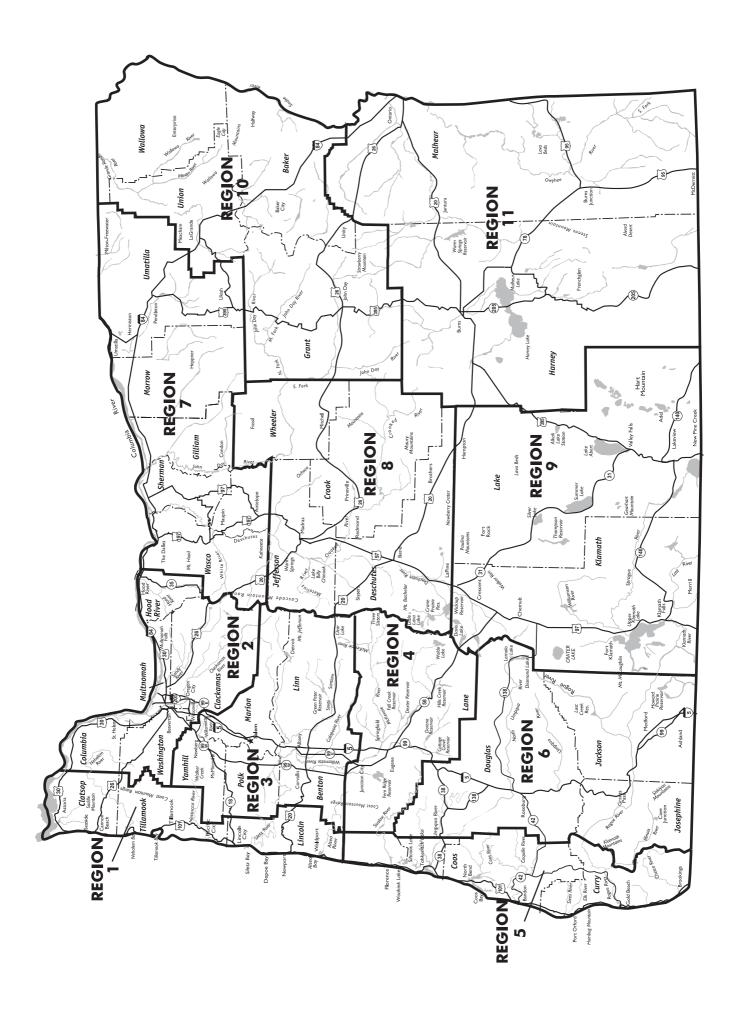
Oregon Trails 2016: A Vision for the Future





2016-2025
Oregon Statewide Recreation Trails Plan
Oregon Parks and Recreation Department



A MESSAGE FROM THE DIRECTOR, OREGON PARKS AND RECREATION DEPARTMENT

I am pleased to present Oregon Trails 2016: A Vision For The Future. This plan is the product of more than two years of consultation and collaboration of recreational trail providers, interest groups and citizens across the state. It is the state's "official plan for recreational trail management" for the next 10 years, serving



veys and public workshops.

as a statewide and regional information and planning tool to assist Oregon recreation providers (local, state, federal, and private) in providing trail opportunities and promoting access to Oregon's trails and waterways. It also identifies how the state's limited resources will be allocated for motorized, non-motorized, and water trail projects throughout Oregon. Further, it establishes a review process for potential State Scenic Waterway corridor additions.

Recreational trails provide many benefits to the citizens of Oregon. In addition to the entertainment value of recreation, trails also provide health, transportation, community, and environmental benefits. They also make a substantial contribution to the state's economy. The plans trail expenditure and economic contribution analysis, conducted by Oregon State University, found that statewide, non-motorized boating, non-motorized trail, OHV trail, and snowmobile participation by Oregon residents and out-of-state visitors contributes 26,873 jobs, \$1.36 billion in value added, and \$826 million in labor income. While Oregon's residents treasure and care for this trail system, they are dedicated to ensuring resources are utilized with fiscal, social, and environmental responsibility, building on the past to provide for future generations.

The OPRD has taken an innovative approach to statewide trails planning by conducting simultaneous OHV, snowmobile, non-motorized, and water trails planning efforts. Public outreach was a key emphasis in the planning effort, which included statistically reliable surveys of trail users and non-motorized boaters resulting in feedback and opinions from 7,450 randomly selected residents. Trails plan workshops were held in 14 locations across the state, allowing additional public input on trails issues and funding need. We would to thank all citizens who took time to participate in the sur-

The plan has identified three top management issues for each trail category type in the state. For OHV and snowmobile trails, closure of trails and unimproved backcountry roads on federal lands came to the forefront as top challenges. For non-motorized trails, more trails connecting towns/ public places and need for improved trail maintenance were identified. For non-motorized boating, increased boater access and lack of funding for non-motorized boating are top challenges. Recommendations are included for addressing these issues in the coming years.

The OPRD will support the implementation of key statewide and local planning recommendations through internal and external partnerships and OPRD-administered grant programs. My hope is that all Oregonians involved in the administration of recreational trails and non-motorized boating opportunities take time to read this important document and make use of its recommendations to support your strategic planning.

Sincerely,

Lisa Sumption Director

Mai A Sumpton

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Executive Summary

The 2016-2025 statewide trails plan, entitled *Oregon Trails 2016: A Vision For The Future*, constitutes Oregon's ten-year plan for recreational trail management. The plan guides the use of the state's Recreational Trails Program (RTP) and All-Terrain Vehicle (ATV) grant funds, and provides information and recommendations to guide federal, state, and local units of government, as well as the private sector, in making policy and planning decisions. Besides satisfying grant program requirements, a primary intent of this plan is to provide up-to-date, high-quality information to assist recreation providers with trail planning in Oregon. Further, it establishes a review process for potential State Scenic Waterway corridor additions.

Public outreach was a key emphasis in the planning effort, which included statistically reliable surveys of trail users and non-motorized boaters, resulting in feedback and opinions from 7,450 randomly selected Oregon residents. The Oregon Parks and Recreation Department (OPRD) contracted with Oregon State University (OSU) to conduct four separate surveys of state residents regarding their participation in four categories of trail-related recreation: motorized (ATV/OHV), snowmobile, non-motorized trail, and non-motorized boating. Statistically reliable results for the OHV, non-motorized trail and non-motorized boater surveys are provided at the statewide scale and trails planning region scale (11 planning regions in state). Results for the snowmobile trail survey are provided at the statewide scale.

Regional trails planning workshops were held in 14 locations across the state, allowing additional public input on trails issues and funding need for each of the four trail category types. In addition, workshop attendees had an opportunity to nominate top water trail and State Scenic Waterway study corridor additions.

OPRD also made a strong effort to involve trail providers (local, county, state, federal, non-profit) from across the state in the planning process. Trails plan collaborative efforts included:

- Four separate trails plan advisory committees (ATV, snowmobile, non-motorized, water) to assist with the concurrent planning process.
- A series of online surveys (ATV, snowmobile, non-motorized, water trails) of Oregon's public recreation providers to determine region-level need for trail funding and issues affecting recreational trail provision.
- Two separate advisory committees to assist with using trails planning findings to develop a set of ATV grant program and RTP grant program evaluation criteria for evaluating trail grant proposals.

The planning effort included four distinct methods to identify trail funding need for each of the four categories of trail-related recreation at the state and region levels. Early in the planning process, OPRD conducted a needs assessment as part of the online surveys of public recreation providers in the state. A similar needs assessment was included in the statewide surveys of resident trail users. These survey results were presented at each of the regional trails workshops. A voting process was used to identify top funding need in each planning region. Summary results were presented to members of the four trail advisory committees. A final set of regional and statewide funding needs were finalized during the four trails planning advisory committee meetings.

The planning effort also included four distinct methods to identify trail issues for each of the four categories of trail-related recreation at the state and region levels. A trail issues assessment was part of the online surveys of public recreation providers in the state. A similar issues assessment was included in the statewide surveys

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of resident trail users. These survey results were presented at each of the regional trails workshops. A voting process was used to identify top trail issues in each planning region. Summary results were presented to members of the four trail advisory committees. A final set of regional and statewide issues were finalized during the four trails planning advisory committee meetings. A set of strategic actions for addressing each statewide issue were finalized during the four trails planning advisory committee meetings.

