

# Proposed Goals, Strategies, and Measurable Outcomes

## November 7, 2018

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## Introduction

This narrative describes a draft set of goals, measurable outcomes, and strategies associated with the Forest Management Plan (FMP), setting the stage for an overall integrated forest management strategy.

Additional documents provide greater insight into the managed land base and the specifics of how implementation occurs (Figure 1). These documents include:

- 1) Guiding Principles, adopted by the Board of Forestry, ground the goals and strategies in this document.
- 2) A Resource Assessment provides details for each managed forest resource. The Assessment provides a baseline assessment, and describes current issues and priorities to inform the Adaptive Management Plan, Implementation Plans, and Operations Plans.
- 3) An Adaptive Management Plan, which establishes a process that ensures the Implementation and Operations Plans adjust based on the current and expected condition of state forest resources and implementation of strategies through best available science.
- 4) Implementation Plans, which describe tactical planning and implementation on specific tracts of ownership. These plans are expected to cover periods of 5-10 years.
- 5) Operations Plans, which describe operational activities and implementation on specific tracts of ownership, typically at a smaller scale than the Implementation Plans. These plans are expected to cover periods of 1-3 years.
- 6) Budgets, which allocate resources toward implementation of Division priorities on an annual and biennial basis and determine the funding level for Division operations.

The goals, strategies, and measurable outcomes described in this document build on the Board of Forestry's guiding principles, and together with the documents described above fit into an overall planning and implementation process (Figure 1).

**Plan components:** The FMP includes guiding principles, goals, strategies, and measurable outcomes. The FMP also includes guidelines for asset management, adaptive management, and implementation. The Adaptive Management Plan (AMP) assesses outcomes against quantifiable targets, and informs policy standards for implementing the plan.

**Process flows:** There is a clear hierarchy of guidance in the planning process. The FMP directs Implementation Plans, which in turn direct Operations Plans. Funding levels determine the amount of financial resources available to implement operations. The AMP is key to successful implementation; it takes implementation results as inputs and provides feedback to Implementation Plans, Operations Plans, and Funding Levels. Performance measures serve as a feedback loop to the BOF to determine if the FMP is achieving the desired outcomes. The Resource Assessment is a stand-alone document that informs management decisions for Implementation Plans.

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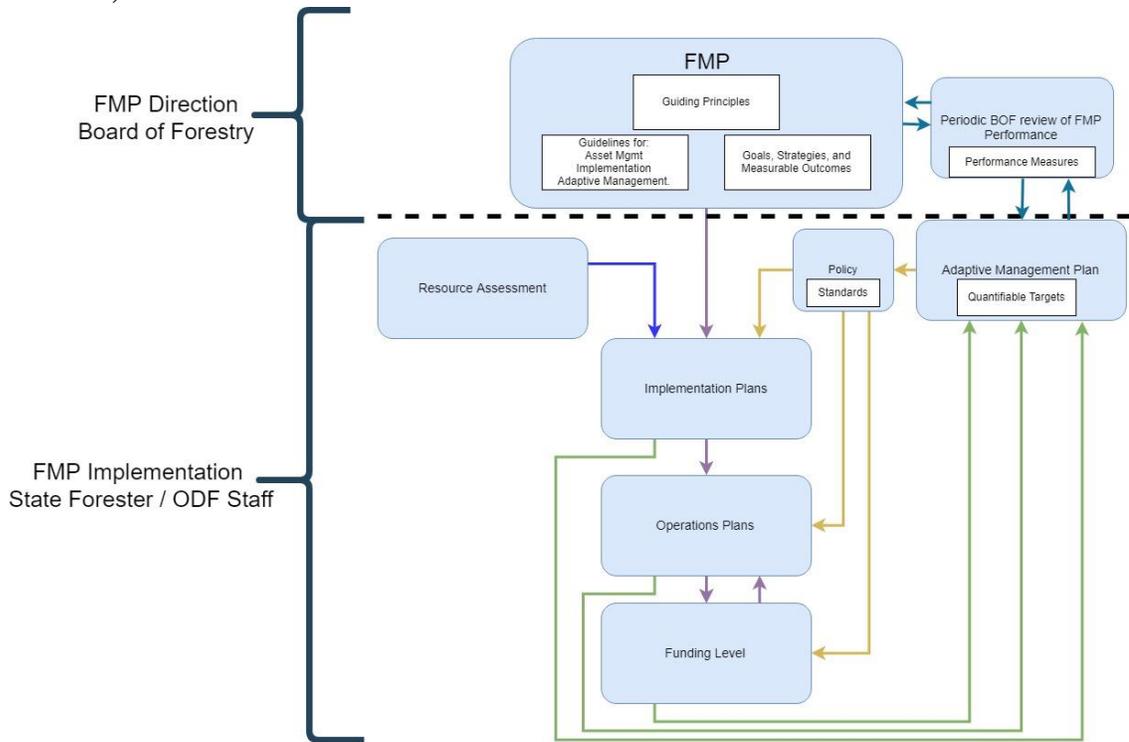


Figure 1. Draft diagram of plan components and the adaptive management process.

