Climate-Smart Forestry:

Climate-smart forestry is a holistic approach for addressing the management needs related to the existential pressures exerted from climate change. Recent impacts go beyond the biotic aspects of the forest and include social dimensions including economics and State financial obligations. Abiotic and biotic forces are driving a divergence of existing ecosystems and the future environment.

The Oregon Department of Forestry and the Oregon Board of Forestry have accepted a definition of climate-smart forestry that includes three legs: adaptation, mitigation, and the social dimension (including communities and economic aspects), and following this will help the Board and Department align with each other and with the State's federal counterparts which have been directed to center climate-smart agriculture and forestry in their own work and processes. Adaptation policy can help forests adapt towards more resilient landscapes through human intervention. Examples include changing forest structure, management approaches, and incentivizing efforts to incorporate climate change into management decisions. Adaptation tools can help forest landowners and managers assess their vulnerability to climate change. Mitigation policy and activities contribute to reducing temperatures through the removal of carbon dioxide from the atmosphere. Natural climate solutions like forests, agricultural lands, and blue carbon offer options to increase this mitigation through biologic sequestration. Policy approaches and levers that can be utilized include incentivizing practices to increase stored carbon in the forests, reducing emissions from forest activities (e.g., limiting slash burning and increasing alternative slash use), among others. Social license considers the impacts of adaptation and mitigation action on people, personal and community health, and community and rural economies. Utilizing climate smart forestry to create healthy, resilient forests that also provide ecosystem and economic benefits can help lift disadvantaged, underserved, natural resource dependent, and those living with intergenerational poverty.

https://doi.org/10.1371/journal.pclm.0000212

Cultural services Regulating services Provisioning services Supporting services

Forest Ecosystem services are the benefits provided by healthy, functioning ecosystems to humans; these services are categorized into the following four groups (Millennium Ecosystem Assessment 2005).

- 1. **Provisioning services**. Provisioning services are raw resources provided by forest ecosystems including but not limited to: sustainable and predictable supply of timber and *special forest products*; food, energy and mineral sources; and clean air and water.
- Regulating services. A regulating service is the benefit provided by a forest ecosystem's impact on natural processes such as carbon storage, water storage and purification, erosion and flood control and decomposition.
- 3. **Cultural services**. Cultural services are nonmaterial benefits provided by forest ecosystems such as sustenance; spiritual, recreational, aesthetic, and scientific benefits; and values as numerous and diverse as the people and cultures that use them.
- 4. Supporting services. Supporting services are necessary for the maintenance and support of all other ecosystem services. Forest ecosystems support the *function* of many systems including *nutrient cycling*, soil formation, pollination and seed dispersal, habitat for fish and wildlife and regional *biodiversity*.

Services to ecosystems are the actions taken by humans that support the continued resilience and adaptive capacity of ecosystems.

- 1. **Protecting Services**. Wildfire management activities, fish and wildlife habitat protection, integrated pest management, riparian and water protection, soil protection, sustainable harvest.
- 2. Enhancing services. Density management, seedling selection, nutrient cycling.
- 3. **Restoring services**. Post-wildfire restoration activities, fish and wildlife habitat restoration and enhancement, promoting carbon storage.
- 4. **Supporting services.** Cultural and natural resources stewardship practices, culturally significant vegetative species strategy, native seed sources, recreation management, educational and interpretive opportunities.

Forestry Plan for Oregon/Vision for Oregon's Forests

20230906-bof-item-10.pdf (oregon.gov)

Shared Stewardship Call-Out Box:

Urgent land management challenges like extreme wildfires, severe drought, and invasive species do not recognize property lines. Shared stewardship is a collaborative approach to land management that emphasizes partnerships across state, federal, private, and tribal landownerships. Shared stewardship approaches seek to identify joint priorities, explore opportunities, and develop cross-boundary strategies that make an impact on a landscape scale to create more resilient landscapes over time. The USDA Forest Service has created a three-minute animated video explaining the concept of shared stewardship, which can be watched at this link.

In 2019, Oregon's Governor and state and federal officials signed a Memorandum of Understanding (MOU) to document the commitment to work collaboratively to create a shared stewardship approach for implementing land management activities in Oregon. This MOU and the passage of Oregon Senate Bill 762 (2021) led to the development of a 20-year strategic plan known as Oregon's Landscape Resiliency Strategy.

