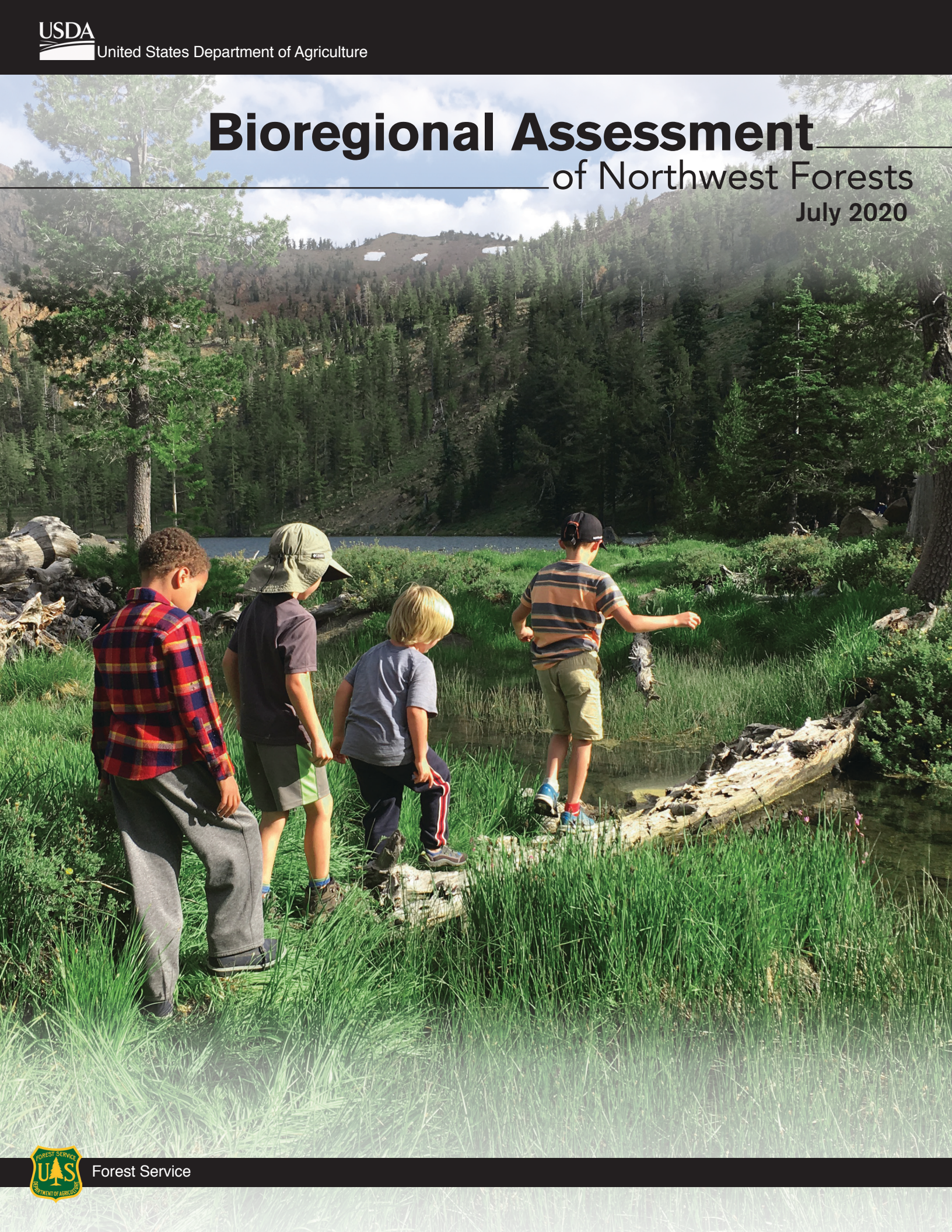


# Bioregional Assessment

of Northwest Forests  
July 2020



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## Dear Reader

The Pacific Northwest and Pacific Southwest Regions land management of the USDA Forest Service are pleased to introduce the Bioregional Assessment of Northwest Forests. For the last several years, in both formal and informal settings, we heard from many stakeholders that our land management plans and the Northwest Forest Plan amendment, covering western Washington, Oregon, and northern California, need updating. Among other issues, we heard that there is an urgent need to address risk to communities and ecosystems from wildfires, insects and disease, and other stressors. We also heard that we need to better balance and disclose the expected tradeoffs between economic and environmental issues.

