

Final

Recreation Management Assessment

For the Oregon Department of Forestry
Northwest Oregon State Forests

Final Report

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Executive Summary

The Oregon Department of Forestry (ODF), established in 1911, manages approximately 600,000 acres of state forestlands in Northwest Oregon that includes the Clatsop, Tillamook, and Santiam State Forests, and 37,700 acres of other forestlands located in three counties.

Until the Board of Forestry adopted the *Northwest Oregon State Forests Management Plan* (FMP) in 2001, no comprehensive, overarching plan was in place to assist the agency in managing these forests for multiple resource use. The FMP currently provides policy direction and guidance for the Northwest State Forests with a multi-resource approach. The Tillamook Recreation Management Plan (RMP) was the Agency's first recreation plan, prepared in 1993. Subsequent plans were prepared in 2000 and 2001 for each of the State Forests and the West Oregon District forestlands as elements of the Forest Management Plan.

In 2006, ODF commissioned Strategic Resource Systems to conduct a second-party assessment of the effectiveness of its two forest management plans, resulting in the *Forest Management Assessment Report*. In January 2007, ODF commissioned David Reed & Associates (DRA) to conduct a second-party assessment of the State Forest recreation program patterned after the Forest Management Plan assessment.

ODF staff requested this second-party assessment to obtain an independent review of current effectiveness and implementation of the four Northwest Oregon recreation management plans, with the goal of continued improvement and enhancement of the recreation program.

The assessment team initially examined the recreation plans, based on their structure and relevance. Based on criteria developed by both the DRA assessment team and ODF staff, field visits were then made to assess the recreation program and management practices. The assessment process concluded with final reviews of the plans to determine their efficacy. Conclusions and general findings from the assessment are summarized here, with more detailed conclusions and findings at the end of the report.

Conclusions

After 15 years of continual growth without the benefit of a strategic and long-range planning framework, the Oregon State Forests recreation program is at a critical juncture. In large part, the program has evolved in response to recreational demands without duplicating other recreational opportunities in the region as directed by the Forest Management Plan.

The recreation program has accomplished much in its short tenure: rehabilitating recreation sites and trails, striving to minimize user conflicts and adverse impacts to forest resources, and building strong relationships with some user groups.

However, with the magnitude, diversity, and complexity of recreational demands placed on the Agency, a more strategic and coordinated approach is imperative. Such an approach will necessitate incorporating more professional management practices and expertise if the recreation program is to achieve the stewardship ethic and sustainability goals of the agency's overall

mission: “. . . protecting, managing, and promoting stewardship of Oregon's forests to enhance environmental, economic, and community sustainability.”

Based on findings from this second-party assessment, the recreation program currently exhibits multiple indicators of programmatic stress. Simply stated, a lack of strategic direction, outdated recreation plans, and inadequate management systems and practices are preventing the program from meeting requirements for a growing, complex delivery system.

As a result, the agency seldom sets limits on recreational use. Additionally, increasing tension is apparent with some user groups when limits of use are proposed. Some recreation uses are also causing impacts to forest resources. These problems are exacerbated by inadequate staffing levels and training, continued use of Limited Duration staff over several years, and an organizational structure that does not provide focused leadership and support for recreation management.

As staff implements recreation management plans for each of the State Forests, it is apparent that these plans have reached the end of their useful life. In particular, the plans lack clear policy direction and a framework for resolving a large number of critical management issues. Some plan directives could even have potentially negative impacts on the program. For example, without updated policy direction and standards, several prescribed recreation uses may not be consistent with the Agency's mission of sustainability for State Forest landscape settings.

On its present course, the recreation program will be unable to respond in an organized and orchestrated fashion to an increasing magnitude and diversity of recreational use. More detailed conclusions are included in the Field Assessment section of this report.

General Findings

As previously noted, State Forest recreation management plans and staff have been in place for a relatively short period of time. Given the long history of unregulated recreation use on State Forests, major accomplishments have been made to establish a strong recreation program within a working forest. Recreation staff is committed to ODF policy mandates including the *Greatest Permanent Value* rule, and staff works positively to achieve integrated forest management goals.

The general findings are summarized as follows:

- Generally, recreation facilities and infrastructure are functional, accessible, well maintained, and in good repair. They are constructed of durable materials and are attractive and well designed. Graffiti is removed immediately and litter removal is a high priority.
- Priorities are placed on site rehabilitation and managing recreation use to protect forest resources. Professional planning and design contractors are providing design development expertise and alternatives for upgrading recreation sites and facilities. Activity zoning has been implemented to organize and manage both motorized and non-motorized trail systems. Trail planning continues to be refined with the assistance of GIS mapping.
- Staff works with recreation advisory committees to involve users in implementing recreation management plans. Staff has also executed formal use agreements with organized groups and

clubs, notably motorized recreation users, the Oregon Equestrian Trail organization, and recently free-ride mountain bike clubs.

- The strength of the recreation program is its staff. Staff members are motivated, take great pride in their work, and are creative and resourceful. They are actively engaged with user groups, and they present a positive attitude with both the recreating public and ODF colleagues in other disciplines, even when challenged by the complexity of their responsibilities.
- Recreation staff is using the recreation plans to guide their management activities and programs, especially when striving to meet objectives and actions prescribed in the action plans. Because the plans are outdated, lack strategic direction, and no policy framework exists for achieving a “Desired Future Condition”¹, staff is often left with little guidance on how to interpret and implement specific elements of the plans.
- The recreation program has grown in complexity and diversity to the point that management structure and capabilities are inadequate. The RMPs are not able to provide policy direction for implementing a recreation program that has the capability of responding to growing demands.
- The current recreation program is not able to achieve sustainability goals of the Agency, including protection of forest resources and habitats. Moreover, as currently funded and structured, the program will not be effective in providing recreation opportunities on State Forests into the future. ODF is attempting to do too much with too little, without a clearly defined role and purpose, and without essential management systems and uniform practices in place that are required to provide safe, high quality recreation experiences across all forest districts.

These specific findings are critical to the future of the recreation program:

Accomplishments. Major progress has been made to rehabilitate, upgrade, and professionally manage the forest recreation system in a relatively short period of time. Recreation staff has also created strong partnerships with a number of user groups to facilitate the design, construction, and maintenance of recreation facilities on state forestlands.

Recreation Plans. Recreation management plans are outdated and lack strategic policy direction or a clear definition of a “Desired Future Condition” to effectively guide the recreation program. Critical management issues are not addressed, and some action plan prescriptions could have potentially negative consequences if implemented.

Current Recreation System. The current recreation delivery system is fragmented, unorganized, and inefficient to maintain due to a lack of strategic direction, formal recreation policies, and critical management practices. Many current management practices are inconsistent throughout the program.

Management Structure. The current management structure is not adequate to provide leadership and support for a growing, more complex, and diverse recreation program. Staffing levels are not adequate and Limited Duration positions fail to provide the continuity required to manage such a dynamic system.

Risk Management. No risk management program exists specifically for managing recreation. Given increased use and the trend to accommodate higher risk activities such as free-ride mountain biking and motorized recreation with more powerful and higher speed vehicles, risk exposure is high.

¹ A *Desired Future Condition* establishes a preferred role and mission for the managing agency including recreation settings, recreation uses, and management strategies that meet specific recreation goals and mandates of the Forest Management Plan.

Business Approach. An overall business approach to recreation management is lacking. Critical information systems and procedures are not in place such as fiscal accountability and impact analysis, benefit/cost analysis, a formal monitoring and research program, and trend analysis.

Maintenance and Operations. Maintenance and operations funding is inadequate, even though funds appear to be readily available for continued recreation facility development. There are indications of stress placed on staff due to increasing and more diverse recreation use, as well as limited capacity to absorb and maintain new and upgraded facilities.

Suitability. Historical use patterns and user demands tend to drive recreation management more than suitability assessments that provide a sound ecological framework for planning, locating, and managing recreation facilities and infrastructure.

Motorized Recreation/Competitive Events. Motorized recreation use and organized competitive events are creating ecological, operational, and staff impacts. In some forest locations, there is direct sediment delivery to streams caused by OHV use.

Organized OHV Groups. Based on staff comments, email correspondence between staff and 4WD groups, and the staff report “Motorized Event Management on the Tillamook State Forest,” organized groups tend to place intense demands on recreation staff. This problem is exacerbated by a lack of strategic planning and inadequate management policies and practices to help guide decisions.

Limits of Acceptable Change. There is no consistent and universal approach to establish desired tolerance levels (Limits of Acceptable Change²) in order to establish minimum thresholds for specific recreation activities, conduct suitability analyses, and achieve forest sustainability objectives.

Resource Damage. Resource damage from recreation use was observed on all State Forests, and in varying degrees. This damage was caused by both dispersed and developed recreation activities. Due largely to a lack of staff capacity and consistent standards and guidelines, OHV recreation use is creating the most acute damage to forest resources.

Integrated Forest Management. Recreation is not well integrated into forest management and transportation planning. This includes both short-term forest operations planning such as timber sales, and long-term planning to achieve interdisciplinary goals of the Forest Management Plan.

Uniqueness of State Forests. Each of the State Forests varies ecologically, in land ownership size and patterns, landscape characteristics, and terrain. While consistent and universal recreation policies and strategic direction are important, flexibility must be maintained to develop programs unique to these special and discrete qualities.

Public Image. ODF does not communicate a clear image to the general public in terms of its recreation mission, role, management goals, opportunities, rules and regulations. Nor does the Agency provide adequate information about “working forests” as the context for managing Oregon’s State Forests.

²*Limits of Acceptable Change* is a recreation management concept that is considered more useful than establishing a preferred “carrying capacity” for recreation settings. Rather than setting thresholds for limiting number of users, LAC acknowledges that recreation use will change the biophysical landscape, and limits are established on how much change will be allowed to occur, and where it will occur. LAC prescribes management actions required to maintain acceptable change based on sustainability and resiliency of the resource.

Introduction

Background

The Oregon Department of Forestry (ODF), established in 1911, manages approximately 600,000 acres of state forestlands in Northwest Oregon that includes the Clatsop, Tillamook, and Santiam State Forests, and 37,700 acres of other forestlands located in three counties. The *Northwest Oregon State Forests Management Plan* (FMP), adopted by the Board of Forestry (BOF) in 2001, is the Agency's first comprehensive, overarching plan that provides a multi-resource approach for policy direction and guidance of the northwest State Forests.

The first recreation management plan, the 1993 *Tillamook State Forest Comprehensive Recreation Management Plan* (RMP), laid the framework for recreation on state forestlands after the program was virtually eliminated during the recession in the 1980s. After several years of implementing the plan with extensive public involvement and working toward a "vision of a forest free of user conflicts," and "where diverse recreation opportunities" would be provided "with minimal resource degradation," the quality of recreation experiences on the Tillamook State Forest has improved and recreation use has increased beyond anticipated levels.

In 2000, ODF prepared the *Tillamook State Forest Recreation Action Plan* with involvement and support of county representatives and recreation advisory committees. This plan not only consists of an updated action and implementation plan, it establishes policy direction for recreation by identifying ODF's role as a provider of "Roaded-Natural" and "Roaded-Modified" recreation opportunities.