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## Goals, Strategies, and Measurable Outcomes

**Goal** – Goals are statements of what the State Forester intends to achieve for each forest resource within the planning area consistent with the Greatest Permanent Value rule (OAR 629-035-0020). Goals are required by the Forest Management Planning rule (OAR 629-035-0030). Goals may apply to multiple guiding principles.

**Strategy** – Strategies describe how the State Forester will manage the forest resources in the planning area to achieve the goals articulated in the plan. Strategies identify management techniques the State Forester may use to achieve the goals of the plan during the implementation phase of the plan. Strategies are required by the Forest Management Planning rule (OAR 629-035-0030). Strategies may apply to multiple goals.

**Measurable Outcome** – Measurable outcomes are the quantifiable results of strategies that can be used to assess progress towards achieving goals and evaluate alternatives and tradeoffs. They form the basis for adaptive management because they can be used to monitor resource status and trends that are responsive to strategies and management standards. A measurable outcome may apply to multiple strategies.

There is an extensive list of potential measurable outcomes identified in this document. Ultimately, a prioritized subset of measures will be contained in the plan and form the basis of the AMP. The measurable outcomes will also inform the development of a small number of Performance Measures that can be reported to the Board of Forestry with an established and meaningful frequency.

The following sections detail resource-specific goals, strategies, and measurable outcomes. Often, the individual strategies listed below can be common to more than one resource goal. Not all goals will have measurable outcomes that are easily monitored and measured, or meaningful; in these cases no measurable outcomes are proposed.

Landscape-wide integrated goals and strategies are often needed to balance competing resource-specific goals. This integrated approach will help maintain consistency between the Board of Forestry intent, FMP, and Greatest Permanent Value mission. In this document, there is little or no intent to integrate these common strategies or to relate them individually to the wider landscape-wide goals. These “integrated strategies” will be developed further in later documents following Board of Forestry direction.

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## Timber Production and Harvest

The timber harvest portion of the plan has four goals. These goals consider the direction provided in all Guiding Principles, but the primary guidance comes from Guiding Principles 1, 3, 4, 6, 7, 8, 9 (Appendix A).

### Goals

1. Timber revenue contributes toward financial viability of the State Forests Division.
2. Sustainable timber harvests that contribute revenue to State Forests and Counties.
3. Direct and indirect financial contributions to local and state governments.
4. Local support for employment in a diversity of job types.

### Strategies

1. Actively manage the state forest landscape and individual forest stands while considering an appropriate blend of economic, environmental, and social outcomes.
  - a. Time regeneration harvest of stands to balance volume, financial return, and other resource objectives. Rotation ages may vary to balance harvest goals with other resource goals.
  - b. Implement thinning prescriptions that maintain or enhance the balance of volume, financial return, and other resource goals.
  - c. Prioritize stands for harvest and silvicultural treatment using multiple criteria, such as stand condition, growth rate, forest health, and harvest revenue.
  - d. Rehabilitate understocked and underproductive stands to improve volume, financial return, and resource outcomes for wildlife, carbon storage, and forest health.
  - e. Implement reforestation and young stand management prescriptions to balance volume, financial return, and other resource objectives.
2. Apply standards for silvicultural techniques and conservation strategies.
  - a. Standards may vary on the landscape, depending on stand-specific goals. Standards for silvicultural techniques, legacy structure, and others may shift as necessary.
  - b. Balance the goals for all strategies when implementing a harvest schedule. Strategies may include:
    - i. Spatially explicit areas with a range of standards based on stand characteristics and nexus to other stands (e.g., connectivity);
    - ii. Creation of stand types through timber harvest that creates a variety of habitat types, patch sizes, and patch placement on the state forest landscape over time (e.g., thinning, patch cuts, skips, species-specific selection); and
    - iii. Balance timber harvest for stands that underperform from a volume or value perspective, or have forest health issues with funding levels.
3. Actively manage the state forest landscape to incorporate silvicultural treatments that integrate harvest objectives with habitat and other conservation objectives at a landscape level.

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4. Develop plans for each district that provide more specific direction, including timber harvest objectives, at time intervals no longer than 10 years.
5. Implement adaptive management measures that are informed through monitoring results.

## Measurable Outcomes

1. Ratio of average timber revenue to average expenditures over implementation period (percent).
2. Net Present Value (NPV, dollars). NPV is an estimate of the fair market value of the forest based on discounted cash flow (DCF) analysis of all anticipated management and harvest activities. At the landscape and forest management plan level, NPV is useful for evaluation of alternative investments in silvicultural treatments, rehabilitation, capital expenditures, and harvest scheduling.
3. Revenue generated from timber sale program over implementation period (dollars).
4. Ratio of timber harvest volume to Periodic Harvest Objective (percent).
5. Average timber volume sold by county over an implementation period (MMbf).
6. Total area of timber sales sold by harvest type (both regeneration harvest and thinning harvest) over an implementation period (acres).
7. Revenue distribution to county governments over an implementation time period (dollars)<sup>1</sup>.
8. Estimated jobs (direct and indirect) attributed to State Forests' annual timber harvest (number of jobs).