As land managers, we reviewed monitoring and internal feedback and identified that the 19 land management plans in the Northwest were not fully achieving desired outcomes, partly due to tremendous changes in ecological and socioeconomic conditions in the last two decades. We believe the landscape-scale approach of the 1994 Northwest Forest Plan amendment has served us well across many resource topics. However, we recognize that given the geographic diversity of the 24 million acres in focus, updates to national forests and grasslands plan direction can help us address the unique challenges national forest and grasslands face to more fully achieve ecological, economic, and social desired outcomes across the landscape.

We recognize forest land management updates initiate a complex planning process that can be time intensive for our stakeholders, partners, local governments and the Forest Service. This is especially true when numerous forests are bound together through amendments such as the 1994 Northwest Forest Plan. Given this challenge, we believe this Bioregional Assessment can inform options to efficiently and effectively update plans while maintaining alignment of plan direction where and when applicable to address broad-scale issues.

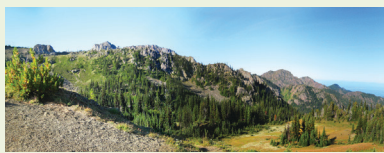
This Bioregional Assessment is not intended to comprehensively address everything that might warrant a change in our land management plans. Instead, we focus on the most compelling issues that need updating and highlight those that are shared across the broad landscape, such as species habitat and wildland fire. We drew upon the best available science and, working collaboratively with our research stations, we designed this assessment to communicate key issues clearly and concisely. Through assessment of the most important information evaluated, we will identify the need to change existing land management plan direction.

What we give you in this document is only the beginning of the journey toward updating our land management plans. We will work together to develop the specific solutions that fully address recommendations in this assessment. We are putting in place robust opportunities for your engagement and feedback throughout the planning process. We anticipate a challenging task balancing the ecological and socioeconomic tradeoffs present in such a dynamic landscape. We value your ideas and appreciate your willingness to work with us to discover innovative approaches to achieve this goal.

Thank you,

Randy Moore, Regional Forester Pacific Southwest Region  
Glenn Casamassa, Regional Forester Pacific Northwest Region

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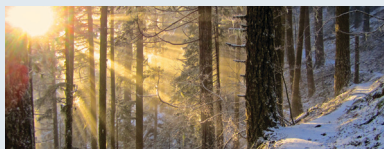
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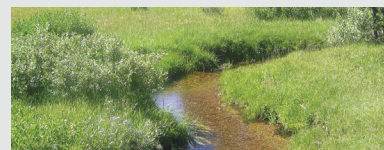
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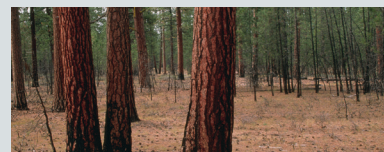


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# Introduction

The Forest Service, U.S. Department of Agriculture, is exploring options to modernize 19 land management plans in the Bioregional Assessment (BioA) area (figures Intro-1 and Intro-2). The 19 plans include all those in the Northwest Forest Plan amendment (NWFP) and two other adjacent national forests. The BioA will help us explore innovative planning strategies to more efficiently and effectively manage national forests and grasslands with similar as well as differing issues and potential solutions, while considering community and stakeholder interests. Rather than being confined by administrative boundaries, our regional approach to modernizing land management plans in the BioA area will be an opportunity to understand the individual contributions of each national forest and grassland as well as their collective contributions to community needs and ecological integrity across a broad landscape. The BioA is focused primarily on national forests and grasslands but, to assess ecological and social connections across the landscape, we considered some other federal and non-federal lands. The BioA assesses current conditions and trends across a broad landscape and serves as a foundation for future land management planning.

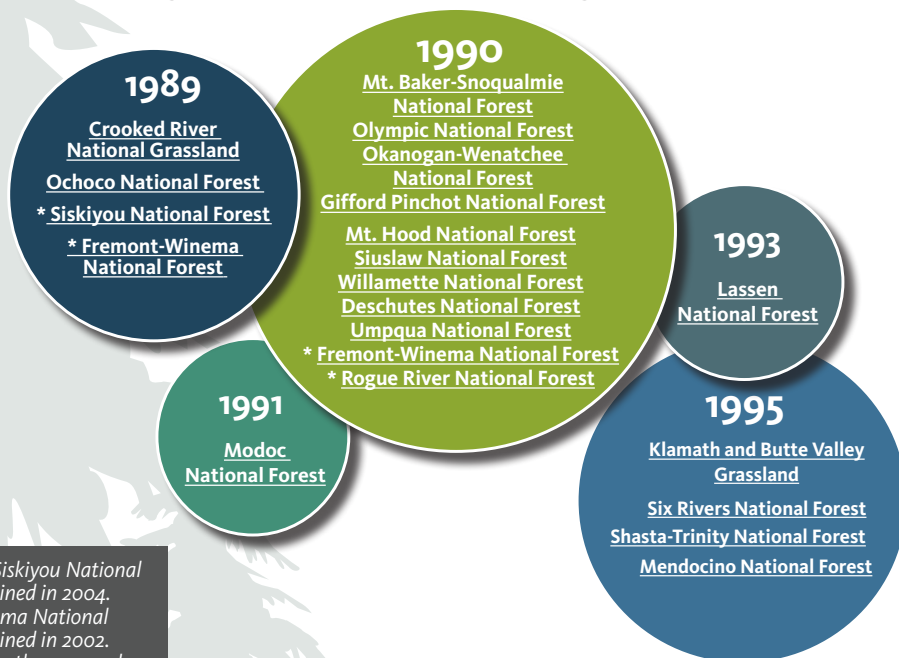
## What the Bioregional Assessment is Not