The following is a summary of key statewide survey findings and implications, trail funding need, and management issues for each of the four trail category types.



MOTORIZED (ATV/OHV)

Statewide Motorized Trail Survey Findings and Implications:

- Class IV (side-by-side) permit sales began in 2012 in Oregon. Survey results show that Class IV riding is now 7% of total OHV rider days in the state. Of the four OHV classes, Class IV operators report the lowest level of satisfaction (46% being very or somewhat satisfied) with OHV trail opportunities in the state. Land managers should reach out to Class IV operators in future planning efforts to better serve their specific rider needs.
- OHV riders reported that the greatest loss in riding opportunities in Oregon in the past 10 years was for riding opportunities outside the state's Designated Riding Areas. The 2015 Oregon OHV Guide includes a listing of 53 Designated Riding Areas in the state. These areas are high-intensity riding areas with associated high operation and
- maintenance costs. There are also many designated OHV routes and trails on public lands in Oregon which are outside the boundaries of these Designated Riding Areas. Many OHV enthusiasts seek out these less crowded riding experiences and enjoy exploring new riding areas. As such, OPRD will provide additional points in the ATV grant program for projects intending to enhance existing or provide new riding opportunities outside the boundaries of the state's official list of 53 Designated Riding areas.
- The survey identified a strong need for funding to maintain existing trails in good/sustainable condition. A recent GAO report found the USFS is only able to maintain about one-quarter of National Forest System trails to the agency standard, and the agency faces a trail maintenance backlog of \$314 million in fiscal year 2012. A consistent trail maintenance backlog is also reported on Oregon national forests. The state of Oregon should investigate the potential for initiating a trails foundation with a mission

- of protecting and maintaining recreational trails in the state.
- Closure of trails and unimproved backcountry roads were also identified as top OHV management issues. Land managers should reduce unwarranted OHV closures through comprehensive review/input/analysis by all stakeholders.
- The survey report identifies expenditure and economic contributions associated with OHV riding on public lands in Oregon. Statewide, OHV use by Oregon residents supports 869 jobs, \$23 million in labor income, and \$58 million in value added. When out-of-state visitors are included, the estimated amounts increased to 1,120 jobs, \$45 million in value added, and \$29 million in labor income. This information should be used to educate Oregonians about the economic benefits received from their investment in OHV riding areas, facilities, and services in the state.

Statewide Motorized Trail Funding Need:

- 1. Maintaining existing trails in good/ sustainable condition.
- 2. More single-track off-road motorcycle trails (Class III).
- 3. Prioritize loop over out-and-back trails.

Statewide Motorized Trail Management Issues:

- 1. Closure of trails. The implementation of federal travel management planning has resulted in a loss of OHV trail riding opportunities in Oregon. Closure of designated trails and routes without providing other designated routes in the same area leads to overuse and impacts in new areas.
- Closure of unimproved backcountry roads. Again, the implementation of federal travel management planning has also resulted in the loss of OHV riding on backcountry roads in Oregon.
- Riding in closed areas. Land managers have reported a proliferation of user created trails arising from repeated unauthorized travel by OHVs.



SNOWMOBILE

Statewide Snowmobiling Survey Findings and Implications:

- The general trend is for lower snow amount accumulations at Oregon snowmobile areas. Less snow was the most common reason for survey respondents reporting a decrease in snowmobiling trips in the state. The USFS should consider the effects of changing climate (e.g., receding snowpack and earlier spring runoff) on future recreation use patterns when conducting OSV travel management.
- Approximately 49% of snowmobile survey respondents are 50 years of age and older, compared to 27% of snowshoeing participants and 29% of cross-country skiing participants. These results suggest that snowmobiling provides an opportunity for older Oregonians to continue to enjoy the outdoors and access to public lands during winter months. The OSSA reports that many club members suffer from a variety of age-related disabilities (arthritis, heart, walking) and continue to snowmobile on a regular basis.
- The survey identified a strong need for funding for backcountry off-trail riding and expanded trail systems. The State of Oregon should work with the USFS Region 6 Office to develop a long-term strategy for using state snowmobile gas tax funds for snowmobile expanding existing trail systems, creating more backcountry off-trail riding opportunities, trail grooming, and trail rehabilitation on USFS lands in Oregon. In addition, a Federal

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- funding mechanism should be implemented to fund such projects on USFS lands in Oregon.
- A recent court ruling requires that all Oregon Forest Districts will need to go through a public planning process in the next five years to review and designate roads, trails, and cross country areas which are open to snowmobile use (similar to OHV Travel Management). This survey identified closure of trails and riding areas as the top snowmobile management issue in Oregon. As a result, land managers should reduce unwarranted snowmobile trail and riding area closures through comprehensive review/input/analysis by all stakeholders.
- The survey also identified a need for trail maps, current snow depth, and safety/ avalanche information for snowmobile riding areas on the internet. Recreation providers should also consider developing geospatial PDF maps of snowmobile routes to allow on-the-snow wayfinding. Such maps can be uploaded onto mobile devices (smartphone or tablet) and then, using an app, use built-in GPS to track the users location on the map.
- The survey identifies expenditure and economic contributions associated with snowmobiling on public lands in Oregon. Statewide, snowmobiling by Oregon residents supports 129 jobs, \$4.1 million in labor income, and \$6.5 million in value added. When out-of-state visitors are included, the estimated amounts increased to 155 jobs, \$7.7 million in value added, and \$5.0 million in labor income. This information should be used to educate Oregonians about the economic benefits received from their investment in snowmobiling areas, facilities, and services in the state.

Statewide Snowmobile Trail Funding Need:

- Expand existing trail system.
- More trail grooming/ rehabilitation.
- More back-country trail riding opportunities.

Statewide Snowmobile Management Issues:

- Closure of snowmobile trails/ riding areas. In the
 coming years, all Oregon USFS Forest Districts
 will go through a public planning process to review and designate roads, trails, and cross country
 areas which are open to snowmobile use as part of
 the over-snow vehicle (OSV) travel management
 rule. There is a need to minimize unwarranted
 snowmobile riding closures during upcoming
 OSV travel management planning in Oregon.
- Riding in closed areas. In recent years, the USFS
 has been confronted with a proliferation of trails
 arising from repeated unauthorized cross-country snowmobile travel. Unauthorized access can
 result from either areas not mapped, signed, or
 marked clearly as open or closed; or snowmobilers ignoring designations.
- Lack of snowmobile trail maintenance. A consistent snowmobile trail maintenance backlog exists on Oregon national forests.

NON-MOTORIZED TRAILS

Statewide Non-Motorized Trail Survey Findings and Implications:

- Relative to all Oregonians, non-motorized trail users tend to be younger and less ethnically diverse. According to the 2013-2017 Oregon SCORP, the state's elderly population (65 years and older) and minority populations (Hispanic, Asian, and African-American) are growing at a much higher rate than the population as a whole. As a result, Oregon's recreation providers should consider developing marketing strategies to encourage regular use of existing trail systems by elderly and minority populations in their jurisdictions.
- Survey results showed that dirt was the most common preferred trail surface for all activities other than biking on hard surface trails. Soft trail surface preference was also identified in the 2011 Oregon Outdoor Recreation Survey. Soft surface



trails are typically constructed of natural earth, crushed rocks, or recycled concrete materials. They can also be made of gravel, dirt, limestone, and mulch. Recreation planners should note this preference in trail planning efforts.

