

policy

Implementation of the Forest Service Open Space Conservation Strategy in Washington State: Exploring the Role of the National Forest System

Richard J. Pringle, Lee K. Cervený, and Gordon A. Bradley

The loss of open space was declared one of the “four threats to the health of our nation’s forests” by former USDA Forest Service Chief Dale Bosworth in 2004. Since then, the agencywide Open Space Conservation Strategy (OSCS) was released and the “four threats” were incorporated into the agency’s National Strategic Plan. These actions indicate that the OSCS is in the implementation stage of the policy process; however, interviews conducted with line officers and program managers of the National Forest System (NFS) in Washington State revealed a more complex story. This research uses concepts from the policy implementation literature and the OSCS to explore how the NFS branch of the agency is engaging in open space conservation. The results indicate that there may be a lack of awareness of the OSCS, partners are essential to successful implementation, and the role of the NFS is a “neighbor” and “final holder” of open space. Additional findings discuss barriers to the NFS engagement in open space conservation. Where appropriate, recommendations that could improve implementation are suggested and some new resources that aid implementation are shared.

Keywords: national forest management, planning, policy, landscape

The USDA Forest Service’s OSCS defines open space as: Land that is valued for natural processes and wildlife, agricultural and forest production, aesthetic beauty, active and passive recreation, and other public benefits. Such lands include working and natural forests, rangelands and grasslands, farms, ranches, parks, streams and river corridors, and other natural lands within rural, suburban, and urban areas. Open space may be protected or unprotected, public or private. (USDA Forest Service 2007a)

When open space converts from natural to developed uses, vital ecosystem functions, natural resources, recreation access, and amenities for quality of life are lost (Stein et al. 2005). The encroachment of urban development around national forestlands creates new management challenges and changes management priorities (Stein et al. 2007). These factors influenced Forest Service Chief Dale Bosworth to declare the “loss of open space” as one of the “four threats to the health of the nation’s forests” in 2004 (USDA Forest Service 2004). The 2007–2012 National Strategic Plan directed the USFS to conserve open space (USDA Forest Service 2007b). Correspondingly, in 2007, the OSCS was released, which further defined how the agency can conserve open space (USDA Forest Service 2007a).

This study examined how Forest Service policy on open space conservation was being interpreted and implemented by Forest Service staff and line officers of the NFS in Washington State. The state is an ideal location to explore NFS efforts to conserve open space because it fully contains five national forests. In addition, several recent assessments identified the concern of private forestland development in the state (Bradley et al. 2007, White and Mazza 2008, Washington State DNR 2010a). We present data that show awareness of open space conservation as a concept, knowledge of the OSCS, existing projects and partnerships, leadership, funding, and decision structure, as well as barriers to participation in the OSCS.

Applying concepts from traditional top-down policy implementation literature to the results might suggest the OSCS was not being implemented by NFS in Washington State because open space was not literally recognized by employees or reported in project accomplishments and planning efforts. A lack of awareness of the OSCS and its details complicated the research approach and may have inhibited the reporting of important open space accomplishments. Line officer discretion and the influence of resource limitations affect management priorities and may have also influenced these results.

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However, despite these shortcomings, many past and current projects and partnerships do closely resemble OSCS goals and occurred through established programs like the Land and Water Conservation Fund and Collaborative Forest Landscape Restoration Program and established partners like land trusts, conservancies, the Mountains to Sound Greenway, Washington State Department of Natural Resources, and collaborative groups like Tapash, the Northeast Washington Forestry Coalition, Skagit Watershed Council, Skokomish Watershed Action Team, and many others. Though the OSCS is not a catalyst for these efforts, the document is a statement of what the agency can do now to engage in open space conservation efforts and a vision for future activities. Many aspects of the OSCS can be carried out without a dedicated funding source or awareness of program managers.

The findings from this study identified barriers to implementing projects and offers insights into how agency direction is interpreted through line officer discretion. Suggestions to improve implementation and awareness of the OSCS conclude this discussion.

Study Context: Washington State

Washington State is a microcosm for exploring factors that influence open space conservation and the future of forest resources. The state is demographically diverse, including a mix of urban, suburban, and rural communities, many of which depend on natural resources for their economic well-being. Washington's *State Forest Action Plan* acknowledges that increasing population growth, changing land-use patterns, and the current economics of forestry have contributed to the loss of working private forestlands at an unprecedented rate (Washington State DNR 2010b). White and Mazza (2008) explain over half the state (22 million acres) is forested and the total amount of forestland has declined by 6% (1.4 million acres) since the mid-1970s.