Using the Tillamook recreation planning process as a prototype, recreation management plans were prepared for the Clatsop and Santiam State Forests in 2000, as well as for the other state forestlands comprising the West Oregon District in 2001. These ten-year plans are designed to be recreation components of the *Northwest Oregon State Forests Management Plan*.

Today, recreation staff manages recreation programs on the Clatsop, Santiam and Tillamook State Forests. While recreation occurs on the West Oregon District forestlands, there is currently no professional recreation staff to manage a recreation program on that District.

In 2006, ODF commissioned Strategic Resource Systems to conduct an assessment of the effectiveness of its two forest management plans, resulting in the *Forest Management Assessment Report*. The report includes 29 findings and four "apparent deficiencies." *Three of the shortcomings described erosion and sedimentation problems caused by both authorized and unauthorized Off-Highway Vehicle (OHV) use near some streams, with a conclusion that "ODF should do more to control OHV use."* The report describes the recreation program as "generally strong" with "some districts lacking recreation plans and inventories."

Assessment Purpose and Scope

In January 2007, ODF commissioned David Reed & Associates (DRA) to conduct a second-party assessment patterned after the Forest Management Plan assessment. Purpose of the assessment was to evaluate effectiveness and implementation of the four Northwest Oregon recreation management plans. DRA was contracted to specifically determine the following:

- Goals and objectives are clearly stated and described;
- Procedures are in place to achieve the goals and objectives;
- Actions are appropriate to achieve the goals and objectives;
- Facility/Resource management and service delivery are being performed to best management practices;
- An effective and on-going evaluation component exists and is used to assess the level of service provided to the public that uses these facilities/resources; and,
- Whether alterations and improvements to the plans are needed to ensure objectives are achievable for funding, personnel, condition of existing opportunities, and quantity of proposed new opportunities.

This assessment is designed to:

- Provide a review of recreation management actions against standards that address facility management, resource management, and service delivery.
- Provide an appraisal of performance towards achieving goals and objectives and appropriate implementation of actions and procedures; and
- Establish a baseline for periodic re-assessment and recommend procedures for measuring success and accomplishment reporting.

Qualifications of the assessment team are provided at the end of this report.

Background Reports

The final report summarizes two technical reports that were prepared as background documents for the assessment of ODF recreation management plans:

Technical Report #1 – Initial Scoping of Recreation Plans
Technical Report #2 – Cycling-back from Field Assessments

Appendix A describes specific management systems and practices that could improve the State Forest recreation program (p. 31).

Assessment Approach and Methods

Context

To provide context for the recreation plan scoping work, the assessment team reviewed the *Northwest Oregon State Forests Management Plan* for an understanding of ODF's legal mandates including the *Greatest Permanent Value* rule; history of management planning; guiding principles, vision, and recreation goals; and management concepts and strategies for recreation, scenic resources, and cultural resources.

Related background reports were also reviewed including the *Oregon Department of Forestry Strategic Plan 2004-2011*, the *Responsive Management Report* (2006), and the *Forest Management Assessment Report* (2006). Several issue reports were also examined including the Board of Forestry's *2006 Issues Scan and State Forests Program Analysis*, the *Recreation Assessment Issue Paper* prepared by an ODF recreation workgroup in 2006, a *Recreation Interns Issues Paper* prepared by the Astoria District in 2006, and a report and recommendations for

Motorized Event Management on the Tillamook State Forest, prepared by recreation staff in 2006.

Staff also provided the *2006 Tillamook Action Plan Accomplishments Report*, annual operations plans for each of the districts, and other background documents including an initial revision and update of the *Santiam State Forest Recreation Management Plan*.

The assessment team first met with the ODF Project Team³ to obtain a clear understanding of staff expectations, to clarify roles and responsibilities, and to begin to identify critical recreation management issues.

Initial Scoping of Recreation Plans

The assessment team conducted an initial scoping process to identify strengths, weaknesses, and gaps in the structure of each of the state forest recreation plans⁴. Each of the plans was scanned as part of a completeness review, based on twelve elements that are typically included in well-developed recreation management plans (*see Appendix B, p. 36*).

From reviews of initial scoping results with the ODF Project Team, preliminary themes were identified, and subsequently the assessment team presented these themes and a more refined analysis of the recreation plans during three, daylong meetings with recreation managers and coordinators from each of the District offices. The meetings and site visits took place as follows:

January 29 – Tillamook (Tillamook and Astoria Districts)

February 1 – Forest Grove (Forest Grove District and Northwest Oregon Area Office)

February 2 – Salem (N. Cascades and West Oregon Districts and State Forest Program Office)

The assessment team also presented and received comments on a list of tentative performance indicators and standards for conducting recreation management assessments at field sites. Three field assessment instruments were drafted and reviewed at the District meetings (*see Appendix D, p. 40*). Following each of the meetings, representative field sites were visited as an orientation for the assessment team. Information generated from each of these meetings was memorialized, and meeting summaries were prepared and distributed to all participants.

Subsequently, the assessment team met on February 12th with the ODF Project Team in Lyons to review results of the District meetings, review draft findings for scoping the recreation plans, and then test the field instruments and assessment criteria at the Santiam Horse Camp. Subsequently the assessment team refined the completeness review of the recreation plans, which resulted in 34 findings reviewed by the ODF Project Team and reported in Technical Report #1. The field assessment instruments were also refined and finalized.

³The ODF Project Team consisted of the Northwest Oregon Area Director, State Forest Program Director, Policy and Planning Manager, Public Use Coordinator, Astoria Support Unit Forester, Recreation Unit Supervisors from the Forest Grove and Tillamook Districts, and the Recreation Coordinator from the North Cascade District.

⁴Clatsop State Forest Recreation Management Plan (2000), Santiam State Forest Recreation Management Plan (2000), Tillamook State Forest Recreation Management Plan (1993), Tillamook State Forest Action Plan (2000), West Oregon District Recreation Management Plan (2001), and Recreation and Cultural Resource Inventory and Assessment Reports prepared for the Clatsop and Santiam State Forests in 1999 and 2000 respectively.

Cycling-back from Field Assessments

For a more complete assessment of the recreation plans, after the field assessments were conducted the assessment team “cycled back” to determine how effective the plans are in terms of fulfilling ODF goals and objectives, and whether management procedures and practices are in place to implement the plans. For this assessment, the team used the five recreation goals from the *Northwest Forest Management Plan* (see pp. 14-16 of this report). The assessment team generated 22 findings that were reviewed by the ODF Project Team and reported in Technical Report #2.

This approach provided a greater depth of understanding to assess adequacy of the plans for achieving recreation management goals and objectives. Results of this phase of the project also helped determine the extent to which the plans are “goal-driven” as defined in the *Northwest Forest Management Plan*.

Equally important, since “adaptive management” is intrinsic to ODF forest management, the final plan assessment should assist the agency in “learning how to manage better” as described in the forest management plan.

Field Assessments

The ODF Project Team developed a list of field sites for the field inspections, with a goal of selecting sites that reflect the diversity of recreation use, facilities, and settings on each district. The Project Team also chose sites that were representative of the range of functional characteristics in terms of management goals and objectives and assessment criteria. During February 20-28, the assessment team conducted field assessments on the following ODF districts for one day each:

- Tillamook (western part of the Tillamook State Forest)
- Forest Grove (eastern part of the Tillamook State Forest)
- Astoria District (Clatsop State Forest)
- North Cascades District (Santiam State Forest)
- West Oregon District (West Oregon State forestlands)

Field Assessment Methods

Led by ODF recreation staff, the assessment team visited 45 recreation sites, facilities, and trails. Working in pairs, the assessment team visited 29 sites on both of the Tillamook State Forest districts, and seven sites on the Clatsop State Forest. One member of the assessment team visited six sites on the Santiam State Forest, and three sites on the West Oregon District (see *Appendix C, p. 38 for a complete list of the sites*).

At each field site, ODF recreation staff provided an overview of how the site was managed, as well as background information on specific management issues. The assessment team used three instruments for the assessments, tailored to settings for motorized recreation, non-motorized recreation, and developed recreation facilities (see *Appendix D, p. 40*).

At the conclusion of each day, debriefings were held with ODF staff, and the assessment team also debriefed each other with initial findings. Assessment team members prepared written summary notes for each of their field visits.

Prior to the March 16 ODF Project Team meeting, preliminary findings were distributed for staff review and comment.

Review of Findings

The assessment team completed the field assessment by reviewing preliminary findings and conclusions and obtaining feedback in a four-hour meeting with the ODF Project Team and field staff on March 16. Drafts of Technical Reports #1 and #2 were also presented and reviewed at this meeting. This review provided an opportunity to link field assessment findings with the scoping and assessment of recreation management plans.

Assessment Method Limitations

A number of limitations emerged as the assessment process unfolded, primarily due to the constraints of time allotted for the project, and logistical challenges of weather and seasonality. However, the assessment team is confident in the factual basis for the assessment findings.

Limitations of the study methodology area as follows:

- The field assessments were limited by contract to one week. This required use of the instruments as guides to generate qualitative findings based on assessment criteria, rather than conducting quantitative assessments.
- Given the time constraints, a decision was made to sacrifice a few in-depth, qualitative assessments as a trade-off for visiting and assessing a maximum number of sites representative of the variety of conditions and recreation settings managed by ODF on each of the districts.
- Travel distances limited the number of assessments of remote, dispersed recreation sites.
- The assessments were conducted in February, with limited opportunity to observe actual recreation use of the State Forests. However, this was somewhat offset by visiting sites during the wet season, therefore providing opportunities to observe adverse impacts such as sedimentation and erosion.
- Weather was not a factor for most of the assessment work; however a snowstorm affected the opportunity to observe ground conditions and reduced the number of sites for field visits on the Clatsop State Forest and the West Oregon District sites.
- While interdisciplinary expertise of the assessment team was utilized for the Tillamook and Clatsop State Forests by pairing assessors, time and budget limitations reduced field assessments on the Santiam and West Oregon District sites to one team member.

While assessment results varied among the State Forests, clear and consistent themes emerged. The assessment team believes the conclusions and findings are based on accurate observations in the field and sound, professional judgments drawn from the assessments.

Draft findings and conclusions were reviewed during a daylong meeting with the ODF Project Team, and staff had several other opportunities to review and comment on subsequent drafts. The assessment team concluded that the staff performed due diligence in selecting sites

representative of a wide range of conditions and settings, to the degree that the sampling is believed to meet survey requirements for preparing valid and supportable findings of fact.

Assessment of Forest Damage

The major field assessment limitation was an inadequate number of observations to determine magnitude, location, and causes of forest damage due to recreational use. The team is confident with the findings and conclusions that adverse impacts are taking place on all the forests, most notably sedimentation and erosion caused by OHV use. However, quantifying such impacts is beyond the scope and budget of this project.