- The survey also identified that the highest priority for additional trails was for walking/ hiking both inside and outside one's community. Trails for hard surface biking were the next highest priority for inside, while trails for backpacking were the next highest priority for outside one's community. Overall, a higher priority was placed on trails inside the community over trails outside. Close-to-home trail investments will maximize everyday use by local residents.
- Repair of major trail damage was identified
 as the highest trail funding priority by survey
 respondents. Such projects involve extensive
 trail repair (e.g., resurfacing of asphalt trails or
 complete replacement, regrading, and resurfacing of all trails) needed to bring a facility up
 to standards suitable for public use. As a result,
 OPRD will provide additional points for projects
 intending to repair major trail damage in the
 RTP evaluation criteria.
- The survey report identifies expenditure and economic contributions associated with non-motorized trail use in Oregon. Statewide, non-motorized trail use by Oregon residents supports 21,730 jobs, \$672 million in labor income, and \$1.0 billion in value added. When out-of-state visitors are included, the estimated amounts increased to 24,340 jobs, \$1.2 billion in

value added, and \$753 million in labor income. This information should be used to educate Oregonians about the economic benefits received from their investment in non-motorized trails in the state.

Statewide Non-Motorized Trail Funding Need:

- Connecting trails into larger trail systems.
- · More signs/ trail wayfinding.
- Repair of major trail damage.

Statewide Non-Motorized Trail Management Issues:

- Need for more trails connecting towns/ public places. This issue is addressed by trails projects that connect communities to each other; provide connections between existing trails; close a gap within an existing trail; provide links to trails outside Urban Growth Boundaries; provide access to parks and open space; and provide access to significant facilities within communities such as schools, libraries, indoor recreation facilities, and businesses.
- 2. Need for improved trail maintenance. For this issue, trail maintenance includes routine trail maintenance and trail rehabilitation/ restoration. Routine maintenance includes work that is conducted on a frequent basis in order to keep a trail in its originally constructed serviceable standards (e.g., mowing, tree and brush pruning, leaf and debris removal, cleaning and repair of drainage structures such as culvers, water bars, and drain dips), maintenance of water crossings, and repairs to signs and other amenities. Routine

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- maintenance work is usually limited to minor repair or improvements that do not significantly change the trail location, width, surface, or trail structure. Trail rehabilitation/ restoration involves extensive trail repair (e.g., resurfacing of asphalt trails or complete replacement, regrading, and resurfacing of all trails) needed to bring a facility up to standards suitable for public use (not routine maintenance). In some cases, trail rehabilitation/ restoration may include necessary relocation of minor portions of the trail.
- 3. Need for more trail signs (directional and distance markers, and level of difficulty). Trail users require a number of different types of signs to safely and enjoyably pursue their trail experience. Location signs that lead people to trailheads and parking areas, directional signs along the trail, destination signs to let people know they have reached end points, interpretive signs that describe the natural or cultural history of the area, and regulatory signs that explain the do's and don'ts of the area are important trail components. Trail managers should provide information about their trails that allows users to choose the trails within their skill and capability level. It is important for all users, but especially elderly or disabled users, to understand a specific trail's maximum grade and cross-slope, trail width, surface, obstacles and length before using the trail.

WATER TRAILS

Statewide Non-Motorized Boater Survey Findings and Implications:

• Survey results show that increased public access for non-motorized boating is the top facility/ service funding priority. These findings can reinforce local efforts to plan and develop non-motorized access sites in their jurisdictions. Access refers to a specific location where the public has the legal right and physical means to get to the water to launch a non-motorized boat. Non-motorized boating access may be unimproved or enhanced to varying degrees. Formal

- non-motorized boater access areas may be paved launch ramps, parking areas with dirt trails, or roadside-to-the-waterway trails.
- The survey also identified a strong funding need for online boating information. Providing online non-motorized boating maps and information will also address the need for increased access for non-motorized boating by informing boaters about existing paddling opportunities in the state. Survey results also identify if water trail smart apps were provided, they should include where/ how to access the waterbody, safety information/ waterbody obstructions, a map of water trail sites, trailhead information, list of amenities that are available at the launch site, driving directions, and regulatory information. Recreation providers should also consider developing geospatial PDF maps of water trail routes to allow on-the-water wayfinding. Such maps can be uploaded onto mobile devices (smartphone or tablet) and then, using an app, use built-in GPS to track the users location on the map.
- Twenty-two percent of survey respondents indicated that they camp less often than they would like to on Oregon water bodies. Lack of primitive campgrounds, lack of first-come first-serve boat camping, and lack of developed campgrounds were top concerns limiting boat camping. Vehicle safety and not enough information about camping opportunities were also identified as top concerns limiting camping. Land managers should continue to develop non-motorized boater camping facilities to meet public boating needs.
- Vehicle safety at non-motorized boating parking lots was identified by non-motorized boaters as the top boater issue. As a result, recreation providers should consider improving parking security at waterway put-in and take-out locations. Strategies to consider include upgrading parking lots and access facilities so that other land-based and water-based recreationists are using the parking lot and facilities reducing opportunities for vandals to break into parked cars. More frequent ranger patrols also reduce



break-ins. Placing signs at parking areas to identify who to call in the event of a break-in can also be considered.

• The survey report identifies expenditure and economic contributions associated with non-motorized boating in Oregon. Statewide, non-motorized boating by Oregon residents generated \$114 million in expenditure across the state. In turn, this expenditure contributed 1,084 jobs, \$54 million in value added, and \$34 million in labor income. When out-of-state visitors are included, the estimated amounts increased to 1,258 jobs, \$63 million in value added, and \$39 million in labor income. This information should be used to educate Oregonians about the economic benefits received from their investment in non-motorized boating facilities in the state.

Statewide Water Trail Funding Need:

- 1. Public non-motorized boater access to the water (developed or undeveloped).
- 2. Non-motorized boat launch facilities.
- 3. Restrooms.

In addition to water trail funding need, top nominations for water trail development and potential State Scenic Waterway additions were also identified to encourage water trail development and Scenic Waterway studies.

Statewide Water Trail Management Issues:

1. Need for increased access for non-motorized boating. The need for increased access for non-motorized boating is driven by a continuing

- increase in participation in non-motorized boating activities in both Oregon and the U.S. in recent decades. Access refers to a specific location where the public has the legal right and physical means to get to the water to launch a non-motorized boat. Non-motorized boating access may be unimproved or enhanced to varying degrees.
- 2. Lack of funding for non-motorized boater facilities. Currently, non-motorized boat users do not register their boats, and as a result, there is no dedicated funding source specifically for non-motorized facility development. The lack of a specific funding source limits the establishment of new opportunities solely for people who enjoy non-motorized boating in Oregon. Therefore, there is a need to address this programmatically by creating a dedicated funding source for non-motorized boat access and launch facilities.
- Lack of non-motorized boating maps and information. Projects addressing this issue could include water trail guides, information brochures, signage projects, websites, smartphone apps, and promotional materials.

The plan also includes a set of ATV grant program evaluation criteria for evaluating OHV grant proposals and RTP grant program evaluation criteria for evaluating OHV, snowmobile, non-motorized and water trail grant proposals. A substantial number of the total evaluation points available for both sets of criteria are tied directly to findings from the trails planning effort.

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► CHAPTER 1

Introduction



PLAN INTRODUCTION

The purpose of this planning effort was to provide guidance for the Recreational Trails Program (RTP), All-Terrain Vehicle (ATV) Grant Program, and information and recommendations to guide federal, state, and local units of government, as well as the private sector, in making recreational trail policy and planning decisions. It also provides guidance for other Oregon Parks and Recreation Department (OPRD)-administered grant programs including the Local Grant, Land and Water Conservation Fund (LWCF), and County Opportunity Grant Programs. Besides satisfying grant program requirements, the primary intent of this plan is provide up-to-date, high-quality information to assist recreation providers with trail system planning in Oregon. In addition, it provides recommendations to the Oregon State Park System operations, administration, planning, development, and recreation programs.

This document constitutes Oregon's basic ten-year policy plan for recreation trails. It establishes the

framework for statewide comprehensive trail planning and the implementation process. In conjunction with that purpose, it is intended to be consistent with the objectives of the Federal Recreational Trails Program (23 U.S.C. 206). The RTP requires that state use of apportioned funds be obligated for recreational trails and related projects that have been planned and developed under the laws, policies, and administrative procedures of the State; and are identified in, or further a specific goal of, a recreational trails plan, or a statewide comprehensive outdoor recreation plan required by the Land and Water Conservation Fund Act of 1965, that is in effect.

The planning effort involved separate (but concurrent) off-highway vehicle (ATV) trail, snowmobile trail, non-motorized trail, water trail, and State Scenic Waterways planning components. There are considerable benefits associated with a concurrent trails planning process including:

Providing user groups with comparative information to emphasize areas of common ground and understanding,

- Packaging four plans into one volume, providing a one-stop planning document for recreational planners who often work on a variety of trails planning projects,
- Reducing administrative and travel costs associated with conducting regional issues workshops.

Legal Authority

The OPRD was given responsibility for recreational trails planning in 1971 under the "State Trails Act" (ORS 390.950 to 390.990). In general the policy of the statute is as follows: "In order to provide for the ever-increasing outdoor recreation needs of an expanding resident and tourist population, and in order to promote public access to, travel within and enjoyment and appreciation of, the open-air, outdoor areas of Oregon, trails should be established both near the urban areas in this state and within, adjacent to or connecting highly scenic areas more remotely located."

In addition, ORS 390.010 states that: "It shall be the policy of the State of Oregon to supply those outdoor recreation areas, facilities and opportunities which are clearly the responsibility of the state in meeting growing needs; and to encourage all agencies of government, voluntary and commercial organizations, citizen recreation groups and others to work cooperatively and in a coordinated manner to assist in meeting total recreation needs through exercise and appropriate responsibilities." The policy also states that it is in the public interest to increase outdoor recreation opportunities commensurate with the growth in need through necessary and appropriate actions, including, but not limited to, the provision of trails for horseback riding, hiking, bicycling and motorized trail vehicle riding; the provision for access to public lands and waters having recreational values; and encouragement of the development of winter sports facilities.

Oregon's All-Terrain Vehicle (ATV) program began in 1985 with the creation of a funding method for

improving motorized recreation trails and areas. Funding for this program comes from a portion of the motor vehicle fuel tax and from ATV permits. The ATV program was transferred to the OPRD from the Oregon Department of Transportation (ODOT) on January 1, 2000, by Senate Bill 1216. The All-Terrain Vehicle Account is established as a separate account in the Oregon Parks and Recreation Department Fund. Monies in the ATV Account established under ORS 390.555 are used for a variety of ATV management purposes. ORS 390.565 also established the ATV Grant Subcommittee (ATV-GS), appointed by the Oregon Parks and Recreation Commission, to advise OPRD on the allocation of monies in the ATV Account.

A portion of the fuel tax monies in the ATV Account are transferred to the ODOT for the development and maintenance of snowmobile facilities. ODOT administers the Snowmobile Program using these fuel tax receipts and registration fees associated with snowmobile use. ODOT administers the Snowmobile Program through a contract with the Oregon State Snowmobile Association (OSSA) which coordinates with land managers to identify snowmobile ride areas and with volunteer organizations and contractors for grooming of snowmobile trails. Since snowmobile projects are eligible for RTP grant funding, this plan will also address this type of trail use.

The Oregon Scenic Waterway Program, established by a vote of the people in 1969, is administered under the authority of the State Parks Commission through the State Parks and Recreation Department (ORS 390.805 to ORS 390.925). The scenic waterway program seeks to preserve, protect and enhance scenic, recreational, fish and wildlife and cultural values possessed by each individual scenic waterway. The OPRD is directed to periodically study rivers or segments of rivers and their related adjacent land for potential inclusion in the State Scenic Waterway Program.

The Oregon Governor's Office directed OPRD to study three waterways every biennium (a two year budget period) to determine their eligibility for designation as a state scenic waterway. Three waterways were studied in 2013-2015; changes to the evaluation process may pause new waterway studies in 2015-2017. Regardless, evaluations include a public process in the affected counties, and the water trails plan includes an effort to identify and establish a review process for potential Scenic Waterway corridor additions.

THE PLANNING PROCESS

The last Statewide Trails Plan for Oregon was completed by the OPRD in February 2005 and maintains the state's eligibility to participate in the Recreational Trails Program (RTP). That plan, Oregon Trails 2005-2014: A Statewide Action Plan, is coming to the end of its ten-year planning horizon.

OPRD began the current trails planning process in September 2013. An initial planning task was to identify the most important issues in Oregon related to recreational trails. Critical statewide management issues identified and addressed in the plan for each trail category are included below.

Trail Category	Statewide Management Issue		
Off-highway Vehicle	Closure of trails		
	Closure of unimproved backcountry roads		
	Riding in closed areas		
Snowmobile	Closure of snowmobile trails/ riding areas		
	Riding in closed areas		
	Lack of snowmobile trail maintenance		
Non-motorized	More trails connecting towns/ public places		
	Improved trail maintenance		
	More trail signs (directional and distance markers and level of difficulty)		
Water	Increased access for non-motorized boating		
	Lack of funding for non-motorized boating facilities		
	Lack of non-motorized boating maps and information		

Since the primary intent of the plan is to provide information to assist recreation providers with trail system planning in Oregon, the plan has been titled, *Oregon Trails 2016: A Vision for the Future.* The plan is written primarily for recreation planners and land managers. In its component parts, it provides background on user need and on current trends affecting motorized (OHV and snowmobile), non-motorized, and water trail opportunities. It was designed as an information resource as well as a planning tool to guide agencies for the following 10 years.

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COMPONENTS OF THE PLANNING EFFORT

The following section includes a brief description of the major components of the planning effort.

Trails Plan Advisory Committees

Early in the planning effort, OPRD established four separate advisory committees (OHV, Snowmobile, Non-motorized, Water) to assist with the concurrent planning process. Advisory committee members were selected to ensure adequate agency/ organizational and geographic coverage and trail-user group representation. During the planning effort, committee members were asked to assist OPRD with the following planning tasks:

- Reviewing the basic planning framework;
- Determining the basic plan outline;
- Reviewing survey methods, instruments, and reports;
- Identifying significant statewide trail issues and solutions;
- Identifying trail funding priorities;
- Assisting with the development of criteria for evaluating grant proposals; and
- Reviewing the planning documents.

In early planning efforts, committee members were asked to review materials provided in email correspondence. A series of conference calls allowed committee members to provide input during survey methodology and questionnaire development. One full committee meeting was held for each of the four Advisory Committees (Water: March 27, 2015, Nonmotorized: May 11, 2015, Snowmobile: June 29, 2015, and OHV: July 29, 2015). Meeting objectives included:

- Finalizing statewide trail user survey reports;
- Finalizing statewide and regional funding needs;
- Finalizing the list of top statewide management issues:
- Improving the list of strategies for addressing top statewide management issues.

A Regional Planning Approach

The trails planning effort provides specific trail findings and recommendations for eleven planning regions. These boundaries provide the most practical basis for providing recreation information need by federal, state, and local units of government to identify key recreational issues, facility and resource deficiencies, and supply and demand information for their planning efforts. Each region (see Figure 1) is of sufficient geographic area and population to have a unique set of issues and associated management concerns.

Web-based Surveys of Oregon Trail Providers

OPRD conducted a series of online surveys of Oregon's public recreation providers to determine region-level need for trail funding and issues affecting recreational trail provision. Separate online surveys were conducted for non-motorized boating, non-motorized trail, snowmobile trail, and OHV trail providers. Non-motorized boating facility providers were also given an opportunity to nominate top Water Trail and State Scenic Waterway additions. These survey reports are included as support documents to this plan and are included in a disk at the back of the plan.