## Geology and Soils

The geology and soils portion of the plan has five goals. These goals consider the direction provided in all Guiding Principles, but the primary guidance comes from Guiding Principles 1, 2, 3, 4, 5, 8 (Appendix A).

## Goals

1. Risks from road-related landslides are minimized and mitigated.
2. Risks to the aquatic environment from canopy removal are minimized and mitigated, and naturally functioning landslide processes are maintained.
3. Risks to public safety from harvest-related activities on steep and unstable slopes are minimized and mitigated.
4. Loss of soil from harvest operations is minimized and mitigated.
5. Soil productivity is fully realized.

## Strategies

1. Obtain evaluation of risk to resources from geotechnical or engineering specialists prior to:

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<sup>1</sup> Note: The actual distribution is expected to fluctuate more than the volume measurable outcome from Goal 2, because there are three-year timber contracts, and purchasers have the flexibility to vary harvest from year-to-year. Variability should be considered for any quantifiable target.

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- a. Final layout of road alignments, large fills, retaining walls, waste area locations, slope stability mitigations, or when activities cross areas of active or formerly active slope movements.
  - b. Harvest on unstable slopes with potential to deliver sediment to aquatic resources.
  - c. Road-building or harvest on high landslide hazard locations located above structures and public roads.
2. Adapt logging methods and type of equipment to the slope, landscape, and soil properties of a harvest unit.
  3. Maintain organic materials in the soil and consider leaving slash, cull logs, downed wood, and snags following harvest operations.
  4. Implement site preparation techniques for tree planting that maintain organic materials in soils when feasible.
  5. Enhance soil nutrient deficiencies through a variety of treatments (e.g., fertilization).
  6. Implement site-appropriate silvicultural treatments that fully utilize soil productivity.

## Measurable Outcomes

1. Road-related landslides: Applicable road locations reviewed (count).
2. Road-related landslides: Road-associated landslides (count, volume and fill depth).
3. Canopy removal: Timber sale units reviewed by geotechnical specialist (percent).
4. Canopy removal: Harvest unit slope failures carrying large wood delivering to aquatic features (percent).
5. Canopy removal: Slope buffers applied to harvest units (acres).
6. Public safety: Timber sale units reviewed by geotechnical specialist (percent).
7. Public safety: FPA citations or unsatisfactory conditions (count).
8. Loss of soil: FPA citations or unsatisfactory conditions (count).
9. Soil productivity: Understocked and underproductive stands rehabilitated (acres).
10. Soil productivity: Ratio of average MAI at final harvest to average CMAI (avg. MAI/avg. CMAI).
11. Soil productivity: Soils treated with soil amendments (acres).

## Roads and Access

The roads and access portion of the plan has five goals. These goals consider the direction provided in all Guiding Principles (Appendix A).

## Goals

1. Facilitate achievement of timber harvest goals.
2. Meet water quality standards and facilitate achievement of aquatic habitat goals.
3. Minimize risk of road-related landslides.
4. Provide for safety of the anticipated road users.

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5. Facilitate the anticipated management and fire protection activities necessitated by the Forest Management and Implementation Plans.

### Strategies

1. Maintain a spatial geodatabase containing attributes of roads, trails, bridges and culverts for transportation planning and tracking.
2. Coordinate transportation planning with planning for timber harvest, reforestation, and recreation.
3. Road construction or reconstruction in areas identified as critical locations will be field-reviewed by the geotechnical specialist, state forests engineer or both. Critical locations include but are not limited to areas with potential for slope instability, public safety risks or impacts to water quality.
4. Utilize transportation planning to minimize or mitigate the potential of landslides and delivery of sediment to streams.
5. Construct, improve, and maintain landings, roads and trail systems using engineering design, construction techniques, and maintenance programs utilizing best management practices consistent with the type and level of use, level of difficulty and hazard, amount of resource risk, and the minimum standards set by the Forest Roads Manual, State Forests Engineering Policy and the Forest Practices Act.
6. Utilize durable surfacing, filtering, settling, traffic management and other best management practices to meet or achieve water quality standards related to wet weather hauling.
7. Manage traffic flow on the transportation system.
8. Monitor conditions of the transportation system at the appropriate level and adjust priorities as needed to react to infrastructure needs, safety, and changing environmental conditions.
9. Coordinate with local fire protection staff and adjacent landowners to identify risks and improve transportation systems to facilitate fire location and suppression.
10. Construct and maintain stable road prisms and landings that eliminate or minimize soil and rock from sliding or toppling.
11. Minimize - through evaluation, maintenance, and improvements of road drainage structures - opportunities for the erosion of soils and aggregate from the road prism.
12. Construct and maintain culverts, bridge spans, and fills near streams so high flows are not constricted, ponded or diverted, and downstream bank/bed erosion is not exacerbated by upstream activities.
13. Disconnect, to the amount practicable, road drainage from natural waterways, so that it dissipates on the forest floor.
14. Evaluate road alignments to ensure proposed activities do not destabilize surrounding terrain.
15. Protect soils from disturbance and deterioration by adapting logging methods to soil and slope conditions.