It is not possible to determine overall magnitude of adverse forest impacts nor sort out the causes, such as a shortage of staff to control and repair damage, or a lack of management controls and clearly established limits of use. To do so would require a different approach, including a more systematic and narrowly focused assessment. Overall, the assessment team believes forest damage is likely caused by a combination of staffing level shortfalls, lack of clear policy direction, and disinclination to set and regulate limits of use, especially for motorized recreation.

Quality Assurance

From the beginning, it was recognized that quality assurance would be vital to the integrity and objectivity of this project, especially due to limitations and constraints of time, budget, and seasonality. These quality assurance measures were taken to achieve outcomes and results that meet performance standards for assessments of this nature:

- Interdisciplinary composition, experience, and qualifications of the assessment team fulfilled professional requirements for the project, including recreation planning, recreation management, forest management, and process facilitation expertise of team members.
- A certified and skilled mediator and facilitator was responsible for assuring the project followed a process to achieve transparency and integrity, create a high comfort level for ODF staff participation, provide ample opportunity for review and comment, accurately memorialize meeting notes and outcomes, and maintain high standards for meeting facilitation.
- The facilitator was not directly engaged in the field assessments. This provided objectivity and quality control for reviewing assessment findings and conclusions, as well as editing all deliverables.
- The assessment team challenged each other in the preparation of assessment findings and conclusions based on individual, complementary disciplines and expertise.
- The facilitator is also a published writer and editor responsible for editing all deliverables for quality assurance including meeting notes, technical reports, and the final report.

Recreation Plan Assessments

The recreation assessment project provided a systematic approach to determine effectiveness of State Forest recreation management plans in three different ways. First, initial scoping, or “completeness reviews,” examined the planning process and structural elements of the plans, as reported in Technical Report #1 and summarized in Appendix B on p. 36. Secondly, field assessments tested management practices against plan goals, policies, and objectives. Finally, the “cycling-back” assessment facilitated a more in-depth evaluation of the strengths, weaknesses, and gaps of the plans, while at the same time assessing how well management practices and systems are helping to implement the plans. Findings for the cycling-back assessment are reported in Technical Report #2.

With this rigorous review, the assessment was able to identify specific improvements needed for the recreation plans to function as policy and action plan documents, as well as address management capacity and tools required to achieve a quality recreation program through plan guidance and implementation.

Scoping ODF Recreation Management Plans

In scoping recreation management plans for Oregon State Forests, historical context is essential. In particular, until a comprehensive, multi-disciplinary forest planning process began in 1991, timber management was largely the focus of ODF planning. Recreation planning and program staffing also began for the Tillamook Forest in 1991. For the other Northwest forests, recreation plans and staff have been in place only within the last few years.

Historical Context

The *Northwest Oregon State Forests Management Plan*, the overarching plan that provides policy direction and management guidance, is a relatively recent plan adopted in 2001. Several features of the plan should be noted, which provide direction for the recreation program:

- The plan takes a much more comprehensive, integrated forest management approach than previous long-range plans for Northwest state forestlands, driven by statutory requirements for achieving *Greatest Permanent Value* with a full range of social, environmental, and economic benefits.
- The plan sets direction for a new forest management philosophy – a shift from rotation-based to structure-based management that “acknowledges uncertainty about the outcomes.”
- Adaptive management is prescribed for dealing with uncertainty, providing “opportunities for learning how to manage better.”
- Recreation is an integral part of the “working forest” management concept – balanced forest management to produce a sustainable mix of interdependent social, environmental, and economic benefits.
- Five recreation goals give policy direction for managing the recreation program and protecting forest resources.

As described in the introduction of this report, the State Forest recreation plans are first-generation plans that have been prepared within the last several years. Because the 1993 Tillamook plan was the prototype for the other State Forests, and none of the plans prescribe periodic reviews, much of the formal policy direction has remained constant since that time.

Well before recreation plans or professional staff were in place, historic patterns of unregulated recreation use were established and facilitated by an extensive open road system on each of the State Forests. This use created a strong sense of entitlement over a long period of time on the part of the recreating public, in many areas causing significant adverse impacts. The 1993 Tillamook recreation plan described chronic problems of inappropriate illegal activity and OHV use causing damage to forest resources including riparian areas, steep slopes, and severely rutted conditions on fire breaks, access roads, and cut banks.

It should be recognized that since the first Tillamook recreation plan was prepared, major improvements have been made to the recreation program on the Tillamook State Forest, as well as the other forests. This is a credit to the recreation staff and their commitment to implementing recreation management plans.

Structure of ODF Forest Recreation Management Plans

The four ODF recreation management plans were scanned for completeness, based on twelve elements that are typically included in well-developed recreation management plans (*see Appendix B, p. 36*). The 1993 Tillamook plan was found to be the most complete. The Clatsop and Santiam plans include most planning elements, and the West Oregon District plan consists more of a report than a management plan. The 2000 Tillamook Action Plan does not update key elements of the 1993 plan.

Two major deficiencies were found in the structure of the recreation plans – none of the plans describe how recreation will be integrated into the working forest management program, and only one plan includes an implementation element.

Findings for Content Analysis of Recreation Management Plans

Each of the plans was analyzed for their structural content to determine qualitative aspects, and findings were developed using the following criteria:

- Acknowledgement of Northwest FMP vision and recreation goals
- Comprehensive and strategic planning approach
- Logical progression of planning steps
- Strategic management issues identified
- Recreation use, trends, and demographics addressed
- Recreation resources and facility conditions inventoried
- Recreation suitability assessment
- Preferred recreation role and strategic direction
- Clear and achievable goals and objectives
- Achievable action and implementation plan elements

The general findings are as follows:

Finding: As first generation plans, ODF recreation plans have provided direction to achieve more effective management of use and resource protection. Given the short history of a formal recreation program on State Forests, significant accomplishments have been made.

Finding: Recreation staff understands the value of recreation plans and seems to use them for planning and management activities, especially action plan elements. Approximately 90% of the 1993 Tillamook Action plan objectives have been accomplished or significant progress made, according to staff.

Finding: ODF recreation plans lack strategic direction and policy guidance, and without periodic reviews, the plans have outlived their usefulness. Action plans tend to be driven by management objectives rather than recreation goals and a Desired Future Condition.

Finding: The *2000 Tillamook Action Plan* did not update the 1993 plan with new information or assessment of a Desired Future Condition; the Clatsop and Santiam RMPs tend to focus more on actions than policy direction; and the West Oregon District RMP is an incomplete management plan.

Finding: Recreation staff exhibits pride and enthusiasm in their jobs, appear to be dedicated and resourceful, and seem to thrive on the agency's culture of empowerment and adaptive management.

Cycling-back from Field Assessments

After the field assessments were conducted, the assessment team cycled back to the recreation plans, using the five *Forest Management Plan* recreation goals as assessment criteria (*see below*). These findings not only confirm initial scoping of the management plans, they also provide a greater depth of understanding of how plan deficiencies are constraining the recreation program and leading more to reactive management rather than a high level of adaptive management. These general findings were generated from this assessment:

Finding: Field assessments confirm that staff place a high priority on building relationships with user groups and involve users in implementing RMPs. Formal use agreements have been executed with organized groups and clubs including motorized recreation users, the Oregon Equestrian Trail organization, and recently free-ride mountain bike clubs.

Finding: Recreation plans have outlived their usefulness and lack strategic direction. The recreation program has grown to the point where management structure and capability are not sufficient, and the RMPs are inadequate to effectively and responsibly manage the present magnitude and diversity of recreation use on state forestlands.

Finding: Recreation plans lack policy direction to meet essential managerial and professional requirements; critical management issues such as risk management and benefit/cost analyses are not addressed. Further, no clear definition exists for a Desired Future Condition for recreation, leaving staff with their own interpretations.

Plan Assessment Findings by Recreation Goals

To conduct a final assessment of the recreation management plans, the five recreation goals from the *Forest Management Plan* were used as assessment criteria.

1a Provide diverse recreation opportunities (Goal 1b)

Finding 1. ODF recreation plans have provided guidance for major accomplishments in creating a wide range of recreation opportunities including a large trail network that supports 4WD, ATV, and motorcycle use as well as a large number of organized competitive OHV events. In addition, non-motorized trails, equestrian facilities, free-ride mountain biking areas, campgrounds, day use areas, and a large number of dispersed recreation sites are also provided on the State Forests.

Finding 2: While recreation plans acknowledge consideration of a Desired Future Condition in preparing the RMPs, a specific DFC is not articulated to provide management guidance.

1b Forest recreation opportunities supplement rather than duplicate opportunities available in the region (Goal 1b)

Finding 3: Due to the lack of strategic direction caused by vague policy direction in the FMP coupled with a poorly defined ODF role as a provider of recreation in the RMPs, the recreation program struggles to create its own identity and to respond to increased recreation demands and new recreation technology.

Finding 4: The recreation plans are so outdated that they may be a potential threat to the preferred future of three of the State Forests. For example, the Clatsop and Santiam Forests may have characteristics that are not suitable for motorized recreation trails as prescribed in the plans. The West Oregon District may not be able to maintain a sustainable recreation program.

Finding 5: With little policy direction, the recreation plans support a program that tends to be “all things to all people” without solid planning, design, risk management, and cost/benefit filters to assure safe, high quality, and manageable recreation programs. For example, target-shooting areas are prescribed in several plans, yet staff is concerned about a lack of rigorous risk assessment to make well-informed decisions.

Finding 6: Recreation plans have tended to create a niche for ODF that is responsive to special interest recreation users and groups without clear direction from the recreation plans on future direction and how recreation facilities and programs will be responsibly managed. Lack of staff to support these groups and recreation activities is also becoming a major concern of the program.

Finding 7: Current recreation plans do not address the magnitude and complexity of the existing recreation program and tend to be more action-driven than goal-driven. As a result, staff operates more in a reactive, opportunistic mode rather than a sound, adaptive planning mode.

Finding 8: Recreation staff do not use prescribed ROS settings of Roded-Modified and Roded-Natural to guide management decisions, which supports initial findings that these settings either do not accurately reflect current practice or are not understood.

2. Provide Opportunities for Interpretation and Outdoor Education (Goal 2)

Finding 9: Recreation plans are focused more on public education, information and communications rather than a broad forest interpretation program including exhibits, trails-side displays, signage, and brochures on natural history, forest ecosystems, and the working forest. Draft revisions now underway for the Santiam State Forest RMP include a new section titled “Forest Education/Interpretation.”

Finding 10: RMPs could provide direction and leadership to expand interpretive and education programs on State Forests, given the new Tillamook Forest Center and other opportunities to interpret the working forest concept in public recreation areas. Recreation staff has concerns, however, that this may create another level of management responsibility for a recreation program they consider to be overextended and under-funded.

3. Manage Recreation Use to Minimize Adverse Impacts (Goal 3)

Finding 11: The recreation plans list a number of adverse impacts from motorized and non-motorized recreation on forest resources including water turbidity, soil compaction, erosion, reduction of understory vegetation, and sanitation problems. These adverse impacts were observed during the field assessments. Management efforts to minimize resource damage were also observed.