REGION

Figure 1. Oregon Trails Planning Regions

Oregon Trail User Surveys

In preparation for the 2016-2025 Oregon Trails Plan, OPRD contracted with Oregon State University (OSU) to conduct four separate surveys of Oregon residents regarding their participation in four categories of trail-related recreation: Non-motorized trail, non-motorized boating, motorized (ATV/OHV), and snow-mobile recreation. Each survey was designed to elicit information on current use patterns (amount, location, and type of use), user experiences and preferences, and the economic contribution of the recreation activity. Statistically reliable results for the non-motorized trail, non-motorized boating, and motorized (ATV/OHV) trail surveys are provided at the statewide scale and trails planning region scale. Results for the snowmobile trail survey are provided at the statewide scale. Survey results provide recreation planners across the state with up-to-date information for use in local and regional planning. A summary of survey results for each of the four reports is included in this plan. The following complete survey reports are included as support documents to this plan and are included in a disk at the back of this plan:

- Oregon All-Terrain Vehicle Participation and Priorities;
- Oregon Snowmobiler Participation and Priorities;
- Oregon Non-motorized Trail Participation and Priorities; and
- Oregon Non-motorized Boater Participation and Priorities.

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Economic Impacts Of Trail Use

Oregonians and out-of-state visitors spend large amounts of money on outdoor recreation related trips in Oregon. The OSU trail-user surveys identified expenditure and economic contributions associated with a non-motorized trail, non-motorized boating, OHV riding, and snowmobiling by residents and out-of-state visitors on public lands in Oregon. This information can be used to educate Oregonians about the economic benefits received from their investment in trail areas, facilities, and services in the state and to make a case for future system additions/ enhancements.

Regional Trails Issues/ Funding Need Workshops

A series of regional trails planning workshops were held at 14 locations (Table 1) across the state during a period from October 1 through October 30, 2014. Please note that some regions had more than one workshop. Daytime sessions (11:00 am - 4:30 pm) were open to public recreation providers and evening sessions (6:00 pm - 8:00 pm) to the general public. Trail issue and funding need information was gathered at these workshops for each planning component type (OHV, snowmobile, non-motorized, water trail). In addition, attendees had an opportunity to nominate top Water Trail and State Scenic Waterway study additions. At the conclusion of each workshop, participants were given 3 colored dots to assist in prioritizing the importance of issues and funding need for each trail category.

Table 1. Oregon Trails Plan Public Workshop Locations

Planning Region	Workshop City	Date
7	Pendleton	10/1/2014
7	The Dalles	10/2/2014
10	Mt. Vernon (John Day)	10/6/2014
11	Burns	10/7/2014
11	Ontario	10/8/2014
10	Baker City	10/9/2014
5	Coos Bay	10/20/2014
6	Rogue River	10/21/2014
9	Klamath Falls	10/22/2014
8	Bend	10/23/2014
1	Lincoln City	10/27/2014
3	Salem	10/28/2014
2	Portland	10/29/2014
4	Eugene	10/30/2014

Trail Funding Need

The planning effort included four distinct methods to identify trail funding need for each of the four categories of trail-related recreation at the state and region levels. Early in the planning process, OPRD conducted a needs assessment as part of the online surveys of public recreation providers in the state. A similar needs assessment was included in the state-wide surveys of resident trail users. These survey results were presented at each of the regional trails workshops. A voting process was used to identify top funding need in each planning region. Summary results were presented to members of the four trail advisory committees. A final set of regional and statewide funding needs were finalized during the four trails planning advisory committee meetings.

Complete listings of region and statewide funding need for each trail category are included in the plan.

Trail Issues and Actions

The planning effort included four distinct methods to identify trail issues for each of the four categories of trail-related recreation at the state and region levels. Early in the planning process, OPRD conducted a trail issues assessment as part of the online surveys of public recreation providers in the state. A similar issues assessment was included in the statewide surveys of resident trail users. These survey results were presented at each of the regional trails workshops. A voting process was used to identify top trail issues in each planning region. Summary results were presented to members of the four trail advisory committees. A final set of regional and statewide issues were finalized during the four trails planning advisory committee meetings. A set of strategic actions for addressing each statewide issue were finalized during the four trails planning advisory committee meetings.

Complete listings of region and statewide issues for each trail category and strategic actions are included in the plan.

ATV Grant Program Project Selection Criteria

To allocate ATV grant funds in an objective manner, a set of evaluation criteria were developed for evaluating OHV trail grant proposals. Separate criteria were developed for evaluating the following types of project proposals: 1.) Acquisition, Development, and Planning Proposals, 2.) Operation and Maintenance, 3.) Emergency Medical, and 4.) Law Enforcement. A substantial number of the total evaluation points available are tied directly to findings from the OHV trails planning effort.

RTP Grant Program Project Selection Criteria

To allocate RTP grant funds in an objective manner, a set of evaluation criteria were developed for evaluating OHV, snowmobile, non-motorized, and water trail grant proposals. A substantial number of the total evaluation points available are tied directly to findings from the trails planning effort.

Potential State Scenic Waterway Additions

The water trails plan included an effort to identify and establish a review process for potential State Scenic Waterway Program corridor study additions. The 2016-2025 Oregon trails planning effort included three distinct methods to identify a list of potential state scenic waterway study areas for the plan's ten-year planning horizon. The following is a description of these methods.

The first method involved an online survey of Oregon non-motorized boating facility managers. Respondents were asked to nominate river segments they would like to see added to the Oregon State Scenic Waterway Program. Recommended additions were identified by respondents using drop-down menus to select the highest, second highest, and third highest priority additions for each region. The overall point score for each nominated waterway was calculated based on three points for each time the

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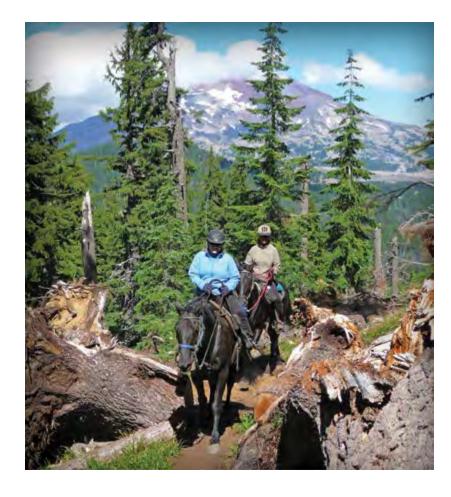
waterway was identified as a first priority addition, two points for a second priority, and one point for a third priority. In the same manner as the survey of Oregon recreation providers, resident trail user survey respondents were asked to nominate river segments they would like to see added to the Oregon State Scenic Waterway Program. Next, regional trails workshop attendees were given an opportunity to prioritize regional scenic waterway nominations. Finally, OPRD staff reviewed and finalized the list of potential study areas.

Potential Water Trail Additions

In a similar manner as described for potential Scenic Waterway Additions, the planning process determined a list of priority waterways for water trail development in the coming ten years. Additional points will be given to water trail projects on the potential water trails list and potential State Scenic Waterway additions list in the RTP evaluation criteria.

Trails Planning Website

Early in the planning process, OPRD staff developed a trails planning website for people across the state to access current information about the 2016-2025 Oregon trails planning process. One of the primary objectives of the website was to disseminate research and report results. The website address is. http://www.oregon.gov/oprd/Trail_Programs_Services/Pages/Trail-Plans.aspx#Updating_the_Oregon_Statewide_Trails_Plan.



► CHAPTER 2

Oregon Resident Off-Highway Vehicle Trail User Survey Summary



INTRODUCTION

Background

In preparation for the 2016-2025 Oregon Trails Plan, the Oregon Parks and Recreation Department (OPRD) contracted with Oregon State University (OSU) to conduct a survey of Oregon resident off-highway vehicle (OHV) trail users regarding their current use patterns (amount, location, and type of use), user experiences and preferences, and the economic contribution of recreation activity. The survey focused on recreational OHV riding on public lands in Oregon. The OHV survey covered the four classes of OHV/ ATV vehicles:

- Class I, quads and three-wheel ATVs.
- Class II, dune buggies, and rails, 4x4 vehicles, and side-by-sides greater than 65 inches in width.
- Class III, off-road motorcycles.
- Class IV, side-by-sides 65 inches or less in width.

SURVEY METHODS

The probability sample was designed to be as representative as possible of Oregon resident OHV riders. It was drawn at random from the list of all persons with off-highway vehicles (OHVs/ATVs) registered with OPRD1. The sample design was developed to derive information at the region level. Results of the survey are provided at the statewide scale and region scale (Figure 1 on page 29).