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### Measurable Outcomes

1. Ratio of miles of planned new road construction to facilitate timber harvest to planned harvest volume.
2. Ratio of miles of planned road improvement to facilitate timber harvest to planned harvest volume
3. Fish passage projects completed (count/description).
4. Fish habitat re-opened (miles).
5. Projects that improve drainage and reduce hydrologic connectivity (count/description).
6. FPA citations or unsatisfactory conditions (count/actions taken).
7. Landslides associated with road maintenance, construction, or drainage failures (count).
8. Material delivered to water courses from road-associated slope failures (estimated volume).
9. Stabilization of fills and side-cast to meet road standards (miles).
10. Specific projects to improve safety (count/description).

### Forest Health

The overall goal of forest health is to provide science-based best management practices and implement treatment programs that prevent or mitigate agents that have a negative impact on forest health. The forest health portion of the plan has two goals. These goals consider the direction provided in all Guiding Principles, but the primary guidance comes from Guiding Principles 1, 2, and 5 (Appendix A).

### Goals

1. Healthy forest conditions are maintained or restored using best management practices to promote sustainable, productive, and resilient ecosystems.
2. Current forest health data is readily accessible to field staff and is fully integrated into decision-making criteria.

### Strategies

1. Actively manage the forest through the application of science-based silviculture and ecological forestry within stands and across the landscape to create a variety of forest conditions that are resistant to disturbance events.
2. Employ young stand management practices appropriate for individual sites to ensure successful stand initiation and development.
3. Use integrated pest management (IPM) to suppress or prevent unacceptable pest damage.
4. Develop and maintain an Early Detection and Rapid Response (EDRR) program for the potential introduction of new exotic pests. Cooperate with other agencies and associations to prevent the introduction of non-native pests.
5. Implement State Forest Program's Swiss Needle Cast (SNC) Strategic Plan.

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6. Use aerial, ground, and insect trapping surveys to monitor forest health to inform management decisions across the landscape.
7. Maintain spatial data for long-term tracking, and integrate forest health information into forest management decisions.
8. Provide training and outreach to field staff when new disease agents are detected to help with EDRR and IPM implementation.
9. Provide periodic forest health updates and provide expertise in best management practices.
10. Participate in research and cooperative programs that actively enhance forest health and biodiversity.
11. Incorporate forest health components into the State Forests forest inventory at the appropriate spatial and temporal scales to support planning and ascertain long-term forest health trends.

### Measurable outcomes

1. Forest land improved or restored compared to forest land acres identified for restoration in Implementation Plans (acres).
2. Forest land affected by key forest health issues, including pathogens and physical disturbance (acres).
3. Implementation Plans clearly identify forest land acres prioritized for restoration.
4. Long-term trends for key forest health issues affecting forest lands.

### Carbon

The carbon portion of the plan has one goal. This goal considers the direction provided in all Guiding Principles, but the primary guidance comes from Guiding Principle 11 (Appendix A).

### Goal

Maintain or improve contributions to Oregon's carbon stores.

### Strategies

1. Implement harvest practices that minimize soil disturbance.
2. Coordinate with state and federal agencies to identify, evaluate, and implement projects that enhance the long-term sequestration of forest carbon.
3. Implement log utilization standards that enhance carbon storage in durable wood products.
4. Maintain and enhance long-term soil productivity through:
  - a. Silvicultural practices and prescriptions that enhance long-term carbon storage;
  - b. Rehabilitation and restoration of underproductive and understocked stands; and
  - c. Use of reforestation prescriptions and species adapted to local site conditions.
5. Mitigate fire risk through forest operations, fuel reduction projects, and public education.
6. Address forest health impacts from pests and disease.
7. Adapt policies, standards, and practices to improve forest resilience as new information on the effects of climate change, forest health, and carbon storage become available.

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### Measurable Outcomes

1. Carbon in forest pools (C).
2. Carbon stored in harvested wood products (C).
3. Risk of wildland fire and associated emissions (C).

### Wildlife

The wildlife portion of the plan has three goals. These goals consider the direction provided in all Guiding Principles, but the primary guidance comes from Guiding Principles 1, 2, 4, 6, 7, 10, and 11 (Appendix A).

### Goals

1. Foster and enhance functional and resilient systems and landscapes to support native wildlife communities.
2. Provide the variety and quality of habitat types and features necessary for long-term persistence of native wildlife species.
3. Maintain and enhance recreational opportunities for interacting with wildlife.

### Strategies

1. Manage habitat for diversity at all levels of biological organization (e.g., genes, individuals, species, communities, ecosystems).
2. Incorporate ecosystem function (processes, systems, groups) into planning, management, and monitoring.
3. Foster and maintain redundancy at various ecological scales (e.g., species, stand types).
4. Manage for diverse habitats across the landscape and over time.
  - a. Manage for a diverse array of seral stages, stand structures, and stand sizes.
  - b. Protect, maintain, and enhance habitats that account for the range of forest types, topography (slopes, aspects, elevations), and habitat features at the district level.
  - c. Identify and protect rare and unique habitats, particularly those that are fragile or sensitive to disturbance.
5. Manage for complex habitats, of all ages, with the full suite of habitat features within and across watersheds.
  - a. Promote structural complexity at stand and landscape scales.
    - i. Protect, maintain, and enhance legacy structures, including remnant old-growth trees, residual green trees, snags, and downed wood. Allow exceptions for public safety.
    - ii. Promote vertical layering where habitat restoration or enhancement are primary concerns or compatible with other goals and where species composition makes this strategy reasonably attainable.
  - b. Promote compositional diversity at stand and landscape scales.
  - c. Promote spatial heterogeneity at stand and landscape scales.

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- d. Adapt standards to region and stand goals (e.g., habitat enhancement, forest restoration, fuels and fire risk, timber production, harvest age), and over time as stand and landscape conditions change.
6. Manage for functional landscapes for native wildlife.
  - a. Create a variety of patch types, patch sizes, and patch placement over time;
  - b. Provide for adequate interior forest habitats; and
  - c. Maintain connectivity between habitats, and broad landscape permeability, for diverse wildlife species including species of concern.
7. Protect, maintain, and enhance habitat for Species of Concern (SOC).
  - a. Comply with ESA requirements and adopt management strategies that contribute to the survival and recovery of currently listed threatened and endangered species, and maintain habitat for species of concern to reduce the need for future listings.
  - b. Conduct Species Assessments to identify species of concern for state forest lands and assess if plan-level habitat strategies are adequate or if additional strategies are needed.
  - c. Collaborate across ownership boundaries.
8. Use active management to meet habitat objectives over time and across the landscape.
  - a. Identify areas with potential to provide complex habitat and develop and implement prescriptions to protect, maintain, and enhance habitat features.
  - b. Implement restoration activities where forest health is of concern and incorporate habitat values in harvest prescriptions and subsequent young stand management where appropriate.
  - c. Identify areas where habitat enhancement is needed and compatible with other goals, and develop and implement appropriate harvest prescriptions or other projects.
9. Consider regional and landscape context (e.g., ownership patterns, habitat distribution, and occupancy by species of concern) when implementing above strategies.
10. Implement an Adaptive Management Plan that evaluates implementation, experiments with techniques, and considers best available science (e.g., trials, monitoring).
11. Improve existing recreational access and provide new access, where appropriate (e.g., trails).
12. Provide wildlife education and interpretation opportunities (e.g., Tillamook Forest Center, social media).
13. Minimize recreational impacts to sensitive wildlife species (trash management and travel management, Off-Highway Vehicles, target shooting, resource sites, important habitats, sensitive sites).
14. Identify and promote local and seasonal wildlife viewing opportunities.
15. Conduct appropriate outreach to existing or potential recreation and education user groups.

### Measurable Outcomes

1. Forest types and plant associations (acres).
2. Reforestation by tree species (acres).

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3. Diversity indices for species assemblages (e.g., plants, soil microorganisms, fungal communities, aquatic invertebrates, bird communities).
4. Areas that may be vulnerable to climate change effects identified and managed according to Plan goals (acres; entails modeling).
5. Forest age classes (acres).
6. Areas designated for habitat (acres by age classes or seral stages or habitat types of interest).
7. Fragmentation metrics [e.g., patch size distribution (acres), interior habitat (acres), proximity of similar patches].
8. Green trees in harvest units (trees/acre by dbh).
9. Snags in harvest units (snags/acre by size and decay class).
10. Downed wood in harvest units (cubic feet/acre by size and decay class).
11. Diversity of forest and habitat types (diversity indices).
12. Stand-level spatial heterogeneity (heterogeneity indices for vertical and horizontal structure).
13. Collaborative efforts/projects and scope of impact (count).
14. Restoration and enhancement projects (count).
15. Habitat enhancement projects (count).
16. Areas with improved access that enhances opportunities to see wildlife (count).
17. Wildlife interpretive signs, tours, and volunteer opportunities (count).
18. Recreation impacts (trash, OHVs etc.) mitigated or removed at sensitive sites (count).  
Hunters and anglers reporting use of BOF lands (ODFW data) (count).

### Aquatics

The aquatic resource portion of the plan has five goals. These goals consider the direction provided in all Guiding Principles, but the primary guidance comes from Guiding Principles 1, 2, 4, 5, 8, 10 and 11 (Appendix A).

### Goals

1. Minimize and mitigate the short- and long-term impacts of climate change on aquatic resources.
2. Maintain, protect, and enhance aquatic habitats to promote properly functioning aquatic ecosystems that support the full range of aquatic species including salmonids, other native fish species including lamprey, beavers, amphibians and other aquatic organisms.
3. Maintain the natural functions and attributes of wetlands over time and ensure that no net loss of wetlands occurs as a result of management activities.
4. Manage recreational use of the forests to minimize adverse impacts to riparian and aquatic resources and adjacent ownerships.
5. Meet the requirements of federal and state regulations for aquatic resources such as the Federal Endangered Species Act and Federal Clean Water Act and Oregon's Statewide Planning Goals (e.g., OAR 660-015-0000(5) and (6)).

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## Strategies

1. Maintain a geodatabase that characterizes all stream segments and wetlands within State Forests by size, fish use, and flow duration and wetland persistence. This database will be regularly updated and used to inform and direct our management practices and conservation strategies.
2. Establish riparian buffer strategies appropriate to maintain, protect, and enhance ecological function of aquatic features (e.g., wetlands, lakes, ponds, bogs, seeps, and springs).
  - a. Classify streams by stream size (small, medium, and large), presence of fish, and flow duration (perennial or seasonal). Seasonal streams are further classified as high debris flow potential or other.
  - b. Establish and maintain standards, including a no-harvest buffer for all perennial streams, all fish streams, and seasonal streams of high debris flow potential.
  - c. Establish and maintain standards including an equipment exclusion zone, variable tree retention, and retention of sub-merchantable vegetation or shrubs for other and small seasonal streams.
  - d. Apply specific strategies to other aquatic habitats (e.g., wetlands, lakes, ponds, bogs, seeps, and springs) to conserve, protect, and enhance ecological function.
  - e. Align these management strategies with applicable species of concern strategies as published by state (ODFW) and federal (USFWS) agencies such as the conservation of amphibians in small headwater streams.
3. Apply alternative vegetation treatment within the riparian zone to achieve habitat objectives.
  - a. Implement vegetation treatment projects using a multi-disciplinary approach and (where possible) through interagency coordination.
  - b. Monitor alternative vegetation treatment projects.
4. Enhance aquatic habitats to promote healthy aquatic ecosystems
  - a. Design and implement aquatic projects that promote the recovery of species listed under the federal endangered species list such as selected salmonid species.
  - b. Assess and identify opportunities for improving aquatic conditions for keystone species or a species of concern, as defined by federal or state agencies.
  - c. Report all riparian and aquatic restoration projects to Oregon Watershed Enhancement Board (OWEB) that qualify as OWEB projects.

## Measurable Outcomes

1. Department of Environmental Quality (DEQ) 303d<sup>2</sup> listed streams listed for temperature (miles, count).
2. Streams in compliance with DEQ's cold water standards (percent).
3. Stream habitat quality that include large wood abundance, riparian shade, and reduction in fine sediment as measured by ODFW's aquatic habitat inventory program.

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<sup>2</sup> A stream listed on the 303d list means the stream has been identified as impaired or threatened due to an environmental concern (e.g., pollutants, temperature).

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4. Riparian buffers applied properly to streams by stream classification category (percent).
5. Stream enhancement projects completed (count and miles).
6. Fish passage barriers removed (count).
7. Fish habitat restored due to removed fish passage barriers (miles).
8. Slope failures that delivered large wood and gravel to fish-bearing streams from buffered high-risk sites (count).
9. Wetlands where riparian buffers meet or exceed extent-appropriate buffer width (percent).
10. Change in extent of wetlands due to management activities (count and area).
11. Recreation-related stream crossings installed or replaced that increase fish passage or reduce sediment (count).
12. Recreational trails removed or relocated from aquatic features (miles).

### Cultural Resources

The Cultural Resource portion of the plan has two goals. These goals consider the direction provided in all Guiding Principles, but the primary guidance comes from Guiding Principles 1, 4, 7, 8, 9, and 10 (Appendix A).

### Goals

1. Archaeological sites or archaeological objects are preserved and protected in accordance with state law (ORS 97.740 to 97.760; 358.905 to 358.955; and 390.235).
2. Historic artifacts and real property of historic significance are conserved in accordance with state law, in consultation with the Secretary of State and the State Historic Preservation Office (ORS 358.640 and 358.653). Preserve additional cultural resource sites that are determined by the Department of Forestry in consultation with tribal archaeologists and the State Historic Preservation Office.

### Strategies

1. Coordinate with the State Historic Preservation Office to ensure all state and federal laws are followed.
2. Complete an inventory and assessment of cultural resource sites and conduct a prehistoric and historic cultural resource review.
3. Maintain and update existing cultural resource databases. Use database for tracking and planning purposes, including a system of recording, filing, and retrieving cultural resource site data from GIS overlays.
4. Develop a procedure for integrating site protection into forest activity plans by providing practical guidelines for identifying, documenting, evaluating and protecting sites.

### Measurable Outcomes

1. Known archaeological sites are protected from forest management activities (count).

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2. Cultural resource concerns in timber sales with known or discovered cultural resources addressed (count).

## Recreation, Education, and Interpretation

The recreation, education, and interpretation (REI) portion of the plan has three goals. These goals consider the direction provided in all Guiding Principles, but the primary guidance comes from Guiding Principles 1, 4, 6, 7, 8, 9, and 10 (Appendix A).

### Goals

1. Provide a range of recreation opportunities, forest education programs and interpretive opportunities to serve the needs of a diverse public.
2. Manage recreational use of forests in a safe and environmentally sustainable manner that seeks to minimize adverse impacts to resources and infrastructure.
3. Provide meaningful, memorable, and enjoyable recreation, education, and interpretation (REI) experiences that help shape a lifelong appreciation and understanding of forests and forest stewardship.

### Strategies

1. Use data on visitation, resource impacts and infrastructure use levels, and the recommendations provided in Oregon Parks and Recreation Department's Statewide Comprehensive Outdoor Recreation Plan (SCORP) to identify opportunities for enhancing, expanding and developing REI opportunities.
2. Develop, manage, and maintain REI infrastructure and programs consistent with the capacity of the resource, agency, and partners.
  - a. Design and manage sustainable REI programs and infrastructure to minimize environmental impacts, reduce user conflicts, improve visitor accommodations and integrate with the management of State Forests.
  - b. Educate to promote responsible use to reduce impacts to the resource and infrastructure.
  - c. Review and implement standards and guidelines to govern management activities, and facility design, development, operation and maintenance.
  - d. Continue to manage, maintain and invest in existing infrastructure, programs and opportunities.
2. Expand and enhance partnership and community engagement opportunities to increase support, foster public stewardship of REI resources, build relationships between users and the Department, increase understanding of forest management challenges, and increase program capacity.
3. Explore partnership, community engagement and cooperative agreement opportunities to diversify funding sources and share costs with those using the resource, or with those having similar goals and objectives or resource management responsibilities.
4. Integrate REI into all aspects of state forest business.

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- a. Work with field units to integrate REI into daily objectives.
  - b. Support all ODF divisions by sharing unified management messaging to the public (Fire prevention/protection, FPA, GPV, etc.).
  - c. Participate in statewide planning process.
5. Complete and implement an integrated REI management plan.
  6. Maintain opportunities for providing high-quality standards-based forest education and interpretive programs.
  7. Protect, maintain, and enhance habitat for native species.

## Measurable Outcomes

1. Forest education and interpretive programs (count).
2. Resources to sustain existing infrastructure and mitigate resource damage.
3. Number of volunteers, volunteer contributions and diversity of community involvement in REI opportunities (count).
4. Partner groups and cooperative agreements and other sources of funding that support REI (count).
5. School children and educators that participate in education programs (numbers)
6. Visitors to the Tillamook Forest Center (numbers)

## Air Quality

The air quality portion of the plan has four goals. These goals consider the direction provided in all Guiding Principles, but the primary guidance comes from Guiding Principles 1, 4, 6, 7, 8, 9, 10, and 11 (Appendix A).

## Goals

1. Contribute to meeting National Ambient Air Quality Standards (NAAQS) and Prevention of Significant Deterioration standards (PSDs) established under the federal Clean Air Act (42 USC 7401 et seq.).
2. Manage prescribed fire to comply with the Oregon Smoke Management Plan.
3. Maintain compatibility with Oregon's Statewide Planning Goal 6 (Air, Water, and Land Resources Quality) direction to maintain and improve the air resource of the state.
4. Minimize wildfire impact on air quality.

## Strategies

1. Comply with the Oregon Smoke Management Plan (OAR 629-048-0000) and Visibility Protection Plan (OAR 340-200-0040, Section 5.2).
2. Use Best Burn Practices (OAR 629-048-210).
3. Use alternatives to prescribed burning (OAR 629-048-0200).
4. Plan burns to avoid smoke entering Smoke Sensitive Receptor Areas (SSRAs) described and listed in OAR 629-048-0140.

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5. Continue to develop and apply Best Available Technology (BAT) related to prescribed burning.
6. Burn material, which would otherwise be a significant hazard during the summer months, under controlled and planned conditions.

### Measurable Outcome

1. Smoke intrusions to Smoke Sensitive Receptor Areas (count).

### Plants

The plants portion of the plan has one goal. This goal considers the direction provided in all Guiding Principles, but the primary guidance comes from Guiding Principles 1, 2, 4, 8, and 10 (Appendix A).

### Goal

Provide habitats, both within stands and across the landscape, that contribute to maintaining or enhancing native, sensitive and endangered plant populations at self-sustaining levels.

### Strategies

1. Manage for a variety seral stages, stand structures, and stand sizes across the landscape.
2. Protect riparian vegetation during forest management activities.
3. Contribute to statewide efforts to reduce the quantity and range of non-native, invasive plant species.
4. Meet or exceed the requirements of the state and federal Endangered Species Acts.

### Measurable Outcomes

1. A variety of plant species are found within stands and across the landscape.
2. Endangered plants are documented and protected from forest management activities.

### Agricultural and Grazing Resources

The agricultural and grazing resources portion of the plan has one goal. This goal considers the direction provided in all Guiding Principles, but the primary guidance comes from Guiding Principles 1, 2, 3, 4, 6, 7, and 10 (Appendix A).

### Goal

Permit agriculture and grazing to the extent that they are compatible with other resource goals.

### Strategies

1. Agricultural uses will be considered on a case-by-case basis. Permits will be issued when these activities are compatible with other forest resources and activities.

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2. Grazing leases will be considered on a case-by-case basis and issued when they are compatible with managing for greatest permanent value of the lands and do not conflict with other resources.

## Energy and Minerals

The energy and minerals portion of the plan has four goals. These goals consider the direction provided in all Guiding Principles, but the primary guidance comes from Guiding Principles 1, 2, 3, 4, 7, 8, and 10 (Appendix A).

### Goals

1. Aggregate rock sources are available for long-term usage in forest management.
2. Impacts to surface resources (e.g., forests, fish, and wildlife) are minimized.
3. Maintain compatibility with Oregon's Statewide Planning Goal 5 (Open Spaces, Scenic and Historic Areas, and Natural Resources).
4. Personal use of small volumes of clay, stone, sand and gravel available as a public benefit.

### Strategies

1. Survey, evaluate, and identify aggregate rock sources important for the long-term management needs of northwest Oregon state forests.
2. Facilitate requests by DSL needed for the processing of claims and permits.

## Scenic Resources

The scenic resources portion of the plan has four goals. These goals consider the direction provided in all Guiding Principles, but the primary guidance comes from Guiding Principles 1, 4, 7, 8, 9, and 10 (Appendix A).

### Goals

1. Meet the scenic protection requirements of the Oregon Forest Practices Act for visually sensitive corridors associated with designated scenic highways (ORS 527.755).
2. Visual impacts in areas designated by the Department of Forestry as visually sensitive are minimized.
3. Public safety requirements are met in visually sensitive corridors.
4. Maintain compatibility with Oregon's Statewide Planning Goal 5 (Open Spaces, Scenic and Historic Areas, and Natural Resources).

### Strategies

1. Identify and classify areas for level of visual sensitivity. Conduct management activities in a manner designed to minimize the negative visual effects.
2. Collaborate with the Oregon Department of Transportation to ensure public safety requirements in visually sensitive corridors are met.

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### Special Forest Products

The special forest products portion of the plan has two goals. These goals consider the direction provided in all Guiding Principles, but the primary guidance comes from Guiding Principles 1, 3, 4, 6, 7, and 10 (Appendix A).

#### Goals

1. The special forest products resource is a viable, sustainable commodity program, compatible with other forest resources.
2. Opportunities to obtain special forest products are available to members of local communities in order to support recreation, jobs in the forest, fuel for heating, and other social values.

#### Strategies

1. Develop inventories for specific, high-demand products.
2. Maintain documentation to guide special forest product sales.
3. Develop and provide districts with resources to manage special forest products.

### Land Base

The land base portion of the plan has three goals. These goals consider the direction provided in all Guiding Principles, but the primary guidance comes from Guiding Principles 1, 2, 3, 4, 6, 7, 8, and 10 (Appendix A).

#### Goals

1. The state forest land base is conserved in order to maintain resource values.
2. The land base is compatible with Oregon Statewide Planning Goals and the Oregon Coastal Management Program.
3. The land ownership pattern is efficiently managed.

#### Strategies

1. Minimize the amount of forest land used for roads, road corridor clearings, landings, and mineral extractions. Ensure that construction and development specifications efficiently meet management activity objectives.
2. Follow the procedures in ORS 197.180 and OAR 660-0030, 660-0031, and the Department's State Agency Coordination Program, OAR 629-0020, to ensure that land use programs and activities are consistent with Statewide Land Use Planning Goals and are compatible with acknowledged county comprehensive plans and land use regulations.
3. Continue with an active land exchange and acquisition program in those districts that have consolidation opportunities that are favorable to improving the Division's ability to provide Greatest Permanent Value and as budgets and workloads allow.

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4. Develop and implement land survey plans for each district in order to establish and/or reestablish state forest boundaries necessary to meet management activity needs.

# Proposed Goals, Strategies, and Measurable Outcomes

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## Appendix A: Guiding Principles

Principle 1: The Forest Management Plan will be grounded in the management mandates for Board of Forestry lands as expressed in the Greatest Permanent Value (GPV) and Forest Management Planning OARs, and the mandates for Common School lands.

Principle 2: State forests will be managed, conserved, and restored to provide overall biological diversity of state forest lands, including the variety of habitats for native fish and wildlife, and accompanying ecological processes. The Greatest Permanent Value and Forest Management Planning rules are the Board's expression of providing conservation.

Principle 3: The plan will provide revenue to ensure financial viability and sustain the values that support GPV.

Principle 4: The plan will provide for a range of social benefits for all Oregonians including direct and indirect financial contributions to local and state governments, ecosystem services, opportunities for public access and recreational use, support for diverse local employment, and a process for participating in the forest management planning and implementation process.

Principle 5: The plan will recognize that investments in forest and watershed restoration are necessary to achieve desired outcomes that align with the Greatest Permanent Value policy direction for Board of Forestry and the "greatest benefit for the people" standard for Common School Forest Lands.

Principle 6: The plan will be developed and implemented at a scale and pace that provide the appropriate geographic and temporal blend of economic, social, and environmental outcomes.

Principle 7: The plan will provide varying levels of economic, environmental, and social outcomes over time as conditions change. While this approach will result in short-term trade-offs among specific goals, over the long-term Greatest Permanent Value will be achieved.

Principle 8: The plan will comply with other state and federal laws and rules.

Principle 9: Diverse input from Oregonians and a variety of interested parties will be a high priority throughout planning processes.

Principle 10: The plan will pursue opportunities to achieve goals through cooperative efforts with other agencies and units of local government, user groups, or organizations.

Principle 11: The plan will be implemented to adapt to climate change and mitigate its impacts on the management of state forest lands. The Plan will also contribute to climate change mitigation and sequester carbon.