Finding 12: Some of the recreation plans prescribe recreation uses that have potentially adverse impacts such as rock crawl features for 4WD vehicles, and target shooting areas. Learning areas for ATVs are also prescribed, and field observations noted that young riders tend to drift into forest habitats causing obvious damage to the understory.

Finding 13: The RMPs provide little guidance for addressing adverse impacts of recreation on forest resources other than prescribing activity zoning. This includes management practices such as relocating facilities that are in riparian areas, or closures and decommissioning of facilities. The exception is the 2000 Tillamook Action Plan that calls for closing and rehabilitating “inappropriate river access sites.” However, closures, and rehabilitation of river access sites were not observed to any large extent in field observations, with a number of heavily used campsites concentrated along riverbanks.

Finding 14: With increased use of GIS mapping and trail planning, and the benchmark Wilson River Corridor Assessment a possible prototype for other areas, ODF has the potential to improve suitability assessments and management capability and reduce damage to forest resources.

4. Minimize Conflict Among User Groups (*Goal 4*)

Finding 15: Staff reports conflicts between motorized user groups (4WD and motorcycles), and ATV use on non-motorized trails. No conflicts were observed during the field assessments undertaken during the low-use month of February. The RMPs prescribe activity zoning for reducing conflicts between users and among user groups.

Finding 16: With increasing use of more powerful and high-speed recreation vehicles and equipment, approaches such as activity zoning will likely be inadequate to effectively manage conflicts among users and user groups.

5. Maintain Compatibility with Statewide Planning Goal 8 (*Goal 5*)

Finding 17: The ODF Forest Management Plan notes that the Statewide Comprehensive Outdoor Recreation Plan “. . . found that statewide, there is a growing gap between the demand for semi-primitive non-motorized settings and the availability of these settings.” The State Forest recreation plans do not incorporate this finding into recreation policy or direction.

Finding 18: Field observations noted a lack of day use and group camping and picnicking facilities in many state forest recreation areas. The State Outdoor Recreation Plan indicates group recreation use is a growing demographic trend.

6. Planning, Staffing, and Management Capability (*added*)

Finding 19: Based on field observations, the ODF recreation program is lacking in both comprehensive planning and site development planning and design. However, recent contracts have been executed to provide more professional planning and design for selected sites.

Finding 20: Staff is overextended in managing the large and complex recreation program, and ODF recreation plans do not address staff and funding requirements.

Finding 21: RMPs do not address basic maintenance management, risk management, and integrated forest management functions of the recreation program.

Finding 22: One of the greatest obstacles to effective recreation planning and management appears to be a critical shortage of trained staff to fulfill both the agency’s recreation goals and objectives, as well as responsibly manage increasing recreation use and demands from user groups.

Field Assessments

The field assessment findings are organized by general findings, specific findings by assessment criteria, and conclusions drawn from the findings. Assessment criteria were developed in collaboration with ODF staff.

To overcome limitations in the assessments including winter weather and time constraints, the assessment team relied heavily on staff knowledge and background information. While team observations were made independently from staff participation in field visits, the team actively engaged staff to identify causal aspects of management shortcomings and deficiencies as observed in the field.

The field assessment instruments are found in Appendix D, pp. 40-51.

General Findings

As noted elsewhere, ODF's recreation management plans and staff have been in place for a relatively short period of time. Given a long history of unregulated recreation use on the State Forests, major accomplishments have been made to establish a strong recreation program within a working forest. Recreation staff is committed to ODF policy mandates including the *Greatest Permanent Value* rule, and works positively to achieve common integrated forest management goals.

Generally, recreation facilities and infrastructure are functional, accessible, well maintained, and in good repair. They are constructed of durable materials and are attractive and well designed. Graffiti is removed immediately and litter removal is a high priority.

Site rehabilitation and managing recreation use to protect forest resources continue to be high priorities, and professional planning and design contractors are providing design development expertise and alternatives for upgrading recreation sites and facilities. Activity zoning has been implemented to organize and manage both motorized and non-motorized trail systems. Trail planning continues to be refined with assistance of GIS mapping.

Staff works with recreation advisory committees to involve users in implementing Recreation Management Plans. Staff has also executed formal use agreements with organized groups and clubs, notably motorized recreation users, the Oregon Equestrian Trail organization, and recently free-ride mountain bike clubs.

The strength of the recreation program is its recreation staff. Staff members are motivated, take great pride in their work, and are creative and resourceful. They are actively engaged with user groups. ODF recreation staff also presents a positive attitude with both the recreating public and ODF colleagues in other disciplines, even when challenged by the complexity of their responsibilities.

Recreation staff is using the recreation plans to guide their management activities and programs, especially when striving to meet objectives and actions prescribed in the action plans. Because the plans are outdated and lack strategic direction with no policy framework for achieving a

Desired Future Condition, staff is often left with little guidance on how to interpret and implement specific elements of the plans.

The recreation program has grown in complexity and diversity, to the point where the management structure and capabilities are not sufficient, and the RMPs are not able to provide policy direction for taking the recreation program to the next level.

The current recreation program is not adequately protecting and maintaining forest resources and habitats, nor is it able to sustain an effective recreation program into the future. ODF is attempting to do too much with too little, without a clearly defined role and purpose. The program also lacks essential management systems and uniform practices that are required to provide safe, high quality recreation experiences across all forest districts.

Specifically, these findings are critical to the future of the recreation program:

1. **Major progress has been made to rehabilitate, upgrade, and professionally manage the forest recreation system**, and in a relatively short period of time. Recreation staff has also created strong partnerships with a number of user groups to facilitate the design, construction, and maintenance of recreation facilities on state forestlands.
2. **Recreation management plans are outdated and lack strategic policy direction or Desired Future Condition⁵** to effectively guide the recreation program. Critical management issues are not addressed, and some action plan prescriptions could have potentially negative consequences if implemented (*see "Conclusions," p. 25 of this report*).
3. **The current recreation delivery system is fragmented, unorganized, and inefficient to maintain** due to a lack of strategic direction, lack of formal recreation policies, and management practices that are inconsistent throughout the program.
4. **The current management structure is not adequate** to provide leadership and support for a growing, more complex, and diverse recreation program. In addition, staffing levels are inadequate and Limited Duration positions fail to provide continuity required to manage such a dynamic system.
5. **No risk management program exists specifically for managing recreation.** Given increasing use and the trend to accommodate higher risk activities, such as free-ride mountain biking and motorized recreation with more powerful and higher speed vehicles, the potential for risk exposure is high.

⁵A *Desired Future Condition* establishes a preferred role and mission for the managing agency, including recreation settings, recreation uses, and management strategies that meet specific recreation goals and mandates of the FMP.

6. **An overall business approach to recreation management is lacking.** Critical information systems and procedures are not in place such as fiscal accountability and impact analysis, benefit/cost analysis, a formal monitoring and research program, and trend analysis.
7. **Maintenance and operations funding is inadequate, even though funds appear to be readily available for continued recreation development.** There are indications of stress placed on staff due to increasing and more diverse recreation use, as well as limited capacity to absorb new and upgraded facilities.
8. **Historical use patterns and user demands tend to drive recreation management** more than suitability assessments that provide a sound ecological framework for planning, locating, and managing recreation facilities and infrastructure.
9. **Motorized recreation use and organized competitive events are creating ecological, operational, and staff impacts.** In some forest locations, there is direct sediment delivery to streams caused by OHV use.
10. **Organized OHV groups tend to place intense demands on recreation staff,** based on staff comments, email correspondence between staff and 4WD groups, and the staff report, “Motorized Event Management on the Tillamook State Forest.” This problem is exacerbated by a lack of strategic planning and inadequate management policies and practices to effectively guide decisions.
11. **There is no consistent and universal approach to establish desired tolerance levels (Limits of Acceptable Change⁶)** in order to set minimum thresholds for specific recreation activities, conduct suitability analyses, and achieve forest sustainability objectives.
12. **Resource damage from recreation use was observed on all State Forests,** and in varying degrees. This damage was caused by both dispersed and developed recreation activities. Due largely to a lack of staff capacity and inconsistent standards and guidelines, OHV recreation use is creating the most acute damage to forest resources.
13. **Recreation is not well integrated into forest management and transportation planning.** This includes both short-term forest operations planning such as timber sales, and long-term planning to achieve interdisciplinary goals of the Forest Management Plan.
14. **Each of the State Forests varies** ecologically, in land ownership, size and patterns, landscape characteristics, and terrain. While consistent and universal recreation policies and strategic direction are important, flexibility must be maintained to develop programs unique to these special and discrete qualities.

⁶*Limits of Acceptable Change* is a recreation management concept that is considered more useful than establishing a preferred “carrying capacity” for recreation settings. Rather than set thresholds for limiting number of users, LAC acknowledges that recreation use will change the biophysical landscape, and limits are established on how much change will be allowed to occur, where it will occur, and prescribes management actions required to maintain acceptable change based on sustainability and resiliency of the resource.

15. **ODF does not communicate a clear image to the general public** in terms of its recreation mission, role, opportunities, management goals, rules and regulations. Nor does the Agency provide adequate information about Oregon’s “working forests,” which is the management context for the State Forests.

Findings by Assessment Criteria

Professional Recreation Staff

Finding 1: ODF is managing the recreation program with strong and dedicated recreation staff. They demonstrate a high capacity for adaptive management, are creative and resourceful, work well with identified stakeholder groups and with each other, and take pride in their work in spite of sometimes highly demanding and challenging work.

Finding 2: Recreation management plans are actively implemented by recreation staff and are adapted to current needs and opportunities.

Finding 3: Recreation staff enjoys their autonomy and empowerment for on-the-ground decisions.

Finding 4: Recreation staff is responsive to interests, proposals, and concerns of users, and encourages active involvement of user groups in volunteer activities and programs.

Rehabilitating Older Sites, New Lands and Facilities

Finding 5: A large part of the current recreation program is focused on continued site rehabilitation, conversion of historic (legacy) sites to more suitable uses, reclaiming damaged areas, controlling vehicles, and making facility improvements.

Finding 6: A number of the rehabilitated recreation sites and staging areas were observed that lack professional design, and continue to function largely based on historical use patterns. As a result, it is difficult to manage these areas and protect forest resources.

Finding 7: New facilities and programs established on State Forests include several cooperative projects with organized groups, such as building and maintaining full service horse camps and free-ride mountain bike areas.

Finding 8: The recreation program has been significantly expanded through recent land transfers and management agreements.

Condition and Adequacy of Facilities

Finding 9: Generally, recreation facilities are functional, accessible, well maintained, and in good repair. Constructed of durable materials, they are attractive and well designed with a consistent “rustic” theme. Graffiti is removed immediately, and removal of litter is a high priority. Water systems are routinely tested to maintain water quality standards.

Finding 10: Vandalism is a major problem on all Northwest State Forests.

Finding 11: Use of portable restrooms is not consistent throughout the districts, and human waste is a major problem in many dispersed recreation sites.

Finding 12: Waste recycling is not consistently applied throughout the districts.

Protection of the Biophysical Environment

Finding 13: Resource management, resource condition assessments, and forest resource protection are not consistent throughout the districts.

