

NATIONAL ADVISORY COMMITTEE FOR
IMPLEMENTATION OF THE NATIONAL
FOREST SYSTEM LAND MANAGEMENT
PLANNING RULE

Final Recommendations to the Secretary of
Agriculture and the Chief of the Forest Service –
February 3, 2018

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1. Letter from Committee Co-Chairs

**National Advisory Committee
for Implementation of the
National Forest System Land
Management Planning Rule**

- Mike Anderson, *The Wilderness Society*
- William Barquin, *Kootenai Tribe of Idaho*
- Susan Jane Brown, *Blue Mountains Forest Partners*
- Robert Cope, *Lemhi County Commissioner (retired)*
- Adam Cramer, *Outdoor Alliance*
- Daniel Dessecker, *Ruffed Grouse Society*
- Russ Ehnes, *National Off-Highway Vehicle Conservation Council*
- Angelou Ezeilo, *Greening Youth Foundation*
- Karen Hardigg, *Rural Voices for Conservation Coalition**
- Valerie Huerta, *New Mexico Farm and Livestock Bureau*
- James Magagna, *Wyoming Stock Growers Association*
- Joan May, *San Miguel County Commissioner*
- Peter Nelson, *Defenders of Wildlife*
- Martin Nie, *University of Montana*
- Michelle Nuttall, *Southern California Edison*
- Caitlyn Pollihan, *formerly with the Council of Western State Foresters**
- Candice Price, *Urban American Outdoors*
- Angela Sondenaa, *Nez Perce Tribe*
- Megan Sutton, *The Nature Conservancy*
- Thomas Troxel, *Intermountain Forest Association*
- Gabriel Vasquez, *Latino Outdoors*
- Ray Vaughan, *Polar Connections*
- Lindsay Warness, *Boise Cascade Company*

*Committee Substitutes

February 3, 2018

Sonny Perdue
Secretary, Department of Agriculture
1400 Independence Ave., SW
Washington, D.C. 20250

Tony Tooke
Chief, U.S. Forest Service
1400 Independence Ave., SW
Washington, D.C. 20250

Dear Secretary Perdue and Chief Tooke:

As the charter for the National Committee for Implementation of the National Forest System Land Management Planning Rule comes to an end, the Committee thanks you, and the Forest Service staff who have been active in the Committee's work, for the chance to be part of the groundbreaking process of helping to implement the Planning Rule.

The first Charter produced comprehensive recommendations for changes to the Planning Rule Handbook. The second Charter produced the Citizens Guide and Government Guide to Forest Planning. The third and final Charter produced final recommendations that we hope will be helpful in assisting the Forest Service in addressing some of the more pressing challenges to implementation of the Rule.

Many of our enclosed recommendations echo and enhance previous recommendations of the Committee. They reflect the chief's priorities of 1) uplifting and empowering employees, 2) delivering remarkable customer service, 3) strengthening shared stewardship, 4) increasing forest and rangeland management, and 5) enhancing outdoor opportunities and improving access and infrastructure. Through these recommendations we intend to emphasize the need to fully incorporate these concepts into future planning processes. In these recommendations, the Committee has focused on five key topics: shared stewardship, youth engagement, species of conservation concern, adaptive management, and planning for success.

A key objective of the Planning Rule is to broaden and deepen the engagement of tribal, state and local governments and the American public in national forest land management planning. During our

discussion with regional planning directors this week, we heard clearly that limited staff capacity, especially given tight budgets, is a significant challenge in forest planning. We believe shared stewardship is a promising strategy to address capacity gaps and are pleased it is one of your priorities.

Our recommendations on enhancing youth engagement seek to improve participation by youth and underserved communities in forest planning and site-specific management decisions. Youth and underserved community participation is critical to the future of forest planning especially in light of the changing demographics of our country.

Planning for conservation of at-risk species requires a team effort. Although significant effort has been made to advance policy direction for species of conservation concern (SCC), further clarification is still needed about the process for identifying SCC, when and how best to involve and leverage the expertise of public and agency partners, and how to consistently identify and apply the best available scientific information, while also allowing appropriate levels of regional discretion. Our recommendations regarding SCC seek to address these challenges.

Adaptive management can only be effectively practiced with the input and added capacity of forest planning stakeholders, who after investing time in the development of a plan, have a keen interest in evaluating whether it effectively delivers the multiple benefits it is designed to provide. Monitoring and evaluating plan effectiveness is critical, yet is often dropped in priority when resources are limited. The Committee, through these recommendations, hopes to ensure that the agency has the capacity to support successful monitoring, evaluation and adaptive management, while also building public engagement and trust.

During our final meeting we reflected on the role and success of this Advisory Committee over the past five years. After multiple new rules over a ten-year period, we commend the Forest Service for developing a resilient rule that will serve national forest management for years to come.

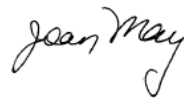
The Committee is invested in the success of future planning efforts. Therefore, we call your attention to the Rule's requirement to establish and administer a national oversight process for accountability and consistency of National Forest System land management planning. We believe continued engagement with members of this Committee and others can be helpful and so we recommend establishing a national oversight council.

Although this Advisory Committee's work is ending, we look forward to continued dialogue and collaboration. Please feel free to contact any individual member of the Committee as we all support the continued success of the Planning Rule.

Sincerely,



Jim Magagna
Committee, Co-Chair



Joan May
Committee, Co-Chair

2. Shared Stewardship

“The ideal management of our public lands would be through shared stewardship.”

- Sonny Perdue, Idaho Statesman, June 1, 2017.

“An okay plan with strong partnerships will succeed, while a ‘perfect’ plan with no support will fail.”

- Peter Gaulke, Southern Region Planning Director, FACA Meeting in Atlanta, August 1-3, 2017.

“We can’t do this alone and only on National Forest System lands. It takes others to help us make a difference on the whole landscape. We will work with all citizens—from rural and urban communities—as we pursue the work in front of us. Strengthening and expanding partner and volunteer programs around shared values is critical for a sustainable future.”

- Tony Tooke, Leadership Corner Blog, October 27, 2017

Objective

Provide recommendations to the U.S. Forest Service on how to develop plan components and other plan content that will allow for and promote **shared stewardship** in the design and implementation of projects under national forest and grassland management plans (plans) and monitoring of plan implementation. The recommendations will also be useful outside the context of forest planning.¹

Introduction

The National Forest System, many rural communities, and much of the American public are suffering from the Forest Service’s lack of capacity to adequately plan, implement, and monitor management activities necessary to achieve its multiple-use mission. Greatly increased costs of fire suppression, coupled with inadequate congressional funding, have resulted in a serious decline in the Forest Service’s management capacity. In addition, increased urbanization is causing greater management difficulties and, at the same time, weakening the connection between people and their national forests and grasslands.

Forest planning can act as a catalyst for the formation of new partnerships and other relationships to add capacity and improve management of the National Forest System. A key objective of the 2012 Planning Rule is to broaden and deepen the engagement of the American public in national forest land management planning.² Accordingly, the Forest Service is seeking to expand collaborative relationships with diverse interests and partners on plan development, implementation, and monitoring. The collaborative planning process provides new opportunities for the public to work with the Forest Service to achieve mutually desirable outcomes.

¹ Within these recommendations, the terms ‘planning’ and/or ‘forest planning’ refer to US Forest Service land management plans on national forests and/or grasslands.

² FSM 1921.02.

“Shared stewardship” – i.e. sharing responsibility for national forest management with willing stakeholders – is an evolving concept through which the Forest Service’s ability to develop relevant, implementable, and effective land management plans is strengthened. Shared stewardship can broaden public involvement and provide greater efficiencies in implementation and monitoring, helping to fill in Forest Service gaps in adaptive management. It moves the focus of planning more toward implementation and reduces the risk that plans will be shelved due to lack of resources and stakeholder engagement. Shared stewardship can also help strengthen the connection between rural and urban cultures by offering education and a means for people to get involved.

While there are numerous stories of successful partnerships and strong relationships in many national forests, we need to ask what more can be done and what can be improved. Our observation is that as the number of supporting policies, programs, and authorities that enable shared stewardship has grown, agency staff and partners often struggle to navigate this increasing complexity, leading to confusion about what’s possible, what’s not, and ultimately limiting the full range of opportunities. Limited time and space to creatively use existing policies, in combination with cultural and organization hurdles, further compounds the problem. We encourage the Forest Service to view the forest planning process as an opportunity to maximize the use of existing authorities and programs that facilitate shared stewardship. For example, the Joint Chiefs Landscape Restoration Program, Tribal Forest Protection Act, Wyden Authority, Good Neighbor Authority, and Stewardship Authority all support the Rule’s requirement that the responsible official “look beyond the unit boundary and develop an understanding of management issues on the plan area within the context of the broader landscape, and coordinate with and encourage participation of other relevant land or resource managers.”³

Defining Shared Stewardship

The concept of “shared stewardship” is intended to encompass multiple approaches for the Forest Service to share responsibility for national forest management with willing stakeholders. Existing models include –

- Tribal “co-management” of natural resources with federal and state agencies. While forest plans should include plan components and other plan content that help define the Federal-Tribal co-management relationship, the term “co-management” is not interchangeable with “shared stewardship.”
- Use of “Good Neighbor” and “Tribal Forest Protection Act” authorities to work with state and tribal agencies on forest health projects.
- Use of “cooperating agency” authority to engage tribal, state, and local governments in NEPA planning.
- “Forest to faucet” watershed management relationships with municipal water utilities and other downstream water users.
- “Community forests” and stewardship contracting (e.g. Weaverville Community Forest, New Mexico land grants).

³ FRN April 9, 2012 p.21162

- Fish and wildlife habitat management agreements with state agencies and fishing and hunting organizations.
- Trail development and management agreements with communities and recreation user groups.
- Collaborative Forest Landscape Restoration Program (CFLRP) implementation and cost-sharing.
- Contributions of private companies, often facilitated by the National Forest Foundation, to fund watershed restoration and recreational improvements.⁴
- Cross-boundary partnerships between private landowners and the National Forest System.

What Shared Stewardship is NOT

Shared stewardship does not mean that the Forest Service abdicates their responsibility for decision making. Partner investments should be considered an addition to the current capacity of the Forest Service. These partnership opportunities should not take the place of the current responsibilities of the Forest Service and should not be used as a reason to reduce congressionally designated funding to the Forest Service.

Shared stewardship does not mean transference of management responsibilities of the national forests to a private partner or another governmental entity. The national forests remain a part of the federal estate and the Forest Service is responsible for the management and maintenance of these lands. Shared stewardship responsibilities are not the same between the parties but are a mutually beneficial relationship that provides additive capacity to the Forest Service.

Shared stewardship should not be perceived as an opportunity to “take over” management of the federal estate by a third party. Nor is it about the Forest Service “taking over management” of private or state lands.

Discussion and Recommendations

The National Advisory Committee for Implementation of the National Forest System Land Management Planning Rule (Committee) strongly encourages the Forest Service to take advantage of opportunities to initiate and expand partnerships and other cooperative relationships through the forest planning process.⁵ Specifically, the Committee makes the following recommendations to develop a robust program and culture of shared stewardship in national forest planning and management. Along with each recommendation, we have provided a brief problem/opportunity statement and, where appropriate, recent examples of how the Forest Service can address each recommendation.⁶

⁴ For more information about Forest Service public-private partnerships, see <https://www.fs.usda.gov/detailfull/prc/home/?cid=stelprd3804156&width=full>.

⁵ <https://www.fs.usda.gov/main/planningrule/committee>

⁶ Most of the examples are drawn from draft forest plan components and other plan content that the Forest Service provided to the Committee before the August 2017 Plan Component Workshop in Atlanta, GA. Other examples come from subsequent searches of draft plan information on Forest Service websites or

Overarching Recommendations, Plan Objectives, and Fiscal Capability

2A. Overarching Recommendations for Shared Stewardship

Problem/Opportunity Statement: The Forest Service’s internal capacity to manage the national forests to achieve ecological, social, and economic sustainability has significantly diminished in recent years, due to escalating fire suppression costs, inadequate funding, and other reasons. Fortunately, a growing number of stakeholders – ranging from state foresters and water utilities to community groups and recreation volunteers – are stepping up to augment the Forest Service’s management capacity. This interest in “shared stewardship” (sharing responsibility for planning, managing, and monitoring) holds great promise for improved management of the national forests and grasslands.

The forest planning process provides an important opportunity to engage the public and mobilize willing partners to create a common vision and build a better future for the national forests. However, in some cases current or potential partners have been disappointed that their contributions have not been well addressed in the planning process. Traditionally, forest plans did not emphasize partnerships; however, the concept of shared stewardship is changing this paradigm. Leadership should continue to emphasize and encourage partnerships to meet the objectives of the new forest plans. This is an exciting opportunity to begin to shift the culture of the Forest Service and accomplish multiple objectives and should be encouraged.

While expanding partnerships to better assist forest plan development, implementation, and monitoring can bring many benefits, the Forest Service must remain mindful of their multiple use mandate and the need for balance among ecological, social, and economic interests. No entity or special interest group should hold undue influence or too large a role in decision-making on National Forest System lands.

- 1. Recommendation: Forest Service national and regional leadership should set an expectation, through performance standards, directives, and policies, that staff prioritize partnership-building, collaboration, and other forms of shared stewardship prior to and during the development, implementation, and monitoring of forest plans. We encourage the agency to begin establishing partnerships and relationships well before initiating the planning process. Forests that are not undergoing forest planning at this time should begin establishing the groundwork for future partnerships and relationships.⁷**
- 2. Recommendation: The Forest Service should clearly articulate roles, responsibilities, and restrictions on any formal agreements or partnerships**

from other information that seemed appropriate to the Committee based on members’ personal experiences and knowledge. The absence of examples for some recommendations does not mean that no appropriate examples exist, just that the Committee is not aware of them.

⁷ The Committee’s past recommendations also emphasize the need to start engaging the public early and often, i.e. prior to, during, and after the land management planning process. ‘Final Outreach Workgroup Challenges and Solutions2_August 2016.pdf’

dealing with shared stewardship activities. The agency should remind partners that they represent but a single voice in the broader discussion of our national forests and grasslands, and that final decision-making authority remains with the Forest Service.

Example:

- Flathead National Forest (Montana) Final Plan, December 2017. Partnerships and Coordination -- Desired Conditions: *“Partnership arrangements are transparent to the public and free of real or apparent conflicts of interest or endorsement of commercial products, services, or entities.”*

2B. Plan Objectives and Fiscal Capability

Problem/Opportunity Statement: Overly strict interpretation of the 2012 Planning Rule’s requirements to ensure that plan components are within the fiscal capability of the Unit and to base plan objectives on reasonably foreseeable budgets, has made it difficult for planners to incorporate shared stewardship into objectives and other plan components.^{8,9} Furthermore, the Planning Rule and Directives say a lot about “what” should be in desired conditions and other plan components, but very little about “how” to achieve them. Consequently, public input regarding potential partner contributions and other shared stewardship opportunities have typically not been well reflected in plan revisions and amendments. This could become a serious barrier to the Forest Service’s ability to add capacity through shared stewardship, thereby threatening the agency’s ability to achieve the Planning Rule’s restoration and collaboration purposes. (See also [Planning for Success](#))

3. Recommendation: Sections 219.1(g) and 219.7(e)(1)(ii) of the Planning Rule should be interpreted broadly to allow reasonably foreseeable contributions of other federal agencies, state and local governments, tribes, universities, businesses, and other partners and volunteers to be considered part of a unit’s fiscal capability. Plans should not be strictly constrained by the current fiscal capability of a FS unit and should look for ways to leverage partnership opportunities as well as utilization of all authorities. Plan objectives and other plan components should promote partnerships and other opportunities to increase capacity for plan implementation and monitoring through shared stewardship.

Examples:

- The Nantahala Pisgah Forest Partnership collaborated and recommended tiered objectives that provide a fiscally-constrained base level and objective growth if additional resources are secured, public-private cooperatives are realized, or innovative and efficient tools are used. This will allow for larger objectives to be analyzed in the EIS even if they are not within the current fiscal capability and will incentivize creative partnerships to get the work done.

⁸ 36 CFR 219.1(g): “The responsible official shall ensure that the planning process, plan components, and other plan content are within Forest Service authority, the inherent capability of the plan area, and the fiscal capability of the unit.”

⁹ 36 CFR 219.7(e)(1)(ii): “Objectives should be based on reasonably foreseeable budgets.”

- Nantahala-Pisgah National Forest (North Carolina) Preliminary Draft Plan, 2017. (example of a tiered objective) *“Across Interface and Matrix, restore young forest conditions using mechanical treatment as a tool on between 650 and 1,200 acres annually... With expanding opportunities, including with partners where possible, this work could accomplish up to approximately 3,000 to 4,000 acres annually.”*
- Coronado National Forest (Arizona) Draft Plan, 2017: *“Provide opportunities for volunteers to participate in recreation planning, project implementation, or operations and maintenance at 15 to 30 recreation sites or facilities annually.”*

Partnerships and Capacity

2C. Partnerships, Communities, and Relationship Building

Problem/Opportunity Statement: The agency can simply no longer afford to “go it alone.” To its credit, the Forest Service has made significant progress in embracing the opportunity for partnerships. However, there is room for improvement. Many times, the agency is hampered by antiquated forest plans, policies, and procedures that discourage the use of partnerships.