Nearly 45% of Washington's total forestlands are privately owned and open to the possibility of converting to developed land uses (White and Mazza 2008, Washington State DNR 2010a). Bradley et al. (2007) found that forestlands along the I-5 corridor in western Washington are most likely to convert from forest to developed land uses. The people of Washington have anticipated consequences associated with urban sprawl and have initiated several planning efforts to address open space loss (Puget Sound Partnership 2008, Puget Sound Regional Council 2008, Cascade Land Conservancy 2008, Washington State legislature 2010, Mountains to Sound Greenway 2011). These efforts have produced several opportunities for the Forest Service to actively participate in local planning efforts to conserve open space.

Policy Implementation Theory

Policy implementation is the process of carrying out a basic policy decision toward achieving an output (Sabatier and Mazmanian 1980). Scholars have long discussed how to study public policy implementation (Hill and Hupe 2002, Kaplan and Corbett 2003, O'Toole 2004, Saetren 2005), but the roots of this debate are the top-down versus bottom-up approaches.

In the 1970s, the first generation of implementation studies employed case study methods to research the "top-down" nature of implementation in bureaucracies (Pressman and Wildavsky 1979, Hill and Hupe 2002, Kaplan and Corbett 2003, Saetren 2005). Scholars attempted to explain why policies created at the top of the hierarchy failed to be implemented by field staff.

A second generation of "bottom-up" studies examined the be-

havior of "street-level bureaucrats" (Lipsky 1980) as ground-level staff that influenced implementation through everyday decisions and administrative actions. Street-level bureaucrats exercise discretion and autonomy to cope with highly regulated environments and scarce resources that fundamentally change a policy creator's intent for implementation (Weatherly and Lipsky 1977, Lipsky 1980, Hupe and Hill 2007). Lipsky (1980) encourages more input from street-level staff during policy creation to ensure success in achieving policy goals.

On linking implementation theory to practice, O'Toole (2004) asserts that the future of implementation research could better progress by building on points of agreement and synthesizing theories instead of emphasizing differences, as scholars often had. The interview guide for this research followed this advice and was built on concepts found in Sabatier and Mazmanian's (1980) framework that were supported by other syntheses of implementation literature.

Several concepts regularly occur in the literature and were considered central to implementing policy. The importance of *clear and consistent objectives* (Sabatier and Mazmanian 1980, Cabbage et al. 1993, Barrett 2004) and the risks of failure from goal ambiguity or lack of goal clarity (Chun and Rainey 2005, Matland 2005) are commonly cited in the literature. Muth and Hendee (1980) discuss the importance of *awareness* early in the process of instituting a policy innovation. An implementer is likely affected by his or her comprehension and understanding of the policy; his or her acceptance, neutrality, or rejection of the policy; and the intensity of that response (Hill and Hupe 2002). The recruitment of an *implementing official* is an important commitment to achieving policy objectives (Sabatier and Mazmanian 1980). Funding and *financial resources* are a basic component of hiring staff, creating communication documents, and a necessary component to achieving a policy's objectives (Sabatier and Mazmanian 1980). Sabatier and Mazmanian (1980) cited the *decision structure*, interpreted as the planning structure or process such as, a forest plan revision process, National Environmental Policy Act (National Environmental Policy Act of 1969 [NEPA]) analysis, or Memorandum of Understanding (MOU), as an important component to achieving behavioral change within the agency. The role of *partnerships and public interest* is also important, particularly when partnerships are relied on for implementation. Other variables such as public support, attitudes and resources of constituency groups, and formal access by outsiders also influence implementation (Sabatier and Mazmanian 1980). May (2003) also stresses that implementation can succeed or fail based on whether a policy is "with or without" public support.

Forest Service Policy and Agency Structure

The mission of the Forest Service is to "sustain the health, diversity and productivity of the Nation's forests and grasslands to meet the needs of present and future generations" (USDA Forest Service 2009). The agency's bureaucratic culture, hierarchical organization, approach to scientific management, and evolution from its roots in professional forestry toward an increasingly diverse workforce and complex mission of multiple and conflicting uses has been well documented (Kauffman 1960, Sedjo 2000, Thomas 2003, Steen 2004, Dialogos 2007). The Forest Service is headquartered in Washington, DC and consists of five mission areas: NFS, State & Private Forestry (S&PF), Research & Development (R&D), International Programs, and Business Operations (USDA Forest Service 2009).

The NFS, S&PF, and R&D branches have primary roles in implementing the OSCS. The NFS is composed of nine regions that are divided into 155 national forests and 20 grasslands that are further divided into over 600 ranger districts (USDA Forest Service 2009). The Chief of the Forest Service (Washington, DC), regional foresters, forest supervisors, and district rangers are the key decision-makers, or line officers, in charge at each level and have a role in communicating priorities through the hierarchy of the agency.