Finding 14: These common problems were observed on motorized trails, with direct sediment delivery to streams in some locations: cut-bank riding and “ditch bogging;” many 4WD trails impacted and eroding; rutting and eroding ATV trails; riders skirting trail closures and creating new impacts; and two observed instances of high-impact stream crossings that may be common on unmanaged, legacy trails.

Finding 15: Organized OHV events significantly increase impacts on trail systems. The draft manual on trail guidelines calls for 4WD trails with the highest difficulty level to be infrequently maintained. These trails are described as “steep, rocky, and rutted trails” – in apparent conflict with the agency’s sustainability mission and ethic.

Finding 16: Off-trail use and forest impacts were observed in youth ATV learning and play areas.

Finding 17: For both motorized and non-motorized trails, no formal standards exist for systematic assessment of trail conditions to identify need for corrective actions and maintenance.

Finding 18: Motorized trail locations and recreation site development upgrades tend to be based more on historical use and not suitability assessments.

Finding 19: Large sources of noxious weeds exist in some high use areas and recreation staff is aware of the need for vegetation management such as control of invasive vegetation. No formal program exists for monitoring, staff training, or resources to eradicate and prevent dispersal of invasive vegetation.

Finding 20: The Wilson River Watershed Assessment inventoried a large number of dispersed campsites and identified adverse resource impacts. Results of this project may be an indicator of a larger, system-wide problem due to an apparent lack of systematic inventories and assessments of dispersed recreation sites incorporated into recreation planning and management practices.

Maintenance Management

Finding 21: Few maintenance management plans have been prepared for recreation sites.

Finding 22: A large number of dispersed recreation sites exist in remote locations that are not inventoried or mapped. Maintenance and operations costs have not been analyzed to assess economy of scale issues and alternative management strategies.

Finding 23: In high use areas with no restrooms, South Fork crews must deal with human waste problems.

Finding 24: No formal hazard tree inventories or record keeping are maintained for developed recreation sites.

Finding 25: The South Fork Inmate Crews provide extensive maintenance and construction support to the recreation program, with emphasis on maintaining quality of workmanship, facility design standards, site cleanup, and trail maintenance.

Risk Management

Finding 26: No formal risk management program exists to monitor and administer the recreation program.

Finding 27: A number of higher risk uses are taking place on State Forests such as free-ride mountain biking areas with structures built by user groups, and a motorized recreation program that accommodates more powerful, higher speed vehicles and a large number of competitive OHV events.

Finding 28: The recreation program is overlaid on a transportation infrastructure system that was designed for forest operations and not public use, which has led to safety problems.

Finding 29: Public access to State Forests often takes place on privately owned roads that are not maintained or designed for safe recreation use.

Integrated Forest Management

Finding 30: Integrating recreation planning into forest operations is not consistently applied throughout the districts.

Finding 31: Impacts from timber sales include skid trails and waste piles that encourage unregulated ATV use, and disposal of road-building waste in or near recreation sites.

Finding 32: In some cases, recreation trails have been lost or trail networks significantly impacted due to forest operations that have not been effectively integrated with all disciplines, creating trail system deficiencies.

Finding 33: A lack of integrated planning exists across all forest management disciplines. For example, long range planning for a recreation trail network is not well integrated into transportation and forest management planning, with few tools or standards for cohesive, unified, decision-making.

Finding 34: Forest operations policy and guidelines have not been developed to support public recreation use: for example improvements in road design to improve public safety.

Safety, Misuse, Conflicts, Vandalism

Finding 35: Random garbage disposal, target shooting, and vandalism are present on all State Forests.

Finding 36: Deputies assigned to the Tillamook Forest consider these to be the top safety issues: (1) illegal recreation (drugs, alcohol, partying); (2) theft of forest products; (3) increasing summer use, and (4) large area and distances to cover.

Finding 37: Law enforcement deputies report increasing ATV use, often on non-motorized trails. ATV users also look for braided trails and old road grades.

Finding 38: Volunteer camp hosts are recruited for established campgrounds. A designated campsite and basic utilities are provided to the hosts, who provide 24-hour presence, meet and greet campground users, and are responsible for general oversight. Recruiting camp hosts is becoming increasingly difficult, especially in remote locations.

Access

Finding 39: An open road and gate system allows public access throughout the forest system, which makes control difficult for managing recreation sites and trails. This also contributes to increased resource impacts from irresponsible use.

Finding 40: Some seasonal closures and rehabilitated trail closures have not been effective.

Finding 41: A large number of “rogue trails” exist on State Forests and are difficult to manage and control – especially trails used for motorized recreation.

Education Information, and Interpretation

Finding 42: Cooperative school education programs are examples of recreation staff initiative to provide interpretation and education opportunities.

Finding 43: Maps that adequately guide and inform recreation users are not readily available on State Forests. Few maps are available on the ODF web site or included in RMPs.

Finding 44: ODF does not have a consistent signage and information program.

Finding 45: Information is insufficient to promote appropriate recreation use. For example, trailhead information is limited to trail type, difficulty level, and brochures, with little information on ODF expectations for use or awareness of careful use.

Finding 46: Very little information and interpretation is provided to educate and inform recreation users on the concepts of a working forest and forest operations, or to highlight forest landscape features such as natural and cultural history, forest habitats, and wildlife.

Planning and Design

Finding 47: Current recreation planning tends to be reactive and inconsistently approached across the districts, and long-term integration of recreation planning with ODF transportation and forest management planning is lacking.

Finding 48: Recreation staff does not use the Recreation Opportunity Spectrum⁷ management settings of “Roaded-Modified” and “Roaded-Natural” as prescribed in the RMPs.

Finding 49: No planning rationale is in place that clearly identifies the Desired Future Condition for recreation on State Forests. Information is lacking on who the target users are and how recreation sites, facilities, and trails will best function to protect forest resources and meet user needs.

Finding 50: Sign standards are not universally applied throughout the recreation system, frequently resulting in sign clutter in some locations, lack of information in others, and a lack of ODF “branding” in general. Some older signs are attached to trees.

Finding 51: A trail location and design manual is in draft form, but it has not been completed and does not include maintenance and use guidelines such as limits on numbers of trail users, vehicle power, equipment, or weight limits.

Finding 52: Recreation staff is increasingly making use of GIS mapping to improve planning, restoration, and management capability.

Finding 53: No formalized master plans exist for motorized and non-motorized trail systems on the State Forests, resulting in a lack of legibility for trail users and little guidance for management decisions.

Finding 54: ODF has recognized the benefits of contracting with professional planners and designers to prepare site plans and bid documents for renovating and upgrading several existing recreation sites. However, there is a lack of consistency across the districts for how sites are planned, designed, and engineered. No universally applied planning and design standards exist.

⁷ *Recreation Opportunity Spectrum* is a recreation management concept that helps identify recreation settings that best match forest landscape characteristics with preferred recreation uses in order to provide high quality recreation experiences and minimize adverse resource impacts.

Recreation Mission, Vision, Desired Future Condition

Finding 55: As directed by recreation goals and management plans, ODF makes a conscious effort to manage a recreation program that has a distinctively different role in relation to other regional providers such as state parks. However, this role is not clearly defined or communicated, nor is it consistently applied throughout the ODF Districts.

Finding 56: Without a clearly stated mission and Desired Future Condition for recreation on State Forests, planning and management decisions have been largely reactive, influenced by historical use patterns, and focused on correcting deficiencies caused by unregulated past use.

Finding 57: The current recreation delivery system is fragmented, unorganized, and inefficient to maintain due to a lack of strategic direction, formal recreation policies, and management practices that are inconsistent throughout the program.

Finding 58: Forest resources are sustaining damage from recreation use on all Districts. Due to the increase and diversity of recreation use on State Forests, and with no clear direction for a Desired Future Condition, there is high potential for increased impairment of forest resources and ecosystems in the future.

Finding 59: A large proportion of the State Forests are supporting single purpose recreation facilities and uses. User groups are highly vested in planning and in some cases constructing and maintaining these sites, and ODF provides extensive recreation facility development and operational support.

Finding 60: User-generated recreation proposals are not subjected to cost and benefit analysis in order to determine merits and feasibility. Without rigorous assessment, the general public interest may not be served.

Finding 61: Some recreation activities such as target shooting and OHV rock crawl features may not be sustainable and or appropriate within the forest landscape. Yet these activities are prescribed in recreation plans. Staff often views these activities as best managed in designated areas rather than dispersed and unmanaged throughout the forest. It is unclear how these uses are addressed in a Desired Future Condition for recreation on state forestlands.

Finding 62: Periodic reviews have not been undertaken for the RMPs, resulting in potential conflicts with current vision and recreation management practices.

Finding 63: Recreation sites, facilities, and trails are managed on State Forests without updated recreation management plans, with inadequate staffing levels, and without a clearly defined role and Desired Future Condition for recreation.

Management Structure, Approach, Information Systems

Finding 64: Staffing levels are inadequate to provide safe, high quality recreation experiences and to protect resources and forest habitats.

Finding 65: Limited duration positions result in loss of skills and experience required to effectively maintain the existing and growing recreation program.

Finding 66: Funds seem to be readily available for recreation development, yet there is no system in place to adequately forecast and absorb these new facilities into the management program with appropriate adjustment for staff and operations.

Finding 67: While autonomy and empowerment are healthy ODF organizational traits, without a universally accepted vision, mission, and Desired Future Condition for the recreation program, the Agency is becoming vulnerable in areas such as risk management and financial stability.

Finding 68: Due to a lack of clearly defined and acceptable limits for resource impacts and thresholds, adequate tools are not in place to effectively manage organized OHV events and motorized recreation. There is evidence of tension between OHV user groups and ODF staff.

Finding 69: Cost and benefit analysis is not an integral part of the recreation management program, and therefore it is difficult to make critical decisions regarding the future of a growing, complex recreation system.

Finding 70: The magnitude of cost is significant to manage the complex and diverse recreation program on State Forests; there is a lack of rigorous fiscal analysis and a comprehensive accounting system to monitor and track expenditures and costs.

Finding 71: An overall business approach is lacking for effective management of the recreation program. Accounting and information systems are not in place to assess adequacy of staff levels, justify expenditures, provide statistical information, analyze trends such as public safety, and identify future funding and programmatic needs.

Finding 72: No formal monitoring, reporting, and information management program exists to provide for systematic data collection and analysis of forest resource conditions, recreation use, and trajectories of change.

Finding 73: The current organizational structure does not provide policy, planning, and management direction for the guidance and support required to effectively manage the large, complex, and dynamic recreation program on State Forests.

Conclusions

After 15 years of continual growth without the benefit of a strategic and long-range planning framework, the Oregon State Forests recreation program is at a critical juncture. In large part, the program has evolved in response to recreational demands without duplicating other recreational opportunities in the region as directed by the Forest Management Plan.

The recreation program has accomplished much in its short tenure: rehabilitating recreation sites and trails, striving to minimize user conflicts and adverse impacts to forest resources, and building strong relationships with some user groups.