This strategy prioritizes restoration actions and geographies for wildfire risk reduction to direct federal, state, and private investments. The process continually develops through a shared stewardship governance structure and engagement with tribes, state-level partners, and regional partnerships and collaboratives. More information on the strategy and governance structure of Oregon's mechanisms for implementing Shared Stewardship can be found on the ODF website at this link.

Partnerships Call-Out Box:

The board and agency recognize that our efforts alone will not achieve a comprehensive, all-lands approach to forest management. Successful partnership development, maintenance, and adjustment will be critical to achieving this vision. Some of these partnerships are longstanding and can be expected to endure for years, for example, state and federal agency partnerships. Other partnerships, for example, those with private landowners, organizations, tribal nations, and local collaboratives, may be strategy-specific and dynamic over time.

Each Forestry Plan for Oregon goal lists the partners, partner agencies, and constituents anticipated to play a vital role in achieving the goal. These lists are not all-encompassing and are likely to evolve. While partnerships with federal and state agencies will likely be consistent over time, more transient opportunities to engage with private landowners and organizations will also be leveraged.

The Landscape Resiliency Program is a prime example of how partnerships can be leveraged to fund and execute projects across ownership and funding types to achieve landscape-scale results. More information on these projects, collaborations, and outcomes can be found in the 2021-2023 Landscape Resiliency Program report on the ODF website at this <u>link</u>.

Place-Based: Finding solutions that are uniquely tailored to the geography and the relevant stakeholders for a given locale (Joe- 9/20)

Oregon is home to diverse and varied landscapes, ecosystems, and peoples. Developing natural resource management strategies that maintain environmental, human, and economic health requires consideration of local differences in both human and natural communities. Taking a place-based approach means finding solutions that are uniquely tailored to the geography and relevant human communities for a given locale, while still meeting broader regional, national, or global needs.

Place refers to both the natural-environmental context (a valley, mountain range, region, ecosystem, etc.) and the human context (human cultural history, economics, laws, etc.). Place-based strategies include goals and outcomes that reflect a balance of needs between the environmental and human components of a place. Understanding and achieving this balance can be challenging, but the Board and department are committed to open and equitable processes that attempt to bridge this often challenging divide.

Link analysis of resilience in spatial planning: https://doi.org/10.1007/s12061-022-09449-z

Call Out Box: Tribal Relations

There are nine federally recognized Indian Tribes in Oregon. These Tribes existed prior to the foundation of the United States of America and retain a unique legal status and provide a historic context to Oregon's natural resources. The Board and Department are committed to communicating, engaging, and partnering with the Tribes at a government-to-government level. This means acknowledging Tribal Governments as sovereign nations that have rights of self-determination. The nine Federally Recognized Tribes of Oregon have lived, worked, and played in Oregon since time immemorial, and partnering in natural resource stewardship is imperative given the challenges we face together, and the millennia of knowledge Tribes bring to ecosystem management in the Pacific Northwest. The Department's intent is to promote and strengthen inter-government relations, resolve potential concerns, and enhance the exchange of information, ideas, and resources for the greater good of all Oregonians.

Link: https://www.oregon.gov/odf/aboutodf/Pages/tribalrelations.aspx

A Vision For Oregon's Forests



Oregon Board of Forestry

and

Oregon Department of Forestry

Strategic Planning Document





Introduction

Social and ecological systems are in a time of transition and rapid change. Recognizing this, the Board of Forestry and Department of Forestry established a **Vision for Oregon's Forests** that responds to the call for a bold, forward-looking policy approach that will best serve forests and people in Oregon into the future.

Context and Commitments

The Board and Department recognize that:

Climate impacts are felt in every corner of the state and in dynamic and unpredictable ways. In today's evolving climate environment our forests represent both an asset and a threat to infrastructure, human health and safety, and the greater economy.

- Policies will be responsive and adaptable to global and local climate change, mitigating threats to human health and safety; and economies.
- Policies will strive for a reciprocal relationship between human cultures and forests as ecological systems.
- Policies will support economic development, diversification and innovation in the forest sector that promotes the adaptive capacity of forests.

Oregon's rural, urban and suburban populations have varying social perceptions and expectations about forests and how forests should be managed to benefit human populations and safeguard natural resources.

- Policies will be based on a comprehensive, all-lands approach, that will reflect the unique landscape and forestland ownership of Oregon, and will honor the complexity of relationships Oregonians have with Oregon's forests.
- Policies will be based on the best available information, and be applicable in a place-based manner to meet local, regional and statewide expectations of Oregonians.