The S&PF and R&D branches reside at the national and regional levels and operate more broadly across all land ownerships. S&PF works with private landowners, states, tribes, and communities outside of the national forests to provide technical and financial assistance programs that help sustain the nation's urban and rural forests and protect them from wildland fires, insects, disease, and invasive plants (USDA Forest Service 2009). The mission of R&D is to develop and communicate scientific information and technology used to manage, protect, and sustain the nation's forests, grasslands, and range lands (USDA Forest Service 2009).

Open Space Conservation Strategy

The Forest Service has had a long history of interfacing with private land development issues (Nie and Miller 2010) before former Chief Dale Bosworth's articulation of the "four threats." In 2007, the OSCS was released after being developed by a diverse team of agency employees, over 22,000 public and agency comments, and three stakeholder focus groups held in Washington, DC, North Carolina, and Colorado (USDA Forest Service 2007a). The OSCS emphasizes voluntary approaches to private land conservation and outlines four priority actions:

1. Convene partners to identify and protect priority open space.
2. Promote national policies and markets to help private landowners conserve open space.
3. Provide and encourage landowner assistance and incentives to help keep working lands working.
4. Participate in community growth planning to reduce ecological impacts and wildfire risks (USDA Forest Service 2007a).

The OSCS states that implementation will use a "grassroots approach to encourage continual learning, innovations, and engagement by all levels of the Forest Service" (USDA Forest Service 2007a). Staff will "identify specific implementation steps in their strategic plans, business plans, and employee work plans" (USDA Forest Service 2007a). The Forest Service open space conservation website explains that each region "will convene partners to identify and protect priority open space" (USDA Forest Service 2007a). The forest and district levels are to participate in community growth planning to reduce ecological impacts and wildfire risks, promote recreation opportunities and access, and provide resources and tools to help local communities create and manage urban open spaces (USDA Forest Service 2007a).

Each agency branch (NFS, S&PF, and R&D) has a specific role in open space conservation. Historically, NFS has managed national forests and grasslands for their multiple uses of timber, recreation, clean water, and fish and wildlife habitat, with little consideration to issues outside the forest boundary. Under the OSCS, however, NFS seems to assume a greater role in cross-boundary management issues by sharing information on resource concerns; participating in local, regional, and transportation planning efforts; and coordinating land acquisitions and exchanges with voluntary partners to strategically conserve landscapes (USDA Forest Service 2007a). The traditional role of S&PF has long supported open space conservation through

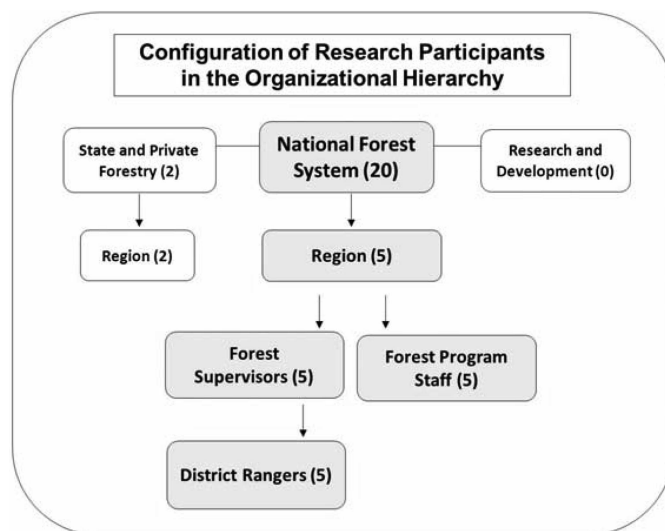


Figure 1. Twenty-two participants represented two branches of the agency, three line officer levels, and a variety of program staff areas, including lands, minerals, recreation, and planning. The number in parentheses indicates how many interviews were conducted in that area.

the Forest Legacy, Forest Stewardship, and Urban and Community Forestry programs that deliver financial and technical assistance to states, tribes, and private landowners. S&PF continues its traditional role under the OSCS, but additional emphases are given to the *Forests on the Edge* publications and their defining of the problem of open space loss, outreach for urban forestry, support for ecosystem service and woody biomass markets, and improving service delivery of private landowner assistance programs. The third branch, R&D, supports the OSCS by contributing research that informs the threat of open space loss and the conversion of forest-land uses. A small selection of research includes assistance with *Forests on the Edge* publications (Stein et al. 2005, Stein et al. 2007, Stein et al. 2009, Nowak et al. 2010), conducting national and regional land-use projections (Alig et al. 2004, Alig and White 2007, White and Mazza 2008, White et al. 2009, Alig et al. 2010a, 2010b, Radeloff et al. 2010), the Renewable Resources Planning Act Assessments (USDA Forest Service 2012), family forest landowners (Butler et al. 2010), ecosystem services (Brown et al. 2007, Deal et al. 2011, Smith et al. 2011), green infrastructure (Bentrup 2008), urban forestry (Nowak et al. 2007), and urban natural resources stewardship (Svendsen and Campbell 2007).

Methods

Case studies and interviews are commonly accepted qualitative methods for conducting implementation research (Kaplan and Corbett 2003, Werner 2004, Rubin and Rubin 2005). A total of 22 personal interviews were conducted over the winter of 2009–2010 with 20 NFS line officers and staff at the region, forest, and district levels, as well as two S&PF employees (Figure 1). Five national forests were represented: Colville, Gifford Pinchot, Mount Baker-Snoqualmie, Okanogan-Wenatchee, and Olympic. Each forest supervisor was interviewed and asked to refer a district ranger and one other staff member for a total of three interviews on each forest. All but one interview (12 in-person interviews, 10 phone interviews) were recorded and transcribed verbatim to ensure accuracy of statements. The transcriptions were coded using an open coding structure with NVivo qualitative analysis software.

A semistructured interview guide was drafted after reviewing concepts from the implementation literature and the OSCS. Preliminary interviews raised the question of awareness of the OSCS. This affected the approach to questioning and interviews were focused more generally on the agency's approach to open space conservation. The OSCS was not discussed until later in the interview.

Findings

The purpose of this research was to explore how NFS was engaging in open space conservation activities in Washington State. The roles of S&PF and R&D in implementing the OSCS were more clearly articulated in the document than the role of NFS. Due to this fact, this study was intended to gain insight into how the NFS branch of the agency was implementing the OSCS. Key concepts derived from the implementation literature (clear and consistent objectives, awareness, point person, funding, decision structure or planning, barriers to engagement) were used to structure the findings of this qualitative study.

Clear and Consistent Objectives

Study participants were first asked "how would you define open space?" Participants' descriptions varied but generally described open space as "land, free of encumbrances, and without concrete." When land was less developed, it was seen as more "open." An important distinction was made between land inside and outside the proclaimed national forest boundary. Several participants discussed that the agency's lack of authority outside the boundaries complicated their ability to address the loss of open space.

Participants who were aware of the OSCS shared what they knew about the OSCS. A region-level employee described the strategy as a piece of guidance for the agency:

It is a thinking piece, it's a framing piece, and it is action oriented... So, things that we could do as an agency to really conserve open space and be good land stewards across boundaries... it didn't necessarily generate more funding... It gave us the ability to put some thinking to it, to invite the public to comment on it, and then reside as a piece of guidance for the agency.

One forest supervisor commented how open space is one step toward the larger goal of achieving landscape scale conservation:

Open space conservation really started initiating the conversations about how we look at the bigger landscape and how we do our restoration activities across landscapes regardless of landownership... So, I think absent... Dale Bosworth's [OSCS]... we probably wouldn't have been talking about large landscape restoration at this point. So you can kind of see how the path of the conversation has flowed through policy.

A forest supervisor aware of the OSCS explained that tackling the open space issue lacked clear guidance employees had on other issues like fire management:

How it gets out of the strategic and into the tactical is part of the challenge...take fire, for example... we have a system, everybody's got their job, they show up, we get it done...Something like open space conservation, strategically we go... 'Well, that is a great idea,' but I don't know that we have the guide, or the organization, or the process... there is no understanding of that. So that is really the big thing that is missing for any kind of forward motion on this. If people understood it, they would go and do it.

Changing priorities with each new administration inhibit communication of agency direction and evoke a sense that agency policy is not taken seriously. One forest-level employee explained,

We have so many strategies out there and every time we get a new administration, or a new chief, some strategies change, and some... 'I like that one...we'll keep that one.' And I know the open space one was two chiefs ago.

A region-level employee explained his/her perception of the OSCS as being more marketing than direction:

It seems like sometimes when an issue all of a sudden becomes one of the hot buttons out there, we all look for what we are doing already that answers that and we'll package that up and market ourselves that way. So, I am not sure that it (the OSCS) has changed anything that we are doing. I haven't seen any more interest or emphasis from forest supe's or regional foresters or the Chief, for that matter, on land acquisition...

Awareness

One barrier to implementation identified was limited awareness of the OSCS. Of the 20 NFS participants interviewed, 13 knew of the OSCS or the agency's concern for the loss of open space and were able to discuss the subject with some understanding. However, two of those participants only learned about the OSCS after receiving the interview request. All participants were expected to be aware of the OSCS since they were line officers or staff referred for interviews based on their interest or involvement in open space conservation. Even participants that sympathized with the need for an agency open space strategy were not necessarily aware of, or fluent with, the document. This lack of awareness complicated the ability to conduct thorough interviews.

Participants who were less aware of the agency's emphasis on open space described themselves as being in information overload, having higher priorities, or did not have a need for a policy like this.

One district ranger explains,

If I need to know about agency open space management then I am sure that I would find that document and start zeroing in better, but so far in this job I have been dealing with [mountain] hazards, landslide hazards, and fires and fatalities of people falling off [mountain ridges] and I'll tell you, every day is a new adventure, it's all exciting, and the pressing issue has not been understanding the agency policy on open space.

A forest supervisor suspected the OSCS was meant more for S&PF than for NFS:

The sense I got...whether it is right or wrong, was that it was really more in the Cooperative (S&PF) side of things and working with our adjacent landowners, and I would say that... there was more emphasis on that side of the house than on what we can do, the [NFS] side of the house, but I don't know that is necessarily correct.

Private lands are traditionally the purview of S&PF. That deputy area led the effort to create the OSCS, which closely relates to its programs. Despite being an agencywide strategy, S&PF's closer relationship to the OSCS could lead NFS employees to believe that the OSCS was less intended for them.

Projects and Partnerships

Participants described agency involvement in a variety of collaborative groups that operated across boundaries for watershed management (Skagit Watershed Council, Skokomish Watershed Action Team, and Dungeoness River Management Team), timber and vegetation management (Tapash Collaborative Forest Landscape Restoration Project, Northeast Washington Forestry Coalition, Pinchot Partners, Mount Adams Stewards, and Lewis River Collaborative), recreation and greenways (Mountains to Sound Greenway

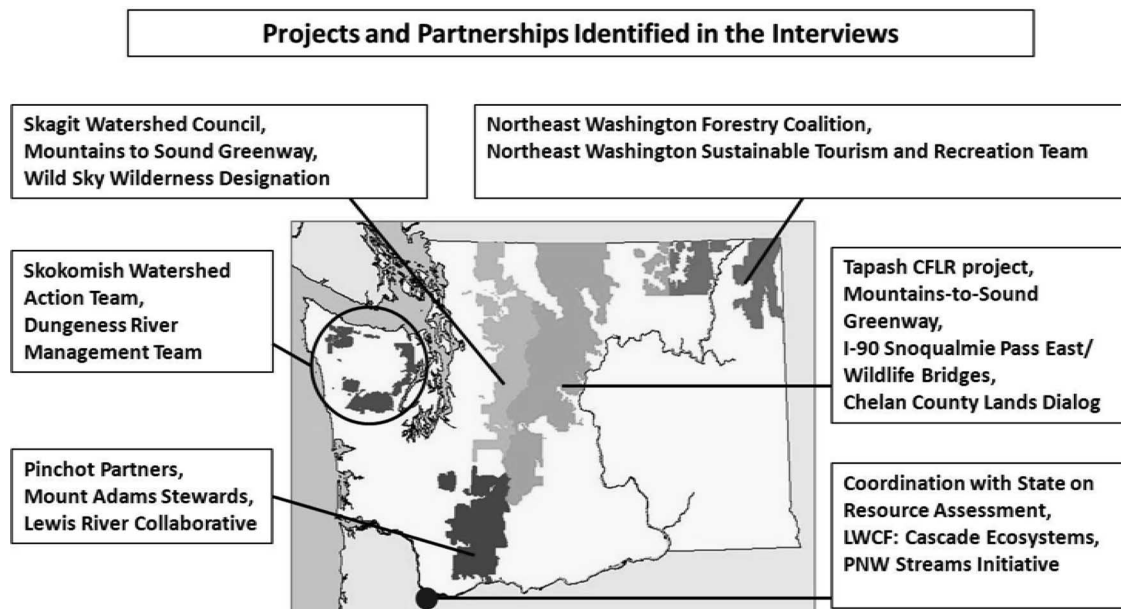


Figure 2. Location of projects and partnerships revealed by participants.

and Northeast Washington Sustainable Tourism and Recreation Team), wildlife corridors (I-90 Snoqualmie Pass East Project and wildlife bridges), and various land acquisitions (see Figure 2). Other projects reflected the traditional mission of managing resources on national forests, some of the nation's largest expanses of open space.