The BioA does not make land management planning decisions; it is not a decision document. It will not replace development of individual forest or grassland assessments; instead, it will inform those assessments, and is intended to reduce the time it takes to complete them.

This is not a comprehensive document and purposefully lacks details on specific solutions. The BioA does not include specific planning components and is intentionally non-prescriptive. Forest, project, or site-specific topics are not discussed in this document but will be collaboratively developed during public and stakeholder engagements as the planning process continues.

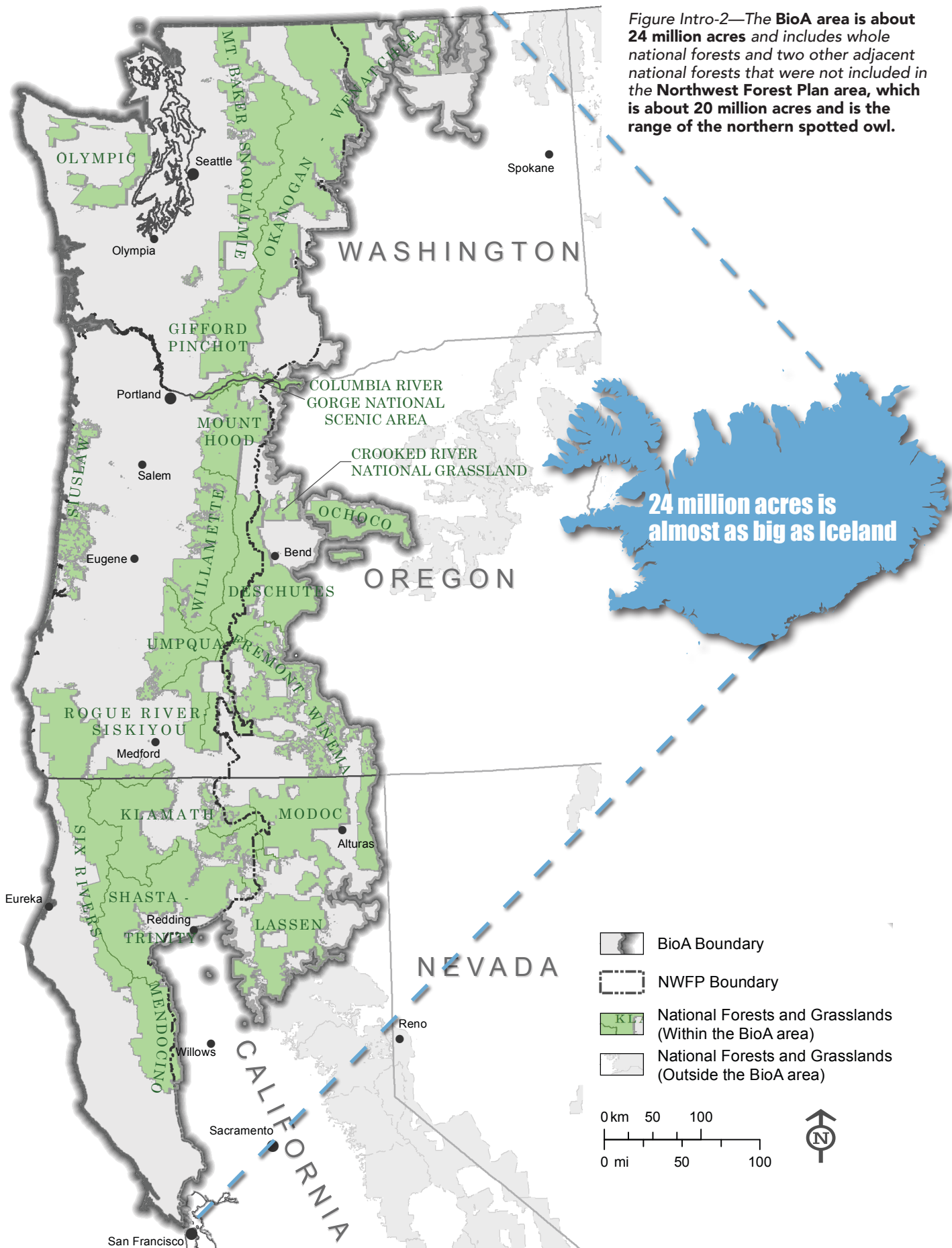
When Land Management Plans in the Bioregion Were Enacted