The State has a unique and specific government-to-government relationship with 9 federally recognized Tribes in Oregon.

https://www.oregon.gov/odf/aboutodf/Pages/tribalrelations.aspx

 Policies will honor government-to-government relationships with Sovereign Nations; and meet obligations to protect tribal cultural resources.

Social expectations are shifting with calls for more inclusive, accountable decision making and recognition of inequities in our systems.

 Policies will seek to reflect and integrate the needs of all communities including those which have been historically marginalized.

Workforce supply and demand are changing, labor costs continue to increase, and there is growing uncertainty about the ability of managed forests to cover associated costs in this dynamic state of climate and social change.

 Policies will recognize the changing needs for a trained and skilled workforce that will support the work needed in Oregon forests. **About the Board of Forestry** (est. 1907): *The Mission of the Board and Department is to guide management of Oregon forests and fire to benefit all Oregonians.*

ADD a LINK

About the Department of Forestry (est. 1911): The Purpose of the Department is to engage communities, staff and resources to sustain and adapt forests and landscapes for social, economic and ecological benefits.

ADD A LINK

Glossary of Terms:

Climate-smart forestry: A holistic approach for addressing the management needs related to the existential pressures exerted from climate change

Complete and coordinated response system: Oregon's cross-boundary wildfire preparedness and response system which includes the coordinated efforts of federal, state, tribal and private partners.

Forest ecosystem services: Direct and indirect benefits to humans derived from forest ecosystems.

Place-based: General planning approach which emphasizes the characteristics and meaning of places as a fundamental starting point for planning and development. "Solutions that are uniquely tailored to a geography and the relevant communities or people for a given locale."

Silviculture: The growing and cultivation of trees.

Wildland-Urban Interface (WUI): The geographic area where structures and other human development meets or intermingles with wildland or vegetative fuels. A transition zone between wildlands and human communities.

GOALS and STRATEGIES

Resilient Forests

<u>Goal</u>: Policy and management decisions enable forest stands and landscapes to persist over space and time.

<u>Context</u>: Changes related to climate, social values and economics are resulting in changes to ecosystem functions and ecosystem services provided to our society. Society recognizes the importance of reciprocal relationships between humans and forests; relationships in which humans support forests so that forests can support humans and other species.

The range of components that describe forest complexity, structure and function in each ecoregion in Oregon will be defined at multiple spatial scales (stand- to landscape-level) and temporal scales (stand initiation to old-growth). Beyond the legal requirement of the Endangered Species Act, the Clean Water Act and the Clean Air Act, and state forest practices act rules, complex and functional forests representing a wide range of seral stages from complex early successional to old-growth contribute to maintaining populations of native species over space and time in each Oregon Forest Type. Active management over the complete lifecycle continuum utilizing science, continuous learning and stand conditions enhance complexity.

Communities in rural, suburban, and urban environments can support active forest management if each individual in those communities can see their values represented in the outcomes of that management. A wide range of values include clean water, clean air, fish, wildlife, aesthetics, and timber for jobs and housing, recreation, and others. Complex, actively managed and functional forest ecosystems in each of Oregon forest types hold the greatest opportunities for providing these values over space and time.

STRATEGIES

- Promote Stewardship Agreements https://www.oregon.gov/odf/fire/documents/shared-stewardship-mou-agreement.pdf that include ecological forestry principles that further forest complexity components, including diversity of regenerated woody and nonwoody species, a wide range of stand densities, extended rotations and increased retention of large legacy structures (live green trees, snags, and downed wood) during harvest activities.
- Support development of Safe Harbor Agreements and Habitat Conservation Plans in collaboration with landowners and the federal government.

- Support additional incentives including statutory changes that allow tax incentives for private landowners who implement Stewardship Agreements that make meaningful contributions towards forest complexity goals.
- Support exploring carbon markets that allow the development of complex functional forests to develop that also sequester and store carbon.
- Support Forest Legacy efforts to retain and manage forests for diverse goals, including forest complexity.
- Support active management to reach silviculture outcomes and landscape objectives.
- Support active management of forests where needed to protect human life and infrastructure, especially in the WUI.
- Support active management that increases and encourages regeneration after disturbance while also considering other benefits created by disturbance and need for landscapes to be resistant to, resilient to and adaptable to fires, wind, floods and other disturbances of varying intensity and frequency over space and time.
- Adopt new, and revise existing, Oregon Administrative Rules pertaining to harvest and reforestation to incentivize retention and development of forest complexity components.

Resilient Communities

<u>Goal</u>: Policy and management decisions foster healthy relationships between humans and forests, so that forests support resilient human communities through social, economic, and ecological change.

<u>Context</u>: Forests have both direct and indirect effects on quality of life, economic opportunities for communities, and ecological conditions in rural, suburban, and urban areas across the state. Resilience varies regionally and between communities of place and culture. Forests provide a range of benefits to Oregonians and contribute to community resilience. Place-based and scientifically informed management approaches support forests to contribute a full range of benefits to enhance community resilience by meeting their needs.

STRATEGIES:

 Promote access to healthy forests for recreation, culture, education, and appreciation, in ways that are welcoming and inclusive for a wide range of needs that are important to Oregonians. Ensure access that respects cultural resource protections, private ownership and natural resources.

- Promote forest and forestry related educational programs, technologies, pilot projects, forest management jobs, infrastructure and other tools to invest in the sustained economic viability and vitality of communities.
- Ensure management of forests contributes to clean water and air for all Oregonians.
- Educate and engage communities on forest issues
- Employ shared stewardship to support collaborative management across ownerships, promoting diverse strategies that maintain environmental and economic values.
- Take a place-based approach to supporting resilient communities that recognizes unique characteristics of that place.

Wildfire Resiliency

<u>Goal</u>: Suppress, manage, mitigate and recover from wildfire to protect communities, allow natural ecosystem processes, and promote the adaptive capacity of Oregon's forests.

Context:

Wildfire has been a force that has helped shape Oregon's forests for millennia. Both natural and human induced fire, and the suppression of fire, have played important roles in creating the forests we have today. Across Oregon, fire in forests has always existed in a variety of regimes, from frequent, low intensity fire to stand-replacing events, and mixed severity fires that present a spectrum of disturbance patterns. Historically, humans see most wildfire as a threat, and more recently, increased development in forested areas and extended periods of drought have resulted in a growing threat to human life and property. At the same time, decades of fire suppression have created a departure from historic fire regimes that inadvertently increases the threat to humans and interrupts normal ecological processes. This plan seeks a balanced approach that recognizes the role of fire suppression in providing protection to life and property, the need for active management to mitigate hazards and control forest fuels, and to allow for natural fire to occur where appropriate. Placebased solutions based on robust assessments of current conditions and desired outcomes will be essential to promoting forests that are resilient and can provide abundant benefits to Oregonians.

STRATEGIES

- Align with the National Cohesive Wildland Fire Management Strategy
 https://www.forestsandrangelands.gov/documents/strategy/natl-cohesive-wildland-fire-mgmt-strategy-addendum-update-2023.pdf
 - Restore and maintain landscapes
 - Support fire adapted communities; and
 - Respond to fire
- Advance the implementation of the 20-Year Landscape Resiliency Strategy
 https://www.oregon.gov/odf/fire/documents/olrs-progress-report.pdf
 and all-lands shared stewardship across Oregon.
- Maintain a high quality complete and coordinated wildfire preparedness and response system.

Climate Leadership

<u>Goal</u>: The Board and Department will be leaders in promoting climate-smart forest policies and actions.

<u>Context</u>: The Board adopted its Climate Change and Carbon Plan in November 2023, which centered climate-smart forest management to guide activities contributing to adaptation and mitigation, as well as social dimensions of the effects of climate change. Climate-smart forestry is a holistic approach for addressing the management needs related to the existential pressures exerted from climate change.

Link to CCCP: https://www.oregon.gov/odf/forestbenefits/Documents/odf-climate-change-and-carbon-plan-draft.pdf

STRATEGIES:

- Silviculture: Establish a just and equitable transition to climate-informed silviculture and climate-smart forestry that optimizes climate mitigation and adaptation, while maintaining a sustainable flow of wood products to ensure long-term resource benefits and viability of the forest products industry and flow of long-lived forest products.
- Fire: Modernize Oregon's complete and coordinated wildfire protection system to respond to the increased severity of wildfire. Promote fire and smoke-adapted communities in the wildland urban interface and beyond, to mitigate the impacts of climate-induced increases in wildfire severity.

- State forests management: Lead by example and demonstrate climate-smart forest management on State Forests to achieve adaptation, mitigation, and the achievement of forest resource goals.
- Restoration: Accelerate the pace, scale, and quality of climate appropriate forest restoration to increase the resilience to increased wildfire, drought, and biotic disturbance severity and incidence. Support implementation of the recommendations of the Governor's Council on Wildfire Response.
- Urban forests: Increase the extent and resilience of urban and community forests to maximize the climate mitigation and health benefits of urban forest canopy.
- Post-fire: Facilitate and encourage the reforestation of areas burned by wildfire and afforestation of low-productivity lands that are understocked or not in forest use.
- Conservation: Support a strong, but flexible, Land Use Planning System as a cornerstone of maintaining Oregon's forests on private lands.
- Research and monitoring: Maintain a research and monitoring program to track the status and trends of ecological, economic, and social indicators and the effects of climate change and to track progress related to this plan.