Partnerships were viewed as essential to completing projects. Interagency partnerships create efficiencies with time, money, and resources to manage projects across landownerships. They also provide knowledge sharing of data and technical expertise. One regional-level employee described the importance of partnerships with land trusts and conservancies, "they are THE instrument that facilitates the acquisition of land to the federal estate and absolutely vital to the success of realizing an [OSCS]." They are able to operate at market pace and hold properties until the agency can navigate bureaucracy and receive appropriations or Land and Water Conservation Fund (LWCF) dollars. Participants explained that outside partners can leverage new funding sources for grants and donations that make conservation projects possible and that creating partnerships is often a requirement of grant funding processes. Outside partners can also lobby and advocate, which are venues that were seen as inappropriate and inaccessible to the Forest Service, but strongly influence open space conservation.

The Lands and Realty Management program was a concrete example of how the NFS can engage in open space conservation through land acquisitions, exchanges, and right-of-way. The LWCF is the primary program that funds these acquisitions. Region 6 has created two programs, the Pacific Northwest Streams Initiative and Cascade Ecosystems, to help projects compete for limited LWCF dollars. Partner groups, such as land trusts, conservancies, and collaborative watershed restoration groups, are essential to making these land transactions occur.

Point Person or Implementing Official

No clear point person was identified in the region as having the responsibility for overseeing implementation of the OSCS. Some participants suspected staff in the lands program, S&PF, or that the responsibility was in the national office in Washington, DC.

Funding

The budget and funding process helps the agency link programs to its accomplishments. As one regional employee said, the budget "is still a primary driver for us as an agency." A question on funding was not included in the interview guide because it was unclear which program areas would be considered as open space projects. Despite this, the discussion of projects commonly led participants to describe the budget system and funding sources.

One participant explains,

Our agency is still very traditional in how we allocate our resources and funds and it's very programmatic. So we give money to a timber program, or a rec program or a fisheries program and when you are talking about an open space concept there is not a programmatic emphasis you can really tie it to. The closest one that you could would be the Lands program, which is one of the smallest programs in the agency. So if you take that as an indicator, then we are not really emphasizing it, and if that's not... then there is no indicator. There is no way to really say, 'here is the sign and here is the proof that the agency is really focusing on it.'

Some participants fused the notions of an agency priority with level of funding received. When asked "is open space conservation a priority for the agency?" one participant used his/her interpretation of what it means to implement agency policy and concluded that it is a mixed message:

Boy, that's a tough one... the fact that it's written down and is in the strategic plan for the agency would say, yes. The funding and subsequent follow up direction that goes with it, that is virtually nonexistent, would tell me, no... it isn't. So, I think it is a very mixed message. I think it is viewed as 'yeah this is something that we need to address, but we really don't have the resources.' Congress is not likely to give us those resources... so it just depends on the LWCF funds... and what they eventually do with those.

This participant shared a copy of the regional business plan, which is the region's interpretation of points from the National Strategic Plan. That copy of the business plan stated the region had not included "Conserve Open Space" in the investment strategy

revealing evidence that no literal funding for open space exists in the region. Another regional employee explained,

We talked about creating a strategic budget objective for open space because open space doesn't have its own line item... And so, we had that discussion to create it, but beyond that we haven't developed to actually identifying an investment level.

When conversations shifted from formal line items to specific projects, additional funding mechanisms surfaced. There is specific funding to support the Lands and Realty Management program. The LWCF is one of the primary mechanisms used for land acquisitions. Additional funding to acquire land within national forests was found in new wilderness legislation for the Wild Sky Wilderness.

Funding for open space objectives not associated with land acquisition was also discussed in the interviews. The Collaborative Forest Landscape Restoration Program did not exist during the creation of the OSCS but is a catalyst for the creation of cross-boundary partnerships for forest restoration. Other authorities were noted for their contributions to aligning or implementing conservation and restoration priorities with partners, including the Farm Bill (requiring state forestry assessments and forest action plans), Wyden Amendment, and Secure Rural Schools and Community Self Determination Act.

Decision Structure (Planning)

Most participants were not involved with forest planning procedures and did not have information to answer if open space was considered during forest planning or other planning processes. Several employees were aware of the goal in the National Strategic Plan to conserve open space, but fewer knew how it was being addressed at the regional level. Two participants described how funding for open space was addressed in the regional business plan. It was also not seen as a component of recent NEPA analyses.

Forest-level planners were best able to describe the status of the forest plans. Participants from other programs were not up-to-date on the status of planning efforts or the details within them. The most recent forest plans in Washington State were completed in the early 1990s after the creation of the Northwest Forest Plan. There was no literal acknowledgment of the term "open space" in any forest plan in Washington State because they predated former Chief Bosworth's "four threats" agenda and the OSCS. However, it has been Forest Service policy to pursue the acquisition of inholdings and consolidate ownership when the opportunities arise. For example, the Okanogan-Wenatchee and Colville National Forests were currently undergoing a joint revision process. Some of the research for the revision process has included open space related concepts such as housing density mapping and habitat connectivity. At the time of these interviews, a current draft of the plan was not available for review.

Barriers to Engaging in Open Space Conservation

Participants cited several barriers to Forest Service engagement in open space conservation. Common barriers included a lack of funding and the lack of staff time and expertise dedicated to projects that might occur outside of the forest boundaries or outside of a forest's program of work.

Several participants stated that they did not have authority to work outside of the national forest boundaries. When asked "is the

loss of open space a threat to your forest?" one forest supervisor responded:

My jurisdiction stops at the forest boundary. So, I would say no, we are not having issues within the forest boundary and the lands that we manage, but we are seeing development right up to the edge, so there are definitely impacts from that, but that is not a place that we have jurisdiction.

Line officers were sensitive to a county's political and economic concerns such as rural development issues and the lost tax revenue that occurs when federal ownership increases. They were respectful of private property rights and aware that some people may distrust the federal government. These conditions make it difficult for NFS to discuss the consequences of open space loss outside forest boundaries.

One district ranger explained,

We have to voice some concerns about what happens on the land neighboring ours, but we really aren't active in saying... 'as a private landowner, we don't think you should do anything with your land...' I choose to say... 'if we are going to be neighbors, then let's get along... and there are some things that matter to us...water quality, road safety, etc....'

Land adjustment projects have additional challenges. The LWCF program is the primary funding source available for federal land acquisitions. The funding process is lengthy and competitive, with widely fluctuating annual funds. These challenges can jeopardize a project and stress partner relationships if a land trust is holding a property in hopes of transferring it to the federal estate. Some land acquisitions are discouraged because the land does not hold the underlying mineral rights or would obligate excessive agency resources and taxpayer funds to complete environmental remediation.

Discussion

This study of OSCS implementation produced a complex story with mixed results. The research approach was complicated by a lack of literature explaining the hierarchy of agency guidance policies and in part by the complexity of the Forest Service organization. While its hierarchical and bureaucratic nature may be best suited for a top-down policy study, its decentralized structure and respect for local autonomy are better explained by the bottom-up literature. While the main points in the OSCS are core agency values and inherent to many agency programs, the strategy's widespread awareness across the agency is still uncertain, as is the degree to which it must be implemented and if one must be aware of the OSCS to implement it. Due to these uncertainties, it was difficult to locate one model framework to guide this study.

Many projects and partnerships discussed in the interviews reflected various actions discussed in the OSCS. When looking solely at concepts from the synthesis of top-down policy implementation literature reviewed above, it would suggest that the OSCS was not being implemented by the NFS in the study area because it is difficult to follow the breadcrumbs. Awareness of the strategy among line officers and staff in lands, recreation, minerals, and planning was lower than expected considering participants were referred due to their involvement in open space conservation. The impact and purpose of the OSCS was also in question from some participants that were aware of it. The term "open space" was not referenced in existing forest planning or NEPA efforts. The direction in the National Strategic Plan to conserve open space was not being included in the regional investment strategy, and few programs were available outside of LWCF for land acquisition, which was the most direct

link to the strategy for NFS. Some participants' comments indicated that the strategy was more marketing than direction.

Many of the barriers identified by participants are characteristic of "street-level bureaucrats" (Lipsky 1980) where line officers and staff exercise autonomy and discretion to cope with competing priorities and resource limitations. In this case, the agency's emphasis on open space conservation is less a mandate requiring implementation and more an agency "priority" or "guidance" document providing a vision for conserving open space now and into the future. In the area of this study, there were higher priorities taking precedence, according to line officers. Reproducing this study in a different region could produce different results.

The NFS branch may have the most difficulty implementing the OSCS. Many budget and personnel restraints described as barriers limit involvement in projects that occur off national forestlands. Some participants were concerned over the appropriateness of their involvement in local planning efforts and their authority to conserve land outside of the forest boundary. The NFS could benefit from clearer direction on how to get involved with open space conservation, particularly outside of the forest boundary. Many of these findings were supported by a research effort within the agency to explore Forest Service's participation in local planning efforts (Lesch 2010).

A lack of awareness of the strategy's details led to varying interpretations of what an open space project is. Several projects and partnerships shared by participants were watershed or vegetation management projects primarily focused on national forestlands that accomplished traditional forest management objectives. In contrast, concepts from the OSCS emphasize consideration over what is happening on lands outside national forest ownership so that managers can address the implications of land use conversions. It is our nation's private lands that have a higher probability of converting to developed uses. These lands have been under the traditional purview of S&PF but where the strategy might move NFS involvement toward a collaborative "all lands" approach to land management.

Several model projects and partnerships were identified when applying a bottom-up perspective. Directly asking participants about the types of open space projects and partnerships they were involved in revealed many projects in Washington State that closely aligned with the priority actions in the strategy. These projects illustrate that the strategy can be implemented without a separate funding source or knowledge of the program managers. Increasing awareness of the OSCS, formally recognizing a project's connection to the strategy, and making open space a clear project accomplishment are small changes that could greatly improve the perception of the strategy's implementation in the future.

Recommendations

1. Clarify to NFS staff some ideas about how they might engage in open space conservation.

NFS could benefit from clearer direction concerning the agency's authority outside of the forest boundaries and their appropriate involvement in local planning efforts. Some participants stated their hesitancy to get involved in planning activities outside the national forest boundary. Training or workshops for Forest Service employees that clarify the appropriate role of the federal government in local planning decisions could help expand this dialogue. Several resources have been created by the agency since these interviews were conducted. The *Planning for Growth and Open Space Conservation Webinar Series* has explored a variety of pertinent topics and is available as an online resource (USDA Forest Service 2013). A re-

cent publication, *Across the Green Line: How Forest Service Employees Can Support Local Land Use Planning Efforts* (Carr and Stein 2014) also contributes to the growing body of tools and resources that can help clarify the appropriate roles of the agency in local land-use planning dialogs.

In addition, the OSCS definition of open space may be too broad to provide the clarity needed for successful implementation. While it captures where NFS, S&PF, and R&D can work collectively, their varying missions, authorities, tools, and partners affect how they can work and how they prioritize projects. National forestlands themselves are not at risk of conversion to other land uses. It is the interspersed inholdings and adjacent private lands that are at risk of conversion that could have consequences for national forest management. A refined definition of open space for the NFS could improve conservation efforts and dispel the notion that "everything we do is open space conservation" simply because national forests are one of the largest open space networks.

2. Identify an implementing official to help identify open space projects at various levels of the agency.

Having a clear point person to communicate direction and project successes could improve implementation and awareness of the strategy.

3. Consider making open space conservation a more tangible outcome of projects.

Open space accomplishments are often the outcome of more specialized program areas. Making open space a more tangible output or component of a planning process could improve awareness and the reporting of open space accomplishments.

4. Improve coordination between NFS, S&PF, and R&D branches of the agency to fulfill open space priorities.

The OSCS and newer landscape approaches to land management have caused NFS to consider external forces such as population growth, climate change, habitat connectivity, fire, insects and diseases, and management actions of adjacent landowners more than ever before. This work has traditionally been the purview of S&PF. Better coordination within the Forest Service could help leverage the strengths of each branch and address the challenges presented by cross-boundary conservation work.

5. Improve communication of agency priorities from the Washington, DC office to the districts.

Knowledge of the OSCS seemed to be more prevalent at the region and forest levels than the district levels. Finding new ways to reach the districts to communicate the importance of open space conservation and working with partners across boundaries could greatly improve awareness, implementation, and reporting successes of the strategy even if separate programmatic funding to specifically label "open space projects" is unavailable.

6. Expand agency involvement in collaborative groups and partnerships.

All participants praised partnerships and highlighted the many benefits they produce. Finding ways to expand the agency's involvement in partnerships could continue to create efficiencies and complete complex cross-boundary projects.

Conclusion

Participants who were aware of the OSCS seemed to share the perspective that the “conserve open space” direction has formalized a function of the Forest Service not clearly articulated in the past. The purpose and impact of the OSCS, then, is not a policy directing the agency to do something new but an assessment and conceptual piece that frames agency functions in a new way. In the words of one forest supervisor, the OSCS has “brought some emphasis to what has been our business all along.” Throughout its history, the Forest Service has managed the nation’s largest blocks of open space and engaged in land adjustments and acquisitions to ease management conflicts of multiple ownerships. The agency’s role was described by participants as a neighbor, partner, and “holder of the green.” After the OSCS, the overall mission is the same, but the agency’s actions are framed toward the new paradigm of collaborative landscape conservation.

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