However, with the magnitude, diversity, and complexity of increasing recreational demands placed on the Agency, a more strategic and coordinated approach is imperative. Such an approach will necessitate incorporating more professional management practices and expertise if the recreation program is to achieve the stewardship ethic and sustainability goals of the Agency's overall mission: “. . . protecting, managing, and promoting stewardship of Oregon's forests to enhance environmental, economic, and community sustainability.”

Based on findings from this assessment, the recreation program currently exhibits multiple indicators of programmatic stress. Simply stated, a lack of strategic direction, outdated recreation plans, and inadequate management systems and practices are preventing the program from meeting requirements of a growing, complex delivery system.

As a result, the agency seldom sets limits on recreational use. Additionally, increasing tension is apparent with some user groups when limits of use are proposed. Some recreation uses are also causing impacts to forest resources. These problems are exacerbated by inadequate staffing

levels and training, continued use of Limited Duration staff over several years, and an organizational structure that does not provide focused leadership and support for recreation management.

As staff implements recreation management plans for each of the State Forests, it is apparent that these plans have reached the end of their useful life. In particular, the plans lack clear policy direction and a framework for resolving a large number of critical management issues. Some plan directives could even have potentially negative impacts on the program. For example, without updated policy direction and standards, several prescribed recreation uses may not be consistent with the Agency's mission of sustainability for State Forest landscape settings.

On its present course, the recreation program will be unable to respond in an organized and orchestrated fashion to an increasing magnitude and diversity of recreational use. These specific conclusions are drawn from the assessment project:

1. **Realigning organizational structure** of the recreation program could provide more focused management leadership and support that is required for a growing and increasingly complex recreation delivery system.
2. **Integrating recreation planning and management** more effectively into the forest management program at all levels (e.g. implementation, annual operations planning and budgeting) would improve on-the-ground decision-making, facilitate continuous improvements, and achieve a safer, more cohesive, and efficient recreation program.
3. **Implementing more of a business approach** using improved information systems, risk analysis, and benefit/cost and fiscal impact analysis could significantly increase effectiveness and efficiency of the recreation program, justify staffing levels and budgets, and help to responsibly manage risks.
4. **Developing a strategic recreation plan** that includes a "Desired Future Condition" and an ongoing evaluation component would provide the management framework and policy direction to progressively move the recreation program toward a preferred future, help fulfill FMP goals, assist in refining and updating State forest recreation plans, and guide sustainable recreation use.
5. **Commitment to a robust monitoring and "early response" system** would contribute to the database and information systems needed to determine magnitude, location, and effects of adverse impacts on forest resources; public safety would also be more effectively addressed.
6. **Developing OHV standards and guidelines** patterned after standards now in place for forest operations would provide the management framework for setting "Limits of Acceptable Change" and a more responsible motorized recreation program.

7. **Expanding use of GIS mapping** would provide information needed for suitability analysis and improved decision-making for relocating, closing, or decommissioning existing recreation facilities and trails. This would also facilitate planning and developing the future system.
8. **Developing relationships and partnering agreements** with a broad spectrum of stakeholder groups could establish a stronger level of support for the recreation program and avoid a possible public perception that State Forests tend to exclusively support special interest groups.
9. **Developing recreation planning and design standards and guidelines**, and redesigning and rehabilitating existing high use recreation sites could significantly improve management efficiency and forest resource protection, as well as enhance the quality of recreation experiences.
10. **Expanding forest interpretation** has outstanding potential for not only improving recreation behavior and providing educational opportunities, but also for creating public understanding, awareness, and support for the ODF working forest concept.

The Assessment Team

David Reed & Associates specializes in assembling experienced and complementary groups of professional associates that provide a range of expertise and experience to strategically address complex recreation planning and management issues. To this end, DRA formed the following team to conduct a recreation assessment for the Oregon Department of Forestry:

David Reed, David Reed & Associates, is the primary contractor and lead consultant for the ODF recreation management assessment. He is a member of the Natural Resources Section of the Oregon Parks and Recreation Association and has 40 years of experience in recreation planning and management.

He has held recreation planning and management teaching positions in the Department of Forest Resources at Oregon State University, as well as teaching and research positions at Texas A&M University, Texas Tech University, and the University of Texas at Austin.

He has been a recreation manager and recreation planner for several agencies, and a consultant based in Springfield, Oregon for the past twelve years. He prepared the recreation and visual resource assessment for the Umpqua Land Exchange project, under contract with the Foundation for Voluntary Land Exchanges. He has also consulted with a number of municipalities and counties to prepare recreation management plans for public natural areas in the Willamette Valley.

He holds the following degrees: Bachelor of Science in Park Administration from Texas Tech University; Master of Science in Resource Development from Michigan State University; and Doctor of Philosophy in Recreation Planning from Texas A& M University.

Paul Hoobyar, Watershed Initiatives, LLC. served as process facilitator for the assessment team and was also responsible for quality assurance. He is a trained facilitator and mediator specializing in natural resource management and planning. He is registered with Oregon's State Agency Mediator Roster, the

U.S. Institute for Environmental Conflict Resolution, and he is a member of the Oregon Mediation Association.

Since 1993 he has provided facilitation for science teams, government agencies, non-profit organizations, and stakeholders to reach agreement on contentious issues, and to develop strategic management plans with measurable benchmarks and objectives. He is also a published writer and editor.

Paul has consulted with the National Marine Fisheries Service, developing a collaborative process with federal agencies, tribal entities, state natural resource agencies, and stakeholders to identify monitoring, research and restoration goals in the Klamath Basin. His clients have also included the U. S. Forest Service, Oregon Governor's Natural Resource Policy Office, Oregon Watershed Enhancement Board, For the Sake of the Salmon, municipalities, local watershed groups, and public interest groups.

He holds a Bachelor of Arts in Natural Resources from the University of California at Berkeley, and a Masters of Fine Arts from the University of Oregon.

Scott Ferguson, Trout Mountain Forestry, served as the assessment team's forest management and planning specialist. His company is certified with the Forest Stewardship Council, and he is a member of the Society of American Foresters and the Forest Guild.

He has over twenty years of experience in sustainable forest management and planning, providing multi-disciplinary forest assessments and stewardship management plans for federal land management agencies, counties, municipalities, and family forest ownerships.

He currently is preparing a Fire Risk Assessment and Desired Future Conditions Plan for Forest Park and Powell Butte in Portland. He also prepared watershed plans as lead forester for both the City of Corvallis and Forest Grove, as well as management plans for several natural areas in Benton County.

He holds a Bachelor of Science in Biological Sciences from Yale University, and a Masters of Forestry from Oregon State University.

Jerry Davis, a recreation management consultant, served as the assessment team's forest recreation management specialist. He was director of the Benton County Natural Areas and Parks Department for 27 years.

Under his direction, he increased Benton County's parks and natural area system to 1,400 acres, working with federal, state, and local agencies as well as private landowners and non-profit groups to create trail systems, restoration projects, recreation facility development, and an education and interpretive program.

Prior to retiring, he was instrumental in obtaining a grant from the U.S. Fish and Wildlife Service to prepare the Benton County Habitat Conservation Plan, and county officials have retained his services to continue the project.

He holds a Bachelor of Science in Resource Recreation Management, School of Forestry, from Oregon State University.

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Note: Dr. Mark Needham, Department of Forestry, Oregon State University, provided assistance in reviewing an initial list of indicators and standards of performance for preparing the recreation field assessment instruments.

Appendix A. Management Systems and Practices

Outlined here are several management systems and practices to help improve the Oregon Department of Forestry's recreation management program. A Strategic Visioning Process provides the over-arching foundation for other systems and practices.

STRATEGIC VISIONING PROCESS⁸

1. Develop Context for ODF Strategic Visioning for Recreation
 - Review history, growth, accomplishments of the recreation program by districts; agree on conclusions
 - Review FMP for policy framework, mandates, management philosophy, recreation goals
 - Review overall ODF strategic planning program and how recreation fits
 - Review Recreation Assessment Report findings and recommendations; agree on themes
 - Examine recreation trends, existing and projected use, changes in recreation program over time
 - Develop strategic recreation management issues and prioritize
2. Develop Agreement on Core ODF Recreation Values
 - Identify core ODF values and beliefs for managing recreation within a working forest
 - Test against ODF recreation goals, working forest mandate, outcomes of Step 1
3. Brainstorm Preferred Strategic Vision for ODF Recreation
 - Review core values and beliefs from Step 2
 - Agree on a preferred role for ODF as a recreation provider (Recreation Goal #1)
 - Agree on a preferred Desired Future Condition for recreation (Recreation Goal #3)
 - Test against outcomes of Step 2
4. Apply Outcomes to Strategic Visions for Each District
 - Review outcomes of Steps 1-3 and determine how they apply to unique qualities and characteristics of each state forest
 - Develop District Strategic Visions and DFC that are discrete for each forest and are consistent with ODF strategic vision
5. Present Outcomes of District Strategic Visions to Recreation Staff
 - Each district presents their strategic vision and DFC
 - Make adjustments and refinements as needed
6. Develop Short-Term and Long-Term Recreation Strategies, Objectives, and Actions
 - Complete the strategic visioning process based on the new Strategic Recreation Vision, including development of recreation strategies, objectives, and action priorities to implement the vision
 - Use strategic visioning outcomes to begin updating RMPs
7. Complete ODF Strategic Recreation Plan
 - Develop a formal Recreation Strategic Plan
 - Integrate the Recreation Strategic Plan into ODF Strategic Planning Process

⁸Public involvement will be vital to success of this effort. Recreation staff will determine appropriate places and levels for public participation from a broad spectrum of constituents.

Creating a “Business” Culture

Description

Creating a “Business Culture” within the Oregon Department of Forestry is important for several reasons: 1) Decisions should be made with sound information – costs and benefits are an essential component in making important decisions. For example: What are the costs (short term/long term) for accepting additional recreation lands and facilities into the system? What are the benefits? Is there capacity to effectively manage the new additions? A final decision can be driven by many factors; however, all pertinent information should be available prior to making any decision. 2) A business model helps manage the program, especially in terms of full accounting for indirect and direct costs of services. It is difficult to determine how fiscally efficient the program is without a complete accounting system. Fiscal alternatives can also be explored such as targeting a program to help pay for itself; this becomes a business decision. 3) Establishing progressive user fees for services is common for a public agency. Setting low costs for services does not serve the Agency as well as instituting more competitive costs. It is common knowledge that users will treat the resource with more respect when they have paid an equitable fee for using the resource. Conversely, there is less respect for the resource when users do not pay an equitable fee. 4) Elected officials generally support government programs that have an entrepreneurial perspective. And equally important, the general public tends to support and have a favorable image of a public agency that is perceived as managing an efficient program over one with a free spending philosophy.

Benefits/Outcomes

Generally, greater support comes from those making budget decisions, as well as more support and respect from users of the system. The business model builds in accountability and stewardship of scarce fiscal resources.

Relationship to Assessment Findings and Conclusions

An overall business approach to recreation management is lacking; fiscal accountability is not in place.