4. Recommendation: Forest plans should identify strategies to increase overall capacity to achieve desired conditions by building relationships with communities and other stakeholders. Forests should provide continued engagement opportunities for the public, communities, partners and governments through plan implementation and monitoring, not just during plan revision. Consider using cooperative forestry agreements, authorities, grants, and funding to support more partner organization capacity and participation throughout the process.¹⁰

Examples:

- Shoshone National Forest Vision Statement: *“Forest Service employees provide high quality customer service in a management environment characterized by collaboration, communication, and cooperation. The Shoshone is a model for successful collaboration and partnerships—people actively participate in caring for the land and maintaining the long-term sustainability of the Shoshone resources”.*
- Chugach National Forest Goals and Desired Conditions: *“Multiple use and enjoyment opportunities within the national forest result from collaborative engagement between the Forest Service and others. Community participation and citizen engagement is a common occurrence, resulting in long lasting partnerships. Relationships with new entities are established in a manner that attracts non-traditional users and strengthens the connections between surrounding communities and the national forest”.*
- Coronado National Forest example: The Coronado National Forest has ongoing collaborative relationships with communities and groups with land management interests. Members of local groups have participated in the plan revision process from its inception, and the forest will continue this collaborative effort in the future to implement monitoring and other common goals. Forest personnel participate in the scheduled meetings of partner groups, their events, and other ongoing partner activities. Coordinating with these groups promotes and develops consistency among resource plans and integrates common land management goals and strategies.

¹⁰ For reference, a summary of the different existing instruments (p.25-26): https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5193234.pdf

- Rio Grande National Forest example: To be more responsive to necessary changes in forest plan content, Rio Grande National Forest staff will annually post proposed changes and the rationale for the changes, which could include annual monitoring results, on the forest website. In conjunction with release of the changes, a stakeholder meeting will be held to discuss the changes proposed in detail followed by a [30 day] comment period. Upon receiving and reviewing all comments, the responsible official would determine the proper authority to be used in making necessary changes to the forest plan content. The entire process will be open and transparent.
- Forest Service Intermountain Region, 2017: In order to support implementation of forest plan revisions across the Region, the Intermountain Region entered into a Challenge Cost Share Agreement with a local, community-based organization Salmon Valley Stewardship (SVS). The agreement recognizes that bringing *“a level of expertise and knowledge to the partnership ... will allow the Forest Service to complete this project consistent with agency directives. The opportunity to collaborate and develop content for mutual use to share knowledge and increase the transparency, consistency, and level of public involvement will allow Region 4 to meet the objectives of the 2012 Planning Rule and provide a better service to the American public”*. Through this agreement, the objectives for SVS include: Increase communication between the agency and the public by utilizing diverse and innovative products such as videos and web-based products; share knowledge regarding community engagement and collaboration across the region; increase participation to diverse audience including youth.” SVS is responsible for *“identifying key audiences, identifying gaps, and uses partners to leverage resources”* among other responsibilities.
- Chugach National Forest (Alaska) Draft Plan, 2015: Desired Condition: *“Multiple use and enjoyment opportunities within the national forest result from collaborative engagement between the Forest Service and others. Community participation and citizen engagement is a common occurrence, resulting in long lasting partnerships. Relationships with new entities are established in a manner that attracts non-traditional users and strengthens the connections between surrounding communities and the national forest.”*
- Inyo National Forest (California) Draft Plan, 2016:
 - Desired Condition, Local Communities: *“The Inyo manages the land in a spirit of shared stewardship with local people.”*
 - Goal: *“Develop memoranda of agreements or other protocols between the forest and local governments as appropriate to guide coordination processes and reflect local perspectives and interests.”*
- Francis Marion National Forest (South Carolina) Final Plan, 2016: Desired Condition, Community Health: *“Communities, both large and small, gain benefits from the Forest but also add to the Forest’s cultural uniqueness. Large communities are able to connect easily to the many opportunities on the Forest. Small and very small crossroads communities (within and neighboring) the forest survive and thrive. Crossroads communities are acknowledged as a valuable part of the larger community’s health.”*
- El Yunque National Forest (Puerto Rico) Draft Plan, 2016: *“The Community Interface Resource Management Area is the best example of the shift from Forest Service-driven-management priorities to a more collaborative management, and is the area where sustainable forest practices could be considered with a community-based shared stewardship approach. This means that this management area opens the door to a day-to-day shared stewardship process with local communities, which connects the Forest to the communities in a way where educational, recreational, and other opportunities are developed.”*
 - Management Approaches:

- *“Promote a closer working relationship with local communities and encourage the Forest Service personnel to ensure the participation of community leaders and stakeholders.*
- *During trail planning, include discussions and input from other land management agencies, non-profit organizations, special-use permit holders, municipalities, as well as other interested members of the public.*
- *Link community and municipal programs with projects ... through a collaborative process in which the Forest provides the technical assistance and resources to empower local sustainable projects that could be reproduced through the region.”*

2D. Assessing Capacity Needs and Partnerships

Problem/Opportunity Statement: To ensure that shared stewardship and collaboration play significant roles in forest planning, they need to be addressed upfront during the assessment process and potentially in the Need to Change. The Planning Directives state that an objective of the assessment is to *“develop relationships with interested parties to facilitate public and government participation among government entities, Indian Tribes, private landowners, and other partners and interested parties.”*¹¹ This objective is consistent with a shared stewardship approach. However, neither the Rule nor the Directives specifically provide for an assessment of a forest’s existing or potential partnerships or the forest’s capacity to implement management plans.

5. Recommendation: During the Assessment phase of planning, forests should assess the forest’s current capacity and existing partnerships with respect to relevant topics in the Assessment.¹² Where appropriate, the Need to Change statement should identify the need to increase capacity through leveraging of partnership opportunities, based on the Assessment.

Examples:

- Gila National Forest (New Mexico) Need for Change Statement, March 2017:
 - *“The successful implementation of this forest plan requires good working relationships between the Gila NF and all stakeholders. With the challenges presented by downward trends in Forest budgets and staffing levels, strong relationships are not a convenience, but a requirement in order to care for the land and serve the people.... The Forest does not always capitalize on partners who are willing to help. For example, stakeholder involvement is not reaching its potential for the recreation resource, resulting in missed opportunities for positive interactions and outcomes.... [T]here is a need to:”*
 - *Include management approaches throughout the plan as appropriate that utilize collaboration with stakeholders, partnerships and volunteer opportunities as a management option to strengthen relationships and to promote movement toward desired conditions. This includes but is not limited to local, state, and federal agencies, local and tribal governments, elected officials, local communities, interested individuals, businesses, permittees, recreation and forest user groups, fire safety and community protection groups, environmental and conservation organizations, users with historic ties to the forest, volunteer and stewardship*

¹¹ FSH 1909.12 sec. 10.2(3).

¹² Forest’s current capacity = personnel, resources and budgets.

groups, educators, and youth groups. This also includes management approaches that encourage working with neighboring land managers to implement projects at a scale that improves landscape scale connectivity across mixed ownerships where natural systems, such as watersheds and wildlife corridors, span multiple administrative boundaries.

- *Develop management approaches that can strategically leverage and streamline processes for engaging partners and volunteers during project implementation and monitoring.*
- *Create management approaches that emphasize public education about the Gila NF's diverse ecological, social, and economic resources, the multiple-use sustained yield philosophy, public laws and regulations, shared use ethics, and management strategies.*
- *Prepare desired conditions and management approaches aimed at connecting people – particularly youth and underserved populations – with public lands and nature.”*

2E. Communications: Telling Stories of Shared Stewardship

Problem/Opportunity Statement: Partners can be very effective messengers about the need for and benefits of shared stewardship restoration work in the national forests. Especially compelling are stories of successful partnerships that educate the public, demonstrate how people can make a difference, and help convince other potential partners of the value of working together with the Forest Service. Partner communications from trusted messengers are especially important as an avenue to reach underserved rural and urban populations and youth. (See also [Youth Engagement](#))

6. Recommendation: In developing partnerships, the Forest Service should encourage and work with partners to create and distribute informational materials, including video and social media, that explain the need for and benefits of shared stewardship.

Examples:

- Northern Arizona Forest Fund: The Salt River Project (a major water and power utility in Arizona) has partnered with the National Forest Foundation (NFF) to create the Northern Arizona Forest Fund, which raises money from Arizona businesses and residents for watershed restoration projects in five national forests. The Salt River Project regularly communicates to its ratepayers and other potential partners about the Fund, including information about each year's restoration projects.¹³
- Angeles National Forest (California): Utilities in Southern California have teamed up with NFF to organize and communicate about volunteer trail maintenance projects in the Angeles National Forest.¹⁴
- Urban America Outdoors: Urban America Outdoors, a cross-cultural TV show based in Kansas City, has created award-winning videos about the national forests and has

¹³ <http://www.srpnet.com/water/forest/naff.aspx>.

¹⁴ <https://www.prnewswire.com/news-releases/socalgas-volunteers-participate-in-national-get-outdoors-day-to-clanup-angeles-national-forest-trails-300283385.html>.

organized and publicized many popular fishing derbies in urban areas in partnership with the Forest Service and other organizations.^{15, 16}

- The Nature Conservancy led a coalition-wide effort to produce and promote a five-year report that details the success of the agency’s Collaborative Forest Landscape Restoration program—1.66 million forested acres treated, 703 miles of stream improved, and more than 4,000 jobs a year created and maintained.¹⁷

2F. Partnership and Volunteer Coordination

Problem/Opportunity Statement: Some national forests are unable to capitalize on current or future partnership and volunteer opportunities because they lack the personnel and/or necessary coordination skills.

- 7. Recommendation:** Every national forest should have access to the necessary personnel, training, and skill sets to help recruit, organize, supervise, and coordinate with partners and volunteers.

2G. Youth Engagement in the Outdoors

Problem/Opportunity Statement: Young people, in both rural and urban areas, are spending too little time in the outdoors where they can learn to understand and appreciate the importance of taking good care of our natural environment. At the same time, the Forest Service is experiencing challenges in recruiting young men and women into natural resource careers. Through programs that get kids outdoors and involved in hands-on activities, the Forest Service can work with partners to help youth connect with nature, build self-confidence, instill feelings of accomplishment and ownership, and find meaningful and rewarding natural resource careers.

Currently in many areas, the Forest Service is spending time and resources duplicating efforts that already exist in the private and nonprofit world. As youth engagement leaders, members of this Committee understand the efficiencies and advantages that the Forest Service can gain by partnering with States, tribes, universities, private businesses, and nonprofit organizations that are already working with youth on public lands and national forests. Many organizations have an understanding of culturally appropriate ways to reach out to diverse youth. These outside resources can help the Forest Service achieve results by leveraging the work of professionals already working in that field. (See also [Youth Engagement](#))

- 8. Recommendation:** The Forest Service should seek to involve young people and youth groups – including grade schools, community colleges, universities, boys’ and girls’ clubs, church groups, and youth conservation corps among others -- in project and monitoring activities and environmental education to help engage youth in the outdoors and develop skills for future careers in natural resource stewardship and management. To accomplish this, the agency should:

¹⁵ <http://uaotv.com/interesting/video/what-is-the-forest-service-us-forest-service-3-show-series/>.

¹⁶ <http://uaotv.com/urban-kids-fish/>.

¹⁷ <https://www.nature.org/newsfeatures/pressreleases/nearly-1k-acres-a-day-treated-to-reduce-fire-risk.xml>

- **Develop partnerships with States, tribes, universities, private businesses, and nonprofit organizations that are already working with youth on public lands and national forests.**
- **Create regional youth engagement partnership directories that list the organizations, names, contact information, and a short description of the work they do. Forests can use the directories for reference and guidance when developing their public outreach strategies for revision efforts.**
- **Establish youth advisory committees at the regional or forest level to assist with youth engagement efforts.**

Examples:

- El Yunque National Forest (Puerto Rico) Draft Revised Plan, 2016: *“Develop and integrate environmental literacy initiatives in the region directed to create a network of schools that can share data from monitoring, management, and conservation projects in the region.”*
- Nantahala-Pisgah National Forest (North Carolina) Preliminary Draft Plan, 2017: Objective: *“Every two years within the implementation of the plan, each Ranger District will implement at least one new educational opportunity that is designed to provide youth or underserved populations a better understanding of their natural and cultural environments and to provide opportunities for people to develop a sense of stewardship and appreciation of the forests. Educational opportunities will vary by Ranger District depending on the local need.”*

2H. Engaging User Groups to Add Capacity

Problem/Opportunity Statement: Shared stewardship can be used to leverage existing resources in almost every area of forest management. The Committee encourages the Forest Service to creatively expand partnerships with third parties in all areas.

Sustainable recreation is one area with substantial opportunities for shared stewardship collaboration. Outdoor recreation has become a tremendously important use of many national forests. However, the condition of trails, campgrounds, access roads, and other recreational facilities and infrastructure has greatly declined as a result of funding shortfalls and increased use. Many entities have expressed interest in maintaining and improving recreational facilities and infrastructure. Some of the outdoor recreation industry, as well as local communities and many thousands of volunteers, have stepped up, but much more help is needed. Other USDA mission areas, such as Rural Development, may also be able to contribute to these efforts and should be invited to participate in forest planning.

As another example, livestock grazing has been the longest-running permitted use on many national forests. Often grazing allotments have been permitted to the same family for five or more generations, during which ecological evolutions have taken place on the land. Grazing permittees, and other partners with long histories on the land can become engaged as critical, often essential, partners in defining and achieving Forest Plan objectives and desired conditions. This provides an opportunity to engage them as important partners in projects such as trail maintenance or in resource monitoring.

9. Recommendation: Plan components and other plan content should strongly emphasize partnership and volunteer opportunities in all areas of ongoing forest management.

Recreation Examples:

- Francis Marion National Forest Desired Conditions: *“Recreation opportunities are enhanced to be more accessible to persons with disabilities and inclusive of a culturally diverse population. Collaborative efforts help guide development of program priorities, promote a connection to place, and foster a sense of stewardship. Community outreach efforts and realignment of recreational offerings lead to an involved citizen population that, over time, is more representative of the communities the national forest serves”.*
- Inyo National Forest (California) Draft Plan, 2017: *“Goals (REC-FW-GOAL)*
 - 01 *Seek to increase transportation systems to connect people to nature, improve personal health, and increase access for underserved communities, minorities and urban youth.*
 - 02 *Promote effective communication with "gateway communities" to help foster partnerships, inspire volunteers, educate the public and support stewardship including funding, implementation of projects and long-term maintenance of facilities.*
 - 03 *Improve facilities through the establishment of "adopt a facility" programs. Encourage individual and community stewardship to enhance experiences and connect people to the landscape.*
 - 04 *Collaborate with a variety of partners to provide stewardship and interpretive services that enhance responsible recreation and increase knowledge of related socioeconomic and environmental issues.*
 - 05 *Enhance stewardship and monitoring through increased volunteer program activities and partner contributions.*
 - 06 *Provide accessible trails for individuals with mobility impairments.*

Potential Management Approaches

- *Consider local organizations, NGO's and partners who interact with the public to provide interpretive services in addition to maintenance and administrative duties.*
- *Work with local organizations to develop a robust trail ambassador corps, a sustainable adopt-a-trail program, and other on-the-ground stewardship and interpretive programs.*
- *Work with local partners and municipalities to achieve timely opening and closing of access and facilities based on snowpack and other seasonal considerations rather than a fixed administrative calendar.*
- *Use available technology, interpretive messages and interactions, and partnerships to educate Forest users and develop sustainable recreation opportunities that are focused on the long-term sustainability of the land, animals, fish, and plant species that support a healthy forest ecosystem.*
- *Develop a clear and concise process for partnership development and implementation. Communicate the Forest's needs in a succinct, easy to understand, and readily available summary. Include the types of agreements, contracts, and mechanisms the Forest will use to work with future partners.*
- *Consider a 'Recreation Users Council' made up of representatives of the various user groups to monitor/ mitigate and resolve any user conflicts if they arise.*
- *Utilize trail head hosts or volunteer patrollers to educate and interact with the public to promote responsible and sustainable public use practices.”*

Livestock Grazing examples:

- The Forest Service and the National Public Lands Council have entered into an Memorandum of Understanding to foster joint collaborative vegetation monitoring on grazing allotments.
- Forest Service Regions 2 and 4 have entered into an Memorandum of Understanding with the Wyoming Stock Growers Association and Wyoming Wool Growers Association to foster natural resource stewardship and improve management through the use of tools that include information sharing; demonstration of sound management techniques and innovative management alternatives on allotments; educational and informational programs and publications; and, when appropriate, use of conflict resolution tools including coordinated resource management (CRM).

Timber examples:

- Carson National Forest (New Mexico) Preliminary Draft Plan, July 2017. Forestry and Forest Products Management Approach:
 - o *“Consider maintaining and expanding the partnership block program on the Carson NF.”*¹⁸
- Vallecitos Federal Sustained Yield Unit Desired Conditions (DA-VFSYU-DC)
 - o *“Timber products are available from the VFSYU to support a sawtimber industry that maintains steady employment opportunities for a local resident workforce and provide the ability to obtain lumber for local community needs.”*

Problem statement: Currently available analytical tools do not adequately take into account all of the spatial, temporal, geographic and use needs, and have hindered planning efforts.

10. Recommendation: The Forest Service should work with its partners to develop new analytical tools to enable a spatially oriented and geographically relevant approach to planning for current and future resources. A spatial orientation will serve to minimize conflicts, improve sustainability of uses, and efficiently allocate Forest Service resources.