Organizational Excellence

<u>Context</u>: Oregon state agencies have an obligation to the Oregonians they serve to continually improve business processes to promote organizational efficiency and effectiveness in their delivery of services. This includes being transparent, accountable and fiscally responsible. In order to achieve this, ODF's operations must be integrated and aligned through shared common policies, goals and objectives that support direction provided by the Board, Executive Branch and Legislature. Engaging with partners, urban and rural communities, local governments and Sovereign Nations is essential. Operational excellence requires a well-trained, highly competent and diverse staff of professionals.

STRATEGIES

- Create and maintain strategic and operational plans that support accomplishment of FPFO goals.
- Collaboratively develop strategic and operational plans.
- Work with other state and federal agencies to leverage efficiencies and opportunities to accomplish individual and shared goals and objectives.
- Increase transparency into agency operations and performance through clear, accurate and easily accessible reporting.
- Continue to build a strong and diverse agency workforce.

• Establish and maintain visible regulatory programs with consistent enforcement of laws and rules.

Additional Resources

Context/Further Information

LINKS will be provided

Climate-Smart forestry

National Wildfire Cohesive Strategy

Diversity, equity and inclusion

Tribal relations

Place Based implementation

Ecosystem services

Reference Materials:

National Cohesive Wildfire Management Strategy:

https://www.forestsandrangelands.gov/documents/strategy/natl-cohesive-wildland-fire-mgmt-strategy-addendum-update-2023.pdf

Pacific Northwest Quantitative Wildfire Risk Assessment: https://pnw-quantitative-wildfire-risk-assessment-osugisci.hub.arcgis.com/

Oregon Forest Action Plan: https://www.oregon.gov/odf/Documents/aboutodf/OregonActionPlan.pdf

ODF Diversity, Equity and Inclusion Action Plan 2023-25: hyperlink coming

ODF/Tribal Relations: https://www.oregon.gov/odf/aboutodf/Pages/tribalrelations.aspx

Shared Stewardship MOU: https://www.oregon.gov/odf/fire/documents/shared-stewardship-mou-agreement.pdf

2021-2023 Landscape Resiliency Program Report:

https://www.oregon.gov/odf/aboutodf/documents/2023-odf-sb762-landscape-resiliency-program-report.pdf

Peer reviewed: Climate-Smart Forestry: Promise and risks for forests, society, and climate. https://doi.org/10.1371/journal.pclm.0000212

Peer reviewed: Meta-Overview and Bibliometric Analysis of Resilience in Spatial Planning – the Relevance of Place-Based Approaches. https://doi.org/10.1007/s12061-022-09449-z

2024 Finalize Vision/Action Planning and Implementation

(Winter/Spring)

Community Engagement / Public Review

Department Action Planning to align with 2024 Vision

Update Indicators and Key Performance Measures to reflect 2024 Vision

(Spring)

Department Action Planning

(Summer/Fall)

Progress Tracking

(Fall)

Board Annual Progress Update

Oregon Board of Forestry Vision for Oregon's Forests Topic Agenda October 19, 2023 Medford, OR

<u>Purpose:</u> Today's discussion of the Vision for Oregon's Forests is intended to bring the full Board and ODF Executive Team together for a discussion of the comprehensive draft containing Introduction, BOF/ODF Joint Mission, Goals & Strategies; and Additional Resources

8:30 a.m. Opening Comments and Debrief Community Event - Jim Kelly, Cal Mukumoto, others

8:45 a.m. Vision for Oregon's Forests Comprehensive Review

Subcommittee introduce a section, Robin and Ryan Gordon facilitate feedback/dialogue

- Introduction Ben Deumling?
- Resilient Forests Joe Justice?
- Resilient Communities- Brenda McCom?
- Wildfire Resiliency- Dave Larsen?
- Climate Leadership Mike Wlson?
- Organizational Excellence Ryan Greco?

10:15 a.m. Break

10:30 a.m. Vision Discussion and Next Steps

Gauge alignment and any tasks to complete the sections above. Discuss 2024 activities to finalize and implement the Vision

Determine Board and ET alignment on the Vision to inform next steps.

12:30 p.m. Break for Lunch