Risk Management

Description

A risk management program is an essential element for any public resource recreation program, especially with advances in more powerful recreation vehicles and speeds. For potentially high-risk activities, a risk assessment will not only limit litigation but also assure a high standard for public safety. What level of exposure is acceptable to the agency, given that inherent risk is associated with all public recreation programs? This is a topic that management should evaluate and, if necessary, create policies that will assist recreation managers to the greatest degree possible. Deciding whether the Agency will take risks such as facilitating a user group constructing non-engineered facilities should be a major policy decision. Risk assessments should be made by staff that will be held accountable if an accident occurs and litigation is pursued.

Benefits/Outcomes

An efficient and professionally managed organization will administer policies for risk management and formally acknowledge levels of risk that are within acceptable limits. While this does not make the organization immune to litigation, the level of risk is transparent to the agency, its staff, user groups, and the general public.

Relationship to Assessment Findings and Conclusions

No risk assessment program exists that is tailored specifically to the ODF recreation program. Recreation activities occur on state forestlands that have potentially high-risk exposure, such as motorized recreation.

Volunteers and Partnerships

Description

Oregon Department of Forestry recreation managers presently work well with volunteers and have created strong partnerships with organized groups, private landowners, and other federal and state agencies. A sound volunteer program and partnering with others are essential for leveraging limited operational funds. Volunteers and user groups can be a liability if they demand more than what the public agency can or should realistically provide. A healthy resource recreation program will have a cross-section of volunteers and partner with a wide spectrum of users. Clubs and associations are a good source of volunteers; however, non-profit organizations (NGO's) are also invaluable in terms of a free workforce and as allies for the department. Building a wide spread constituency is essential for a public agency that relies on public dollars for its operation.

Benefits/Outcomes

A public agency should generate support and a positive image from the general public as a whole, not just from a specific segment of the population. The benefits are many: 1) budget support; 2) assistance with program priorities; 3) labor/workforce leverage; 4) grants and other outside funding support (an untapped resource for the Oregon Department of Forestry); and 5) creation of a healthy recreation program that has a systems approach for providing services to the public.

Partnering with landowners and other agencies assists in meeting recreation goals to avoid duplication of services. Partnering also provides a high quality regional recreation system through collaboration in planning and management, such as trail systems.

Relationship to Assessment Findings and Conclusions

ODF tends to limit its focus on volunteers and user groups that represent special interests; there is an opportunity to build a broader constituency and increase public support for the recreation program.

Additional Funding Opportunities

Description

An additional sign of a healthy resource recreation program is the ability to leverage operational dollars with funding from outside the Agency. It is important to seek funds that are within the priorities of the Agency and not seek random dollars that will take the program beyond its scope and strategic direction. It is also important to be aware of potential opportunities for funding when undertaking strategic planning - this is an indicator of what is important to funding organizations. As stated in the volunteer section, volunteer organizations, non-profit organizations, and individuals can be very helpful in writing grants, or at the minimum, providing letters of support for specific funding requests. Grants and foundations are an unlimited source of funding opportunities. Professional skills are required to pursue these additional funding sources. However, it is well worth the cost required to develop this untapped resource.

Benefits/Outcomes

Leveraging operational dollars is a major benefit to a public recreation program, including: 1) obtaining support from policy-makers that decide budget allocations; 2) assisting the agency's ability to work with volunteers and partner with others; 3) providing assistance in creating a healthy recreation program.

Relationships to Assessment Findings and Conclusions

A more entrepreneurial approach is needed for the recreation program to provide high quality experiences and protect forest resources.

Invasive Species Management

Description

Invasive species are potential threats to biological diversity and ecosystem resilience to disturbance. Control of invasives is most effective and efficient during the early stages of establishment, when negative impacts are not always obvious. Recreation facilities such as horse camps and equestrian trails should be monitored to prevent establishment of non-native vegetation. Management procedures and practices include 1) training staff to identify and control invasive plants; 2) assessing resource conditions to inventory and determine abundance; 3) prepare a Vegetation Management Plan; 4) prioritize, prescribe, and implement management actions, and 5) monitor results.

Benefits/Outcomes

An ounce of prevention or control equals many pounds of cure when dealing with invasive plants. Many of the sites on the State Forests are relatively free of problems, but with continued public use this condition will not last without more active involvement of management.

Relationship to Assessment Findings and Conclusions

This system addresses areas found lacking in the assessment, including monitoring of invasive plants and policies and procedures regarding vegetation management.

Limits of Acceptable Change

Description

The Limits of Acceptable Change process focuses on maintaining resource and social conditions by setting specific standards and monitoring, including a clear policy direction that establishes a Desired Future Condition (DFC). Management procedures and practices include: 1) setting a DFC, 2) identifying areas of concern; 3) selecting indicators of resource and social conditions; 4) inventorying and assessing current conditions; 5) developing standards; 6) identifying management actions required to achieve standards, and 7) monitoring results.

Benefits/Outcomes

This system can provide for forest resource stability. Baseline conditions are assessed and standards established that can be monitored over time. A formal management program is in place to achieve ODF goals for maintaining sustainable and health forest ecosystems.

Relationship to Assessment Findings and Conclusions

This system addresses areas that the assessment found lacking, including no clear and meaningful DFC, incomplete or non-existent standards, and monitoring and maintenance deficiencies.

Suitability Analysis

Description

Also referred to as “vulnerability analysis,” suitability analysis is a method for determining optimum locations and recreation settings for sustaining specific recreation use. This spatial analysis is a mid-point process between the broader determination of Desired Future Conditions (DFC) and site and resource-specific performance standards and prescriptions. The publication *Forest Landscape Analysis and Design*⁹ outlines a step-by-step approach for integrated resource analysis with GIS information layers that could apply to ODF forest recreation and planning.

Benefits/Outcomes

Suitability analysis is especially applicable for planning trail systems and recreation facility development, combining preferred social conditions and experiences with forest health and sustainability goals. It recognizes that forest resources are capable of supporting a number of recreation activities, yet provides an information base to identify recreation settings that are most suited to those activities. With spatial analysis, management efficiency can also be addressed in terms of staffing and maintenance capability and resources. Spatial analysis provides an excellent opportunity to integrate all forest management goals and objectives. Without such an approach, recreation can easily become marginalized in multiple use management.

Relationship to Assessment Findings and Conclusions

The recreation assessment concluded that historical patterns of use and user demands tend to drive ODF recreation management more than suitability analysis. For example, planning for motorized and non-motorized trail systems tends to be driven by activity zoning that emphasizes use over recreation settings, in part because of a lack of a strategic direction and clearly defined Desired Future Condition. Suitability analysis provides an opportunity for a more comprehensive analysis of recreation use and resource analysis, and an enhanced opportunity to integrate and balance recreation use with forest resource protection and management. The assessment also concluded that an improved information base is needed for determining maintenance and management requirements for a recreation system that is growing in size and complexity.

⁹ Nancy Diaz and Dean Apostol. 1992. *Forest Landscape Analysis and Design: a process for developing and implementing land management objectives for landscape patterns*. U.S. Forest Service, Pacific Northwest Region

Appendix B. Recreation Plan Completeness Review

Structure of ODF Forest Recreation Management Plans*

PLAN ELEMENTS	Clatsop	Santiam	Tillamook		W. OR District
	2000	2000	1993	2000	2001
FMP Guiding Principles, Vision, Goals for Recreation and Scenic Resources	✓	✓	✗	✓	✗
Situation Analysis – Management and Use	✓	✗	✓	✗	✓
Strategic Management Issues and Challenges	✓	✗	✓	✓	✓
Resource and Facility Inventory and Analysis	✓	✓	✓	✗	✗
Recreation Supply/Demand Analysis, Trends	✓	✓	✓	✓	✓
Recreation Suitability Analysis	✓	✗	✓	✓	✗
Integrated Forest Management	✗	✗	✗	✗	✗
Role and Purpose as a Recreation Provider	✓	✓	✓	✓	✗
Management Policy, Goals, and Strategies	✓	✓	✓	✓	✗
Action Plan with Objectives and Actions	✓	✓	✓	✓	✗
Implementation Plan with Priorities and Strategies (including Asset Management)	✗	✗	✓	✓	✗
Future Needs and Opportunities	✗	✓	✓	✓	✓

*Results of the scan of ODF recreation management plans to determine how they are structured, based on twelve plan elements. Assessment findings provide a completeness review that addresses qualitative aspects of the plan elements. Descriptors for each of the elements are provided on the next page.

- ✓ Element addressed in RMP
- ✗ Element not addressed in RMP

Descriptors for Recreation Management Plan Elements

FMP Guiding Principles, Vision, Goals for Recreation and Scenic Resources

The NW Oregon State Forests Management Plan provides the policy framework and guidance for how recreation will be managed within the working forest concept, including five management goals for recreation and three for scenic resources.

Situation Analysis – Management and Use

An overview of current conditions and trends, describing the recreation management program and procedures; types, quantity, and locations of recreation use; and the facilities and services that are provided.

Strategic Management Issues and Challenges

Listing, discussion, and prioritization of critical recreation management issues that must be addressed through management strategies and the action plan.

Resource and Facility Inventory and Analysis

A description and analysis of opportunities and constraints of the forest landscape including cultural, natural, and scenic resources and forest land use, and a description of recreation facilities and infrastructure including general information on physical conditions.

Recreation Supply/Demand Analysis Trends

An analysis of the most current information on recreation needs, trends, and settings as determined by the Statewide Comprehensive Outdoor Recreation Plan (SCORP), an analysis of other regional providers, and summaries of most recent user surveys administered on the forest.

Recreation Suitability Analysis

Examination of forest recreation settings and identification of lands most suitable for recreation activities, including potentials and limitations.

Integrated Forest Management

A description of the basic concepts and procedures for achieving integrated forest management including recreation.

Role and Purpose as a Recreation Provider

Synthesizing the preceding plan elements, a preferred role and purpose is articulated including analysis of potential recreation settings that are suitable for specific recreation opportunities.

Management Policy, Goals, Strategies

Strategic direction, mission, and goal statements for managing recreation, including statement of a Desired Future Condition for what recreation should look like within certain time frames. Specific management strategies are identified to fulfill the goals.

Action Plan with Objectives and Actions

A detailed plan of achievable and measurable activities organized by management objectives, preferably within a priority matrix.

Implementation Plan

Staffing and funding requirements to implement the action plan; also standards and guidelines, and research and monitoring requirements.

