



Western Oregon Forest Management Plan

DRAFT Chapter 4 Guidelines

In October 2020, the Board of Forestry (BOF) directed the State Forests Division to continue the development of a Forest Management Plan (FMP) and Implementation Plans (IPs) for about 640,000 acres of Oregon Department of Forestry (ODF)-managed lands west of the Cascades. The mission of the Western Oregon State Forests FMP and IP project is to implement the social, economic and environmental values required of state forests, in conjunction with the Western Oregon State Forests Habitat Conservation Plan (HCP). If approved, the Western Oregon State Forests FMP would replace the current Northwest Oregon and Southwest Oregon State Forests FMPs.

ODF is sharing portions of the Draft FMP in advance of a virtual meeting open to the public scheduled for Tuesday, February 7, 2023. This meeting will offer the public an opportunity to learn about the forest management planning process and primary components. There will also be an update on the Western Oregon State Forests HCP and associated National Environmental Policy Act (NEPA) process.

What is this Chapter?

Chapter 4 Guidelines describes the processes for how the FMP will be implemented and revised and how the public will be engaged in these processes. The chapter includes guidelines for asset management, implementation, decision-making, adaptive management, monitoring and research, and public engagement. Chapter 4 is currently in draft form.

Stakeholders and members of the public will have the opportunity to ask questions at the February 7 Public Meeting.

CHAPTER 4

Guidelines (DRAFT)

This chapter describes the processes for how the Western Oregon State Forest Management Plan (FMP) will be implemented and revised and how the public will be engaged in these processes.

4.1 Asset Management Guidelines

Assets, as they are discussed in this section, are confined to the tangible resources and infrastructure (e.g., parcels of land, forest products, forest roads and related improvements, trails, campground facilities) on the state forest lands. Maintaining or enhancing value for assets described in this plan is fundamental to long-term sustainability of resource values described in the Greatest Permanent Value rule (OAR 629-035-0020) such as timber, revenue, aquatic and wildlife habitat, and recreation. The asset management guidelines discussed in this section align with Oregon statutes, Oregon administrative rules, and ODF policy.

Implementation of the FMP will be consistent with these guidelines to ensure that the asset value of the forest is maintained or enhanced. The guidelines are influenced by the implementation priorities under which the State Forests Division (Division) is operating. The guidelines discussed herein include the following.

- Conserve forest lands by maintaining the state forest land base.
- Maintain a land exchange and acquisition program that pursues acquisitions and exchanges to consolidate state forest lands for management efficiencies, economic values, or enhanced stewardship practices.
- Implement marketing strategies that increase the forest product value.

- Prioritize and undertake investments in *stand management* activities that increase timber quality and quantity or that enhance ecosystem services.
- Maintain, develop, and protect investments in forest infrastructure such as roads, bridges, and facilities, while recognizing that in some cases investments may need to be moved, removed, or decommissioned.
- Maintain existing assets that support recreation, education, and interpretation (REI) activities, while recognizing that in some cases investments may need to be moved, removed, or decommissioned.
- Maintain investments in forest inventory, geographic information system (GIS) technologies, and timber harvest-tracking technologies that support planning and implementation processes and contribute to adaptive management processes.
- Prioritize and undertake investments in research and *monitoring* projects consistent with Section 5.3, *Adaptive Management Guidelines*.
- Maintain a budgeting and financial management system that tracks revenues and expenses and aids in financial decision-making.
- Implement and maintain timber accountability strategies and systems that ensure the state and other beneficiaries receive anticipated revenue from forest products.

4.1.1 Implementation Priorities

Funding levels for plan implementation vary with cyclical economic trends. FMP implementation is primarily funded through timber harvest revenues. There may be periods where revenues limit funding. Annual budget instructions for developing fiscal budgets reflect the *Forest Development Fund* (FDF) balance and the projected FDF balance. The highest level of implementation and investment occurs when the FDF balance exceeds 12 months of operating expenses, and the balance is forecast to be relatively steady or increasing. The lowest level occurs when the FDF balance is less than 6 months of operating expenses and the balance is forecast to decrease (Table 5-1). To avoid service level decreases, ODF may seek external funding sources, such as grants or legislative funding through policy option packages or legislative concepts. Table 5-1 shows the forest management investment levels based on the revenue forecast and FDF balance.

TABLE 4-1

Forest Management Investment Level Guidance Based on Revenue Forecast and FDF Balance

	Increasing 3-year Revenue Forecast	Decreasing 3-year Revenue Forecast
FDF Contains Greater than 12 Months of Operating Expenses	Level 1: Expand existing investments and fund new strategic investments	Level 2: Maintain or expand existing investments and explore additional strategic investments
FDF Contains 6 to 12 Months of Operating Expenses	Level 2: Maintain or expand existing investments and explore additional strategic investments	Level 3: Invest in deferred maintenance and consider small set of new strategic investments
FDF Contains Less than 6 Months of Operating Expenses	Level 3: Invest in deferred maintenance and consider small set of new strategic investments	Level 4: Maintenance to achieve core business and meet legal obligations; no new investments

Note: Level 1 is the highest level of investment, while level 4 is the lowest.

External funding sources should be considered at investment level 2 and pursued if investment level is projected to be at level 3 or level 4.

4.2 Implementation Guidelines

The FMP, approved by the Board of Forestry, identifies the resource management goals and strategies that are intended to achieve an appropriate blend of resources. Greatest Permanent Value is achieved through integration of forest management activities by taking an ecological approach and using an adaptive framework across western Oregon state forests. The FMP does not focus on a single objective, but considers several key social, environmental, and economic goals at different scales. Land managers are tasked with considering all of the goals and strategies, identifying and addressing trade-offs, and meeting Greatest Permanent Value when implementing the FMP. The process for implementing the FMP relies on the following set of tools and processes presented in Figure 5-1.

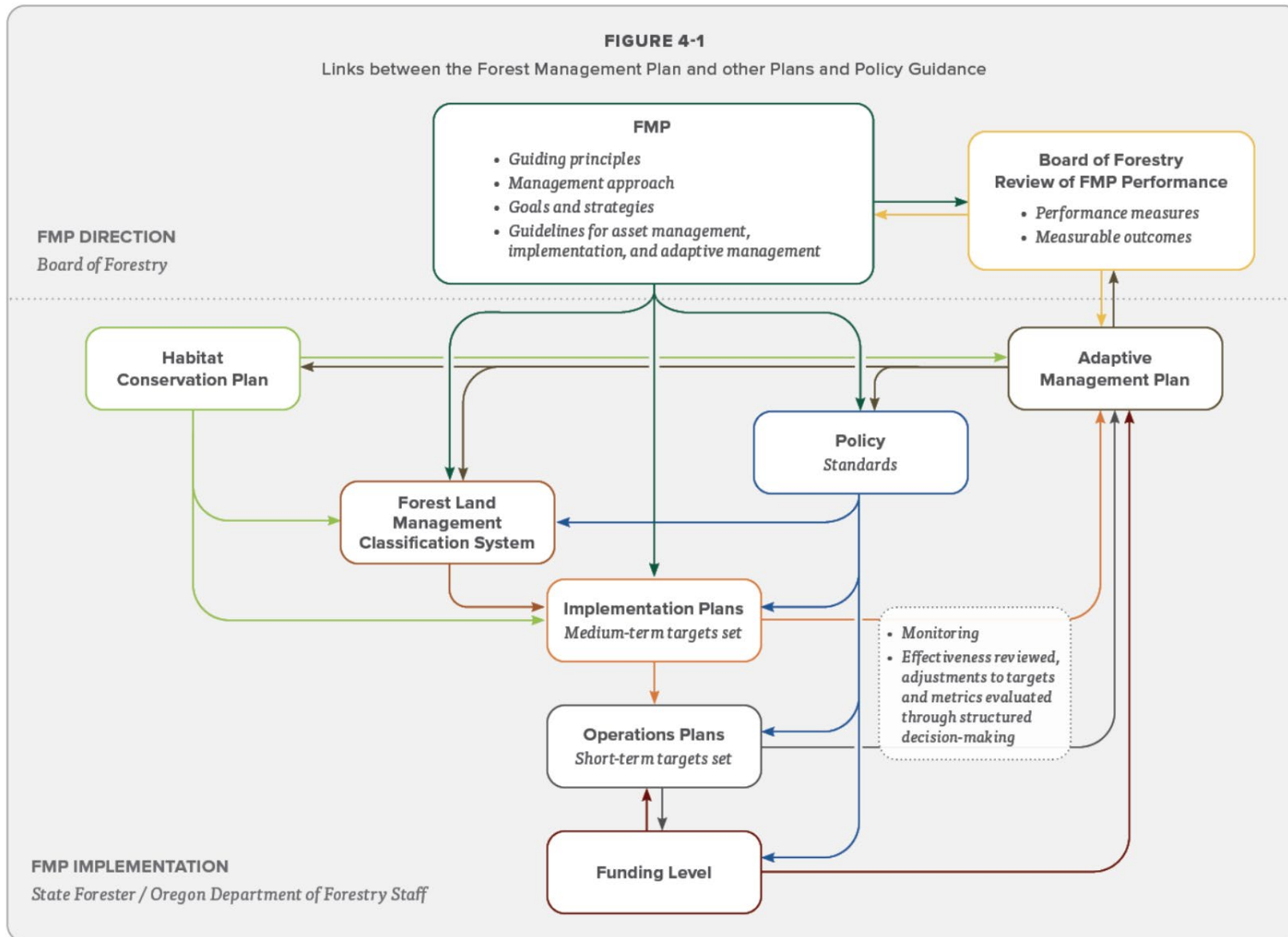


Figure 4-1. Link between the FMP and Other Plans and Policy Guidance

FMP implementation is supported by the following elements.

- *Habitat Conservation Plan (HCP)*. The HCP enables ODF to comply with the federal Endangered Species Act for certain covered species while conducting land management activities on State Forests west of the Cascade crest. During the development of the HCP, land managers, and partners identified and provided feedback on a multitude of trade-offs. The HCP biological goals and objectives document these decisions, which are implemented through Implementation Plans and Operations Plans.
- *Performance measures*. Performance measures are developed with direct input from the Board of Forestry and contain specific metrics and targets. Performance measures are monitored for individual resources and provide the essential “dashboard” for the Board of Forestry and others to track progress toward FMP goals and to maintain accountability for management commitments.
- *Operational Policies*. While the FMP sets certain management standards, primarily associated with resource protection, there are many instances where different management options exist to achieve FMP goals and implementation plan objectives. Operational policies guide decisions within this range of options by defining specific procedures and best management practices that allow for management flexibility, while ensuring sound management and resource protection. Operational standards describe quantitative measures tied to laws and regulations and FMP and HCP goals and strategies, such as minimum leave trees. These policies and standards provide the framework for forest managers to develop implementation plans and operations plans and to work through on-the-ground trade-off discussions. Operational policies are developed within the Division at the direction of the *State Forests Division Chief*.
- *Modeling*. Modeling is used as a decision-support tool to evaluate trade-offs and objective levels at various spatial and temporal scales, and the costs and outputs associated with each scenario. Modeling aids forest managers to evaluate effects and make decisions to allocate resources across uses.
- *Implementation plans (IPs)*. IPs quantify shorter time scales (for example 8–12 years) objectives for each resource at the district or multiple district-level. IPs describe the management approaches along with the types and amounts of activities designed to achieve the FMP goals and the HCP goals and objectives, and how the management strategies are applied. IPs provide linkages between the FMP, HCP, operational policies, and on-the-ground activities that are described in operations plans. Trade-off considerations are assessed and considered at the landscape level and are then incorporated into the IPs to provide guidance for the types and amounts of activities to be included in the operations plans.
- *Forest Land Management Classification System (FLMCS)*. As codified in OAR 629-035-0050, the FLMCS is a method of describing the management emphasis of parcels of state forest land. The FLMCS is recorded as a GIS layer. The management emphasis identifies the extent to which a parcel of land can be managed for a variety of forest resources. It also identifies when a

particular forest resource may need a more focused approach in its management, or possibly an exclusive priority in its management as designated by this FMP, the HCP, and other laws or commitments. This information is used in the development of IPs and during operational planning.

- *Operations plans (OPs)*. OPs describe individual projects for achieving expected FMP and HCP outcomes, over the near term (for example 1- to 2-years), that align with fiscal budgets and IPs. OPs prioritize activities and investments in the forests (e.g., inventory, young stand management, recreation development) based on implementation levels as described in Section 5.1, *Asset Management Guidelines*.
- *Adaptive Management Plan (AMP)*. The AMP describes the adaptive management process used to monitor and track outcomes, evaluate trade-offs, determine if the strategies are meeting the goals of the FMP and HCP, determine if assumptions used in developing the strategies need to be updated, and inform management decisions.

4.2.1 Implementation Responsibilities

The State Forests Division Chief and *Area Directors* provide guidance for implementing the FMP and HCP through IPs and OPs. They review IPs, which are approved and signed by the *State Forester*. *District Foresters* implement the FMP and HCP within their districts through the oversight of OPs. The tasks and responsibilities for IP and OP development are described in Table 5-2.

TABLE 4-2

Roles and Responsibilities of Decision-Makers in the Implementation, Operations, and Revision Approval Process

Task	Responsible Party
Approves IPs and major revisions	State Forester
Approves OPs	District Forester
Implements IPs and OPs	District Forester

4.3 Decision-Making, Adaptive Management, Monitoring, and Research Guidelines

Meeting the goals of the FMP in a changing environment requires adaptive management within a decision-making framework. For this plan:

Adaptive management means “the process of implementing plans in a scientifically based, systematically structured approach that tests and monitors assumptions and predictions in management plans and uses the resulting information to improve the plans or management practices used to implement them (OAR 629-035-0000(2)).”

These guidelines describe how adaptive management informs decisions, determines whether strategies are meeting FMP goals, and tests if the assumptions used in the development of the strategies need updating.

The land manager’s dedication to learning from management, applying new findings, and acknowledging uncertainty is key to maintaining the social, economic, and environmental benefits of forests (Bormann et al. 2017). While the intuitive language of adaptive management has widespread use in natural resource management, it is often difficult in practice to change course or even know if an alternative will improve management. A common shortcoming of adaptive management is that more monitoring or greater scientific understanding of a natural resource issue may not translate into improved management—the uncertainty of outcomes, diversity of values, and multitude of objectives hinder decision-makers (Gregory et al. 2012). Applying adaptive management requires tailoring it to the forest management agency’s mandate and the social process within the institution for making decisions with input from interested parties (Minkova and Arnold 2020). Adaptive management, monitoring, and research are the potential tools that support a decision-making framework that guides the use of new information within the agency.

The guidelines for decision-making, adaptive management, monitoring, and research are presented in this section. They are followed by an outline of the accompanying AMP, which is the key hub for integrating information needs, designing, and prioritizing monitoring projects, reporting on *metrics*, and facilitating the decision-making process. The AMP may be changed as we learn how to improve the process to work more effectively.

4.3.1 Decision-Making Framework

ODF will improve its management by applying *decision analysis*, a process used to simplify decisions by breaking them down into key parts to work through in sequence (Hemming et al. 2022). The ProACT acronym (Problem, Objectives, Alternatives, Consequences, and Trade-offs) is one popular ordering of the components that go into making a decision (Hammond et al. 2002). These steps for decision analysis have been adapted to many disciplines, and *structured decision-making* (SDM) is the predominant process in natural resource management for making complex, multi-objective decisions that emphasize deliberation, estimating outcomes of alternative actions, and clarifying choices upon which the decision maker can act (Figure 5-2) (Gregory et al. 2012). One benefit of SDM is that it scales to the decision’s complexity, proving useful for a single person or small group brainstorming management alternatives, for a facilitated process with public input at the level of an IP, or for the Board of Forestry evaluating the FMP success through performance measures.

The decision-making framework assesses management questions and *trade-offs* across multiple objectives for different forest resources; addresses adaptive management needs described in the FMP, HCP, and other policy documents; and updates the learning process following advances in forest management and decision science.

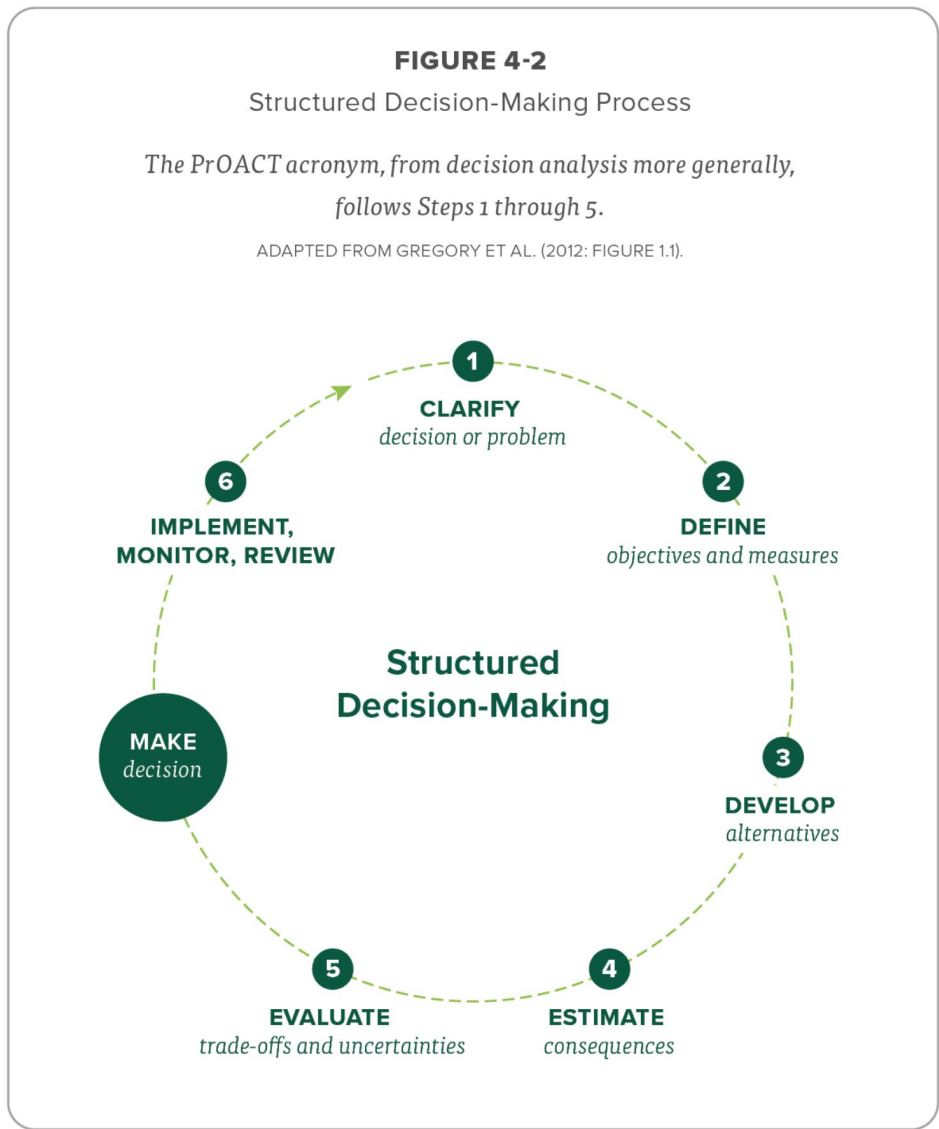


Figure 4-2 Structured Decision-Making Process. The PrOACT acronym, from decision analysis more generally, follows Steps 1 through 5.

The SDM process (Figure 5-2), whether being conducted with ODF staff or external interested parties, involves the following steps.

- Step 1. The SDM process begins with defining the decision, determining the decision’s scope, describing the decision’s context in management objectives, and identifying the decision maker(s).

- Step 2. The second step defines objectives and measures to specify what considerations matter and how to quantify their outcomes.
- Step 3. Participants develop management alternatives that will affect objectives to different degrees. Based on the previous steps, participants may identify adaptive management as an alternative approach to be reviewed. Subsequent steps in the SDM process align with the typical “set-up phase” for adaptive management (Williams et al. 2009).
- Step 4. A technical working group develops potential consequences for each alternative defined for the objectives.
- Step 5. The proposed consequences and their associated uncertainty inform a trade-off analysis and participants provide refined alternatives for the decision maker, who ultimately makes the decision.
- Step 6. Once the decision is implemented, the outcomes of the SDM process are monitored to inform the next iteration of the decision-making process.

Public engagement in the SDM process depends on the scope and impact of the decision, with greater public outreach for more significant changes. Participation by interested parties provides feedback to the technical working group, ensuring that ODF does not miss important objectives, possibilities for alternatives, consequences for affected groups, or ways to avoid trade-offs.

Adaptive Management

Adaptive management is one approach to learning that may be used within the decision-making framework. It works best when management has a high impact on the resource objective, but the consequences of using management alternatives are uncertain (Williams et al. 2009). In this case, the effort dedicated to learning from different management treatments reaps benefits that outweigh the potential delay in meeting the resource objective. In a situation where the uncertainty about the effects of management is low, adaptive management is not as useful. Monitoring a natural resource may still inform decisions; however, learning more about how the system works would not change the management approach. Assessing the potential costs and benefits of engaging in adaptive management as an alternative action can be part of the SDM process. In other words, SDM addresses a wider variety of decision-making situations than adaptive management (Gregory et al. 2012).

Adaptive management can vary in effort and experimental design, but the key component is learning from alternative management treatments (Williams et al. 2009). Generally, *active adaptive management* is for cases with high uncertainty and a need for learning about the cause-and-effect relationship of management on the resource objective. Active adaptive management uses a statistically valid experimental design to allocate alternative management approaches, increasing the effectiveness of learning while diverging from “management as usual.” In *passive adaptive management*, monitoring data are purposefully collected from alternative management approaches with hypotheses in mind about the effects of management on a resource. In this case, the experiment

does not necessarily include controls, replication, or a randomization of management prescriptions, so it is more difficult to establish cause and effect (Williams 2011).

Monitoring

There are a variety of monitoring approaches the Division uses depending on the objectives. Compliance monitoring (a.k.a. *implementation monitoring*) involves gathering information to determine whether rules, regulations, or requirements are being followed. *Effectiveness monitoring* assesses whether the implementation of management actions has the intended outcomes, such as tracking whether forest treatments increase occupied habitat of a species of concern. Effectiveness monitoring may require *status monitoring* or *trend monitoring* to judge management success. Status monitoring involves determining the state of a resource (e.g., spotted owl occupancy, snag density) at a point in time. Trend monitoring is an extension of status monitoring, where the change in status over time is examined. Trend monitoring can be used to assess whether management thresholds are being breached (e.g., spread of invasive weeds increased beyond a target density) or whether there appears to be a pattern of change across time (e.g., habitat quality is increasing).

Decision-making processes such as SDM may include a monitoring component to evaluate the effects of the decision and the state of the resource. The outcomes of monitoring inform the next iteration of decision-making. The ideal monitoring approach may change with time. As resource objectives, monitoring technology, and the understanding of the system change over time, the accompanying monitoring efforts also need to adjust to continue providing reliable and relevant information. *Adaptive monitoring* is a framework that reassesses monitoring questions and protocols in light of these changes while maintaining the integrity of long-term records (Lindenmayer and Likens 2009).

As an example of how new monitoring may be planned, a snapshot estimate (status monitoring) of a resource is compared with the desired state of the resource to determine if a problem exists (Nichols and Williams 2006). Before monitoring begins, hypotheses are developed about how the larger system affects the resource. The differences among the hypotheses capture the range of possibilities about how the system functions. The hypotheses can also affect where and how frequently data are collected. This thoughtful approach helps ensure that the monitoring provides useful information: both an estimate of the resource condition and a test of which hypothesis is best supported. The resource estimate allows the condition of the resource to be evaluated in the absence of temporal data demonstrating a trend, thereby helping to determine whether a management intervention or more targeted monitoring is needed.

Research

Research in the context of the FMP revolves around generating and using the best scientific information available to guide management actions. New research performed by the agency would be developed using adaptive management within a decision framework, rather than research focused on theory. The agency supports and relies on several research cooperative partnerships to

advance scientific understanding in strategic areas important for achieving management objectives. ODF offers planning support and special use permitting for research performed on State Forests by scientists outside of the agency.

The decision-making framework provides the process for incorporating new information to ensure that the FMP is using the best available science. Published research may change the validity of the assumptions that were used to develop the FMP strategies. New information fits into the SDM cycle when assessing the management alternatives, consequences, trade-offs, and uncertainty. Revisiting prior steps in the decision-making framework is expected when new information is incorporated.

4.3.2 Adaptive Management Plan

The AMP offers direction and administration for (a) facilitating decision analysis and adaptive management, (b) designing monitoring projects, (c) reporting monitoring results and decision-making products, and (d) identifying and integrating information and decision needs within State Forests.

The AMP is a separate document from the FMP that provides an expanded and current roadmap for the process and results that support the implementation of the FMP and improve management over time.

Transparent. Interested parties and ODF staff can easily access current work plans and planning documents for decision-making processes and anticipated timelines for delivering results.

Understood. Interested parties and ODF staff know about the AMP and understand its mission and purpose.

Effective. State Forests manages its lands to achieve Greatest Permanent Value and can make changes to management practices based on new information.

Inclusive. The AMP integrates interested parties and ODF staff into its processes and incorporates their feedback.

Efficient and timely. The AMP focuses on informing planning and management via developing monitoring efforts that deliver useable results as quickly as possible.

Responsive. When State Forests detects issues through monitoring, it works to address management problems creatively, transparently, and effectively.

Valued. Interested parties and State Forests recognize the social and technical benefit that AMP products provide to State Forests and all Oregonians.

Reliable. Decision analysis and monitoring design use the best available science to produce reliable outcomes.

Vision for the Adaptive Management Plan

- ✓ **Transparent.** Interested parties and ODF staff can easily access current work plans and planning documents for decision-making processes and anticipated timelines for delivering results.
- ✓ **Understood.** Interested parties and ODF staff know about the AMP and understand its mission and purpose.
- ✓ **Effective.** State Forests manages its lands to achieve Greatest Permanent Value and can make changes to management practices based on new information.
- ✓ **Inclusive.** The AMP integrates interested parties and ODF staff into its processes and incorporates their feedback.
- ✓ **Efficient and timely.** The AMP focuses on informing planning and management via developing adaptive monitoring efforts that deliver useable results as quickly as possible.
- ✓ **Responsive.** When State Forests detects issues through monitoring, it works to address management problems creatively, transparently, and effectively.
- ✓ **Valued.** Interested parties and State Forests recognize the social and technical benefit that AMP products provides to State Forests and all Oregonians.
- ✓ **Reliable.** Decision analysis and monitoring design use the best available science to produce reliable metrics.

Workflows for Decision Analysis, Monitoring Design, and Information Needs

The AMP serves as a hub for information gathering and decision support across other policies and plans that incorporate adaptive management in their objectives. With support from the AMP, decisions are made by individuals or groups at the relevant planning level. For example, if monitoring shows the need for a fundamental change in FMP strategies, the decision would be made by the Board of Forestry after a formal public involvement process and codified through Oregon Administrative Rule. A smaller change, for instance in operational policy or management standards, could be made by the State Forests Division Chief after engaging interested parties through the decision-making process, which may suggest monitoring or adaptive management be included.

In the examples in the workflow diagram (Figure 5-3), a need for decision support may be identified by State Forests, interested parties, or metrics falling outside a range of acceptable targets identified in the HCP or performance measures adopted by the Board of Forestry. The AMP guides the SDM process (Figure 5-2) to develop recommendations for the decision-maker to consider. As shown by the dashed lines in Figure 5-2, SDM may include designing new monitoring and reporting results as needed for decision support. Decisions may affect IPs and OPs through the process described in Section 5.2, *Implementation Guidelines*.

FIGURE 4-3
Adaptive Management Plan Workflow

This workflow shows key Adaptive Management Plan roles and how they can affect FMP implementation through decision support, monitoring, and reporting.

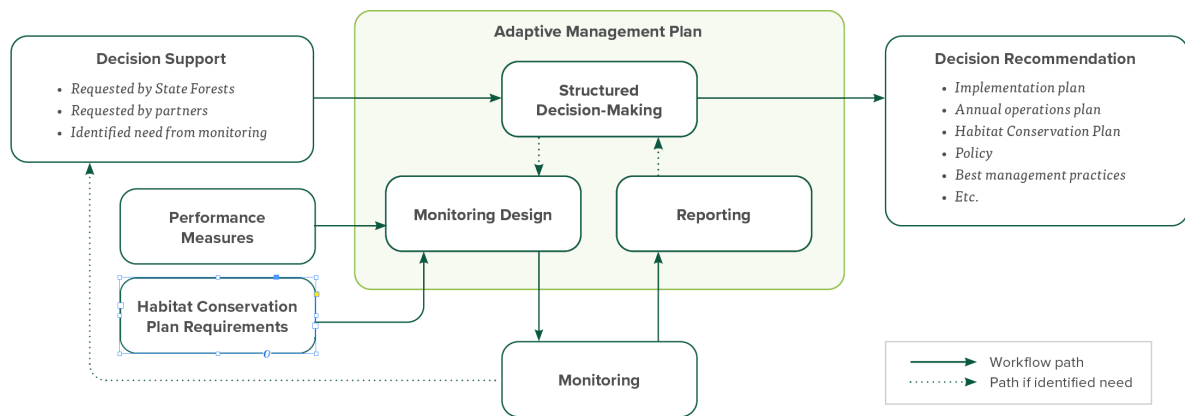


Figure 4-3: Adaptive Management Plan Workflow. This workflow shows key Adaptive Management Plan roles and how they can affect FMP implementation through decision support, monitoring, and reporting.

Key Monitoring Needs

Monitoring and reporting for the HCP and the Board of Forestry-adopted performance measures is integral to implementation of the FMP. Figure 5-3 shows what drives monitoring and reporting needs and that the AMP designs monitoring, provides reporting, and responds to needs for additional decision support. The AMP integrates the requirements contained in the HCP, for both compliance monitoring and effectiveness monitoring, with the Board of Forestry-adopted performance measures and other monitoring such as forest inventory to ensure efficient use of resources. It is anticipated that HCP monitoring often will not require facilitated SDM, as HCP requirements are mandated. Both the HCP and performance measures have thresholds for action if monitoring indicates a need for adjustment, in which case decision support is requested and SDM could determine the best remedy.

Implementation of the HCP requires a detailed program of monitoring and adaptive management to ensure compliance and verify progress toward achieving the biological goals and objectives. The AMP serves as the structure for the adaptive management program required by the HCP to assess data gaps and scientific uncertainty that could affect how species are managed and monitored over time. The *HCP administrator* at ODF serves as the key coordinator to initiate the process when triggers for action are identified from either over- or under-accomplishment of biological goals and objectives, or when alternative conservation practices are available. The HCP adaptive management process fits well within the decision-making framework described in Section 5.3.1, *Decision-Making Framework*, with additional regulatory considerations and involvement with the federal permitting agencies.

The performance measures assess the impact State Forests have on social, economic, and environmental wellbeing in a meaningful, transparent, and intuitive way. Performance measures will be adopted by the Board of Forestry to contain specific metrics with targets and acceptable ranges that will ensure progress toward FMP goals. Some performance measures may be supported through new or existing monitoring programs, which will be organized through the AMP. The AMP develops reporting dashboards to track performance measures for the Board of Forestry and public engagement.

Project Prioritization and Timeline

The AMP contains a broad suite of monitoring and reporting needs to implement, which may be dependent on the Division's resources. Multiple sources (public engagement, the Division's business needs, the HCP, the Board of Forestry) identify needs for decision analysis, adaptive management, or monitoring that will be integrated and prioritized for efficiency.

The AMP sets priorities to develop workplans based on the following criteria comparing potential projects.

- Regulatory requirements, such as HCP compliance monitoring.
- Potential impact on Greatest Permanent Value.
- Likelihood of influencing future management decisions.
- Degree of uncertainty or knowledge gap.
- Capacity or feasibility of getting answers in reasonable time and at a reasonable cost.
- Efficient integration with ongoing or planned monitoring.
- Potential for research partnerships.

The timeline for reporting decision analysis products and monitoring results aims to complement IP revisions and comprehensive reviews of HCP implementation. The IP is the key opportunity for the decision-making process, public engagement, and adaptive management changes based on monitoring. The AMP workflow focuses on IP information needs in the 2 years leading up to planned IP revisions. New information needs will occur outside of the IP and HCP cycles; the AMP is responsive to opportunities to integrate decision analysis into other Division needs.

4.4 Revision Guidelines

In order to stay relevant to an ever-changing environment, revisions to plans and processes may be necessary to implement adaptive management and to incorporate new information.

4.4.1 Forest Management Plan

The Board of Forestry reviews the management focus of the FMP no less than every 10 years in light of current social, economic, scientific, and silvicultural considerations (OAR 629-035-0020). It may require 10 years or more to develop relevant monitoring information to establish trends. As new information becomes available, it is evaluated in the context of the guiding principles, goals, and strategies of the FMP. If implementation of the FMP is not achieving desired results, as indicated by the performance measures, the Division will make revisions to operational policies. If the lack of performance cannot be corrected through revised operational policies, or if research or monitoring information shows the need for a fundamental change in FMP strategies, the Board of Forestry and State Forester will weigh the scientific, operational, and public information in a transparent and formal public process to determine if changes are needed to the FMP. The changes will then be codified through Oregon Administrative Rule.

4.4.2 Habitat Conservation Plan

The HCP modification process is described in the HCP's Chapter 8, *Implementation*. HCP or permit modifications are expected to be rare and informed by the adaptive management process as outlined in Chapter 6 HCP, *Monitoring and Adaptive Management*. USFWS and NOAA Fisheries are key decision-makers in the modification process.

4.4.3 Operational Policy

Changes to operational policy occur as needed, in response to information from the adaptive management process, changing laws or conditions, new technology, improved management strategies, or new direction from the Board of Forestry or ODF leadership. Key decision-makers depend on the policy.

4.4.4 Implementation Plan

As new information becomes available, a revised IP may be developed before the end of the specified IP timeframe in response to changing conditions or development of new or better implementation strategies identified through adaptive management. Revisions made at the IP level may include the types or amounts of management opportunities and spatial arrangement that are pursued during the timeframe of an IP. Key decision-makers are outlined in Table 5-2.

4.4.5 Forest Land Management Classification System

Revisions may be needed to the FLMCS when there is a change to the management emphasis on a parcel of land. Examples of such changes include the development of a new campground, a new wild and scenic river designation, or the removal of a research area after completion of a project. Definitions of minor and major revisions can be found in OAR 629-035-0060.

4.5 Public Engagement Guidelines

The goals for public involvement in forest land planning are outlined in OAR 629-035-00 and include providing information, seeking insight, building understanding, and providing public comment opportunities.

The purpose of public engagement is to provide the public with meaningful opportunities to comment on and affect planning decisions at a time when public involvement can contribute positively to the planning decisions under consideration. Public engagement is most beneficial during the implementation planning process, as this is the time when public input can have the most influence on the levels and types of planned management activities. Public input may contribute to setting priorities and identifying general locations of where management activities may occur. Input provided at the *Operation Plan* level would focus on small changes, refinements, or clarification of the plan. Table 5-3 shows the public engagement opportunities by plan level.

TABLE 4-3
Public Engagement Opportunities and Examples

Plan Level	Public Input Engagement Areas	Topic	Example Comment
AMP	<ul style="list-style-type: none"> Feedback and participation in the SDM process with regard to objectives, alternatives, consequences, and trade-offs Performance measures adopted for the Board of Forestry to assess the FMP 	SDM public engagement	Our user group would like XYZ objectives included in the decision analysis, and this is how we could measure the impact of management alternatives on our user group.
		Board of Forestry meeting public	The Board should request an evaluation of the trend in the XYZ Performance Measure reported on the public dashboard because it is showing that management of XYZ resource needs to be changed.
		Monitoring prioritization	Recreational surveys should be prioritized during this IP to gather information to reduce conflict between user groups.
IP	<ul style="list-style-type: none"> Harvest levels, harvest types, priorities and general locations REI development/activities levels, types, priorities, and general locations 	Recreation type and location	I would like an increase in mountain biking trails preferably built inside HCAs to reduce potential conflicts with harvesting.

Plan Level	Public Input Engagement Areas	Topic	Example Comment
	<ul style="list-style-type: none"> Stream enhancement levels, types, priorities, and general locations Road project levels, types, priorities, and general locations Monitoring project prioritization and opportunities for adaptive management 	<p>Stream enhancement/road project priority and location</p>	<p>I propose the “generic” watershed be a high priority for stream enhancement and road improvement projects to align with work being done by “Generic” Watershed Council in the next 5 years to replace non-fish passable culverts and accomplish stream enhancement on 5 miles of the “generic” creek.</p>
<p>OP</p>	<ul style="list-style-type: none"> Ensure the operations plan is consistent with the implementation plan and/or forest management plan Suggest to improve efficiency or effectiveness Clarify how planned operations are described Provide additional information or correcting an error Offer solution-oriented comments to further the division in achieving 	<p>Efficiency/effectiveness</p>	<p>The boundary for the XYZ sale could be extended to the southwest where the stand flattens out. Extending the boundary would eliminate the need to work through young stands while harvesting the timber during future sales.</p>
		<p>Clarification</p>	<p>I don’t understand the terminology being used in this plan. Can you include definitions for BA, shelterwood and MBF in the document?</p>

Plan Level	Public Input Engagement Areas	Topic	Example Comment
	Greatest Permanent Value goals and objectives.	Solutions-oriented	The XYZ sale area will affect approximately one mile of the existing trail. I realize that the forest is a working forest and ask for the following considerations: Limit the timing so the harvest operation is not active during prime horse riding season (July-Sept). If this is not possible then: Fall trees away from the trail whenever possible. Have all slash removed from the trail so the trail is in equal or better shape than pre-harvest conditions. Have trails open for use on weekends if possible.

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4.6 References

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