## When Land Management Plans in the Bioregion Were Enacted



\* Rogue River and Siskiyou National Forests were combined in 2004. Fremont and Winema National Forests were combined in 2002. Each forest is currently managed under a land management plan enacted before merging.

Figure Intro-1—Land management plans in the BioA area are more than 25 years old. There have been changes in social, ecological, and economic conditions, as well as in resource demands, and new scientific information and policy is available. We need to make sure that land management plans are responsive to current issues and conditions.



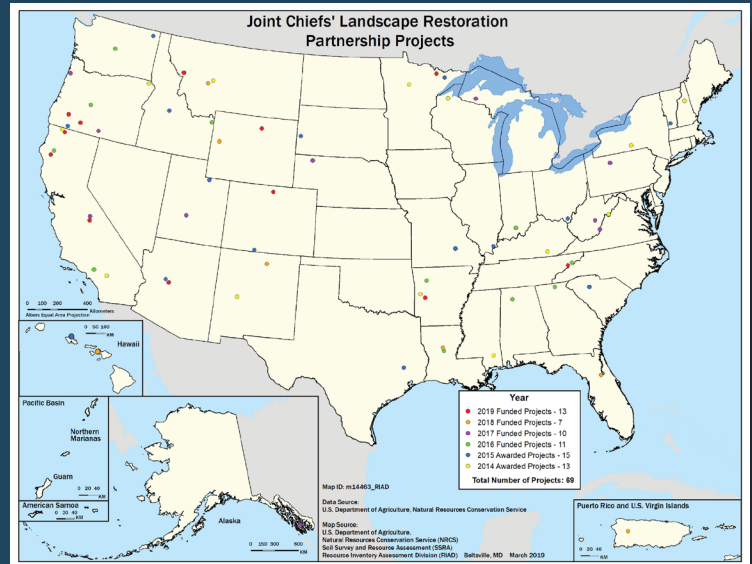
The BioA is grounded in science, land management experience, and feedback received during community listening sessions. To compile this document, the Forest Service Pacific Northwest and Pacific Southwest development team relied on nearly 25 years of monitoring data<sup>1</sup> and many information sources, including the 2018 *Synthesis of Science to Inform Land Management within the Northwest Forest Plan Area*,<sup>2</sup> other adjacent-area science syntheses,<sup>3</sup> the 2015 public listening sessions, fire-risk assessments, and state action plans.

## Shared Stewardship

*“Shared Stewardship is about working together in an integrated way to make decisions and take actions on the land.” — USDA Forest Service Chief Vicki Christiansen*

Today’s Forest Service land managers face a range of urgent challenges, including uncharacteristic wildfires, increasing recreation needs, conflicting public needs, degraded watersheds, and insect and disease epidemics. We are committed to a shared stewardship strategy to address these challenges by working collaboratively to identify priorities for landscape-scale treatments and working with a variety of partners to do the right work in the right place and at the right scale. By coordinating at the state level, we will be able to increase the scope and scale of critical forest treatments that support communities and improve forest conditions.

The shared stewardship strategy builds upon a foundation of collaborative work, such as the Joint Chiefs’ Landscape Restoration Partnership, the National Cohesive Wildland Fire Management Strategy, and the Collaborative Forest Landscape Restoration Program. The strategy also builds on authorities created or expanded in the 2018 Omnibus Bill and the 2018 Farm Bill, such as the Good Neighbor Authority. The Forest Service will build on the foundation to work more closely with states, Tribes, and other partners to set cross-boundary priorities.



The BioA was informed by 19 public listening sessions held throughout the Northwest in the spring of 2015. During the sessions, we gathered public thoughts and concerns about revising land management plans in the BioA area. We learned that there is a need to balance local values and economic considerations with environmental concerns, more fully consider fire management and risk, work to meet the NWFP timber projections, focus more on recreation, improve road maintenance and safety, protect water quality and watershed health, and avoid single-species management. We also heard that we should keep much of what is working well, like the conservation networks in the NWFP. We value public feedback and are committed to a transparent planning process as we continue to improve trust and build relationships throughout the entire planning process.

## 19 Public Listening Sessions



In the spring of 2019, the BioA team held meetings with more than 220 Forest Service employees working on the national forests and grasslands in the BioA area. Their feedback helped us better understand the opportunities and challenges these national forests and grasslands face when implementing their land management plans.

Based on what we heard from the public and our employees, we developed five categories to organize the findings and recommendations presented in the BioA—ecological integrity, fire and fuels, sustainable timber, habitat management, and sustainable recreation.

The Forest Service will continue to engage with our publics and stakeholders throughout the entire land management planning modernization effort. A Northwest Forest Plan Modernization webpage provides updates and opportunities for further public engagement.

<sup>1</sup> <https://www.fs.fed.us/r6/reo/monitoring/>

<sup>2</sup> Spies and others, 2018. <https://www.fs.usda.gov/pnw/page/synthesis-science-inform-land-management-within-northwest-forest-plan-area>

<sup>3</sup> Long and others, 2014 - Sierra Nevada Science Synthesis (2014); Dumroese and others, 2018 - Northern California Plateaus Science Synthesis in progress; Stine and others, 2014 - Eastside Moist Mixed Conifer Science Synthesis (2014); Quigley and Arbelbide, 1997 - Interior Columbia Basin Assessment (1997).

## Forest Service Collaboratives

There are more than 40 local and four nationally chartered Collaborative Forest Landscape Restoration Program<sup>4</sup> collaborative groups across the BioA area. For decades, the Forest Service has been committed to and engaged in collaboration to address local community priorities, build community capacity, leverage resources, meet goals, and increase benefits. Collaboratives have played important roles in bridging rural and urban needs and moving beyond bilateral relationships toward large-scale, integrated collaboration with diverse stakeholders.



The BioA benefited from reviews by a science synthesis team working with the Forest Service's Pacific Southwest and Pacific Northwest Research Stations. Monitoring efforts to verify whether land management plans were achieving the desired results have been a successful key element of the NWFP. Research results and monitoring reports, which were captured in the 2018 *Synthesis of Science to Inform Land Management Within the Northwest Forest Plan Area*, provided the team with an up-to-date review of scientific literature about the national forests and grasslands within the NWFP area.

Forest Service assessments evaluate readily available information on land management plan topics that are appropriate and relevant. Although new analysis or studies aren't initiated during an assessment process, the assessment can help us identify information gaps that should be addressed as we move forward with the planning process. During our future land management planning efforts, we will conduct further analysis; develop or revise plan components; engage stakeholders, Tribes, and local governments; and conduct an environmental review on the affected environment, as required under the National Environmental Policy Act, regulations, and Forest Service policy.

The NWFP and other multi-land management plan amendments have guided Forest Service land managers across Washington, Oregon, and northern California with a landscape-level approach to land management. Some aspects of this approach have been working well. Forests have worked collaboratively toward common objectives across administrative boundaries guided by direction associated with Land Use Allocations (figure Intro-3). Forest Service land managers have shared learning and adaptation under monitoring programs and the survey and manage standards and guidelines. They've leveraged the Aquatic Conservation Strategy as well as Pacific Anadromous Fish Strategy (PACFISH) and Inland Fish Strategy (INFISH) Aquatic Conservation Strategies to restore fisheries and link aquatic and terrestrial habitat, and they've addressed species conservation under the Sierra Nevada Framework<sup>5</sup> (figure Intro-4).

### Science Shows Increased Threats and Concerns

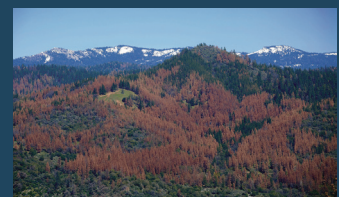
Three significant ecological threats in the Bioregional Assessment area are invasive species, such as the barred owl; wildfire because the area is increasingly likely to experience large, uncharacteristic fires; and climate change, which is affecting rates of tree mortality, temperatures of streams, and frequency and intensity of floods.



Invasive Species



Uncharacteristically Severe Wildfire



Climate Change

<sup>4</sup> <https://www.fs.fed.us/restoration/CFLRP/>

<sup>5</sup> USDA Forest Service, 2004.



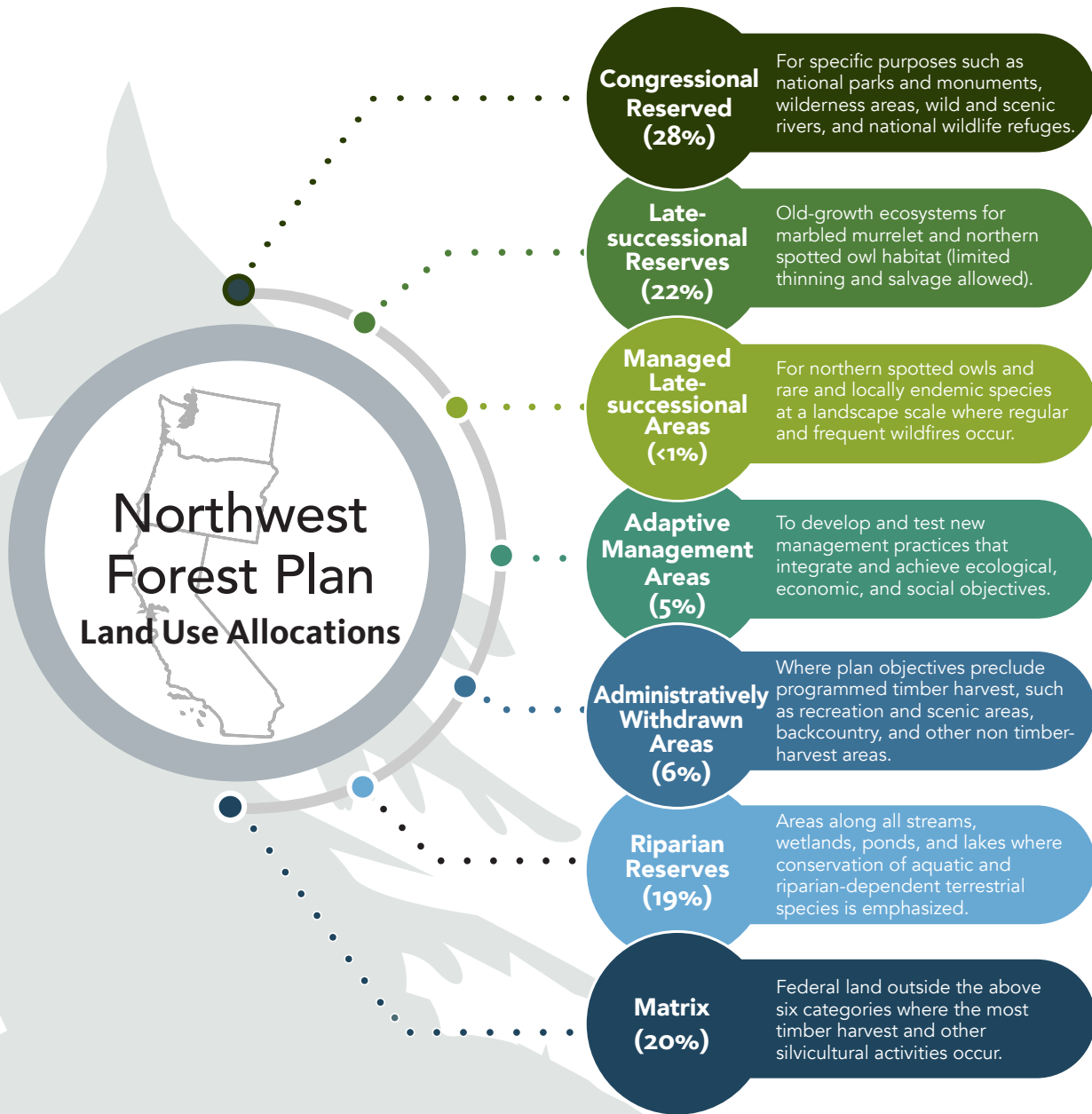


Figure Intro-3—Land use allocations are a central feature of the NWFP. Each allocation has specific direction to help ensure consistent management wherever that allocation occurs.

### Northwest Forest Plan Amendment

The 1994 Northwest Forest Plan amended the land management plans on the national forests and grassland in the range of the northern spotted owl. The amendment was developed in response to mounting public concern and legal battles that halted timber harvesting in old forests throughout the owl's range. Approval of the amendment allowed timber management to continue with new operating restrictions, while habitat management for northern spotted owls, marbled murrelets, other species associated with old forests, and aquatic species was achieved. However, neither the goal to maintain a viable timber industry to sustain rural communities and economies nor the goal to recover habitat for the northern spotted owl has been achieved.

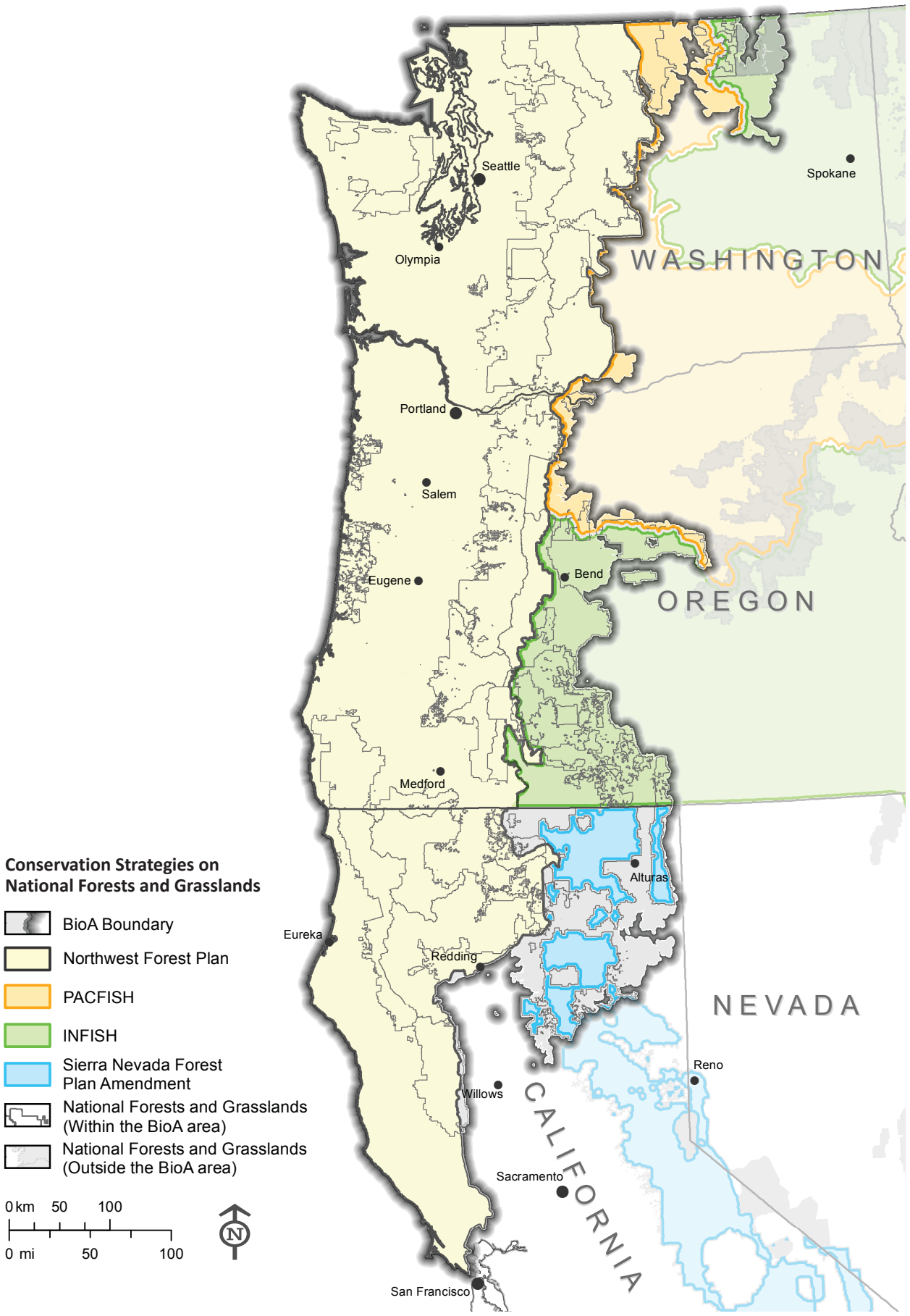


Figure Intro-4—Conservation strategies amending land management plans on national forests and grasslands across the BioA area. Most of the national forests in the BioA area were amended by the NWFP (72 percent) but INFISH (14 percent), PACFISH (3 percent), and the Sierra Nevada Forest Plan Amendment (10 percent) also influence land management plans within the BioA area.

Although there are benefits from consistent land management policy, **land managers struggle with a one size fits all management approach that does not always fit the circumstances.** For example, some plan direction hasn't worked well in distinguishing between the dry and wet forest ecosystems across the national forests and grasslands in the BioA area, especially given the fire adapted ecology of some forests. The landscape-level amendments have focused on protecting and developing habitat for aquatic and old forest-dependent species, and they don't necessarily reflect today's understanding of dynamic landscapes. Some habitat types in the wetter parts of the region, such as vegetation that emerges after forest-replacing disturbances, are becoming scarce across the landscape. And, although the Forest Service is one of the largest suppliers of outdoor recreational opportunities in the area, the NWFP and other land management plans and amendments lack modern direction supporting sustainable recreation.

The BioA offers management recommendations to address some of these challenges. As the modernization effort moves into individual national forest and grassland assessments, analyses, and planning, we will use the BioA as a tool during conversations with diverse stakeholders to more fully address the social aspects surrounding natural resource management.

We acknowledge that land management planning alone won't resolve conflicts in values or tradeoffs. We are committed to learning how and why stakeholders hold different values and to providing transparent public engagement opportunities throughout the entire planning process to increase shared learning and build trusting relationships. We believe that improving and maintaining trust among the Forest Service, Tribes, other agencies, local partners, and communities is essential to developing broadly supported land management plans, which help ensure that we're moving toward the desired conditions on the lands we manage.<sup>6</sup> With public and stakeholder participation, we'll determine what current land management plan direction should be carried forward and what can be improved upon based on new information, today's issues, and what best meets the needs of today's communities and stakeholders.



## What are Land Management Plans and Monitoring Plans and why we do them

The National Forest Management Act of 1976 requires that every national forest and grassland develop and maintain a land management plan. Plans set the overall management direction for a forest or grassland, guiding projects and activities on the ground. The process for developing and revising land management plans, along with the required content of plans, is outlined in Forest Service planning regulations, often referred to as the planning rule. The [2012 planning rule](#) created a collaborative and science-based planning process to guide management of national forests and grasslands so that lands are ecologically sustainable and contribute to social and economic sustainability. The planning rule emphasizes public involvement through every step of the planning process and specifies working with Tribal, state, and local governments.

Land management plans have integrated components that guide land management decision-making. **Desired conditions** are a description of specific social, economic and/or ecological characteristics of the plan area towards which progress can be made. **Objectives** are measurable and time-specific statements that, if achieved, would contribute to maintaining or reaching the desired conditions. **Standards** are a mandatory constraint on project and activity decision-making, often expressed as sideboards that are established to help achieve desired conditions. **Guidelines** are like standards, but they allow for departure from the terms, if the purpose of the guideline is met. Specific lands within a plan area are determined to be suitable or not suitable for various uses or activities, such as timber production, grazing, and road construction, based on the desired conditions for those lands. **Suitability of lands** is a required plan component, but need not be identified for every use or activity. A land management plan is also required to have a **plan monitoring program**. A broader-scale monitoring strategy is developed at the regional level for monitoring questions that are best answered at a scale larger than one forest or grassland. We use monitoring information to determine if changes are needed to the plan direction, the management activities, the monitoring program or, if we should reassess the current conditions and trends.

<sup>6</sup> Cerveny and others, 2018.

Most land management plans in the BioA area were written about 30 years ago, and a lot has changed since they were adopted and amended. Communities are better informed and are interested in working with the Forest Service to contribute to land management approaches and planning solutions that tackle complex social, economic, and ecological challenges across multiple boundaries and ecosystems. Today, there's a greater expectation that national forests and grasslands provide a range of ecosystem services, such as clean air and water. These lands also help people and communities build relationships with nature and serve as a repository of cultural and natural treasures for future generations.

Based on the findings in the BioA, the Forest Service may approach individual land management plan modernization by grouping national forests and grasslands based on geography, common issues, or ecosystems, if consistent management approaches are warranted. Or, it might be appropriate to complete region-wide or sub-region-wide plan amendments to modernize plans and ensure that consistent direction is developed and applied at the appropriate scale. The Forest Service might decide to combine some modernization approaches, and we'll consider other options, such as updates to Forest Service policy and regional forester direction. Regardless of the adopted planning strategy, we will sustainability manage national forests and grasslands in the BioA area to deliver long-term benefits and services to the communities and stakeholders that rely on our national forests and grasslands.

## Roadmap

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The BioA contains five chapters, bookended by an Introduction and Next Steps. There's a glossary at the end of the document to help clarify some words and terms used in the document and a reference section, also at the end, that provides a citation for each of the in-text references. After the Introduction, we focus on the importance of the communities we serve and the many benefits and services that national forests and grasslands can and do provide (chapter 1). Delivering the bottom line up front, we dive right into our 10 key management recommendations in chapter 2, summarizing potential updates to the existing land management plans in the BioA area. In chapter 3, you'll read about what's been working well under the existing plans, suggesting that some guidance and direction should be retained as we move through the modernization process. Chapter 4 acknowledges that there have been management challenges, and we talk about the potential opportunities for change that support the recommendations in chapter 2. Chapter 5 is an overview of key geographic considerations highlighting where similar challenges and opportunities for change are occurring across the landscape. The BioA closes with some initial thoughts on the next steps that we might take together as we move toward modernizing the Forest Service land management plans in the BioA area.