Appendix C. List of Field Assessment Sites

Clatsop State Forest (Astoria District)

Astoria Basin
Gnat Creek Campground
New Gnat Creek Trail
Nicolai Mountain OHV Area
Henry Rierson Spruce Run Campground
Lost Lake
Northrup Creek Horse Camp

Santiam State Forest (North Cascades District)

Butte Creek Falls Trail
Butte Creek Falls Trailhead and Developed Site
Shellburg Falls Recreation Area
Shellburg Falls Trail
Shellburg Falls Free-ride Trail
August Mountain Bike Loop Trail

Tillamook State Forest (Forest Grove District)

Reehers Horse Camp
Gales Creek Trailhead
Blue Gate Dispersed Site
Gales Creek Campground and Trailhead
Rogers Camp Day Use Trailhead
Browns Camp OHV Staging Areas
Little Browns Camp OHV Campground Overflow
Stagecoach Horse Camp
Little Rubicon OHV Dispersed Camp
Lyda Creek OHV Staging Area
Kings Mountain Trailhead
Grotto Dispersed Site
Storey Burn Trail
Powerline OHV Trail
Wilson River Wagon Road Trail
Elmers OHV Trail
Cedar Tree OHV Trail
Gunnyworm OHV Trail
Firebreak Five Rock Crawl

Tillamook State Forest (Tillamook District)

Footbridge Day Use Area
Crooked Creek Dispersed Site
Nehalem Falls Campground and Trailhead
Peninsula Day Use Area
Jordan Creek Campground
Jordan Creek OHV and ATV Trails
Lake Tahoe Campground

Wilson River Corridor
Trask River Corridor and OHV Trail
Edwards Creek Beginners ATV Loop

West Oregon District

Mt. Baber ATV Area
Dispersed Sites along Big Elk Creek (2)

Appendix D. Field Assessment Instruments

ODF Recreation Facility Assessment Tool Developed Recreation Sites and Facilities

Name of Facility: _____ Date of Review: _____

Location: _____ Assessor (initials): _____

Forest Landscape Setting: _____

Land Management Classification: _____

Recreation site or facility, components, features:

Campground (size) _____ campsites StagingArea/Trailhead _____

Restroom type/no. _____ Interpretation (type) _____

Parking area _____ capacity Signage (type) _____

Other _____ Other _____

USER SAFETY/CONFLICTS

Is the area free of detectable safety hazards? Hazardous trees? No Yes

Are there **visible or known conflicts with recreation user groups or uses** on the site or in the surrounding forest landscape setting? No Yes

Are visitors **safe from adjacent active forest management** activities? No Yes

FACILITY CONDITION

Are recreation **facilities functional, safe, durable and in good condition**? No Yes

Are recreation **facilities attractive and well designed** within the forest landscape? No Yes

SITE PLANNING AND DESIGN

Is the site **well planned and designed** to meet requirements such as adequate vehicle circulation, user legibility, compatibility with site characteristics and features, and efficient maintenance?

No Yes

SITE MAINTENANCE

Is the site well maintained?

No Yes

Is litter present? Does garbage exceed capacity of containers?

No Yes

Are buildings and built facilities well maintained?

No Yes

Is the site well drained; is there standing water?

No Yes

Is there evidence of blow-down impacts from storms or forest operations?

No Yes

RESOURCE PROTECTION

Is **vegetation and forest cover** in good condition?

No Yes

Is there presence of **invasive vegetation**?

No Yes

Is the **forest canopy healthy** and in good condition?

No Yes

Is there **tree damage or soil compaction**?

No Yes

Are there **user impacts** on nearby natural features and attractions?

No Yes

Are **undesignated trails** creating resource impacts? No Yes

Are **vehicles confined** to roads and designated parking areas; are there impacts to the forest setting? No Yes

FOREST OPERATIONS/LAND USE COMPATIBILITY

Are **harvesting, reforestation, and rehabilitation practices** sensitive to the function of the site as a focused recreation area? Are there unplanned forest operations? No Yes

Is there evidence of **unplanned impacts from forest operations**? No Yes

Are there impacts from **adjacent private lands**, incompatible activities, or land use that detracts from the recreation setting or on views from the recreation site? No Yes

ACCESSIBILITY

Do **restrooms meet accessibility standards**? No Yes

Is the **capacity of the parking area** sufficient? No Yes

Is **access** to the site satisfactory? No Yes

Is the access road and site **well marked with signs and information**? No Yes

LOCATION AND SITE SUITABILITY

Is the site **suitably located** with respect to the forest landscape setting and biophysical characteristics (riparian areas, wetlands, etc.) No Yes

MISUSE

Are there user impacts such as **injured trees, damaged signs or facilities**? No Yes

Are there **unintended, unsuitable or inappropriate uses** of the site? No Yes

Is there evidence **of target shooting**? No Yes

Is there evidence of **unauthorized removal of forest products**? No Yes

INFORMATION AND EDUCATION

Is **the site well marked**; are signs and information adequate? No Yes

Is **information and education** adequate to inform the public of ODF expectations including rules and regulations? No Yes

Is **information and education on the working forest** provided such as signs to Indicate forest operations such as new plantations? No Yes

OTHER

Is **firewood available** in high-use campgrounds? No Yes

OVERALL

Does the site meet standards for achieving a high quality recreation experience? No Yes

ADDITIONAL INFORMATION:

ODF Recreation Facility Assessment Tool Motorized Trails

Name of Trail _____ Date of Review _____

Location _____ Assessor (initials) _____

Forest Landscape Setting _____

Land Management Classification _____

Recreation components, features

Designated Trail (type) _____ Zoned _____

Undesignated Trail (uses) _____

Group Sponsor/Partner(s) _____

Organized Events _____

Signage (type) _____

Difficulty Level _____ Other _____

SAFETY/CONFLICTS

Does the trail appear to be free of detectable **safety hazards**? No Yes

Are there **visible or known conflicts** with other user groups or uses on the trail? No Yes

Are **users safe from adjacent active forest management** activities? No Yes

Do **motorized and non-motorized trails intersect** and encourage conflicts with trail use? No Yes

MAINTENANCE – Trail Surface, Drainage, Side Slopes

Does the trail surface appear to be in good condition commensurate with the difficulty level and acceptable trail standards?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
Are there trail tread problems such as major erosion?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
Is water drainage effective? Running water, erosion?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
Are cut-slopes and fill-slopes stable?	No <input type="checkbox"/>	Yes <input type="checkbox"/>

MAINTENANCE MANAGEMENT

Are bridges, drainage facilities, other infrastructure in good condition?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
Is there evidence of blow-down impacts on trails and roads from forest operations or storms?	No <input type="checkbox"/>	Yes <input type="checkbox"/>

RESOURCE PROTECTION

Is there evidence of water quality impacts such as erosion gullies; soil delivered to streams unfiltered by vegetation?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
Is there evidence of mass soil movement triggered by recreational road and trail use?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
Are there multiple and/or excessive crossings in riparian areas?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
Is there presence of invasive vegetation ?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
Is there evidence of recreational impacts on high-value conservation areas such as sensitive habitats?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
Does the trail meet ODF motorized trail standards for location, steepness, and manageability?	No <input type="checkbox"/>	Yes <input type="checkbox"/>

MISUSE

Are there **vehicle or equipment impacts** such as injured trees, damaged signs, litter? No Yes

Are there **target -shooting impacts** such as injured trees, damaged signs, litter? No Yes

Is there evidence of **inappropriate and/or misuse of trails or off-road use** such as mud plugging, mud bogging, bank crawling, rock crawling, or widening of single track trails? No Yes

Is there evidence **off-road soil disturbance and compaction**? No Yes

Is there evidence of **breaching gates** and continued use of roads/trails that are closed? No Yes

Is there evidence of **unauthorized removal of forest products**? No Yes

SEASONAL CONTROLS

Is the trail protected from **overuse in the winter**, such as following storm events through methods such as road closure? No Yes

FOREST OPERATIONS COMPATIBILITY

Are **harvesting, reforestation, and rehabilitation practices** sensitive to the trail corridor? Unplanned operations? No Yes

Is there evidence of **unplanned impacts from forest operations**? No Yes

INFORMATION AND EDUCATION

Is the **trail well marked**; are signs and trail information sufficient? No Yes

Is information and education adequate to inform the public of **ODF expectations including rules and regulations**? No Yes

Is there **information and education on the working forest**, such as signs to indicate forest operations such as new plantations? No Yes

OVERALL

Does the trail meet standards for achieving a high quality recreation experience? No Yes

ADDITIONAL INFORMATION:

ODF Recreation Facility Assessment Tool Non-Motorized Trails

Name of Trail: _____ Date of Review: _____

Location: _____ Assessor (initials): _____

Forest Landscape Setting: _____

Land Management Classification: _____

Recreation components, features:

- Designated Trail (type) _____ Zoned _____
- Undesignated Trail (uses) _____
- Group Sponsor/Partner(s) _____
- Organized Events _____
- Information/Education _____
- Signage (type) _____
- Difficulty Level _____ Other _____

SAFETY/CONFLICTS

- | | | |
|--|--------------------------------|---------------------------------|
| Does the trail appear to be free of detectable safety hazards ? | No
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| Are there visible or known conflicts with other user groups or uses on the trail? | No
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| Are users safe from adjacent active forest management activities? | No
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| Do non-motorized and motorized trails intersect and encourage conflicts with trail use? | No
<input type="checkbox"/> | Yes
<input type="checkbox"/> |

MAINTENANCE – Trail Surface, Drainage, Side Slopes

Does the **trail surface** appear to be in good condition commensurate with trail standards and difficulty level? No Yes

Are there **trail tread problems** such as major erosion? **Trail track widening**? No Yes

Is **water drainage effective**? Running water, erosion? No Yes

Are **cut-slopes and fill-slopes** stable? No Yes

MAINTENANCE MANAGEMENT

Are **bridges, drainage facilities, other infrastructure** in good condition? No Yes

Is there evidence of **blow-down impacts** on trails and roads from forest operations or storms? No Yes

RESOURCE PROTECTION

Is there evidence of **water quality impacts** such as erosion gullies; soil delivered to streams unfiltered by vegetation? No Yes

Is there evidence of **mass soil movement** triggered by recreational trail use? No Yes

Are there **multiple and/or excessive crossings** in riparian areas? No Yes

Is there presence of **invasive vegetation**? No Yes

Is there evidence of **recreational impacts on high-value conservation** areas such as sensitive habitats? No Yes

Does the trail meet ODF **non-motorized trail standards** for location, steepness, and manageability?

No Yes

MISUSE

Are there **user impacts** such as injured trees, damaged signs, litter?

No Yes

Are there **target shooting impacts** such as injured trees, damaged signs, litter? corridor?

No Yes

Is there **evidence of motorized use** on the non-motorized trail; are there physical impacts?

No Yes

Is there evidence of **off-trail use** such as meander trails that impact sensitive habitats?

No Yes

Is there evidence of **unauthorized removal of forest products**?

No Yes

FOREST OPERATIONS COMPATIBILITY

Are **harvesting, reforestation, and rehabilitation practices** sensitive to the trail corridor? Unplanned operations?

No Yes

Is there evidence of **unplanned impacts** from forest operations?

No Yes

SEASONAL CONTROLS

Is the trail protected from **overuse in the winter**, such as following storm events using methods such as road closure?

No Yes

INFORMATION AND EDUCATION

Is the trail well marked; are signs and trail information adequate?

No Yes

Is information and education adequate to inform the public of **ODF expectations including rules and regulations**?

No Yes

Is **information and education on the working forest** provided such as signs to indicate forest operations such as new plantations?

No Yes

OVERALL

Does the trail meet standards for achieving a high quality recreation experience?

No Yes

ADDITIONAL INFORMATION: