include the Apalachicola, Osceola, and Ocala National Forests which collectively span more than 1.2 million acres in north and central Florida. The USFS in Florida also manages the 1,400-mile Florida National Scenic Trail, which is one of 11 national scenic trails in the United States.

Interviewees reported that the state's Shared Stewardship agreement builds upon ongoing landscape-level initiatives like the the Ocala to Osceola Wildlife Corridor project, a conservation initiative in North Central Florida that received funding from the National Resources Conservation Service. Related to this project is the Ocala to Osceola (O2O) Partnership, which is a regional partnership of public agencies and private organizations working together toward the common goal of land conservation that will create a 1.6 million acre stretch of land connecting the Ocala and Osceola National Forests. There are also existing multi-partner efforts through the Longleaf Alliance, a Landscape Conservation Cooperative, and the Florida National Scenic Trail partnership.

I think right now, we're just waiting to try to figure out again, what do those [Shared Stewardship goals] mean... trying to distill that down into what does that means at a state level, what does it mean at a regional level...how we actually implement that move it forward when some of these national messages are written quite broadly. • •

Progress since agreement signing

Interviewees believed that Shared Stewardship adds formality to efforts that were already underway in the state. Shared Stewardship was characterized by interviewees as the next logical step for landscape-level management in the state; they said that it outlines how partners will work together to more efficiently utilize their respective skill sets and resources. Interviewees viewed Shared Stewardship as an umbrella that covers all of the work they have been doing and provides a framework to increase the success of future efforts.

Shared Stewardship in Florida is just beginning to be formally implemented. Interviewees described recent progress as a new Shared Stewardship position, continued conversations among partners, and the development of new tools for prioritization. The new Shared Stewardship position will be housed on the Osceola National Forest and will be a Florida Wildlife Commission position jointly funded with the USFS. Interviewees said that the signatories to the MOU continue to meet regularly, although not necessarily under the banner of Shared Stewardship. Interviewees spoke about new tools designed to aid in prioritization and data sharing among agencies and partners; they did not identify these tools specifically as elements of Shared Stewardship.

Primary opportunities and challenges

Interviewees hoped that Shared Stewardship would formally encourage partners to share resources and find other ways to work together efficiently to ease the capacity gaps and challenges that they all face. Interviewees felt there was opportunity to build more partnerships to restore more of the landscape. They also thought that engaging the forest industry in initiatives like Shared Stewardship could help to ameliorate pressures related to population growth, including forest conversion and market sustainability.

Interviewees said that the biggest challenge is not having clear direction on what Shared Stewardship means and how they will implement projects, as there have been no formal meetings among partners to specifically discuss the initiative. They said administration and leadership changes present challenges for implementation and longevity. Also, public perception and highly fragmented private land ownership are two challenges interviewees said are key hurdles to land-scape-level management. Finally, many interviewees mentioned the partner-centric principle of Shared Stewardship being greatly affected by the COVID-19 pandemic. Signatories signed the MOU virtually, and the inability to meet in person has affected subsequent implementation, according to interviewees.

Interviewees perceived that federal agency internal barriers made working with state agencies and other partners more difficult. Often interviewees referenced how federal policy and processes slow down the pace of accomplishing work. Interviewees did not feel optimistic that this would change and suggested that communication would be key to working around those barriers to accomplish more on the landscape. Interviewees identified the need for a specific position or committee focused on planning and managing efforts at the state level. They also pointed to the need for consistency in communication and the need to develop metrics for measuring the success of Shared Stewardship.

Research takeaways

Florida managers face growing challenges with population growth leading to urbanization, the ability to engage in active management for issues like wildfire, and the maintenance of timber markets. Both public and private forestlands play a critical role in supporting Florida's forest products industry, and supporting this industry is an important priority for state agencies. The implementation of Shared Stewardship is still in its infancy in Florida, and there are few examples of projects being done specifically under the formal title of "Shared Stewardship." However, there is an existing culture of successful collaborative relationships and projects completed under past collaborative initiatives. Progress has included building prioritization infrastructure for integrating the Strategy into existing cross-party documents and a new Shared Stewardship position housed on the Osceola National Forest. Interviewees felt that the next step for implementation would be conducting formal meetings for partners to discuss Shared Stewardship. Interviewees believed that it would be helpful to have a state-level coordinator to facilitate these meetings and to help move implementation forward in the state.

Key websites for more information:

FL Forest Action Plan
Florida MOU

Region 8 Shared Stewardship



GEORGIA

Shared Stewardship agreement: MOU signed 11/23/2019 by the U.S. Department of Agriculture and the Governor of Georgia.

Interviewees: 10 people between June - July 2021

National forest footprint: ~750,000 acres across one forest in Region 8

History and context

Interviewees expressed that priority management needs in Georgia are centered around more active forest management at the landscape level, and reaching out to private landowners. There was an emphasis on increasing activities like prescribed burning and thinning to address forest health concerns associated with overstocked forests that, in the past, have led to outbreaks of southern pine beetles and ips beetles. There are also management needs related to improving forest composition in the northern part of the state, where fire has been excluded and thus invasive vegetation has spread across the landscape. Some people also mentioned a lack of road infrastructure prohibiting some management activity in northern Georgia. Interviewees stressed the importance of communication with private landowners about management practices, especially given the large percentage of land in private holdings adjacent to public state and federal lands. Forest conversion was another concern among interviewees. Some said that the urbanization of Georgia forests could lead to declines in forest ecosystem services. Interviewees identified stronger timber markets as one way to slow the rate of forestland conversion to non-forest uses.

Forests account for two-thirds of the state's total land area. Interviewees described the forestry industry in Georgia as an economic backbone of the state. Georgia claims status as the number one forestry state in the nation based on metrics like the amount of privately owned timberland and annual harvest volume. Georgia has more forests privately owned than any other state in the nation, while state and federal agencies account for a very small percentage of ownership. Georgia's single national forest, the Chattahoochee-Oconee National Forest, covers 749,689 acres in north Georgia and contains six ranger districts.

Georgia has a longstanding history of landscape-level partnerships and initiatives that set the tone for the implementation of Shared Stewardship. Examples include the Greater Okefenokee Association of Landowners, the Sentinel Landscape Partnership, the Altamaha River Initiative, the Gopher Tortoise Conservation Initiative, and participation in longleaf pine restoration under America's Longleaf Restoration Initiative and the Longleaf Alliance. In addition, the Foothills Landscape project stretches across 157,625 acres of the Chattahoochee National Forest and is designed to maintain and improve watershed and ecological conditions.

We've had this scattered shotgun approach in the past, where it's almost as if we're having these random acts of conservation across the landscape. And so having a greater awareness... will help us to better leverage the resources that we have.

Progress since agreement signing

Interviewees believe the Shared Stewardship agreement adds formality to existing efforts and provides opportunities to increase the pace and scale of future projects by leveraging partners' capacity. Shared Stewardship in Georgia builds on previous federal policies and programs like the Good Neighbor Authority and Joint Chiefs' Landscape Restoration Partnership projects. Interviewees felt that past initiatives and existing projects fall under the umbrella of Shared

Stewardship and represent ongoing efforts towards the goals outlined in the MOU. The Foothills Project was highlighted by interviewees as a current landscape-level effort that aligns with the vision of Shared Stewardship. With this project, the USFS is seeking to create, restore and maintain ecosystems that are more resilient to natural disturbances. The North Carolina Data Basin, built by a team of scientists at the Conservation Biology Institute to provide an open-access tool for sharing biological, spatial, and socio-economic datasets, was identified as a tool that could help to advance shared prioritization and decision-making. Though this tool is still in preliminary stages of use and has not been rolled out in Georgia, interviewees said it was a possible opportunity for future data sharing under Shared Stewardship by both federal and state partners.

Primary opportunities and challenges

Interviewees hoped that Shared Stewardship would encourage more partnerships and incentivize partners to share resources to increase the scale of management across the landscape. They identified private landowner-oriented NGOs like the National Wild Turkey Federation and Quail Forever as critical partners, citing an increased need for NGO liaisons to work with private landowners. Although there are no federally recognized Tribal reservations in Georgia, interviewees still recognized the need and opportunity to include Tribal partners in land management plans; however, interviewees had no formal examples for how this would be done. Shared Stewardship was also seen by interviewees as an opportunity to leverage existing capacities and authorities to help partners focus on overlapping priorities. Interviewees also spoke about existing working relationships across state borders for restoring longleaf pine ecosystems in the region.

Interviewees spoke about key challenges, including the lack of clear direction from state and federal agencies for implementing the Strategy. Some interviewees felt that the Shared Stewardship MOU was an agreement with no action behind it and expressed concern that the initiative would disappear, at least in name, if direction for implementation were not provided soon. Interviewees said leadership and staff turnover after signing the agreement were factors inhibiting

the implementation of work on the ground. They felt that to move forward with Shared Stewardship there was a need for a new state-level Shared Stewardship coordinator to promote and guide action in Georgia. Interviewees also thought that it was important to keep agency leaders engaged with implementing Shared Stewardship by continuing to promote state-level efforts. Finally, interviewees said identifying metrics and indicators to measure the outcomes of Shared Stewardship was an important component for long-term sustainability of joint efforts.

Research takeaways

Forest health in Georgia is influenced by the effects of urbanization, the economic drivers of forest management, and the capacity to plan and implement forest stewardship activities. Like many states in the region, Georgia has a long history of collaboration and partnerships among agencies and across boundaries to address these issues. Shared Stewardship efforts have done little to date to fundamentally change existing efforts. Implementing new actions under the banner of Shared Stewardship would require a combination of stronger leadership, dedicated staff, and increased resources. Interviewees said that, while the primary objectives of the Strategy were already in place within the state, there is a need to add formality to current efforts and to increase landscape-level management. There are notable partnership efforts and ongoing projects that can be considered under the umbrella of Shared Stewardship; however, these longstanding efforts also come with the challenge of managers possibly not being open to change from the way things have always been done. Interviewees said the next steps for Georgia will be discussing how to have people in place to promote Shared Stewardship conversations and implementation for the long term.

Key websites for more information:

GA MOU
GA State Forest Action Plan
R8 Shared Stewardship
GFA 2021 Forestry Report



MASSACHUSETTS

Shared Stewardship agreement: MOU signed 11/21/2019 by the U.S. Forest Service and the Massachusetts Office of Energy and Environmental Affairs

Interviewees: 10 people between November 2020 - March 2021

National forest footprint: 0 acres in Massachusetts. The Mohawk Trail Woodland Partnership area covers ~ 360,000 acres.

History and context

Interviewees identified three priority needs for forest management in Massachusetts, including land conservation, economic sustainability, and a revitalization of the forest products and recreation/tourism industries. Other concerns included managing changes in forest composition resulting from climate change, though this was mentioned less frequently.

The USFS does not manage land in Massachusetts. There is public land owned and managed by the State of Massachusetts and local governments, though it is thoroughly intermixed with private property. Because of this land ownership context in Massachusetts, Shared Stewardship is centered on the Mohawk Trail Woodlands Partnership (MTWP), located in the hardwood forests of the northwest corner of the state.

The MTWP aims to promote conservation and economic sustainability across 21 towns in Franklin and Berkshire counties of western Massachusetts. It began in 2012, when the U.S. Department of Housing and Urban Development brought into a joint planning effort the Berkshire Regional Planning Commission, the Franklin Regional Council of Governments, the Franklin Land Trust, and the Massachusetts Office of Energy and Environmental Affairs. This effort eventually resulted in the MWTP, with a Board of Directors made up of members from the local communities. Throughout this process, the USFS acted as a non-voting consultant in determining priorities or actions of the MWTP.

Progress since agreement signing

Many interviewees perceived the signing as a positive public relations effort in a rural region historically distrustful of the federal government. Some interviewees, however, said that the signing of the agreement had little effect on collaborative efforts already occurring in Massachusetts. All interviewees said the USFS was playing a supportive role in the MWTP by acting as an informal consultant and providing advice on forest management when requested. All non-USFS interviewees believed the MTWP landscape would benefit from increased USFS involvement in the region, which they said may require federal legislation that allows USFS employees to increase their level of participation. All USFS interviewees declined to comment on this subject.

The signing of the Shared
Stewardship plan was a really
good one. I think it got some
positive [public relations] for that
area of the state. But I think the
foundation has been there before
the Shared Stewardship program
was even signed off on.

At the time of our interviews, decisions made by the MWTP were finalized with consent from all the townships that are signatories to the MTWP agreement. One interviewee described this as a "consensus process". The Franklin and Berkshire regional planning committees each have regional plans for their counties, and interviewees said that these will likely form an initial foundation to begin jointly prioritizing project

areas, administrative objectives such as targeted grant proposals, and next steps at a more localized scale. Since the Shared Stewardship agreement was signed, USFS State and Private Forestry has awarded the MTWP multiple grants that were key to developing a forest climate resiliency program and a riparian tree planting program. These grants have been used to leverage over \$150,000 in state funds for the MWTP.

Primary opportunities and challenges

Interviewees identified three primary opportunities or effects of Shared Stewardship: increasing funding availability, increasing technical support from the USFS, and creating a forest education and research center. Interviewees believed that more USFS involvement could result in grants and funding directed to the region. They also thought that more USFS involvement could result in the sharing of technical forestry expertise that could increase the pace and scale of conservation work, though many interviewees were unclear about what specifically they hoped the USFS would bring to the table. Interviewees envisioned the opportunity for the potential development of a forest education and research center along with a demonstration and research forest to help garner support from those skeptical of federal involvement with their local lands. Some interviewees also mentioned a desire to increase the involvement of the Northern Research Station (NRS). They spoke positively of NRS's past interactions with the MWTP and also highlighted the value of the participation of USFS State and Private Forestry.

Many interviewees perceived the primary challenges facing Shared Stewardship in Massachusetts to be distrust among local residents toward the federal government, the declining forest products industry, the COVID-19 pandemic, and difficulties securing long-term funding. Despite some initial distrust, however, interviewees said that the relationship between the USFS and local communities had dramatically improved. Environmentally focused activists opposed aspects of the initial MTWP plan, and interviewees also anticipated further challenges on that front.

Interviewees noted the difficulty in creating a sustainable forest economy, as the existing infrastructure for such an industry is in sharp decline in the state.

Some interviewees spoke about the need to create markets to handle the type of low-value material that would likely come out of the landscape covered by the MTWP. Finally, interviewees generally discussed the need for long-term funding commitments, which they said would improve the ability to plan and implement more management activities.

Research takeaways

Shared Stewardship in Massachusetts is less USFS centered than in other states due to the absence of National Forest System land in the state. This was broadly - but not universally - seen as a barrier to increased USFS involvement. Most interviewees said they did not believe the Shared Stewardship MOU signed in 2018 would impact the MTWP beyond providing an opportunity for positive public relations for increased federal involvement in forest management in the area, though some interviewees did express optimism for an increase in technical assistance and funding from the USFS. The State Forest Action Plan for Massachusetts was not the centerpiece of collaboration for Shared Stewardship efforts. Rather, the MTWP agreement and framework were of central importance. Currently, the planning and prioritization process for Shared Stewardship operates through the MTWP's model of collective decision making. Interviewees supported state and federal leadership thus far and hoped that the initial interactions with the USFS were a preview to a fruitful relationship ahead. Interviewees perceived that federal legislative changes could allow a more active role for the USFS in Massachusetts and help provide additional funding and support to the Partnership.

Key websites for more information:

Mohawk Trail Woodlands Partnership

Region 9 Mohawk Trail Woodlands Partnership/ Shared Stewardship Website

Massachusetts State Forest Action Plan



NEBRASKA

Shared Stewardship agreement: MOU signed 09/04/2020 by the U.S. Department of Agriculture and the Governor of Nebraska

Interviewees: 7 people between March - May 2021

National forest footprint: ~257,000 acres across two forests (managed by one forest supervisor) in Region 2

History and context

Interviewees identified numerous priority needs for improving the management of Nebraska forests, including: addressing eastern red cedar encroachment, improving and continuing public outreach, mitigating the risks and negative outcomes of high-severity wildland fires in the Panhandle region through thinning and prescribed fire, managing the spread of noxious weeds, and creating and sustaining timber harvesting and forest products industries. Importantly, priority management needs described by interviewees varied by location within the state due to vastly different ecological and jurisdictional contexts.

The western portions of the Nebraska National Forest and Grasslands have intermixed land ownership characteristics and contain naturally occurring ponderosa pine forests along the Pine Ridge escarpment. The eastern portions of the Nebraska National Forests and Grasslands, by contrast, are separate, but contiguous, blocks of land without private inholdings. These eastern Nebraska lands contain hand-planted ponderosa pine and eastern red cedar forests that were converted from grasslands in the early 20th century by foresters. Because of this land-use history, these lands are ecologically distinct compared to adjacent land ownerships, the vast majority of which retain grassland characteristics. National forest land managers in western Nebraska are more concerned with wildland fire, while those in eastern Nebraska are focused on invasive species encroachment.

Following catastrophic fires in 2006 and 2012 that damaged the majority of ponderosa pine populations on the Pine Ridge, the USFS began working with Nebraska Game and Parks to perform fuel treatments aimed at protecting remaining ponderosa stands near the Highway 385 corridor with assistance from the Nebraska Department of Transportation. Interviewees said this sustained collaborative effort and partnership is a recent innovation in Nebraska, where the USFS traditionally operated independently unless wildfire suppression incidents necessitated resource sharing.

I think it's so far in its infancy and that they're still looking to identify the shared priorities and goals and those types of things. I would hope this time next year, that a lot of the things will not only be solidified, but even built upon.

Progress since agreement signing

Formal Shared Stewardship is early in its development in Nebraska. After the agreement was signed between the USDA and the state, the USFS and Nebraska Forest Service (state) formed a joint steering committee to determine initial priorities. These two agencies split the members of their committee into four sub-committees that focus on wildland fire, forest health and resilience, forest product utilization and market development, and grant opportunities.

Interviewees familiar with Shared Stewardship thought the goal was to leverage resources and capacity to work across boundaries. Other interviewees, including people from the USFS, NRCS, a local government agency, and an NGO, said they were not familiar enough with Shared Stewardship to know what its goals might be. Currently, the USFS and the Nebraska State Forest Service are the only two partners engaged in Shared Stewardship discussions, and it is unclear if more part-



ners will eventually join these efforts. Interviewees expressed optimism that the process would develop more rapidly after initial relationships were cemented.

Primary opportunities and challenges

Interviewees said that Shared Stewardship might generally provide the opportunity to increase cooperation between the USFS and the state, which would allow increased resource and capacity sharing. Interviewees also said they hoped increased federal-state communication would lead to more grant opportunities for private landowners to perform work on their own properties. Because Nebraska is 97% privately owned, interviewees acknowledged that landscape-level objectives were unachievable without private landowners also working toward shared goals. Interviewees who discussed the NRCS believed there was an opportunity to expand usage of the Environmental Quality Incentives Program to reach more private landowners. This approach, they said, would build upon past and current Joint Chiefs' Landscape Restoration Partnership projects. From 2017-2019, these projects directed nearly \$1,000,000 to private landowners to complete vegetation treatments on their property through contracts written by Nebraska State Forest Service staff members.

Interviewees said they believed that the Shared Stewardship steering committee would help the state and USFS align management priorities, and some believed their newly revised State Forest Action Plan (SFAP) could serve as a roadmap for these discussions. Importantly, the SFAP process began months before Shared Stewardship discussions in Nebraska. While the Nebraska Forest Service used USFS datasets to inform the SFAP, the USFS was not directly involved with the SFAP revision. Interviewees said they viewed the SFAP revision as an internal process to the Nebraska Forest Service.

The final opportunity that interviewees identified was the potential for accessing federal datasets and research capabilities to inform management needs across the state. No interviewee pointed to the same dataset or specific research capability, however, and examples ranged from herbicide impact data to fuel modeling.

Interviewees said that a lack of staff capacity and lack of funding are the two primary barriers to implementing the Shared Stewardship Strategy in Nebraska. Specifically, interviewees discussed a shortage of staff in grants and agreements positions within the USFS. Interviewees did not consistently identify specific funding gaps, though they did routinely mention that the USFS in Nebraska was underfunded.

Research takeaways

In early 2021, the development of a Shared Stewardship effort in Nebraska was in its early phases. A Shared Stewardship committee was formed between the USFS and the Nebraska Forest Service and was still in the process of developing specific landscape-level priorities. Many interviewees were not familiar with the goals of Shared Stewardship. As in many other states, interviewees perceived USFS and state agency capacity as a limiting factor that they hoped Shared Stewardship efforts would address.

Key websites for more information:

Nebraska State Forest Action Plan
Nebraska National Forests and Grasslands
Nebraska State Forest Service
USFS Region 2 Shared Stewardship



NORTH CAROLINA

Shared Stewardship agreement: MOU signed 09/25/19 by U.S. Department of Agriculture, North Carolina Department of Agriculture and Consumer Services, North Carolina Forest Service, and North Carolina Wildlife Resource Commission

Interviewees: 10 people between April – June 2021

National forest footprint: National forest footprint: ~1.25 million acres

across four forests in Region 8

History and context

Interviewees identified several priority needs for improving the management of North Carolina forests, including: various aspects of restoring forest ecological health, and communication with private landowners. In particular, oaks and other mast-bearing trees in the western part of the state have declined precipitously due to the absence of fire. Management actions recommended by interviewees included thinning and reintroducing fire. Interviewees also noted a need to increase the scale of work, manage cross-boundary issues such as invasive species, especially feral hogs, and improve the health of watersheds. Some interviewees also identified population growth and subsequent land development pressure in the state as other key issues, noting the need for private landowner outreach.

Forested land accounts for the majority of land coverage in North Carolina, with oak-hickory being the dominant forest type, closely followed by planted pine. Private landowners account for most of the timberland, while state and federal land ownership accounts for the remaining small percentage. There are four national forests in North Carolina that account for 1.25 million acres of public land: the Nantahala, Pisgah, Uwharrie, and Croatan National Forests.

A history of collaborative efforts provides an important policy backdrop in the state. There is currently an "All Lands" project underway in western North Carolina. This All Lands Strategy was collaboratively developed by local, state, and federal government agencies, conservation interests, and local stakeholders to prioritize, coordinate and better deliver conservation services across all lands in Western North Carolina.

State agencies are providing staff members to help collect inventory data for national forests in western North Carolina, help with hurricane debris removal on the coast, and do work related to prescribed burning in the Piedmont under the Good Neighbor Authority. Examples of other collaborative efforts include the North Carolina Longleaf Coalition, which formed in 2010 to address priority areas for longleaf pine restoration in the state. The Coalition brings together state agencies, NRCS, NGOs, private landowners, and academics, and coordinates with other state efforts like the North Carolina Sandhills Conservation Partnership and the Greater Uwharrie Partnership.

Cone of the next steps that we have been talking about is really digging in now. We have a State Forest Action Plan, we have a State Wildlife Action Plan, we're working on finalizing our forest plans for the Nantahala and Pisgah [National Forests]...we can utilize those things in order to really hone in on some of these kind of shared priority landscapes that we all want to work on together, around some of these key issues.

Progress since agreement signing

Shared Stewardship in North Carolina builds upon existing collaborative efforts. Interviewees referenced several Good Neighbor Authority projects that provided a platform for Shared Stewardship. Since the signing of the MOU, state and federal agency signatories have been involved in conversations to identify priority areas

where their interests overlap. Interviewees said Shared Stewardship has given partners a vehicle for improving cross-boundary approaches, providing managers with more thoughtful ways of working together to establish rankings for priority projects. They felt that Shared Stewardship has created a way to bring missing partners, like industry and Tribal partners, into conversations for future cross-boundary management projects.

Interviewees described the State Forest Action Plan and the State Wildlife Action Plan as important prioritization tools for cross-boundary work for the state agencies, noting that these were crafted with input from federal partners as needed. The North Carolina Data Basin is an open-access tool for sharing datasets to inform prioritization for forest management plans. This tool currently contains information for different regions in North Carolina through member-uploaded spatial datasets, internet-based maps, and group discussion forums for specific topics. The "All Lands" project in western North Carolina has made use of this tool, and interviewees described the tool as an example of how data sharing could occur. Interviewees did not seem to think that Shared Stewardship would drastically change prioritization, given the existing suite of tools and partners.

Primary opportunities and challenges

Interviewees expected Shared Stewardship to formally encourage partners to share resources, find ways to effectively work together, and ease the pressures they face regarding capacity to meet management objectives. They saw opportunities to strengthen existing relationships and even include new partners to leverage resources in future projects. Interviewees identified the opportunity to measure success with Shared Stewardship through a tiered approach outlined in the new Nantahala and Pisgah Forests Plan revision, which delineates different levels of what can be accomplished with the help of partners versus when the USFS acts alone.

Interviewees mentioned the need for more direction to guide Shared Stewardship beyond the MOU, which they described as a starting point for implementation. They stressed the need to address challenges associated with USFS staff and funding capacity. They also recommended clear communication, support for management activities, and strong leadership direc-



tion from agencies and partner organizations to help align expectations and enable new approaches. Interviewees said that leadership turnover is a challenge for completing projects, noting that it obstructs progress with inter-agency relationships.

Research takeaways

Shared Stewardship implementation was still in its early days, and there were no new projects associated with it yet. However, interviewees thought that there is an existing culture of successful collaborative relationships and projects completed under past collaborative initiatives that were emblematic of the intent of Shared Stewardship. The future of forests in North Carolina will be affected by population growth and increased urbanization. This is anticipated to result in future conversion of forests and put pressure on other forest resources. Also, people said more active management is needed to address issues like wildfire and invasive species that have the potential to lead to both ecological and economic impacts. Interviewees felt Shared Stewardship in North Carolina provided an opportunity and mechanism for partners to join together to address these impending threats to the state's forests. However, there is a need to increase conversation among partners about Shared Stewardship in the state to move towards actual implementation.

Key websites for more information:

NC MOU

R8 Shared Stewardship

NC State Forest Action Plan

Nantahala and Pisgah Forests Plan



TEXAS

Shared Stewardship agreement: MOU signed 7/16/20 by the U.S. Department of Agriculture and the Governor of Texas

Interviewees: 9 people between January - April 2021

National forest footprint: ~637,000 acres across four forests (managed by one forest supervisor) in Region 8

History and context

Interviewees identified two priority needs for improving the management of Texas forests, including: restoring historic forest conditions through mechanical treatments and prescribed fire, and increasing the amount of public outreach to communicate forest health objectives and treatments. Interviewees said forested lands in Texas are overstocked compared to historical conditions; this has led to an increase in insect and disease outbreaks and greater wildfire risk. Interviewees also discussed the need to reach out, communicate, and work directly with landowners if they wish to achieve landscape-level objectives.

Interviewees oriented their responses to the humid forests located in east Texas characterized by intermixed ownership patterns with high proportions of private property and dispersed sections of public land. Interviewees noted that in addition to influencing how they discussed Shared Stewardship in Texas, these ownership patterns also framed past efforts to work across boundaries in the state.

The Texas Forestry Council is at the center of cross-boundary forest management in Texas. Formed in 2009, the Council established a platform for public agencies to address forest management issues and communicate goals and objectives among agencies, all of which manage intermixed landownerships. The Council assembles quarterly, giving agency leaders the opportunity to discuss priorities and upcoming management activities with one another. If an agency's management activities align with the priorities of other agencies in the Council, multiple agencies will sometimes share capacity. Interviewees said this shared capacity was most commonly in the

form of ground-level implementation staff for the execution of fuels or prescribed burn projects. Because of these Council activities, many interviewees believed that a well-developed approach that meets the intent of Shared Stewardship has been present in Texas for some time. Non-governmental partners and private landowners are not typically included in these discussions or meetings among the Council.

Because of the [Texas Forestry]
Council, [the Texas A&M Forest
Service] already had a very strong
relationship with the [U.S.] Forest
Service. Shared Stewardship in and of
itself for Texas has not added a ton.
We were already pretty much there.
The agreement itself just reinforced
what we were already doing.

Progress since agreement signing

Interviewees were clear that the signing of the Shared Stewardship agreement has not significantly changed forest management in the state. Rather, it cements the work of the Council by formally committing the USFS and state agencies to the communication and coordination framework that the Council has engaged in for the last decade. Most interviewees believed that the Shared Stewardship agreement would not fundamentally change forest management efforts in Texas because it does not add any new responsibilities or prioritization processes.

Interviewees said that the Council does not use a formal joint prioritization process to plan and prepare formal documents. For example, The Texas State Forest Action Plan and Texas State Conservation Action Plan are written by the Texas A&M Forest Service (state forest agency) and Texas Parks and Wildlife Department, respectively, without significant contributions from other agencies. Despite this, most, although not all, interviewees said that priorities tend to be well aligned among the different agencies. Interviewees said they did not expect this to change because of Shared Stewardship.

One interviewee mentioned that, in retrospect, the Good Neighbor Authority has been more important than Shared Stewardship for changing federal agency practices because it has allowed them to leverage capacity across jurisdictional boundaries. Interviewees thought that more collaboration might result from Shared Stewardship, but they did not anticipate specific new prioritization efforts, capacity sharing, partnerships, or performance measures emerging due to Shared Stewardship.

Primary opportunities and challenges

Interviewees generally thought that Shared Steward-ship might provide the opportunity to continue building partnerships that further the goals of the Council. Some interviewees spoke about involving Tribes in future discussions. Interviewees also said the model of the Council could be shared with other states without as much collaborative history to provide a roadmap for success.

Some interviewees expressed the need for additional capacity to adequately achieve management objectives at a landscape scale. They discussed the need for more field-level personnel to execute management activities and more funding to continue and expand the scale of operations.

There were opposing viewpoints on the efficacy of stewardship contracts to implement forest management activities on federal lands. USFS personnel spoke highly of the mechanism, saying it allowed them to better implement restoration activities and provided work for local contractors. Industry-oriented interviewees were critical of stewardship contracting because they believed it reduced revenue to local communities, bypassing the traditional timber receipt funding structure many counties relied on to fund schools.

Interviewees generally described the challenges of maintaining interagency and partner relationships. Interviewees said that the constant turnover within agencies complicates multi-year partnerships and management plans. They said that when agency employees leave their positions, the process of building a working relationship begins anew. Interviewees believed intentional interaction is necessary to maintain a positive, collaborative approach moving forward, and most were optimistic that despite challenges presented by turnover, this would continue.

Finally, interviewees in NGOs described how the COVID-19 pandemic reduced their staff capacity due to budget shortfalls. Because of reduced income, NGOs in Texas lost substantial numbers of employees to layoffs. This had a cascading impact on government agencies; interviewees mentioned that NGOs partner with the USFS and perform management activities on federal land. Interviewees believed the reduced capacity is a temporary problem, and that eventually staffing will return to pre-pandemic levels.

Research takeaways

Interviewees viewed Shared Stewardship as a continuation of the work of the Texas Forestry Council. In this well-established system, prioritization is an independent process done by each agency, including for the Texas A&M Forest Service's State Forest Action Plan and the Texas Parks and Wildlife Department's Conservation Action Plan. There is, however, communication that takes place among agencies informing this prioritization during Texas Forestry Council meetings. The Texas Forestry Council provides a venue to discuss what is occurring on each agency's landholdings and supports capacity sharing as necessary. Shared Stewardship in Texas is largely viewed as an opportunity to continue fostering relationships across jurisdictional boundaries, rather than a paradigm shift that will affect prioritization processes.

Key websites for more information:

Region 8 Shared Stewardship

Texas A&M Forestry

Texas State Forest Action Plan

Texas State Conservation Action Plan