2I. Respecting Tribal, Indigenous, and Traditional Communities’ Wisdom and Stewardship

Problem/Opportunity Statement: Tribal, indigenous, and traditional communities that have utilized forests since before the United States was formed can aid the planning process and lead to better forest plans. By demonstrating respect for that wisdom through shared stewardship, the Forest Service may be able to improve both community relationships and sustainable land management. As an example, “Traditional Ecological Knowledge” is a widely shared cultural value among Indian tribes and other indigenous communities. Through multiple generations of experience, people have learned the consequences of unsustainable land uses.

11. Recommendation: Seek out and incorporate knowledge from tribal, indigenous, and traditional communities to develop, implement, and monitor the plans.

¹⁸ The Camino Real Ranger District has managed a successful community partnership program referred to as stewardship blocks. The forest identifies parcels of land and marks trees, and community members can then harvest wood from the areas. Community members get fuelwood and other wood products in return for restoration work in the forest.

Look for ways to honor that knowledge, sustain community economies, emulate sustainable land management practices, build pride in community traditions, sustain rural economies, and empower those communities to pass along those practices and traditions to future generations.

Examples:

Carson National Forest (New Mexico) Preliminary Draft Plan, July 2017.

- Traditional Communities – Rural Historic Desired Conditions:
 - *“The uniqueness and values of rural historic communities and the traditional uses important for maintaining these cultures are recognized and valued as important.*
 - *The long history and ties of rural historic communities and traditional uses (e.g., livestock grazing, fuelwood gathering, acequias, and hunting) to NFS lands and resources is understood and appreciated.*
 - *Forest resources important for cultural and traditional needs (e.g., osha, piñon nuts, okote (pitch wood), medicinal herbs, and micaceous clay), as well as for subsistence practices and economic support (e.g., livestock grazing, acequias, and forest products) of rural historic communities are available and sustainable.*
 - *Rural historic communities have access to places of traditional use (e.g., individual and group ceremonies, traditional activities, and the collection of forest products) that are important to them.*
 - *Acequia systems on NFS lands are accessible for maintenance, repair, and improvement.¹⁹*
 - *Social, cultural, and economic resources provide a setting for educating youth in culture, history, and land stewardship, and for exchanging information between elders and youth.”*
- Traditional Communities – Rural Historic Management Approaches:
 - *“In collaboration with Northern New Mexico communities, consider developing interpretive and educational exhibits or other media that focus on the history of the NFS lands administered by the Carson NF, to provide the public and Forest Service employees with a greater understanding and appreciation of shared history, culture, and traditions.*
 - *Consider working with traditional communities, such as those associated with the Northern Rio Grande Heritage Area, to identify partnership, education, and interpretation opportunities that help sustain the traditional communities’ heritage, language, culture, traditions, and environment in Northern New Mexico.*
 - *Consider ways of educating Northern New Mexico youth in local culture, history, and land stewardship, and for exchanging information between community elders and youth.*
 - *Consider FS employees working with traditional communities to understand their needs and build respectful, collaborative relationships, in order to achieve desired conditions.*
 - *Consider providing training opportunities for Forest Service employees to gain a deeper understanding of the unique traditional communities, customs, traditions, and values of Northern New Mexico.*
 - *Consider offering Carson NF offices as welcoming places for local community members to engage with Forest Service employees and one another, disseminate*

¹⁹ Acequias are community operated and organized water irrigation systems. They serve as important water infrastructure for communities, and their associations are important community organizations throughout New Mexico.

- and receive information, and attend meetings, seminars, and exhibits that promote community knowledge and collaboration.*
- *Consider holding annual meetings with acequia associations and land grants-mercedes to improve communication and relationships.”*
 - Cultural Resources and Archaeology Desired Condition:
 - *“The public has opportunities for learning about, appreciating, and understanding cultural resources, as well as resources significant to traditional communities.”*
 - Rangeland and Livestock Grazing Desired Condition:
 - *“Sustainable livestock grazing contributes to the long-term socioeconomic diversity and stability of local communities and cultural identity tied to traditional uses.”*
 - Forestry and Forest Products Desired Conditions:
 - *“Forest products (e.g., fuelwood, latillas, vigas,²⁰ Christmas trees, herbs, medicinal plants, and piñon nuts) are available to businesses and individuals in a manner that effectively contributes to watershed health and the restoration and maintenance of desired vegetation conditions.*
 - *Forest products are available for traditional communities and culturally important activities.”*

State and Tribal Government Relationships

2J. State and Tribal Forest Management

Problem/Opportunity Statement: Forest management affects not only national forests and grasslands, but also the greater landscape. The 2014 Farm Bill authorized the Forest Service to enter into “Good Neighbor” agreements with state governments that allow state agencies to implement forest management activities on national forest lands. The use of this authority is growing, but the potential it provides to increase capacity to get work done is even greater.

The Tribal Forest Protection Act (TFPA) allows tribes to propose a specific project to the Forest Service that addresses a resource concern (including fire, insect infestation, disease, and other threats) originating on federal lands but impacting adjacent tribal trust land or tribal communities. In 2013, the Intertribal Timber Council released a report on implementation of the Tribal Forest Protection Act, which found that only six projects had been implemented since the Act was adopted 2004. Regulatory and funding uncertainties and frequent Forest Service staff turnover were cited as factors contributing to lack of implementation. The Council recommended that the Forest Service should promote better TFPA implementation through performance incentives and accountability measures, budget direction, monitoring, reviews, and development of direction and guidance. Since then, the Council and the Forest Service have held several joint workshops on TFPA implementation. Forest planning affords an additional opportunity to provide more effective and cost-efficient plans.

²⁰ Vigas (heavy logs that support a roof) and latillas (peeled pieces of wood laid between vigas) are essential in building and renovating pueblo-style or territorial-style adobe homes that are characteristic of the architecture in Northern New Mexico.

12. Recommendation: Forest plans should identify opportunities to use and leverage the Good Neighbor authority and Tribal Forest Protection Act to support implementation of plan goals and objectives throughout the planning process.

Examples of successful partnerships at the project-level:

- Idaho Good Neighbor Authority²¹: The Forest Service and the State of Idaho’s Department of Lands have a three-year plan to use Good Neighbor Authority (GNA) to plan and implement ten forestry projects on 10,000 acres in four national forests, supplementing the Forest Service’s regular timber sales and forest health management program. The state will provide support to the Forest Service in project planning and design, timber sale preparation, and contract administration. In 2017, private timber companies in Idaho provided \$295,000 in cooperative funding to the state’s GNA program. In 2018, the Idaho state legislature will provide \$250,000, and the timber industry will provide \$200,000 in private funding. The federal government is providing an additional \$272,000 in grant funding both years. The ten projects are expected to produce 66 million board feet of timber and generate approximately \$14.4 million in revenue, some of which will be retained to fund additional GNA projects and potentially make Idaho’s GNA program self-supporting.
- Tule River Reservation Protection Project, Sequoia National Forest (California)²². In 2005, the Tule River Tribal Council submitted a Tribal Forest Protection Act project proposal to the Forest Service. The Forest Service began project planning a few months later, but did not issue a Record of Decision for the project until 2015. Frequent Forest Service staff turnover, including at least five different forest supervisors and four different lead planners, contributed to the delay. In the meantime, the Tule River Tribe completed fuel reduction work on adjoining tribal land using Forest Service grant funds.

2K. Tribal Sacred Sites

Problem/Opportunity Statement: The national forests and grasslands include many culturally important sites held sacred by Indian tribes. These sacred sites may be eligible for the National Register of Historic Places as historic properties of religious and cultural significance to Indian tribes. The Memorandum of Understanding among the Departments of Defense, Interior, Agriculture and Energy and the Advisory Council on Historic Preservation Regarding Interagency Coordination and Collaboration for the Protection of Indian Sacred Sites (“Sacred Sites Memorandum”) contains a number of specific recommendations regarding shared stewardship of these sacred sites, including:

- Developing guidance for the management and treatment of sacred sites, including best practices and sample tribal-agency agreements;
- Developing and implementing a public outreach plan focusing on the importance of maintaining the integrity of sacred sites and the need for public stewardship in the protection and preservation of such sites;
- Establishing management practices that could be adopted by the Participating Agencies; for example, these could include mechanisms for the collaborative stewardship of sacred sites with Indian tribes, such as Federal-tribal partnerships in conducting landscape-level cultural geography assessments.

²¹ <https://www.idl.idaho.gov/forestry/gna/091917-gna-idl-2017-review.pdf>.

²² Tule River project information: <https://www.fs.usda.gov/project/?project=15504>.

Intertribal Timber Council report: http://www.itcnet.org/issues_projects/issues_2/tfpa/tfpareports.html.

13. Recommendation: Forest plans should identify opportunities for Federal-Tribal shared stewardship of sacred sites and include plan components that will aid in achieving shared stewardship.

Examples:

- Coronado National Forest (Arizona), Draft Plan, 2017: *“Consult with the Mescalero, Ft. Sill, San Carlos, and White Mountain Apache Tribes to develop stewardship plans for archaeological sites and other traditionally important places and to foster collaborative stewardship with Ft. Bowie. Establish a memorandum of understanding between the Forest Service and Mescalero Apache Tribe to facilitate tribal events in the Chiricahua Ecosystem Management Area.”*
- Nantahala-Pisgah National Forest (North Carolina), Preliminary Draft Plan, 2017: *“Consult and partner with Cherokee tribes to identify and ensure preservation and protection of special tribal areas and to develop interpretation as appropriate. Include the National Park Service’s Blue Ridge Parkway in the latter.”*

2L. Cross Boundary Planning and Management

Problem/Opportunity Statement: Working cooperatively across public and private boundaries is essential for addressing the ecological and economic challenges facing our nation’s forests. Likewise, the health and vitality of social and economic systems rely on multiple land ownerships. As federal budgets become increasingly tight, pooling resources from across ownerships will be helpful to natural resource stewardship and community well-being. In particular, all-lands approaches can leverage resources for greater impact and improve strategic planning across ownership boundaries.

However, narrow interpretation of the 2012 Planning Rule regarding the permissible geographic scope of forest plan components could create barriers to cross-boundary/all-lands management. The Planning Rule states that forest plans guide management of *“resources within the plan area in the context of the broader landscape.”*²³ The Rule defines the “plan area” as the National Forest System lands covered by the plan.²⁴ The Rule also describes the “desired conditions” plan component as *“social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area, toward which management of the land and resources should be directed.”*²⁵ There are opportunities for plans to improve coordination with other landowners in the broader landscape.²⁶ This includes issues where external land management influences the forest and vice versa, e.g. points of access, transportation, parking, etc.

14. Recommendation: Forest Service personnel should continue to work with landowners on collaborative, cross-boundary, landscape-scale planning across

²³ 36 CFR 219.1(b).

²⁴ 36 CFR 219.19.

²⁵ 36 CFR 219.7(e)(1)(i).

²⁶ See, for example, 36 CFR 219.8(a)(1)(ii) and (iii). The planning Directives explicitly encourage use of goals (optional plan components) when the agency is unsure of the rate of progress because the agency lacks control, such as when “the outcome is the result of a partnership between the Forest Service and other land owners within the broader landscape.” FSH 1909.19, sec. 22.16.

federal, tribal, state, private, and other non-federal lands. Where appropriate, plan content should help to facilitate an all lands management approach and help to achieve the social, economic, and ecological sustainability goals of the Planning Rule.

15. Recommendation: To be successful, shared stewardship on a landscape planning level should consider the following guidelines:

- **The process begins in the assessment phase with the establishment of clear sustainable lines of direct communication among landowner/land manager interests;**
- **The authorities and rights of all landowners/land managers are clearly understood and respected;**
- **Common goals and objectives are defined that are acceptable and achievable across multiple land ownerships, and the shared stewardship role of each party clearly recognizes and respects the individual capacities of each party based on available resource and legal authorities.**

Examples:

- El Yunque National Forest (Puerto Rico) draft plan, 2016: “... *geographic areas will facilitate an ‘all-lands approach’ to planning and management that supports cross-boundary work with neighboring and nearby landowners and communities, as well as with state, Federal, and other land management and governmental agencies.*”
 - Desired Conditions for Community Interface Resource Management Area: “*The public understands and recognizes the links of the region through an all-lands approach and the management strategies applied in the CIRMA.*”
- Francis Marion National Forest (South Carolina) final plan, 2017: Objective for use of Wyden Amendment Authority: “*Increase Wyden Amendment agreements by 3 to 5 agreements for prescribed burning within 10 years of plan approval, which increases the prescribed burning program by additional 3 to 5% on private land within the administrative boundary.*”
 - Management Strategy: “*Wyden Amendment agreements allow the Forest Service to coordinate with adjacent landowners on prescribed burning efforts. For instance, the Forest Service may be able to prescribe burn private land if it reduces the amount of constructed fireline needed to burn national forest land. To increase a core area of restored ecosystems that are fire-adapted, the Forest Service can use resources to prescribe burn on private lands adjacent to the forest.... The intent is to work with adjacent landowners, the ... green infrastructure project in Berkeley County, the Forest Service State and Private Forestry Program and the SCFC to increase restored fire-adapted ecosystems.*”
- Carson National Forest (New Mexico) draft plan, 2017: Management Approach for Vegetation: “*Consider planning in cooperation with landowners, when proposed vegetation treatments are adjacent to private land.*”

2M. Cohesive Wildland Fire Strategy

Problem/Opportunity Statement: The National Cohesive Wildland Fire Management Strategy is a collaborative effort with active involvement from all levels of government and non-governmental organizations, as well as the public, which seeks national, all-lands solutions to wildland fire management issues. Implementation of the Cohesive

Wildfire Strategy is critically important in many national forests but may often involve strategic fuel reduction beyond the agency's own fiscal capability.

16. Recommendation: Plans should seek to achieve better alignment with the Cohesive Wildland Fire Strategy. When desired resilient forest conditions, fuel reduction and other wildland fire objectives cannot be achieved by relying solely on available Forest Service funding, forest plans should consider a full range of collaborative strategies to expand capacity, partnerships and economic efficiencies.

Examples:

- Nez Perce–Clearwater National Forest (Idaho) Proposed Action, 2014: Desired Condition for Timber: *“The sustainable flow of commodities ... is a result of treatments used to move the current vegetation pattern to a desired vegetation pattern.”*
- Sequoia National Forest (California) Draft Plan, 2016: Management Strategy for Timber: *“Plan vegetation, fuels, and other restoration projects across large landscape areas (e.g., greater than 5,000 to 10,000 acres), when it can increase efficiency in planning and support partnership-based approaches, such as stewardship contracts.”*
- Sequoia National Forest (California) Draft Plan, 2016: Desired Condition for Fire: *“The forest contributes to increased awareness and understanding about wildfire risk among community leaders, service providers, homeowners, permittees and tribes who are invested in or adjacent to the forest. This includes an understanding about the need to adapt communities, properties and structures to wildfire, while also recognizing that wildland fire is a needed ecological process.”*

2N. Intergovernmental Cooperation on Fish and Wildlife Plan Direction

Problem/Opportunity Statement: The Planning Rule directs the Forest Service to collaborate with state, local and tribal governments in considering how to manage for habitat conditions.²⁷ Federal, Tribal and state agencies have legal obligations regarding fish and wildlife populations. Stronger cooperation and coordination between the Forest Service, state agencies, other federal agencies, tribes, counties, and other groups can support not only habitat conditions but lead to stable or upwards trend of native fish and wildlife species. Through shared stewardship, partners can share data on current and desired populations and habitat requirements for species. For further information on intergovernmental cooperation, the past charter of this Committee developed a Guide for State, Local, and Tribal Governments.²⁸ (See also [SCC - Leveraging Outside Expertise](#))

17. Recommendation: The Forest Service should work with local, state, and tribal agencies when developing desired ecosystem conditions that support native fish and wildlife species populations.

Examples:

- Flathead National Forest (Montana) Draft Plan, 2016: Desired Conditions for Partnerships and Coordination: *“Cooperation and coordination with state agencies,*

²⁷ 36 CFR 219.10(a)(5)

²⁸ Understanding Your Opportunities for Participating in the Forest Service Planning Process: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd520672.pdf

federal agencies, tribes, counties and other groups lead to a stable or an upward trend of native fish and wildlife species and desired non-native aquatic and terrestrial species”.

- Summary of Best Available Scientific Information: *“Cooperation between state and federal agencies and tribes contributed to the best available scientific information. The Forest coordinated with other national forest and regional specialists, Montana Fish, Wildlife and Parks (MFWP), Montana Natural Heritage Program (MTNHP), and the U.S. Fish and Wildlife Service (USFWS) on lists of species known to occur on NFS lands managed by the Flathead National Forest, species habitat associations, and development of the plan revision and its alternatives. Examples of other plans that have been considered during the development of the revised forest plan include Montana’s Statewide Wildlife Action Plan (MFWP 2015) as well as other state management plans (e.g., MFWP elk, wolf, bald eagle, common loon, grizzly bear); MT Department of Natural Resources and Conservation Habitat Conservation Plan for grizzly bear, Canada lynx, and riparian management areas; and tribal plans related to wildlife management and climate change.”*

20. Watershed Restoration

Problem/Opportunity Statement: One in five Americans get their drinking water from the national forests. Protecting water flows and healthy watersheds for communities, fish, recreation, irrigation, and other downstream uses is a fundamental purpose of the national forests and grasslands. Yet, nearly half of all 15,000 national forest watersheds are in an at-risk or degraded condition. To help address this problem, the 2012 Planning Rule and the Watershed Condition Framework require the Forest Service to select “priority watersheds” and develop “watershed restoration action plans” for the watersheds.²⁹

While the agency and its partners have been able to restore 71 “at risk” watersheds to “properly functioning condition” between 2012 and 2016, many more remain to be restored.³⁰ The Forest Service by itself clearly lacks the resources to restore more than a small fraction of these watersheds.

18. Recommendation: **The Forest Service should encourage stakeholders, other landowners, fish recovery groups, downstream water users, stakeholders, and others to (1) help select Priority Watersheds and develop appropriate plan components and monitoring programs, and (2) help create, implement, and monitor Watershed Restoration Action Plans to restore the Priority Watersheds.**

Examples:

- Flathead National Forest (Montana) Draft Revised Plan. Watersheds Objective: *“Complete all essential work identified within 5 to 10 priority watersheds as identified under the Watershed Condition Framework.”*
- Olympic National Forest (Washington) “Working Together” Website, 2016³¹

²⁹ 36 CFR 219.7(f)(1); Watershed Condition Framework, 2011, https://www.fs.fed.us/biology/resources/pubs/watershed/maps/Watershed_Condition_Framework2011FS977.pdf.

³⁰ Forest Service Budget Justification for Fiscal Year 2018, p. 99, https://www.fs.fed.us/sites/default/files/Forest_Service-fy18-budget-justification.pdf.

³¹ <https://www.fs.usda.gov/detail/olympic/workingtogether/partnerships/?cid=stelprdb5399978>.

“Skokomish Watershed Restoration: Two Decades of Work Pays Off
The Olympic National Forest recently reached a watershed restoration milestone, with the completion of large scale road treatments in the upper South Fork Skokomish, capping more than 20 years and millions of dollars of restoration work. Last fall (2015), Olympic National Forest completed the last of the planned large-scale road decommissioning and stabilization projects on National Forest System lands in the upper watershed. In accordance with the Watershed Condition Framework guidelines, the Forest Service has now re-classified the South Fork Skokomish as a “properly functioning” watershed. Watershed conditions are still recovering, but key watershed processes have largely been restored. Watershed conditions and aquatic habitat will continue to improve over time.”

- Skokomish Watershed Action Team (SWAT): *“The Skokomish Watershed Action Team (SWAT) is a highly effective, broad-based collaborative group promoting restoration of the Skokomish River watershed on Washington’s Olympic Peninsula. The SWAT has forged a strong and durable partnership that actively promotes collaboration on restoration work on National Forest Service lands in the upper South Fork Skokomish watershed and coordination of work throughout the Skokomish valley.”*

Learning and Accountability

2P. Monitoring

Problem/Opportunity Statement: Monitoring plays a critically important role in building trusted relationships and without trust, shared stewardship will never succeed. Adequate monitoring is also essential for adaptive management. However, monitoring has been chronically underfunded, putting both shared stewardship and adaptive management at risk of failure. As the 2015 Planning Directives appropriately acknowledge, *“Monitoring plans and strategies are constrained by fiscal and technical capabilities of the Agency, and should use available information sources and partnerships to expand these capabilities.”*³² Indeed, the success of the 2012 Planning Rule and the concept of shared stewardship will be partly determined by the Forest Service’s ability to recruit and mobilize monitoring partners. (See also [Monitoring](#)).

19. Recommendation: Forest plans should include monitoring programs or monitoring guides that explicitly identify existing and potential monitoring partnerships and relationships wherever possible.³³

Examples:

- Francis Marion National Forest (South Carolina) Final Plan, 2016: Monitoring program identifies *“collaborative partners who would be involved in providing data for the monitoring process.”* For example, the partners for monitoring of at-risk plant species include the following: U.S. Fish and Wildlife Service, South Carolina Department of Natural Resources, The Nature Conservancy, College of Charleston, The Citadel, volunteers, and local botanists.
- El Yunque National Forest (Puerto Rico) Draft Plan, 2016: Objectives: *“Integrate at least one collaborative monitoring strategy by geographic region. Use the flora and fauna of the Forest to integrate collaborative management and monitoring with civic groups.”*

³² FSH 1909.12, Sec. 31.

³³ FSH 1909.12, Sec. 32.2.

Recommendations Cross Reference

Recommendations in the Shared Stewardship section are compatible and complimentary with the recommendations in the [Youth Engagement](#), [Monitoring](#), [Species of Conservation Concern](#) and [Planning for Success](#) sections.

3. Youth Engagement

Objective

Provide recommendations to the US Forest Service on how to increase the effectiveness of youth engagement and outreach strategies, better connect youth to the natural world, increase knowledge about natural resource manager career opportunities, and bridge the urban/rural divide by building mutual understanding and goals.

Introduction

The 2012 Planning Rule requires outreach to diverse stakeholders and forest users in surrounding communities, including youth and historically underserved populations. In past forest plan revision processes and project-level management discussions, youth and underserved populations have been largely absent from the negotiating table. The lack of meaningful participation by youth and underserved communities in forest-wide and site-specific management decisions is problematic for the Forest Service and the future health of our forests for several reasons:

- Changing demographics in this nation indicate that minority youth are growing in greater numbers and thus, represent a larger user base for forests in the future. As such, the future of conservation of our forests in large part will fall on their shoulders.
- Without meaningful engagement of youth in forest management and other forest activities that introduce them to possible careers in conservation, the user-to-career pipeline will not be built.
- Forest users across the nation do not reflect the diverse demographics of this nation; to get more young people to care in general about conservation issues, we must engage in collaborative ways, including public-private partnerships, to leverage new culturally-relevant opportunities to increase use by a more diverse group of youth.
- Because of limited capacity and resources, youth engagement is oftentimes seen more as “nice to have”, rather than as a critical voice in the management of Federal lands.
- Public lands and wild places have immense capacity to provide healthy engagement and enlightenment to young people by building a deeper understanding of ecology and their role in the natural world.

Past charters of this Committee have included a general set of recommendations for public engagement.³⁴ These youth engagement recommendations build off the Committee’s past learning and continue to emphasize the need to start engaging the public early and often, i.e. prior to, during, and after the land management planning process. ([See also Shared Stewardship](#))

³⁴ Appendix 3d.Final Outreach Workgroup Challenges and Solutions2_August 2016.pdf

Discussion and Recommendations

To facilitate meaningful participation by youth and underserved communities in land management planning processes, the agency needs to: 1) address internal barriers and 2) leverage outside expertise via public-private partnerships.

3A. View Land Management Planning as a Catalyst for Improved Relationships

“The best time to plant a tree was 20 years ago. The second-best time is now.”
– Chinese Proverb

Problem/Opportunity Statement: Although it can be challenging to make the complex planning process relevant to young people, the process also presents the opportunity to engage and educate youth, connect with families, and strengthen relationships between urban and rural communities. The Rule requires that forests engage youth, low-income populations, and minority populations.³⁵ Forest plans themselves can serve as conduits for youth engagement; plan components (desired conditions, goals and objectives) and other plan content (management approaches) can be used to establish and foster conservation education and employee training. (See also the [Shared Stewardship](#))

20. Recommendation: Establish partnerships with NGOs, colleges and universities and local schools to incorporate forest planning into science curriculums.

21. Recommendation: Make planning relevant to young people by helping them see that they are part of the solution, e.g. tie national forests to drinking water and clean air, describe challenges and opportunities and ask youth how to solve problems.

22. Recommendation: Develop specific plan content (desired conditions, goals, objectives, management approaches) to continually educate and engage diverse youth throughout the life of the plan in the ecological, economic and social importance of our forests.

23. Recommendation: Partner with “trusted community contacts” and youth leaders throughout various communities to serve as liaisons.

3B. Prioritize Youth Engagement & Share Success Stories

Problem/Opportunity Statement: Over the past five years, the Committee has had the opportunity to hear from forests and Regions throughout the country that are effectively engaging youth via innovative programs. Although every forest, region, and community is unique, the Committee has found that the greatest correlation for success in engaging youth is leadership intent. In areas where Forest Service leadership and line officers have made youth engagement a priority, success stories abound – regardless of geographic location. Many of these projects and programs are duplicatable. The agency would

³⁵ § 219.4a1(ii) Requirements for public participation.

benefit from identifying and sharing these efforts with other units. (See also [Shared Stewardship](#))

24. Recommendation: To increase the effectiveness of youth engagement in forest management (including the planning process), the agency should include youth engagement as an element in the “mission critical” section of line officer performance evaluations.

25. Recommendation: Learn from, and expand upon, existing Forest Service programs that successfully engage a diverse youth constituency (i.e. rural, urban, proximate to and distant from forests). These models should be strongly considered when developing new youth outreach plans during and after the forest planning process.

Examples:

- The Pacific Northwest (PNW) Region has prioritized youth engagement in several ways. The Regional Forester has developed youth engagement hard targets for Forest Supervisors that are reflected as mission critical elements in performance evaluations and has linked this to future funding decisions. The PNW Region has also developed a dedicated youth engagement budget at the regional level. Annual reporting is required for all projects supported by Regional Office or Washington Office funding to ensure learning and accountability. This information is used to inform future efforts and help identify areas of success and gaps. Strategies are then developed to address gaps.
- The Children’s Forest Network (consisting of Greening Youth Foundation, US Forest Service, Appalachian Trail Conservancy, and the University of Georgia Research and Education Center) formed in response to a growing disconnect with the natural world, especially among young people. Despite having 875,000 acres of national forest lands in Georgia within two hours of major metropolitan areas, urban and rural youth alike often lack exposure and opportunities to participate in life-changing experiences in the outdoors. The Children’s Forest Network aims to address cultural and financial obstacles in order to expose young Georgians to national forests right in their backyard. The partnership collectively planned three major events that would offer environmental education outside of schools: 1) Forest For Every Classroom (FFEC): teacher training and conference, which is an extension of the Trails For Every Classroom teacher training program; 2) UGA Research and Education Center field days, where urban youth receive exposure to their local forests; and 3) Urban Campout to introduce urban youth to overnight camping in our national forests. The Children’s Forest Network is scalable and replicable.
- Oregon State Extension Service is working with the local school districts to ensure that each 5th or 6th grader has the opportunity to attend three contiguous days of “Outdoor School” for every child in the Oregon School System. All curriculum is developed at the Forest Service district level.

3C. Employee Training

Problem/Opportunity Statement: Increasing young people’s exposure to forest management will enhance forest plan revisions and implementation. Training the existing Forest Service workforce to effectively engage youth is also a cost-effective way to improve connection with future land stewards. Yet, public interaction, especially with youth, is not prioritized as a skill set for employees.

26. Recommendation: Train and promote from within the agency, in order to elevate those that are already interested in and skilled at youth engagement for appropriate positions. Utilize partners to assist with employee trainings, via shared stewardship.

27. Recommendation: Develop a general guide to using culturally and age-appropriate language and values to help maximize the success of the Forest Service’s communication with these forest users.

Example:

- Oregon Forest Resources Institute has multiple teaching guides for a range of educational levels that discuss the importance of the forests and the needs that these forests supply for both the rural and urban communities. There is a great opportunity for the Forest Service to utilize some of these materials to help supplement educational opportunities within the local community. Training surrounding available materials and developing appropriate messaging for audiences are necessary to ensure that the messages are well-received.

3D. Strategic Hiring and Succession Planning

Problem/Opportunity Statement: Without meaningful engagement of youth in forest planning, management and other forest activities that introduce them to possible careers in conservation, the user-to-career pipeline will not be built. The Forest Service anticipates significant staff retirements in the near future. There is an opportunity to engage youth through internships and volunteer opportunities to foster hiring of young people and increase the diversity of the agency composition to reflect the American public.

28. Recommendation: Work with partners to employ young and diverse interns and create opportunities to hire them as Forest Service employees to help engage youth and underserved communities. Continue to support and expand youth intern programs such as the Public Land Corps by establishing a diverse board of directors; work with Office of Personnel Management to create a smooth transition into the agency.

29. Recommendation: New interns and employees from diverse backgrounds should be placed in work environments that nurture their development. This will ensure minority employees are successful. Create upward mobility programs to allow those groups below parity, opportunities to advance. Continue to address unconscious bias in the agency that may contribute to the lack of advancement of underserved groups.

30. Recommendation: Utilize existing programs such as the ‘USDA Direct Hire Authority for Resource Assistants’ and 1860 ‘Senior, Youth and Volunteer Programs’. ^{36,37, 38}

31. Recommendation: Work with the schools, colleges and universities to encourage students to pursue natural resource management to supply future candidates for Forest Service career opportunities.

Examples:

- The Pacific Northwest Region has created the Office of Communications and Community Engagement (OCCE). The OCCE has dedicated staff that manage youth programs, conservation education, and volunteer and service programs across all resource areas. The OCCE helps to oversee allocation and use of funding from other director areas, earmarked for youth engagement; coordinates input, priorities, and technical expertise across director areas; and ensures that communications and engagement are complementary and work in concert. The staff believe that this structural change is a key aspect to the trajectory of cultural change that Region 6 is experiencing.
- The Region 8 Career Internship Program is an opportunity for recent graduates to get hands-on field experience for six months to a year while being trained and mentored by the Region’s top talent. These graduates came into their positions with a long-term interest in conservation, dedication to the program, and a passion for the Forest Service. Over the course of the program they are given the opportunity to engage in a number of professional development opportunities at their sites, Greening Youth Foundation and Forest Service-led workshops, site visits, certification and training programs, and biweekly check-ins and webinars.
- Wallowa Resources (Wallowa County, OR) has a youth engagement coordinator that helps to coordinate the Outdoor School for 4th-6th graders. They also coordinate watershed monitoring for high school students that assists the Forest Service with monitoring data. This group also provides after school and summer educational programs for local youth in order to foster an interest in the outdoors.

Recommendations Cross Reference

Recommendations in the Youth Engagement section are compatible and work together with the recommendations in the [Shared Stewardship](#), [Species of Conservation Concern](#), [Monitoring](#), and [Planning for Success](#) sections.

³⁶ The Public Lands Corps (PLC) Healthy Forests Restoration Act of 2005 authorized a Resource Assistants Program (RAP) for DOI and USDA land management agencies operated in collaboration with Partner organizations. 16 U.S.C. 1725 – Resource Assistants.

³⁷ The Program is designed to attract recent graduates of institutions of higher education with particular emphasis on ensuring full representation of women and participants from historically Black, Hispanic, and Native American schools or other schools with diverse student populations. This authority will enable the Forest Service to directly appoint eligible resource assistants who successfully complete a minimum of 960 hours on a Forest Service unit and have attained a minimum Associate degree without competing in a competitive examination or competing with career and career-condition employees under internal merit staffing procedures for qualifying permanent positions for which they are eligible in a land management agency. By adopting a direct hire authority that’s designed to attract talent from historically under-represented demographics, the Forest Service will be well poised to build a diverse and inclusive workforce, one that values employees and recognizes their contributions.

³⁸ Forest Service Manual 1860 ‘Senior, Youth and Volunteer Programs’
<https://www.fs.fed.us/im/directives/dughtml/fsm1000.html>

4. Planning for Success: Building and Implementing Efficient and Effective Forest Plans

Background

Adaptive management is a key tenet of the 2012 Planning Rule, and indeed, of forest planning and management more generally. The Directives implementing the Planning Rule observe that:

“The three phases of planning (assessment, planning, and monitoring)...are a framework for adaptive management that will facilitate learning and continuous improvement in plans and Agency decision-making. Adaptive management is a structured, cyclical process for planning and decision-making in the face of uncertainty and changing conditions with feedback from monitoring, which includes using the planning process to actively test assumptions, track relevant conditions over time, and measure management effectiveness.

“This approach supports decision-making that meets resource management objectives while simultaneously accruing information to improve future management.” – (FSH 1909.12.06)

The Directives elaborate on the core principles and features of adaptive management, including the following:

1. Explicitly characterizing uncertainty and assumptions.
2. Testing assumptions and collecting data using data collection protocols at appropriate temporal and spatial scales.
3. Analyzing new information obtained through monitoring and project experience.
4. Learning from feedback from monitoring results and new information.
5. Adapting assumptions and strategies to design better plans and management direction.
6. Adjusting actions and making decisions on the basis of what has been learned.
7. Creating an open and transparent process that shares learning internally and with the public. – (FSH 1909.12.06.1)

The Committee is strongly supportive of adaptive management in forest planning and management, and recognizes that not all adaptive management requires peer-reviewed journal-level structure. Instead, decision makers and the public can learn a great deal about whether a forest plan is “working” based on less formal implementation monitoring or other methods of plan evaluation.

It is the Committee’s view that one of the hallmarks of a “good” forest plan is whether the Forest Service is able to efficiently and quickly implement projects that tier to the forest plan. Plans that allow for swift environmental analysis (because broad and cumulative analysis has been conducted at the plan level) and provide regulatory certainty (because plan components clearly protect resources requiring such certainty, such as species, biodiversity, or cultural resources) are plans that set clear expectations for the public and decision makers, and are more likely to be successfully implemented.

While the Committee is strongly committed to adaptive management, we are concerned that to date forest planners are not utilizing the Rule’s full potential with respect to adaptive management. Based on our review of early- and mid-adopter draft and final plans, it appears as though there remains an entrenched adherence to the old way of developing forest plans under prior planning rules. We therefore make the following recommendations, organized along the core phases of adaptive forest planning, with a focus on assessments, the development of plan components, and monitoring. (FSH 1909.12.06.3).

4A. Assessment

Problem/Opportunity Statement: The assessment phase of planning is the first opportunity to identify what is known as well as information gaps. This information must be tracked through the planning process and be evident in plan components (FSH 1909.12, sec. 11.3) (“Assessments describe the nature, extent, and role of existing conditions and trends within the plan area and in the broader landscape”). The Committee believes that assessments are a key part of the adaptive planning framework put forth in the Planning Rule, with the intent of creating “*a responsive planning process that informs integrated resource management and allows the Forest Service to adapt to changing conditions, including climate change, and improve management based on new information and monitoring*” (§219.5). As we summarized in our December 1, 2015 letter to the Chief, “*Planning teams should view and use assessments as a crucial part of a more adaptive planning framework.*” (See also [Monitoring](#))

32. Recommendation: Forest Plan revision teams should view and use the assessment process to identify “key assumptions, risks, areas of uncertainty, and how the assessment can inform the development of the monitoring program” (FSH 1909.12, ch. 10, sec. 11.3). Identifying these information needs, assumptions, risks, and uncertainties will be essential to structure a more adaptive approach to planning in the future. Some forest assessments identify information needs, but only in a cursory fashion, and there is often no corresponding discussion of how these information needs could be filled and their relevance to the monitoring program. Clearly identifying information needs will be critical to the development of a more adaptive planning framework.

33. Recommendation: The Forest Service should invest in peer-to-peer learning in the form of workshops and desktop exercises that permit Forest Service planners to experiment and learn from informed colleagues about the Planning Rule, plan components, and the monitoring and adaptive management process. The Committee recognizes exercises such as Region 1’s “plan to project” workshop as critical to successful integration of plan components, and encourages the use of similar exercises throughout the plan development phase.

4B. Development of Plan Components

Problem/Opportunity Statement: Development of plan components is the most critical aspect of forest planning and revision, and perhaps the most prominent location for

adaptive management principles. The Committee believes that some forest plan revisions contain too many plan components (particularly guidelines, goals, objectives, and management approaches or other optional plan content) that are written in a way that is not conducive to monitoring and measuring. *Plan components must be structured so to allow for monitoring to test their effectiveness.* For the adaptive management cycle to work, the information gathered from the monitoring program must be used to test the effectiveness of plan components, with an understanding that those components could be revised as a result of what is learned.

36 C.F.R. 219.7 lists and defines required Plan Components, i.e., Desired Conditions, Objectives, Standards, and Guidelines. Plan components are both required and enforceable aspects of the Plan. They are the Plan Direction. Plan Components guide and limit Forest Service land management decision-making and every Forest Service project and activity must be consistent with the applicable Plan Components. Forest Plan Monitoring is based on Plan Components. Therefore, Plan Components must be written with clarity of purpose and without ambiguity so that a project's consistency with Plan Components can be easily determined and the effectiveness of Plan Implementation can be monitored.

34. Recommendation: Information needs, assumptions, risks, and uncertainties should be identified and clearly tracked through the plan development phase (i.e., development of plan components) to ensure that the intent of the Planning Rule is met in final plans. These information needs, assumptions, risks, and uncertainties should be addressed through the judicious use of plan components and in the development and implementation of the plan monitoring program. Successful plans and plan components should naturally support adaptive management.

When sufficient information is available to understand the sideboards (based on an analysis of options during the NEPA process), forests should consider using appropriate “triggers” or “if/then” conditions under which management – and the forest plan – may change, given new information that reduces uncertainty. This helps set realistic stakeholder expectations regarding plan outcomes, and may provide the basis for additional partnership opportunities (for example, by providing monitoring or funding capacity).

35. Recommendation: Forest plans should include plan components that are adaptable to known unforeseen circumstances such as wildfire in fire prone ecosystems, windstorms in hurricane prone regions, and volcanic eruptions in volcano country. Including plan components that are responsive to such events will increase the efficiency of forest plan implementation and speed the process of forest plan amendments, should such an event require an amendment of the plan to reflect changed circumstances.

Example:

- The Northwest Forest Plan (NWFP) contains guidelines for salvage of dead trees following a stand-replacing event, including considerations for desired future condition,

long-range objective, size of disturbed sites, snag retention, quantities of coarse woody debris, future risk of fire or insect damage, hazards to people, etc. NWFP Standards and Guidelines, C-13 – C-16.

36. Recommendation: Forest plans should create a shared vision for how a national forest or grassland will be managed. This management necessarily requires decisions about challenging natural resource trade-offs. The environmental analysis process required by the National Environmental Policy Act – particularly the requirement to consider a reasonable range of alternatives – should be utilized to clearly identify and distinguish among these tradeoffs. Not all resource issues will require such a trade-offs analysis. The Assessment process, and public and government engagement, should be used to identify which resource issues are appropriate for such a concentrated trade-offs analysis.

37. Recommendation: Regardless of which required (desired conditions, objectives, standards, guidelines, and suitability of lands) or optional (goals, potential management approaches or strategies, and partnership opportunities or coordination activities) plan content is utilized in plan components, each plan component must be consistent with the corresponding definition from the Rule.

Problem/Opportunity Statement: The Committee recognizes the challenge of striking an appropriate balance suite between restrictive, flexible, regulatory, and/or aspirational plan components. The Committee also recognizes that plan components are nested in a suite of plan components, and that in the “give and take” between plan components, increasing flexibility in one plan component may reduce certainty in another plan component, and vice versa, with effects on various stakeholders. Additionally, failing to provide sufficient certainty at the plan development phase may result in “kicking the can down the road” (i.e., putting off the resolution of difficult management trade-offs), which will result in dissatisfaction with and inefficient project implementation. It is clear to all Committee members that monitoring and adaptive management are critically important to informing plan development and delivering on public expectations. ([See also Monitoring](#))

38. Recommendation: In determining how best to achieve an appropriate balance among plan components, the Committee recommends that the Forest Service consider the following factors:

- Risk
- Controversy (including opposition or support for a use)
- Significance of resource/use
- Uncertainty of environmental effects
- Trends
- Rarity/value of resource/use
- Financial capability
- Consequences or tradeoffs of action/inaction

Example:

- The higher the risk or uncertainty of a management approach on a resource, the more standards and guidelines with detailed adaptive criteria may be needed within the plan. On the other hand, for management approaches with a low-impact activity or where there is substantial scientific evidence around the expected outcomes, more “flexible” or “aspirational” plan components may be appropriate. We recognize that this represents the side boards of the spectrum and would expect to see many plan components that fall somewhere in between.

4C. Desired Conditions and Objectives

Problem/Opportunity Statement: Based on the Committee’s review of plan components, we often found examples of Desired Conditions that were inconsistent with the Planning Rule definition, with the majority of the problems associated with the requirement that Desired Conditions be written “specific enough to allow progress toward their achievement to be determined.” If Desired Conditions for a particular area cannot be written to conform to the Planning Rule’s definition, then we recommend considering including that intent as either a Goal or a Management Approach/Intent/Strategy.

39. Recommendation: While Desired Conditions do not have completion dates, by definition of the Rule, the Committee recommends linking Desired Conditions to Objectives that will enable the Forest Service to make measurable progress toward the Desired Condition during the life of the Plan to the fullest extent possible.

Examples:

Clearly written, unambiguous Desired Conditions:

- *“In the Recovery Unit, 10% of the total stands of mixed conifer will have a basal area of 170 square feet per acre, and 10% of the total mixed conifer stands will have a basal area of 150 square feet per acre.”*
- *“Young forest is represented, occurring across 8-13 percent of the landscape within this ecotone.”*

Clearly written, unambiguous Objective:

- *“In Backcountry Management Area X, 25 new miles of mountain bike trails will be added to the existing trail network, two river access points will be developed to River Y and parking facilities will be maintained to enable continued access to cross country skiing”.*

Unclear, ambiguous Desired Conditions:

- *“The composition, structure, and function of terrestrial ecosystems are influenced by natural ecological processes, including disturbance events such as fire, insect or disease infestations, wind, and flooding.”*
- *“Recreation management is guided by recreation setting prescriptions established by the ROS maps, as well as by other resource goals and objectives.”*
- *“Oil and gas development is planned, conducted, and reclaimed to a standard commensurate with the ecological, aesthetic, and human values attached to the land where the extraction is occurring.”*

40. Recommendation: Desired conditions and objectives are important required plan content and should be explicitly linked to each other by writing condition-based or outcome-oriented objectives. In addition, individual desired conditions

and objectives should be written so that they are realistic, specific, measurable, and relevant. Objectives should also be time-bound and achievable. This will ensure that all stakeholders know what to expect from the forest plan, and how forest management will change if monitoring demonstrates that desired conditions and objectives are not being met. An emphasis on tractable desired conditions and objectives will increase transparency and trust among stakeholders, particularly those who do not believe desired conditions and objectives are “meaningful” without quantitative measures. To that end, monitoring plans should focus on metrics to assess effectiveness and implementation accomplishments and/or trends (as appropriate) to determine if implemented objectives are achieving desired conditions. (See also [Monitoring](#))

Problem/Opportunity Statement: Many, but not all, of the Objectives reviewed were consistent with the Planning Rule. One concern we identified was the lack of a clear, concise time frame for some Objectives in some Plans. For example, we found Objectives with time frames such as “over the planning period”, “over the life of the plan”, “over a ten-year period”, “over a 10-year period following plan approval”, “within 10 years of plan approval”, “5-year period following plan approval”, and “annually following plan approval”. Clear, measurable time frames are essential for monitoring implementation of plans and for adaptive management.

41. Recommendation: Avoid using ambiguous time frames like “over the planning period” or “over the life of the plan,” since revised plans will most likely be in effect for 15 to 20 years. Objectives should be written to anticipate those longer time frames. Where possible, Objectives should be written to reflect specific, measurable timeframes.

4D. Standards

42. Recommendation: Forest Service planners must draft Standards that are clear and unambiguous.

Examples:

- The following Standard is vague, unclear, and unmeasurable, and likely will require further analysis during the project analysis: *“Authorizations to cut, collect, or use forest products for any personal, commercial, or scientific purpose shall include provisions to ensure the needs of wildlife, which depend upon those forest products, will continue to be met.”*
- The following Standard provides flexibility to test and evaluate alternative grazing utilization Standards, conditional on successful implementation of the original plan Standards: *“Where professional judgement and quantifiable measurements find that current practices are maintaining range in good to excellent condition, the grazing utilization standards above may be modified to all for the Forest Service, in partnership with individual permittees, to rigorously test and evaluate alternative standards.”*

4E. Optional Plan Content

Problem/Opportunity Statement: 36 C.F.R. 219.7 provides for “Optional Content in the Plan,” which could include Management Approaches, Management Strategies,

Management Intent, Explanatory Narrative, Management Principles, or Management Challenges. The Committee supports the use of Optional Plan Content to describe additional management intent associated with the forest plan, and recommends the use of Optional Plan Content for that purpose. However, *Optional Plan Content is not a Plan Component and is not enforceable, and must not replace management intent embodied in required plan content.*

43. Recommendation: While Optional Plan Content may be changed administratively, the Committee cautions the Forest Service against using Administrative Changes as an opportunity to skirt the requirements for plan amendment or public information and involvement.

4F. Economic and Social Sustainability

Problem/Opportunity Statement: The 2012 Planning Rule is a three-legged stool of ecological, economic, and social sustainability. Plans typically substantially focus on ecological sustainability, but social and economic sustainability remain equally as important.

44. Recommendation: Plans should include significant plan components addressing economic and social sustainability that are specific, measurable, achievable, relevant, and time-bound. The Forest Service should explore partnerships with academia, nonprofit organizations, and governments that allow the agency to develop plan content that adequately reflects the importance of social and economic sustainability, and allow for their measurement, monitoring, and adaptability.

Problem/Opportunity Statement: While the responsible official must ensure that “the planning process, plan components, and other plan content are within...the fiscal capability” of each national forest, the Committee encourages the Forest Service to explore plan components or alternatives that represent a “fully funded” vision for the unit. While the Committee is well aware of and very sympathetic to the impact on the Forest Service and the National Forest System that inadequate budgets have on delivering expected outcomes to the public, sometimes this fact limits creativity and an accurate assessment of the needs of the land and the communities that depend upon it. After all, budget priorities can change, and partnership resources may become available that permit the Forest Service to implement a more robust restoration or management vision. (See also [Shared Stewardship](#))

45. Recommendation: The Forest Service should consider at least one alternative with plan components that reflect the real socioeconomic and ecological needs of the unit, regardless of whether the unit currently possesses the budget to implement this vision.

4G. Geographic applicability of components

Problem/Opportunity Statement: Some draft plans reviewed by the Committee contained a number of overlapping management areas, management approaches, and other plan

components that rendered unclear “what plan components applied where” on the forest. References to maps or geographic landmarks unknown to the broader public did not always resolve this confusion.

46. Recommendation: When developing plan components, forests should clearly identify the geographic applicability of components.

Examples:

The following frequently used terms may not adequately identify where plan components do or do not apply:

- “Big game winter range”
- “Areas providing future old growth conditions”
- “Historic habitat”
- “Groundwater-persistent ecosystems”

4H. Clarity

Problem/Opportunity Statement: Words matter in the development of plan components. Many words that have a vague, common understanding lose that meaning in the planning process.

47. Recommendation: The Forest Service should carefully choose words that express clarity of purpose, and are objective and unambiguous.

Examples:

Popular terms that may not meet these criteria include:

- “Adequate”
- “Sufficient”
- “Sustainable”
- “Necessary”
- “Low to moderate”
- “Reduce”
- “Minimize”
- “Maximize”
- “Avoid” (unless the extent of the term is clearly spelled out)

Concepts that require more explicit definitions include:

- “Within the range of natural variation”³⁹
- “Within reference ranges as defined by agency monitoring”
- “Habitats that contribute toward recovery”⁴⁰

4I. Monitoring

Problem/Opportunity Statement: Monitoring is essential to ensuring that forest plans are delivering expected outcomes to the public and affected stakeholders. Without monitoring, adaptive management cannot occur; and by extension, the Planning Rule will

³⁹ The 2012 Planning Rule and Directives emphasizes the use of natural range of variation (NRV).

Through review of early- and mid-adopter draft and final plans, the Committee found that many forests are not adequately defining the term.

⁴⁰ Forests must clearly tie the definition of this term to species recovery plans.

not be successful. In order for adaptive management to be successful, the Forest Service and the public both need to clearly understand what is being monitored, and why, when, and how that information will be used in subsequent decision making. Monitoring can be applied to ranges in circumstances that are less clear (e.g. condition class or numeric values), to other values such as forest cover types or land cover, and even rights. Therefore, it is critical that monitoring and planning for changes to the plan based on learning from plan implementation through project implementation be a deliberate part of the plan.

48. Recommendation: The Forest Service must write plan components that are specific, measurable, achievable, relevant, and time-bound.

49. Recommendation: Monitoring Plans should include tracking implementation of Objectives. (See also [Monitoring](#))

Recommendations Cross Reference

Recommendations in the Planning for Success section are compatible and work together with the recommendations in the [Shared Stewardship](#), [Youth Engagement](#), [Species of Conservation Concern](#), and [Monitoring](#) sections.

5. Species of Conservation Concern

Background and Problem Statement

Section 219.9 of the Planning Rule *"adopts a complementary ecosystem and species-specific approach to maintaining the diversity of plant and animal communities and the persistence of native species in the plan area."* A key component of this strategy is the identification of Species of Conservation Concern (SCC) that may require additional plan components to ensure, or contribute to, viable populations within the plan area.

This particular provision of the Rule has generated a considerable amount of interest from agency staff, stakeholders, and the Committee. As a result, significant effort has been invested in clarifying guidance in the Directives, including Committee reports and recommendations (See recommendations on the draft Directives dated November 2013, and memo to DFO, Chris French, dated April 25, 2016), and internal agency reports such as the "SCC Enquiry" compiled by the Washington Office staff in February 2016.

Despite this work, there remain outstanding questions about how to identify SCC, when and how best to involve the public and agency partners, how to address information gaps, identify and appropriately use existing BASI, and maintain consistency while also allowing appropriate levels of regional discretion. The agency has made the Committee aware of problems associated with the timing resolution of SCC identification; the Committee notes that resolution of identification issues needs to occur early enough in the process so as to avoid hindrance of the planning process, such as by a need to revisit analysis, plan component development or amend a plan.

Objective

Provide recommendations to the U.S. Forest Service on how to evaluate, identify, and build plan components for Species of Conservation Concern to ensure maintenance of viable populations within the plan area when it is within the inherent capability of the plan area to do so.

Discussion and Recommendations

The Committee strongly encourages the Forest Service to continue to refine policy and guidance around SCC, and how best to fully develop plan components to support maintenance of biodiversity. Specifically, the Committee makes the following recommendations regarding SCC.

5A. Overarching SCC Policy Recommendation

Problem/Opportunity Statement: Based on stakeholder feedback, reviews of draft plans, and agency discussions, there remains significant uncertainty and inconsistency with regards to SCC identification and integration into forest plans. There is a need to stabilize these inconsistencies to build better plans with better outcomes, especially around key areas of tension like definitions, BASI, and public participation.

50. Recommendation: Forest Service leadership should continue to refine policy and guidance regarding SCC development and use in forest plan revisions. Specifically, the Committee recommends the following strategies:

- **Continue to evaluate and improve implementation of the SCC process, especially around key areas of tension like timing and potential resolution of SCC identification, definitions, BASI, and public participation. This learning should be communicated to the field through training opportunities for key staff, workshops and check-in opportunities like the SCC meeting hosted in Atlanta in August 2017, and/or dissemination of additional guidance as needed.**
- **Develop a national SCC work group composed of agency and a broad spectrum of non-agency partners and stakeholders to help guide/review implementation of SCC policy. This SCC-specific work group could be nested within the larger advisory group called for under Section 219.2b5(ii) of the 2012 Rule. (See also Path Forward)**

5B. Stakeholder Engagement at the Plan Level⁴¹

Problem/Opportunity Statement: Few topics have generated as much stakeholder interest as SCC identification and integration into forest plans. The Committee heard very clearly that "We need this part of the plan to work" when we engaged in a series of stakeholder calls in February 2016. Despite that interest, there continues to be confusion among Forest Service staff and stakeholders as to how, at what point, and which stakeholders to include in the SCC process.

There are also challenges in navigating between the Regional SCC process and the local planning level. Stakeholders don't often know whom to talk to or how they can have input to decisions made at the Regional office. Both vertical integration (between the region and forest) and horizontal integration (between the agency and stakeholders) is needed.

51. Recommendation: As part of the public engagement process, SCC-specific stakeholder, state and tribal engagement should occur early and often throughout the planning process to maximize benefits to the agency and increase collaboration around SCC. This process should be very clear, transparent, and consistent across the national forest system. Specifically, the agency should:

- **Engage in focused collaboration and targeted SCC outreach at the plan level;**
- **Utilize outside expertise and local knowledge to help inform SCC identification and plan component development; and**
- **Provide opportunities for the public to participate and fully understand how SCC are identified at the Regional level, and integrated into Forest Plans. It will be important for the agency to clearly communicate the role and goal of SCC- focused collaboration in the context of broader public engagement strategies.**

⁴¹ Within the SCC recommendations, the term stakeholder is used to describe a broad spectrum of partners including, but not limited to, State and other Federal agencies, local governments, tribes, NGOs, universities, and interested members of the public.

5C. Leveraging Outside Expertise

Problem/Opportunity Statement: One of the biggest challenges surrounding the SCC issue is the lack of information on which to base SCC selection decisions as well as plan component development. Often, critical information is not publicly available in the form of reports or published literature but is instead housed with species experts in the form of field notes, survey data, and professional knowledge. It is imperative that the Forest Service identify and invite partners with subject matter expertise to assist with BASI identification and data sharing to reduce FS analysis capacity challenges as part of the SCC and biodiversity discussions. In particular, Tribal and State fish and wildlife agencies have a great amount of expertise that should be utilized by the Forest Service in its development of the SCC identification. (See also [Shared Stewardship](#))

There may be a need to further identify research needs and data gaps on SCC presence, distribution, population size, ecology, and viability. Forest Service capacity can be greatly increased by building a team of outside experts to help with species conservation. This team effort should extend through plan implementation as part of the adaptive management framework set forth in the plan. In addition to leveraging partners with subject matter expertise, forests should engage a broad and balanced spectrum of stakeholders as part of the public engagement process.

52. Recommendation: Forests should engage external subject matter experts in helping to collect and analyze the necessary data through a neutral and transparent scientific process as part of a team effort to conserve species.

Recommendations Cross Reference

Recommendations in the Planning for Success section are compatible and work together with the recommendations in the [Shared Stewardship](#), [Monitoring](#) and [Planning for Success](#) sections.

6. Monitoring

Background and Problem Statement

Adaptive management is one of the key distinguishing features of the 2012 Planning Rule that promises greater efficiency and efficacy of plan development and implementation. As a result, the 2012 Rule requires a more robust approach to monitoring than the 1982 rule. Monitoring is the engine of adaptive management- it is the means by which progress towards desired conditions and objectives are to be measured.

Historically, monitoring has been one of the first areas cut when resources are tight. Committee members are keen to ensure the agency is able to implement monitoring at the necessary scope and scale to support successful adaptive management. Additionally, Committee members noted that, in their view, some of the early adopters seemed to struggle with how to build integrated monitoring plans to support adaptive management.

Moving forward, the Forest Service has an opportunity to transition the collaboration and partnership building that results from forest planning into robust monitoring programs that measure key plan components and successful implementation of new plans. Failing to develop sufficient monitoring programs that ask appropriate questions will result in inadequate data for decision making, and a breakdown of the adaptive management framework envisioned under the 2012 rule. ([See also Shared Stewardship - Monitoring](#))

Section 219.12(a)(2) of the Rule states *"Monitoring questions and associated indicators must be designed to inform the management of resources on the plan area, including by testing relevant assumptions, tracking relevant changes, and measuring management effectiveness and progress toward achieving or maintaining the plan's desired conditions or objectives."* This may seem a herculean task on its surface but successful plan implementation requires it, especially in the face of changing ecological, social, and economic climates.

Objective

Provide recommendations to the U.S. Forest Service on how to develop effective, efficient, science-based forest plan monitoring programs that support adaptive management and inform decision making while also building public engagement and trust.

Discussion and Recommendations

The Committee strongly encourages the Forest Service to fully integrate monitoring questions and protocols into forest plan revisions in support of adaptive management. Specifically, the Committee makes the following recommendations to develop monitoring programs associated with forest plans.

6A. Overarching Monitoring Recommendation

Problem/Opportunity Statement: Successful implementation of the 2012 Rule will require sufficient monitoring and scientifically-based data for managers to make informed decisions within the adaptive management framework called for in the Rule. Following years of declining budgets and staff reductions, monitoring programs

throughout the Forest Service have, however, been relegated to a "nice to do" element of the workload instead of being seen as "mission critical". The resultant lack of data leaves agency decisions vulnerable to challenge, hinders early detection and response to emerging issues, reduces adaptive management opportunities, and leads to uncertainty among stakeholders. An additional challenge is the uncertainty around measuring successful movement towards desired conditions.

Strengthening monitoring programs has several benefits including building trust among stakeholders, providing opportunities for shared stewardship, better management of uncertainty, early detection of changing conditions, and more nimble decision-making. All of these are positive outcomes in support of adaptive management.

53. Recommendation: Forest Service leadership should prioritize, emphasize and support monitoring as a "mission critical" element to successful forest plan development and implementation. This requires a shift in perspective and practice (e.g. hiring and developing professionals with the right expertise), shifting budget allocations, ensuring leadership intent, and developing partnerships with outside groups to facilitate monitoring. Significant cultural and fiscal changes may need to occur within the agency to support monitoring to the extent called for in the 2012 Rule.

The following recommendations further elaborate options for implementing this overarching recommendation.

6B. Plan Development and Monitoring Integration

Problem/Opportunity Statement: During the planning process, waiting to develop monitoring questions, protocols, and feedback mechanisms until late in the process often results in insufficient integration of monitoring plan components into finished forest plans. Treating monitoring as an afterthought or add-on erodes the strengths and benefits of an adaptive management approach to decision-making. Planners should be asking themselves "what data do I need to make decisions", instead of "what can I measure" as they formulate key monitoring questions.

Monitoring plan components need to be fully integrated throughout the plan in a logical way so that managers and the public can clearly see how data-driven decision making will occur. There should be a clear linkage between the assessment, need for change, desired conditions and other plan components, and monitoring. Plans should describe how the data will be used to evaluate progress and/or inform changes in management. For example, use if/then statements within plan components and create triggers, thresholds, and criteria that need to be evaluated so that partners understand the need for monitoring and its implications for management.

The Forest Service needs to consider the tension between scientific rigor and the realities of limited resources when developing monitoring programs. There should be thoughtful, deliberative consideration about what to monitor and at what level. This process should be clearly documented and conducted with full transparency so that stakeholders can

participate and understand the rationale behind the final outcome. (See also [Planning for Success – Assessment](#))

54. Recommendation: Forests should begin thinking about monitoring during the assessment phase of planning (e.g. when assessing the current condition of the forest, knowledge gaps will be identified, uncertainties and assumptions will be documented) so that full integration can occur throughout the planning process. Forests should clearly define how monitoring information will be used *in advance* so that stakeholders can clearly see the linkage between monitoring and plan implementation (e.g. progress toward desired conditions or response of characteristics to management).

Where sufficient knowledge exists, develop an adaptive management decision framework using ‘if/then’ statements in plan components, or create triggers, thresholds and criteria as a way to clearly link ecological/social/economic conditions and future management changes. Forests could also use a tiered approach to incentivize different approaches to monitoring.

Examples:

- Sage Grouse Plan Components (Multiple Regions)⁴² - use of "soft", "disturbance cap", and "hard" triggers to inform management actions based on pre-determined conditions on the plan area. Soft triggers represent an intermediate threshold indicating that management changes are needed at the project/implementation level to address habitat and population losses. The disturbance cap trigger represents a threshold indicating that more restrictive action is necessary to prevent further degradation of sage grouse habitat. In the event that soft triggers and disturbance caps prove to be ineffective, the hard trigger represents a threshold indicating that immediate action is necessary to stop severe deviation from sage grouse conservation objectives. The hard trigger is intentionally set at or below the normal range of variation to provide a threshold of last resort.
- Francis Marion National Forest Draft Plan (R8) example for red cockaded woodpecker conservation uses well defined "Alerts" and resultant "Responses" to guide management. If monitoring shows a pre-determined decline in woodpecker populations, then action is specifically called for to address the situation.

6C. Distinction and Importance of Implementation and Effectiveness Monitoring

Problem/Opportunity Statement: In addition to broad scale monitoring, successful measurement of plan accomplishments will require two other distinct, yet complementary, types of monitoring efforts. Implementation monitoring can be used to assess whether a forest is achieving the specific Objectives set forth in the plan, while effectiveness monitoring evaluates if management actions are resulting in measurable changes in Desired Conditions or trends toward achieving the Desired Conditions. It is the difference between evaluating outputs versus outcomes. The two types of monitoring programs are not mutually exclusive, and each has an appropriate place in an adaptive management framework.

⁴² Example from the August 2017 Plan Components Workshop Workbook

Often, we see inconsistent application of the two types of monitoring and/or an emphasis on implementation monitoring with inadequate effectiveness monitoring. This is likely due to the fact that implementation monitoring can be much more straight forward to conduct. For example, asking if the forest completed their Objective of 10 miles of trail maintenance per year is much easier to measure than evaluating if trail user safety and enjoyment increased as a result of the work. Simply conducting implementation monitoring, however, is insufficient to meet the intent of the 2012 Rule. (See also [Planning for Success](#))

55. Recommendation: Forests should develop integrated, complementary implementation and effectiveness monitoring with a focus on high priority resources, ecosystems or management questions.

6D. Monitoring Efficiencies

Problem/Opportunity Statement: Declining budgets and multiple competing priorities will require the Forest Service to be innovative in their approach to conducting monitoring programs. Forests may lack the funding, infrastructure, equipment, and/or expertise to fully implement their monitoring programs by themselves. It's important for the Forest Service to always check with the other governments to see what valid and acceptable data may already exist, and to also coordinate with the other governments in developing monitoring plans to avoid redundancy and share the effort.

By using advances in technology, standardized protocols, and partnering with outside interests, national forests can better achieve their monitoring goals using existing resources. It's important for the Forest Service to always check with the other governments to see what valid and acceptable data may already exist, and to also coordinate with the other governments in developing monitoring plans to avoid redundancy and share the effort. (See also [Shared Stewardship](#))

56. Recommendation: To improve efficiencies the Forest Service should identify and leverage partnerships to:

- **Take advantage of existing data/monitoring efforts (even if produced outside the agency), involving the scientific community and making room for citizen science;**
- **Use new information technologies (e.g. remotely sensed or presence/absence data); and**
- **Use standardized protocols across units to allow for data pooling.**

Examples:

- Bureau of Land Management's AIM program (<http://aim.landscapetoolbox.org/>).
- Forest Inventory and Assessment (FIA) (<https://www.fia.fs.fed.us/>)
- Collaborative Forest Landscape Restoration Program (CFLRP) (<https://www.fs.fed.us/restoration/CFLRP/>)
- Southwest Crown Collaborative (<https://www.swcrown.org/monitoring-1/>)
- Environmental DNA (sampling technique that facilitates presence/absence assessment) R8, Francis Marion N.F., Red-cockaded Woodpecker monitoring program

6E. Third Party Monitoring and Citizen Science

Problem/Opportunity Statement: Engaging partners through monitoring programs can improve efficiency while also fostering shared stewardship, building positive relationships, and improving public confidence in forest decision-making. It is important for the Forest Service to involve and honor local communities that are on the ground precisely because they have place-based knowledge and understandings that enhances their engagement in monitoring activities. Citizen science programs bring the added benefits of public outreach, science education, and youth engagement. (See also [Shared Stewardship](#))

When building third party and citizen science programs it is essential to use standardized, replicable, scientifically valid protocols to ensure data quality and reduce concerns over the validity of third party data. Data quality concerns can be alleviated by partnering with existing programs (e.g. Breeding Bird Surveys or the Christmas Bird Count), or asking USDA Research Station or university scientists to help develop or identify scientifically valid protocols for citizen scientists. It is important to recognize that some types of monitoring lend themselves better to third party monitoring than others, and there will always be specific data collection that is best handled by skilled, professional staff.

57. Recommendation: Where possible, develop scientifically based monitoring programs that utilize local stakeholders and citizen scientists to collect and record monitoring data. Leverage efficiencies by using existing programs, protocols, and public databases when available. Review data collection activities as needed to ensure data quality and validity.

Examples:

- e-bird (<http://ebird.org/content/ebird/>)
- Breeding Bird Surveys (<https://www.pwrc.usgs.gov/bbs/>)
- Avian Knowledge Network (http://blmsolar.anl.gov/program/avian-solar/symposium/doc/Fitzgibbon_AKN.pdf)
- Bird Monitoring using citizen scientists in Arizona (RMRS-GTR-368 available at www.treearch.fs.fed.us/pubs/54536)

6F. Ensuring Scientifically and Statistically Valid Data

Problem/Opportunity Statement: Collecting monitoring data with sufficient sample size to ensure appropriate confidence in the outcome can be cost-prohibitive. Ecological data is inherently noisy so often requires large sample sizes to result in statistically meaningful outcomes. This is a luxury that most monitoring programs can't afford in terms of time, staffing, or funding. There remains, however, a need to have some level of confidence in monitoring results if they are to be used to drive decision making.

Decisions on what and how to monitor should be based on a risk assessment of the resource in question and the consequence of failing to detect significant changes. Discussions can be held on *how* to monitor, but all protocols need to use valid methods

based on the best available science. Engaging knowledgeable experts, researchers, and statisticians can all help inform monitoring plan development.

58. Recommendation: Forests should develop a meaningful, transparent process for determining what level of scientific rigor is needed in monitoring programs based on level of risk, uncertainty, controversy, and the significance of management decisions that will be influenced. All monitoring protocols need to be defensible and use current, scientifically valid methods.

6G. Incorporate Social and Economic Monitoring

Problem/Opportunity Statement: The 2012 Rule clearly articulates the goal of balancing ecological, social and economic concerns into forest plans; yet, reviews of early adopter forests indicate that social and economic plan components are often not as robust as ecological components, including monitoring. Further, there appears to be very real expertise and capacity challenges within the Forest Service to developing specific, relevant social, and economic monitoring programs. This situation provides good motivation to collaborate and coordinate with external partners to develop and implement economic and social data collection and analysis.

Because economic monitoring is a relatively new endeavor for the Forest Service, it provides an excellent opportunity to increase standardization across Regions and the entire Forest Service. Standardized methods using readily available data (e.g. 10-year census data) to evaluate key variables will be inherently more efficient than encouraging each planning unit to develop their own approach. In addition to evaluating standard variables, each planning unit can also incorporate unique monitoring measures to capture variables important to their local situation.

59. Recommendation: Work with external experts, economists, social scientists and stakeholders, ranging from businesses to non-governmental organizations who, have data resources, to develop and fully incorporate social and economic monitoring into forest plans using standardized methods and variables to improve efficiencies and data management. Encourage local planning units to incorporate additional monitoring based on their unique situations.

Examples:

- R8, Southern Forest Futures Project. This project assessed all the forests in the Southeast to determine how forest resources are changing and provided forecasts for social and economic implications for forests' ability to provide ecosystem services (timber, water, recreation). The effort was completed in partnership with R&D, private landowners, and states. Portions of the Southern Forest Futures Project may be suitable for use in the other Regions.
- Region 5, Inyo National Forest: To address data gaps, the agency worked with Chico State University and local governments on joint identification of community-level social/economic information and indicators during pre-assessment and assessment phase. The Forest Service also worked with Inyo County, via their Cooperating Agency Status, to collect survey information on forest benefits. This information was then used to develop spatial mapping of the economic and social benefits that the forest provides.

These maps were used to develop alternatives around land use, land designations, and access⁴³.

6H. Broad Scale Monitoring

Problem/Opportunity Statement: Broad scale monitoring can answer questions that are relevant to multiple units (and across land ownerships) by addressing issues that affect a much larger landscape than individual planning units.⁴⁴ Data can be aggregated and interpreted to track large issues like ecological integrity and the effects of climate change. Despite the benefits to developing broad scale monitoring programs, such actions have been slow to develop which leads to inefficiencies and uncertainty during forest planning.

60. Recommendation: **The Forest Service should expedite development of broad scale monitoring strategies in Regions undergoing revisions so as to clarify scope and scale of landscape level data needs and resultant Planning Unit obligations. Whenever possible, adopt existing programs that are already conducting monitoring on larger issues such as climate change, rangeland health, water quality, or economic growth. Consider benefits of expanding existing programs such as Forest Inventory and Assessment (FIA) to include new monitoring elements like wildlife species presence/absence or measures of soil health. Both broad scale and forest-specific monitoring should be identified and included in forest and grasslands monitoring plans and biennial reports.**

Examples:

- Region 8, Broad Scale Monitoring Framework. The first version addresses climate change and social, cultural, and economic monitoring requirement to meet the pressing needs of the field. The strategy is rooted in efficiencies, supports adaptive management, provides flexibility, increases integrity and provides high quality data. Plan revisions and the biennial reports are the engine for the broad scale effort and the effort strives to maintain clear linkages between the broad scale and plan level. The agency has coordinated with state and private partners to engage them in a robust way, not just for consumption.⁴⁵
- National Cohesive Wildfire Strategy (<https://www.fs.fed.us/restoration/cohesivestrategy.shtml>)
- Watershed Condition Framework (https://www.fs.fed.us/biology/watershed/condition_framework.html)

6I. Monitoring Threatened, Endangered, and Species of Conservation Concern

Problem/Opportunity Statement: Section 219.12(a)(5)(iv) of the Planning Rule clearly articulates the requirement for monitoring of selected ecological conditions necessary to contribute to the recovery of federally listed species, conservation of federal candidate and proposed species, and maintenance of viable populations of Species of Conservation

⁴³ From Mark Metcalfe, Regional Economist, USFS Pacific Southwest Region, presentation at the November 2017 FACA meeting.

⁴⁴ Recognizing that monitoring cross land ownerships must respect the desires of the landowner regarding any use of data identifiable to that land.

⁴⁵ From Emrys Treasure, Region 8 Regional Inventory, Monitoring, Assessment, and Climate Change Coordinator, presentation at the August 2017 FACA meeting.

Concern. This requirement alone could easily consume a forest's monitoring capacity if the unit has large numbers of special status species, and yet conservation of biodiversity is a key component of the agency's multi-use mission and the Planning Rule.

This challenge is best met with innovative approaches and strong collaborations with interested partners. Fortunately, at-risk species generate a lot of interest and resources from a wide variety of stakeholders including but not limited to other federal agencies (USFWS, NOAA, EPA, USGS), conservation groups, environmental groups, tribes, researchers, and the general public. This interest opens a wide array of options for collaboration and shared stewardship through forest plan development and implementation. This is an area where the Forest Service needs to clearly and openly ask for assistance from their partners. (See also SCC)

61. Recommendation: The Forest Service should work collaboratively with other agencies, groups and the general public to accomplish monitoring to ensure recovery, conservation and/or viability of special status species. Tier monitoring questions to key components in conservation or recovery plans and enlist partners to collect and analyze the data. Look for efficiencies by selecting variables that can be used to inform a wide range of monitoring questions.

Examples:

- Francis Marion National Forest (Region 8), Red-cockaded Woodpecker
- Flathead National Forest (Region 1), Lynx and Grizzly Bear

6J. Use of Focal Species

Problem/Opportunity Statement: A review of early adopter forest plans indicates that focal species are currently underutilized as a means to assess the ecological conditions required under 219.9 of the Planning Rule. It appears that some forests may have incorrectly interpreted the Rule to require selecting only a single focal species in the plan area when actually the Rule calls for "*a small subset of species*" (219.19) that are selected based on their functional role in the ecosystem. Early identification of focal species can help shape an appropriate monitoring program to measure the effectiveness of the plan in maintaining or restoring ecological conditions. Further, use of the same focal species throughout the ecosystems in which they occur (and across planning units) can provide consistency and economies of scale within the monitoring programs of multiple forests.

62. Recommendation: Focal species should be identified using clearly articulated rationale early in the planning process to select appropriate species to evaluate ecological integrity and biodiversity of the plan area. Whenever possible, focal species should be designated and monitored across multiple planning units to increase efficiencies, allow data pooling, and address consistency issues.

Example:

- Rio Grande National Forest Draft Revised Plan - proposes beavers as a focal species for aquatic and riparian systems, with a monitoring strategy to include the number of watersheds with beaver activity, and tracking beaver presence and range expansion.

6K. Development and Use of Biennial Monitoring Reports

Problem/Opportunity Statement: The importance of the biennial monitoring reports is clearly stated in Section 219.12(d)(2) in that "*The monitoring evaluation report must be used to inform adaptive management of the plan area.*" Without clear monitoring results it will be difficult to make adaptive changes to an existing plan. While the biennial report is not a decision document, it provides critical information to the responsible official on whether current plan direction and implementation is moving the plan area toward desired conditions. In this way, the report provides the basis for any decision to amend or revise an existing plan, which is a critically important step in an adaptive management framework.

Given the significance of biennial monitoring reports to adaptive management, it is timely to address their content, format, and audience. If appropriately developed, the biennial reports can provide a key step in the adaptive management process as well as being a critical conduit for informing the public about forest plan implementation, and the status of ecological, social, and economic sustainability on the planning unit.

63. Recommendation: The Forest Service should take a more centralized approach to the format and organization of biennial monitoring reports to maximize efficiencies, improve readability, and increase utility. Ensure the reports are targeted to the appropriate audience while allowing access to more technical monitoring information for those individuals or groups that are interested. For example, include an executive summary of monitoring results with descriptive graphics to quickly convey key conclusions to Forest Service management and the general public. Provide consistent guidance on distribution and use of biennial monitoring reports such as required posting to Forest websites, distribution to local governments, and holding public meetings to share monitoring results. Develop an archival database to house relevant datasets.

Example:

- Rio Grande National Forest Draft Revised Plan - proposes an annual posting of proposed changes and annual monitoring results on the forest's website, and an annual stakeholder meeting to discuss the monitoring results and proposed changes, followed by a comment period. Following the comment period, the Responsible Official would decide what changes are necessary and the process to make those changes.

Recommendations Cross Reference

Recommendations in the Monitoring section are compatible and work together with the recommendations in the [Shared Stewardship](#), [Youth Engagement](#), [Species of Conservation Concern](#), and [Planning for Success](#) sections.

7. Objections

Introduction

The Forest Service has made a paradigmatic shift from the post-decision appeals process to a pre-decisional administrative review (objections) process at the project and plan-level. The aim of the objections process is to encourage early public participation, engage diverse perspectives, and foster open communication, with the intention of resolving concerns before a decision is made. With this increased investment in public involvement throughout the process, the Committee recognizes a need to harmonize the multiple objections processes to enable better understanding of this portion of public engagement.

7A. Align the multiple objections processes

Problem/Opportunity Statement:

The Forest Service currently has three different objection processes for similar Forest Service projects and plans: 1) Project-level objections under the 2003 Healthy Forests Restoration Act, 2) Project-level objections under 36 CFR Part 218, and 3) Plan-level objections under 36 CFR 219 Subpart B.⁴⁶ The different language, requirements, timeframes, parties, roles, and responsibilities of these processes have contributed to significant confusion for both Forest Service personnel and the public. In addition, the ‘Presidential Executive Order on Reducing Regulation and Controlling Regulatory Costs’, executed on January 30, 2017, requires Federal agencies to repeal at least two existing regulations for every new regulation.⁴⁷ Aligning the three objections processes would meet this directive.

64. Recommendation: Consolidate the 218, 219, and HFRA objection processes to create one objection process that harmonizes the requirements, objection timeframes, parties, roles and responsibilities

7B. Add an ‘Intervenor’ Role

Problem/Opportunity Statement: Under the current objection processes, there is no opportunity for entities in support of the project or plan to help craft a resolution to objections. Entities who support the project or plan in the current form, are forced to object to the draft decision or draft plan in order to ensure that their interests/needs are met in any proposed resolution to solve the current objections. If they do not object, they risk having a final decision that is negotiated between objectors and the Forest Service that does not meet their needs. Ultimately, this practice can severely strain relationships built during the collaborative process and cause significantly more work for the Forest Service when responding to objections.

65. Recommendation: Add an ‘intervenor’ role to allow stakeholders that support project and/or plan decisions, to fully participate in the objections resolution process in a manner that is equal to and distinct from the objector role.

⁴⁶ <https://www.fs.fed.us/objections/index.php>

⁴⁷ <https://www.whitehouse.gov/presidential-actions/presidential-executive-order-reducing-regulation-controlling-regulatory-costs/>

Intervenors would be required to meet the same substantive comment requirements as objectors, but they would not be allowed to add issues. In addition, intervenors would need to meet the same timeline as objectors for filing based on the draft plan. Intervenors would have equal status to objectors in the resolution process.

7C. Guidance to Improve Implementation of the Objections Process

The Committee also recommends the following guidance to help establish a clear de minimus baseline for objections resolution meetings. Reviewing officers and objections support staff are encouraged to build further upon this as appropriate.

- Provide sample objections, and/or simple guidance such as how did the plan not address your comments, and how would you like to see the plan address your comments).
- Include an opportunity for structured public comment at all resolution meetings.
- ID team members should attend resolution meetings to directly address objections and any associated confusion regarding science and process.
- Share a white paper that summarizes the different perspectives on the issues prior to the objections meeting.
- Be clear about the reviewing officer's decision space (i.e. one cannot ask for a road to be built when it hasn't been analyzed in the document).
- Structure meetings in a manner that allows for resolution-focused discussion.
- Reviewing officers should summarize and provide feedback on the discussions at the resolution table.
- Ensure clear communication between the Washington Office, the Regional Office, and the Forest prior to and during the resolution process.

Recommendations Cross Reference

- Recommendations in the Objections section are compatible and work together with the recommendations in the [Shared Stewardship](#) section.

8. Path Forward

Objective: Recommendation to Work with a Volunteer National Oversight Council to Ensure Accountability and Consistency in Forest Planning

Problem/Opportunity Statement: An important and ongoing responsibility of the Chief of the Forest Service under the 2012 Planning Rule is to “*establish and administer a national oversight process for accountability and consistency of NFS land management planning.*”⁴⁸ In 2016, our Committee recommended that the Forest Service “engage non-Forest Service sectors, including academia, tribes, state and local governments and the public, in developing and implementing the oversight and evaluation process.”⁴⁹ We noted that “*it will be key to gather insight from a broad spectrum of entities in order to truly assess the success of the 2012 Planning Rule.*”

In the spirit of shared stewardship, the Committee encourages the Forest Service to form a National Oversight Council to help the agency ensure accountability and consistency in land management planning. The Council would not give consensus advice. Instead, the Council would provide valuable and useful input, feedback, and insight regarding implementation of the forest planning process from a broad spectrum of entities. It would also provide a platform for continued dialogue with the American public. Moreover, the Committee’s past recommendation: ‘*Final Planning Rule FACA Planning Tool for Measuring Success 0418_2016*’ provides both a checklist and initial advice for developing this oversight body.

66. Recommendation: The Forest Service should establish a National Oversight Council on Forest Planning and should work with those members to develop an effective and efficient process to maximize the utility of the Council.

8A. Agency-Led Working Group

One form that a National Oversight Council on Land Management Planning could take is an agency-led working group. The pros for this approach are that the Forest Service can control membership and direct the priority focus and activity level of the members to exactly what they need when they need it.

Details of how the Forest Service could establish such a working group of subject matter experts on planning could vary; below is one option that would give the agency maximum control over the process and work. If there is a real potential for the FACA Committee to be re-constituted and re-chartered in the near future (within the next fiscal year, for example), this option would provide the agency the easiest and most complete bridge between the existing FACA Committee and such a future charter.

- For maximum efficiency, the agency should consider pulling people from this sunseting Committee and include other experts on planning as needed.

⁴⁸ 36 CFR 219.2(b)(5)(ii).

⁴⁹ FACA Recommendation on “Final Planning Rule FACA Planning Tool for Measuring Success,” April 18, 2016.

- The working group should be divided into subsets of complementary experts to help the agency address specific planning issues that it faces imminent needs around (SCCs, adaptive management, shared stewardship, assessment design, youth engagement, etc.). The agency should seek input and individual suggestions from the members of these subsets about those issues. (See also SCC)
- The agency should conduct email conversations and conference calls with these subsets of the working group as often as needed to receive individual suggestions on how to handle the issues the agency currently faces.
- The agency should conduct a conference call with the entire working group at least every two months to update the entire group on the issues brought before the subsets and how the agency is using the input it received and to make sure the entire working group is up to speed on all the issues and work surrounding them. An email summarizing all the work of the subsets should be sent to the entire working group at least every month.
- For issues that the agency needs more help with than a subset can provide or that the subset involved thinks needs more input, the agency should conduct email conversations and conference calls as needed with the entire working group to get their input and individual suggestions.
- As needed, the agency should have discussions with individual working group members to address specific issues when the agency thinks those members can provide quick and useful input to the agency. Such input from individual members should be shared with the entire working group in the monthly email and regular conference calls.
- The working group should have an in-person meeting or field trip at least once every year. Working group members would be responsible for organizing and paying for any in-person gathering. Agency staff would be welcome but not expected to attend.
- While the FACA Committee hopes that such a working group will be sufficiently useful to the agency to help it with its issues over implementation of the 2012 Planning Rule, the Committee also recommends that the agency keep in mind that a full FACA Committee would be more helpful and useful. FACA provides a level of power, credibility and buy-in from all levels of people and organizations involved with National Forest management that cannot be obtained simply from more ad hoc assistance. When budgets and circumstances make it possible, the agency should consider reconstituting and re-chartering the 2012 Planning Rule FACA Committee with a charter more focused on the then-current planning needs of the agency.

Recommendations Cross Reference

Recommendations in the Planning for Success section are compatible and work together with the recommendations in the [Shared Stewardship](#) and [Species of Conservation Concern](#) sections.

Appendix 1 – List of Recommendations

Shared Stewardship

1. **Recommendation:** Forest Service national and regional leadership should set an expectation, through performance standards, directives, and policies, that staff prioritize partnership-building, collaboration, and other forms of shared stewardship prior to and during the development, implementation, and monitoring of forest plans. We encourage the agency to begin establishing partnerships and relationships well before initiating the planning process. Forests that are not undergoing forest planning at this time should begin establishing the groundwork for future partnerships and relationships.
2. **Recommendation:** The Forest Service should clearly articulate roles, responsibilities, and restrictions on any formal agreements or partnerships dealing with shared stewardship activities. The agency should remind partners that they represent but a single voice in the broader discussion of our national forests and grasslands, and that final decision-making authority remains with the Forest Service.
3. **Recommendation:** Sections 219.1(g) and 219.7(e)(1)(ii) of the Planning Rule should be interpreted broadly to allow reasonably foreseeable contributions of other federal agencies, state and local governments, tribes, universities, businesses, and other partners and volunteers to be considered part of a unit’s fiscal capability. Plans should not be strictly constrained by the current fiscal capability of a FS unit and should look for ways to leverage partnership opportunities as well as utilization of all authorities. Plan objectives and other plan components should promote partnerships and other opportunities to increase capacity for plan implementation and monitoring through shared stewardship.
4. **Recommendation:** Forest plans should identify strategies to increase overall capacity to achieve desired conditions by building relationships with communities and other stakeholders. Forests should provide continued engagement opportunities for the public, communities, partners and governments through plan implementation and monitoring, not just during plan revision. Consider using cooperative forestry agreements, authorities, grants, and funding to support more partner organization capacity and participation throughout the process.
5. **Recommendation:** During the Assessment phase of planning, forests should assess the forest’s current capacity and existing partnerships with respect to relevant topics in the Assessment. Where appropriate, the Need to Change statement should identify the need to increase capacity through leveraging of partnership opportunities, based on the Assessment.
6. **Recommendation:** In developing partnerships, the Forest Service should encourage and work with partners to create and distribute informational materials, including video and social media, that explain the need for and benefits of shared stewardship.
7. **Recommendation:** Every national forest should have access to the necessary personnel, training, and skill sets to help recruit, organize, supervise, and coordinate with partners and volunteers.

8. Recommendation: The Forest Service should seek to involve young people and youth groups – including grade schools, community colleges, universities, boys’ and girls’ clubs, church groups, and youth conservation corps among others -- in project and monitoring activities and environmental education to help engage youth in the outdoors and develop skills for future careers in natural resource stewardship and management. To accomplish this, the agency should:
 - Develop partnerships with States, tribes, universities, private businesses, and nonprofit organizations that are already working with youth on public lands and national forests.
 - Create regional youth engagement partnership directories that list the organizations, names, contact information, and a short description of the work they do. Forests can use the directories for reference and guidance when developing their public outreach strategies for revision efforts.
 - Establish youth advisory committees at the regional or forest level to assist with youth engagement efforts.
9. Recommendation: Plan components and other plan content should strongly emphasize partnership and volunteer opportunities in all areas of ongoing forest management.
10. Recommendation: The Forest Service should work with its partners to develop new analytical tools to enable a spatially oriented and geographically relevant approach to planning for current and future resources. A spatial orientation will serve to minimize conflicts, improve sustainability of uses, and efficiently allocate Forest Service resources.
11. Recommendation: Seek out and incorporate knowledge from tribal, indigenous, and traditional communities to develop, implement, and monitor the plans. Look for ways to honor that knowledge, sustain community economies, emulate sustainable land management practices, build pride in community traditions, sustain rural economies, and empower those communities to pass along those practices and traditions to future generations.
12. Recommendation: Forest plans should identify opportunities to use and leverage the Good Neighbor authority and Tribal Forest Protection Act to support implementation of plan goals and objectives throughout the planning process.
13. Recommendation: Forest plans should identify opportunities for Federal-Tribal shared stewardship of sacred sites and include plan components that will aid in achieving shared stewardship.
14. Recommendation: Forest Service personnel should continue to work with landowners on collaborative, cross-boundary, landscape-scale planning across federal, tribal, state, private, and other non-federal lands. Where appropriate, plan content should help to facilitate an all lands management approach and help to achieve the social, economic, and ecological sustainability goals of the Planning Rule.
15. Recommendation: To be successful, shared stewardship on a landscape planning level should consider the following guidelines:

- The process begins in the assessment phase with the establishment of clear sustainable lines of direct communication among landowner/land manager interests;
 - The authorities and rights of all landowners/land managers are clearly understood and respected;
 - Common goals and objectives are defined that are acceptable and achievable across multiple land ownerships, and the shared stewardship role of each party clearly recognizes and respects the individual capacities of each party based on available resource and legal authorities.
16. **Recommendation:** Plans should seek to achieve better alignment with the Cohesive Wildland Fire Strategy. When desired resilient forest conditions, fuel reduction and other wildland fire objectives cannot be achieved by relying solely on available Forest Service funding, forest plans should consider a full range of collaborative strategies to expand capacity, partnerships and economic efficiencies.
 17. **Recommendation:** The Forest Service should work with local, state, and tribal agencies when developing desired ecosystem conditions that support native fish and wildlife species populations.
 18. **Recommendation:** The Forest Service should encourage stakeholders, other landowners, fish recovery groups, downstream water users, stakeholders, and others to (1) help select Priority Watersheds and develop appropriate plan components and monitoring programs, and (2) help create, implement, and monitor Watershed Restoration Action Plans to restore the Priority Watersheds.
 19. **Recommendation:** Forest plans should include monitoring programs or monitoring guides that explicitly identify existing and potential monitoring partnerships and relationships wherever possible.

Youth Engagement

20. **Recommendation:** Establish partnerships with NGOs, colleges and universities and local schools to incorporate forest planning into science curriculums.
21. **Recommendation:** Make planning relevant to young people by helping them see that they are part of the solution, e.g. tie national forests to drinking water and clean air, describe challenges and opportunities and ask youth how to solve problems.
22. **Recommendation:** Develop specific plan content (desired conditions, goals, objectives, management approaches) to continually educate and engage diverse youth throughout the life of the plan in the ecological, economic and social importance of our forests.
23. **Recommendation:** Partner with “trusted community contacts” and youth leaders throughout various communities to serve as liaisons.
24. **Recommendation:** To increase the effectiveness of youth engagement in forest management (including the planning process), the agency should include youth engagement as an element in the “mission critical” section of line officer performance evaluations.

25. Recommendation: Learn from, and expand upon, existing Forest Service programs that successfully engage a diverse youth constituency (i.e. rural, urban, proximate to and distant from forests). These models should be strongly considered when developing new youth outreach plans during and after the forest planning process.
26. Recommendation: Train and promote from within the agency; in order to elevate those that are already interested in and skilled at youth engagement for appropriate positions. Utilize partners to assist with employee trainings, via shared stewardship.
27. Recommendation: Develop a general guide to using culturally and age-appropriate language and values to help maximize the success of the Forest Service’s communication with these forest users.
28. Recommendation: Work with partners to employ young and diverse interns and create opportunities to hire them as Forest Service employees to help engage youth and underserved communities. Continue to support and expand youth intern programs such as the Public Land Corps by establishing a diverse board of directors; work with Office of Personnel Management to create a smooth transition into the agency.
29. Recommendation: New interns and employees from diverse backgrounds should be placed in work environments that nurture their development. This will ensure minority employees are successful. Create upward mobility programs to allow those groups below parity, opportunities to advance. Continue to address unconscious bias in the agency that may contribute to the lack of advancement of underserved groups.
30. Recommendation: Utilize existing programs such as the ‘USDA Direct Hire Authority for Resource Assistants’ and 1860 ‘Senior, Youth and Volunteer Programs’.
31. Recommendation: Work with the schools, colleges and universities to encourage students to pursue natural resource management to supply future candidates for Forest Service career opportunities.

Planning for Success: Building and Implementing Efficient and Effective Forest Plans

32. Recommendation: Forest Plan revision teams should view and use the assessment process to identify “key assumptions, risks, areas of uncertainty, and how the assessment can inform the development of the monitoring program” (FSH 1909.12, ch. 10, sec. 11.3). Identifying these information needs, assumptions, risks, and uncertainties will be essential to structure a more adaptive approach to planning in the future. Some forest assessments identify information needs, but only in a cursory fashion, and there is often no corresponding discussion of how these information needs could be filled and their relevance to the monitoring program. Clearly identifying information needs will be critical to the development of a more adaptive planning framework.
33. Recommendation: The Forest Service should invest in peer-to-peer learning in the form of workshops and desktop exercises that permit Forest Service planners to experiment and learn from informed colleagues about the Planning Rule, plan components, and the monitoring and adaptive management process. The Committee

recognizes exercises such as Region 1’s “plan to project” workshop as critical to successful integration of plan components, and encourages the use of similar exercises throughout the plan development phase.

34. Recommendation: Information needs, assumptions, risks, and uncertainties should be identified and clearly tracked through the plan development phase (i.e., development of plan components) to ensure that the intent of the Planning Rule is met in final plans. These information needs, assumptions, risks, and uncertainties should be addressed through the judicious use of plan components and in the development and implementation of the plan monitoring program. Successful plans and plan components should naturally support adaptive management.

When sufficient information is available to understand the sideboards (based on an analysis of options during the NEPA process), forests should consider using appropriate “triggers” or “if/then” conditions under which management – and the forest plan – may change, given new information that reduces uncertainty. This helps set realistic stakeholder expectations regarding plan outcomes, and may provide the basis for additional partnership opportunities (for example, by providing monitoring or funding capacity).

35. Recommendation: Forest plans should include plan components that are adaptable to known unforeseen circumstances such as wildfire in fire prone ecosystems, windstorms in hurricane prone regions, and volcanic eruptions in volcano country. Including plan components that are responsive to such events will increase the efficiency of forest plan implementation and speed the process of forest plan amendments, should such an event require an amendment of the plan to reflect changed circumstances.
36. Recommendation: Forest plans should create a shared vision for how a national forest or grassland will be managed. This management necessarily requires decisions about challenging natural resource trade-offs. The environmental analysis process required by the National Environmental Policy Act – particularly the requirement to consider a reasonable range of alternatives – should be utilized to clearly identify and distinguish among these tradeoffs. Not all resource issues will require such a trade-offs analysis. The Assessment process, and public and government engagement, should be used to identify which resource issues are appropriate for such a concentrated trade-offs analysis.
37. Recommendation: Regardless of which required (desired conditions, objectives, standards, guidelines, and suitability of lands) or optional (goals, potential management approaches or strategies, and partnership opportunities or coordination activities) plan content is utilized in plan components, each plan component must be consistent with the corresponding definition from the Rule.
38. Recommendation: In determining how best to achieve an appropriate balance among plan components, the Committee recommends that the Forest Service consider the following factors:
- Risk
 - Controversy (including opposition or support for a use)

- Significance of resource/use
 - Uncertainty of environmental effects
 - Trends
 - Rarity/value of resource/use
 - Financial capability
 - Consequences or tradeoffs of action/inaction
39. Recommendation: While Desired Conditions do not have completion dates, by definition of the Rule, the Committee recommends linking Desired Conditions to Objectives that will enable the Forest Service to make measurable progress toward the Desired Condition during the life of the Plan to the fullest extent possible.
40. Recommendation: Desired conditions and objectives are important required plan content and should be explicitly linked to each other by writing condition-based or outcome-oriented objectives. In addition, individual desired conditions and objectives should be written so that they are realistic, specific, measurable, and relevant. Objectives should also be time-bound and achievable. This will ensure that all stakeholders know what to expect from the forest plan, and how forest management will change if monitoring demonstrates that desired conditions and objectives are not being met. An emphasis on tractable desired conditions and objectives will increase transparency and trust among stakeholders, particularly those who do not believe desired conditions and objectives are “meaningful” without quantitative measures. To that end, monitoring plans should focus on metrics to assess effectiveness and implementation accomplishments and/or trends (as appropriate) to determine if implemented objectives are achieving desired conditions.
41. Recommendation: Avoid using ambiguous time frames like “over the planning period” or “over the life of the plan,” since revised plans will most likely be in effect for 15 to 20 years. Objectives should be written to anticipate those longer time frames. Where possible, Objectives should be written to reflect specific, measurable timeframes.
42. Recommendation: Forest Service planners must draft Standards that are clear and unambiguous.
43. Recommendation: While Optional Plan Content may be changed administratively, the Committee cautions the Forest Service against using Administrative Changes as an opportunity to skirt the requirements for plan amendment or public information and involvement.
44. Recommendation: Plans should include significant plan components addressing economic and social sustainability that are specific, measurable, achievable, relevant, and time-bound. The Forest Service should explore partnerships with academia, nonprofit organizations, and governments that allow the agency to develop plan content that adequately reflects the importance of social and economic sustainability, and allow for their measurement, monitoring, and adaptability.
45. Recommendation: The Forest Service should consider at least one alternative with plan components that reflect the real socioeconomic and ecological needs of the unit, regardless of whether the unit currently possesses the budget to implement this vision.

46. Recommendation: When developing plan components, forests should clearly identify the geographic applicability of components.
47. Recommendation: The Forest Service should carefully choose words that express clarity of purpose, and are objective and unambiguous.
48. Recommendation: The Forest Service must write plan components that are specific, measurable, achievable, relevant, and time-bound.
49. Recommendation: Monitoring Plans should include tracking implementation of Objectives.

Species of Conservation Concern

50. Recommendation: Forest Service leadership should continue to refine policy and guidance regarding SCC development and use in forest plan revisions. Specifically, the Committee recommends the following strategies:
- Continue to evaluate and improve implementation of the SCC process, especially around key areas of tension like timing and potential resolution of SCC identification, definitions, BASI, and public participation. This learning should be communicated to the field through training opportunities for key staff, workshops and check-in opportunities like the SCC meeting hosted in Atlanta in August 2017, and/or dissemination of additional guidance as needed.
 - Develop a national SCC work group composed of agency and a broad spectrum of non-agency partners and stakeholders to help guide/review implementation of SCC policy. This SCC-specific work group could be nested within the larger advisory group called for under Section 219.2b5(ii) of the 2012 Rule.
51. Recommendation: As part of the public engagement process, SCC-specific stakeholder, state and tribal engagement should occur early and often throughout the planning process to maximize benefits to the agency and increase collaboration around SCC. This process should be very clear, transparent, and consistent across the national forest system. Specifically, the agency should:
- Engage in focused collaboration and targeted SCC outreach at the plan level;
 - Utilize outside expertise and local knowledge to help inform SCC identification and plan component development; and
 - Provide opportunities for the public to participate and fully understand how SCC are identified at the Regional level, and integrated into Forest Plans. It will be important for the agency to clearly communicate the role and goal of SCC-focused collaboration in the context of broader public engagement strategies.
52. Recommendation: Forests should engage external subject matter experts in helping to collect and analyze the necessary data through a neutral and transparent scientific process as part of a team effort to conserve species.

Monitoring

53. Recommendation: Forest Service leadership should prioritize, emphasize and support monitoring as a "mission critical" element to successful forest plan development and implementation. This requires a shift in perspective and practice (e.g. hiring and developing professionals with the right expertise), shifting budget allocations,

ensuring leadership intent, and developing partnerships with outside groups to facilitate monitoring. Significant cultural and fiscal changes may need to occur within the agency to support monitoring to the extent called for in the 2012 Rule.

54. Recommendation: Forests should begin thinking about monitoring during the assessment phase of planning (e.g. when assessing the current condition of the forest, knowledge gaps will be identified, uncertainties and assumptions will be documented) so that full integration can occur throughout the planning process. Forests should clearly define how monitoring information will be used in advance so that stakeholders can clearly see the linkage between monitoring and plan implementation (e.g. progress toward desired conditions or response of characteristics to management).

Where sufficient knowledge exists, develop an adaptive management decision framework using ‘if/then’ statements in plan components, or create triggers, thresholds and criteria as a way to clearly link ecological/social/economic conditions and future management changes. Forests could also use a tiered approach to incentivize different approaches to monitoring.

55. Recommendation: Forests should develop integrated, complementary implementation and effectiveness monitoring with a focus on high priority resources, ecosystems or management questions.
56. Recommendation: To improve efficiencies the Forest Service should identify and leverage partnerships to:
- Take advantage of existing data/monitoring efforts (even if produced outside the agency), involving the scientific community and making room for citizen science;
 - Use new information technologies (e.g. remotely sensed or presence/absence data); and
 - Use standardized protocols across units to allow for data pooling.
57. Recommendation: Where possible, develop scientifically based monitoring programs that utilize local stakeholders and citizen scientists to collect and record monitoring data. Leverage efficiencies by using existing programs, protocols, and public databases when available. Review data collection activities as needed to ensure data quality and validity.
58. Recommendation: Forests should develop a meaningful, transparent process for determining what level of scientific rigor is needed in monitoring programs based on level of risk, uncertainty, controversy, and the significance of management decisions that will be influenced. All monitoring protocols need to be defensible and use current, scientifically valid methods.
59. Recommendation: Work with external experts, economists, social scientists and stakeholders, ranging from businesses to non-governmental organizations who, have data resources, to develop and fully incorporate social and economic monitoring into forest plans using standardized methods and variables to improve efficiencies and data management. Encourage local planning units to incorporate additional monitoring based on their unique situations.

60. Recommendation: The Forest Service should expedite development of broad scale monitoring strategies in Regions undergoing revisions so as to clarify scope and scale of landscape level data needs and resultant Planning Unit obligations. Whenever possible, adopt existing programs that are already conducting monitoring on larger issues such as climate change, rangeland health, water quality, or economic growth. Consider benefits of expanding existing programs such as Forest Inventory and Assessment (FIA) to include new monitoring elements like wildlife species presence/absence or measures of soil health. Both broad scale and forest-specific monitoring should be identified and included in forest and grasslands monitoring plans and biennial reports.
61. Recommendation: The Forest Service should work collaboratively with other agencies, groups and the general public to accomplish monitoring to ensure recovery, conservation and/or viability of special status species. Tier monitoring questions to key components in conservation or recovery plans and enlist partners to collect and analyze the data. Look for efficiencies by selecting variables that can be used to inform a wide range of monitoring questions.
62. Recommendation: Focal species should be identified using clearly articulated rationale early in the planning process to select appropriate species to evaluate ecological integrity and biodiversity of the plan area. Whenever possible, focal species should be designated and monitored across multiple planning units to increase efficiencies, allow data pooling, and address consistency issues.
63. Recommendation: The Forest Service should take a more centralized approach to the format and organization of biennial monitoring reports to maximize efficiencies, improve readability, and increase utility. Ensure the reports are targeted to the appropriate audience while allowing access to more technical monitoring information for those individuals or groups that are interested. For example, include an executive summary of monitoring results with descriptive graphics to quickly convey key conclusions to Forest Service management and the general public. Provide consistent guidance on distribution and use of biennial monitoring reports such as required posting to Forest websites, distribution to local governments, and holding public meetings to share monitoring results. Develop an archival database to house relevant datasets.

Objections

64. Recommendation: Consolidate the 218, 219, and HFRA objection processes to create one objection process that harmonizes the requirements, objection timeframes parties, roles and responsibilities
65. Recommendation: Add an ‘intervenor’ role to allow stakeholders that support project and/or plan decisions, to fully participate in the objections resolution process in a manner that is equal to and distinct from the objector role. Intervenors would be required to meet the same substantive comment requirements as objectors, but they would not be allowed to add issues. In addition, intervenors would need to meet the same timeline as objectors for filing based on the draft plan. Intervenors would have equal status to objectors in the resolution process.

Path Forward

66. Recommendation: The Forest Service should establish a National Oversight Council on Forest Planning and should work with those members to develop an effective and efficient process to maximize the utility of the Council.

Appendix 2 - List of Committee Members

- Mike Anderson, The Wilderness Society
 - William Barquin, Kootenai Tribe of Idaho
 - Susan Jane Brown, Blue Mountains Forest Partners
 - Robert Cope, Lemhi County Commissioner (retired)
 - Adam Cramer, Outdoor Alliance
 - Daniel Dessecker, Ruffed Grouse Society
 - Russ Ehnes, National Off-Highway Vehicle Conservation Council**
 - Angelou Ezeilo, Greening Youth Foundation
 - Karen Hardigg, Rural Voices for Conservation Coalition*
 - Valerie Huerta, New Mexico Farm and Livestock Bureau**
 - James Magagna, Wyoming Stock Growers Association
 - Joan May, San Miguel County Commissioner
 - Peter Nelson, Defenders of Wildlife
 - Martin Nie, University of Montana
 - Michelle Nuttall, Southern California Edison
 - Caitlyn Pollihan, formally with the Council of Western State Foresters*,**
 - Candice Price, Urban American Outdoors
 - Angela Sondenaa, Nez Perce Tribe
 - Megan Sutton, The Nature Conservancy
 - Thomas Troxel, Intermountain Forest Association**
 - Gabriel Vasquez, Latino Outdoors**
 - Ray Vaughan, Polar Connections
 - Lindsay Warness, Boise Cascade Company
- *Committee Substitute
**Members consulted but not present for final meeting