This chapter includes a summary of selected state-wide and region scale survey results. The full survey report, Oregon Off-highway Vehicle Participation and Priorities, is available online at: oregon.gov/oprd/Trail_Programs_Services/Documents/ATV_Participation_Priorities.pdf.

Survey respondents could complete the questionnaire in either online or paper format. Surveys were sent out to 10,297 residents. Of those delivered (10,084), 2,569 were obtained, for an overall

1 http://www.oregon.gov/oprd/atv/pages/permits.aspx

response rate of 25%. This included 21% for those engaging in OHV use in the past year (2,139 respondents) and 4% for those who did not engage. This response rate is typical by current survey standards, especially considering the long median online completion time of 23 minutes. With respect to format, 65% of the surveys were completed online and 35% in paper format.

Sample data were weighted by age and region. OPRD does not record age in the OHV permit registration process, so the reference point was the age distribution of OHV riders (all classes combined) from the 2011 survey conducted for the 2013-2017 Oregon Statewide Comprehensive Outdoor Recreation Plan (SCORP). The age-weighted region distribution in the current trail sample was further weighted to correspond to the region distribution of OHV households in the OPRD registration list. The list of survey recipients involved oversampling of rural regions and OHV classes other than Class I, in order to obtain sufficient data to present results by region and class.

DEMOGRAPHICS AND OHV OWNERSHIP

This section presents demographic results from the OHV survey probability sample.

Gender

Within the sample, 89% of respondents were male and 11% female (Table 2). Respondents also reported the gender and age of additional OHV riders in the household. When these additional OHV riders are accounted for, 62% were male and 38% were female.

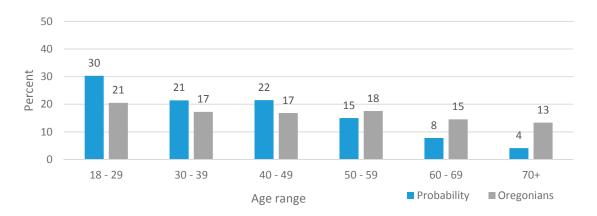
Table 2. Gender Of OHV Riders In Household, Percent

	Male	Female
Respondent	89	11
2nd OHV rider	37	63
3rd OHV rider	58	42
4th OHV rider	50	50
5th OHV rider	58	42
6th OHV rider	49	51
Total	62	38

Age

Figure 2 shows the age distribution for respondents and all Oregonians. OHV riders tend to be younger than the Oregon population as a whole.

Figure 2. OHV Rider Age Distribution



As with gender, respondents reported the ages of additional OHV riders in the household. As shown in Table 3, the age of additional OHV riders is lower than that of the respondent. The average age across all OHV riders was 33.

Evaluation of the full distributions suggests that the "2nd OHV rider" typically was an additional adult, whereas the 3rd of higher OHV riders often were children (Figure 3). Figure 4 shows the combined age distribution across all OHV riders in households.

Table 3. Age Of OHV Riders In Household, Years Old

	Mean age
Respondent	41
2nd OHV rider	37
3rd OHV rider	22
4th OHV rider	22
5th OHV rider	26
6th OHV rider	21
Total	33

Figure 3. Age Distribution, Additional OHV Riders

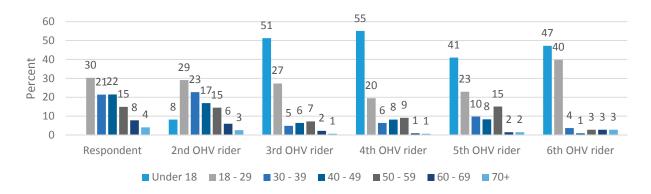
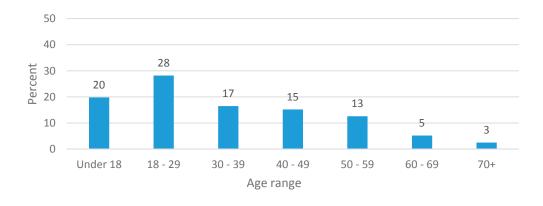


Figure 4. Age Distribution, Across All OHV Riders In Households



Income

Figure 5 shows the distribution of annual household pre-tax income. OHV riders – at least those with their own OHVs – tend to have a higher income level than Oregonians as a whole.

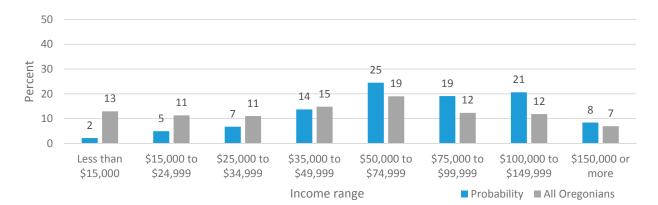


Figure 5. Annual OHV Rider Household Pre-Tax Income

Household Vehicle Ownership

Figure 6 shows number of vehicles owned by OHV households, across class. For example, 35% of OHV households do not own a Class I vehicle (though they received the survey because they registered at least one OHV across the four classes). A quarter (24%) own one Class I vehicle, 19% own two, and so on. As expected, Class IV vehicles were the least likely to be owned and were owned in the smallest numbers; very few households own more than two Class IV vehicles.

With the negligible number of "more than 8 vehicles in a given class" responses set to eight, the average number of vehicles owned by OHV households is 1.44 Class I vehicles, 0.89 Class II vehicles, 1.01 Class III vehicles, and 0.22 Class IV vehicles.



Figure 6. Number Of OHVs Owned In Household

Permit Sales

All OHVs operated on public lands in Oregon must be registered with OPRD, and Figure 7 shows registration counts by class over time. Permit sales from 1999 are missing from agency records; because permits are valid for two years, numbers from both 1999 and 2000 are missing. Registration peaked in 2007 at 191,782 vehicles across all classes, with the exception of Class IV with permit sales beginning in 2012.



Figure 7. Number Of Permitted OHVs In Oregon

TRIP CHARACTERISTICS AND PARTICIPATION

This section presents trip characteristics and participation estimates.

Day Trip and Multi-Day Trip Characteristics

Almost all respondents (96%) took at least one day trip and 86% took at least one multi-day trip in the previous 12 months. Multi-day trips are defined as those involving an overnight stay away from home, even if the respondent only rode an OHV one day

during the trip. The day versus multi-day distinction is used in presenting results in this section as well as in estimating economic contributions.

The following results are for the "typical" day and multi-day trips, defined as the single location where respondents most often engaged in each type of trip in the past 12 months. Figure 8 indicates that three-quarters of day trips (75%) were within 60 miles of home while two-thirds (67%) of multi-day trips were more than 60 miles from home.

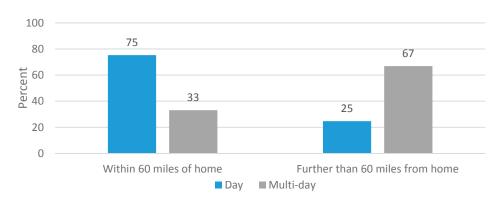


Figure 8. Typical Day And Multi-Day Trips, Distance Traveled

The remaining results in this section and estimating expenditure and economic significance are based on travel parties. The National Visitor Use Monitoring (NVUM) approach to outliers is followed here².

Figure 9 shows number of persons in travel party for day and multi-day trips. The average number of persons is 3.5 for day trips and 3.9 for multi-day trips.

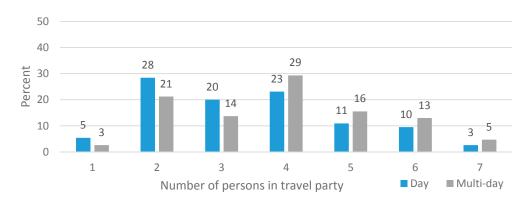


Figure 9. Typical Day And Multi-Day Trips, Persons In Travel Party

Figure 10 shows number of days for multi-day trips. Three days is the most common trip length, which may reflect a high portion of "long weekend" trips. The average number of days was 5.2 days, keeping in mind that this mean is "pulled up" by longer trips (10 or more days). The median is 3 days.

Respondents indicated whether the numbers of each type of trip (day trip and multi-day trip) had increased in the past five years, with results in Figure 10 (day trips) and Figure 11 (multi-day trips). Results are similar across trip type, with the percentage of respondents for whom number of trips has increased being larger than the percentage for whom number of trips has decreased.

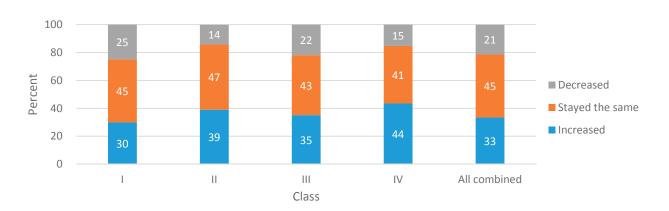


Figure 10. Change In Number Of Day Trips In The Past Five Years, By Class

White, E.M., D.B. Goodding, and D.J. Stynes. 2013. Estimation of national forest visitor spending averages from National Visitor Use Monitoring: round 2. Gen. Tech. Rep. PNW-GTR-883. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.



Figure 11. Change In Number Of Multi-Day Trips In The Past Five Years, By Class

Among the reasons for change, more free time was mentioned by 27% of the respondents who indicated a change in either type of trip, less free time was mentioned by 17%, more income was mentioned by 16%, the high cost of fuel was mentioned by 16%, and less income was mentioned by 12%. The open-ended reasons for increased trips were diverse, with increased interest amongst family (often children) and friends being a common response. Reduced access was the main open-ended reason for decreased trips.

OHV riders engaged in a variety of activities while on day or multi-day trips (Figure 12), with exploring the town/ area and watching wildlife being mentioned most. Responses in the Other category were diverse and included hiking, golfing, boating, geocaching, mushroom hunting, prospecting/ mining, and casino visits.



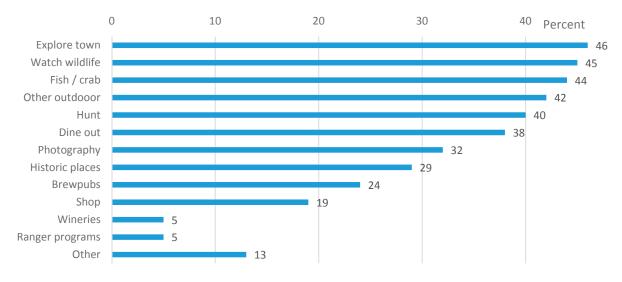


Figure 13 indicates that RV or tent camping in dispersed areas was the most commonly used form of lodging while on multi-day trips. Responses to Other category were varied, with common responses being cabins and vacation rentals.

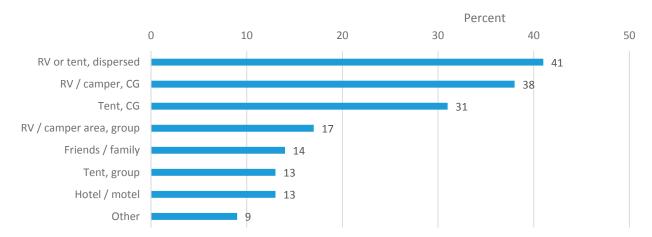


Figure 13. Lodging Used During Multi-Day Trips

Participation By Riding Area And Region

Table 4 shows the average number of days by riding area, across all respondents in the probability sample. The Other category for each region (e.g., R10 Other) reflects days ridden on other areas on public lands, such as dirt roads.

The table is sorted by number of days for all classes combined, with the "Top 5" sites for each class highlighted in gold. Winchester Bay is the site ridden most for all classes combined (4.43 days), and it is in the Top 5 for Class I, Class II, and Class IV riders. It is not in the Top 5 for Class III riders. Tillamook State Forest is the site ridden most by Class III riders, but it is not in the Top 5 for the other three classes.

The "All classes combined" column includes respondents who did not answer the "most often" question and respondents who reported different "most often" classes for designated versus other areas. Thus, it is possible for the value in that column to appear inconsistent with the values in the "by class" columns, as is the case for Winchester Bay.

Table 4. Days Riding Per Year By Site, Average Number Of Days By "Most Often" Class

Site	Site					All classes
number	name		II		IV	combined
	All listed sites combined	26.26	41.91	26.95	29.46	<i>33.87</i>
7	Winchester Bay	2.08	3.19	1.10	3.33	4.43
6	South Jetty	2.63	2.71	1.07	2.60	3.06
8	Horsfall	1.63	5.18	1.30	2.48	2.75
2	Tillamook State Forest	0.88	2.10	2.56	0.35	1.93
	R10 Other	1.74	2.90	0.95	2.72	1.36
	R6 Other	2.36	0.60	0.77	0.50	1.07
4	Sand Lake	1.10	1.15	0.38	0.65	1.03
	R1 Other	0.68	1.70	1.16	0.24	1.00
43	Blue Mountain	0.61	1.15	0.27	0.95	0.94
	R9 Other	1.00	1.46	0.49	1.66	0.84
	R8 Other	0.42	2.35	1.18	0.95	0.80
35	East Fort Rock	0.42	1.02	1.32	0.22	0.76
	R3 Other	0.86	0.79	0.62	0.35	0.69
1	Nicolai Mountain	0.21	0.46	0.47	0.06	0.67
	R11 Other	0.76	0.74	0.49	2.05	0.64
46	Mt. Emily	0.84	0.59	0.13	0.66	0.62
	R2 Other	0.18	1.56	0.61	0.28	0.62
44	Virtue Flat	0.22	1.94	0.17	0.22	0.60
	R7 Other	0.56	0.69	0.24	0.63	0.59
25	Shotgun Creek	0.29	0.14	1.21	1.20	0.58
	R4 Other	0.50	0.36	0.45	1.01	0.54
	R5 Other	0.45	1.59	0.59	0.62	0.53
33	Millican Valley	0.60	0.54	0.77	0.14	0.51
37	Christmas Valley	0.35	0.82	0.42	0.64	0.51
26	Northwest Area	0.18	0.86	0.68	0.07	0.43
3	Upper Nestucca	0.52	0.41	0.38	0.02	0.41
45	Winom-Frazier	0.36	0.08	0.81	0.49	0.41
42	John Day Area	0.42	0.29	0.04	0.98	0.38
40	Morrow/Grant Cty Trails	0.40	0.43	0.42	0.35	0.37
29	Santiam Pass	0.20	0.46	0.39	0.16	0.36
30	Cline Buttes	0.37	0.81	0.33	0.13	0.35
9	Winchester Trails	0.15	0.22	0.27	0.09	0.33
20	North Umpqua	0.10	0.20	0.02	0.08	0.32
24	Huckleberry Flats	0.17	0.24	0.43	0.08	0.26
16	Timber Mountain	0.00	0.02	0.90	0.16	0.25
23	Cottage Grove	0.14	0.15	0.49	0.18	0.23
19	Prospect	0.22	0.03	0.18	0.46	0.22
10	Blue Ridge	0.11	0.24	0.11	0.06	0.21

Table 4. (Continued)

Site number	Site name	1	II	Ш	IV	All classes combined
15	Lily Prairie	0.00	0.11	0.75	0.03	0.21
47	Breshears	0.25	0.20	0.19	0.22	0.21
21	Diamond Lake	0.18	0.13	0.05	0.59	0.18
11	Chetco	0.08	0.03	0.19	0.07	0.16
48	Upper Walla Walla	0.15	0.03	0.22	0.00	0.15
27	McCubbins Gulch	0.06	0.04	0.18	0.04	0.14
39	Radar Hill	0.16	0.06	0.00	0.13	0.14
22	Three Trails	0.03	0.10	0.14	0.16	0.13
34	Edison Butte	0.09	0.34	0.08	0.10	0.12
31	Henderson Flat	0.10	0.03	0.20	0.01	0.11
5	Mt. Baber	0.07	0.14	0.19	0.00	0.10
18	Klamath Sportsman Park	0.03	0.06	0.10	0.05	0.10
13	Galice	0.04	0.04	0.04	0.02	0.08
32	Green Mountain	0.05	0.10	0.14	0.01	0.08
38	Crane Mountain	0.07	0.05	0.01	0.00	0.07
14	McGrew 4x4 Trail	0.05	0.11	0.03	0.01	0.06
36	Rosland	0.03	0.00	0.14	0.05	0.06
12	Pine Grove / III. River	0.05	0.05	0.01	0.00	0.05
28	McCoy MRA	0.02	0.07	0.05	0.00	0.05
17	Elliott Ridge	0.00	0.00	0.03	0.04	0.04
41	West End (Sunflower)	0.04	0.05	0.04	0.11	0.03

Table 5. Respondent Days Per Year, By Region

Region	Days per	Percent of
Region	respondent	total
Region 1	5.14	15.2
Region 2	1.05	3.1
Region 3	1.10	3.2
Region 4	1.61	4.8
Region 5	11.47	33.9
Region 6	2.48	7.3
Region 7	1.66	4.9
Region 8	2.82	8.3
Region 9	1.65	4.9
Region 10	4.11	12.1
Region 11	0.78	2.3
Statewide	33.87	

Table 5 shows the estimated annual number of days riding per respondent by region, reflecting the sum of Table 4 results across sites within the region.

OHV Riding Days By Region

The annual number of riding days statewide was estimated based on the OPRD database of permits by vehicle class (see Figure 7) and the annual number of days ridden for recreational purposes on public land, by class, from the 2014 Oregon fuel consumption report³ referenced in footnote 3 (see page 8 of that report for recreational days per vehicle and page 10 for proportion on public land). Results are shown in Table 6.

Table 6. Riding Days Per Year By Oregon Res ident OHV Riders, By Class

Class	Permits (vehicles)	Days ridden on public land per vehicle	Days
I	84,871	19.8	1,684,520
II	24,909	21.7	541,173
III	32,799	20.5	671,323
IV	8,846	24.6	217,337
Total	151,425		3,114,353

The statewide total number of days (3.1 million) was then allocated to regions based on the percentages shown in Table 5, with the allocation shown in Table 7.

Table 7. Riding Days Per Year By Oregon Resident OHV Riders, By Region

Region	Days
Region 1	472,624
Region 2	96,548
Region 3	101,145
Region 4	148,040
Region 5	1,054,669
Region 6	228,036
Region 7	152,637
Region 8	259,300
Region 9	151,718
Region 10	377,915
Region 11	71,721
Statewide	3,114,353

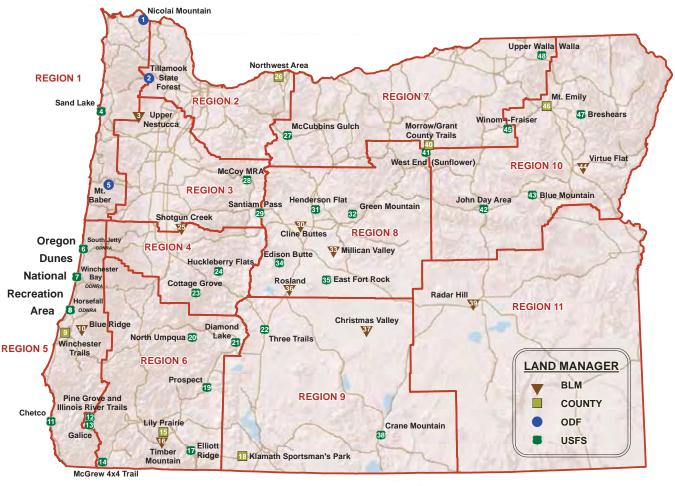
RIDING TYPES, EXPERIENCES, PREFERENCES, AND PRIORITIES

Recreational OHV riding in Oregon was grouped into two main types:

- The 48 designated riding areas as shown on the map on the following page (Figure 14).
- Other areas or routes, such as dirt roads open for riding on Forest Service, BLM, state forest, or county lands.

³ OSU Survey Research Center. 2015. Procedures and Results of Data Collected for the 2014 Oregon Off-Highway Vehicle Survey on Fuel Consumption. Report to the Oregon Department of Transportation and Oregon Parks and Recreation Department.

Figure 14. Map Of OHV Designated Riding Areas And Regions



Area #	Area Name	Region #	Area #	Area Name	Region #	Area #	Area Name	Region #
1	Nicolai Mountain	1	18	Klamath Sportsman's	9	35	East Fort Rock	8
2	Tillamook State Forest	1		Park		36	Rosland	8
3	Upper Nestucca	1	19	Prospect	6	37	Christmas Valley	9
4	Sand Lake	1	20	North Umpqua	6	38	Crane Mountain	9
5	Mt. Baber	1	21	Diamond Lake	6	39	Radar Hill	11
6	South Jetty	5	22	Three Trails	9	40	Morrow/Grant County	7
7	Winchester Bay	5	23	Cottage Grove	4		Trails	
8	Horsefall	5	24	Huckleberry Flats	4	41	West End (Sunflower)	8
9	Winchester Trails	5	25	Shotgun Creek	4	42	John Day Area	10
10	Blue Ridge	5	26	Northwest Area	2	43	Blue Mountain	10
11	Chetco	5	27	McCubbins Gulch	7	44	Virtue Flat	10
12	Pine Grove & Illinois River	6	28	McCoy MRA	3	45	Winom-Fraiser	7
12	Trails	0	29	Santiam Pass	3	46	Mt. Emily	10
13	Galice	6	30	Cline Buttes	8	47	Breshears	10
14	McGrew 4x4 Trail	6	31	Henderson Flat	8	48	Upper Walla Walla	7
15	Lily Prairie	6	32	Green Mountain	8			
16	Timber Mountain	6	33	Millican Valley	8			
17	Elliott Ridge	6	34	Edison Butte	8			

Vehicle Class Use

Figure 15 shows the class of vehicle used most often for each type of riding area. In designated riding areas (first column), 42% of respondents most often rode Class I vehicles, 17% Class II vehicles, 32% Class III vehicles, and 9% Class IV vehicles. The distribution for other areas differs from that for designated areas in that Class II and Class IV are somewhat more likely to be the "most often" class of vehicles uses.

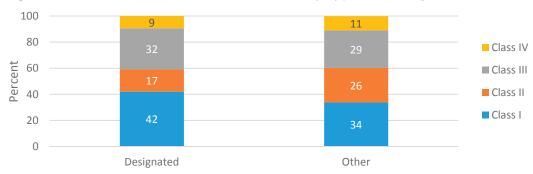


Figure 15. Class Of Vehicle Used Most Often By Type Of Riding Area

Change In Riding Opportunities

Figure 16 and Figure 17 show respondent evaluation of the change in availability over the past 10 years for each type of riding. For both types, the percentage for decreased was greater than for increased, but this was especially the case for Other areas.

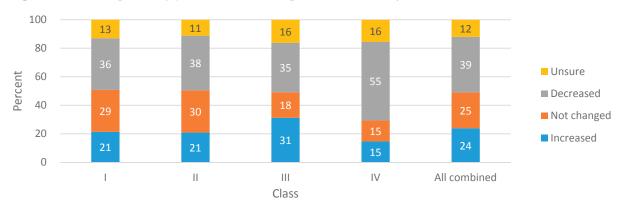
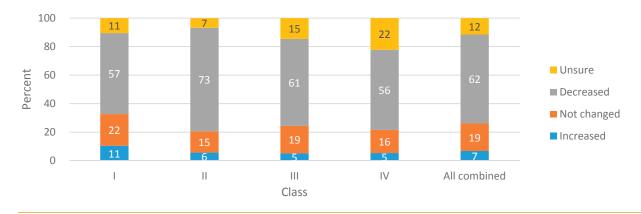


Figure 16. Change In Opportunities, Designated Areas, By Class





Travel Distances

Respondents indicated the riding area where they rode most, then reported the distance traveled to the area (one-way driving miles from home). Table 8 presents results, sorted by the number of observations for each riding area. Among sites with at least ten observations, the John Day Area (site 42) was the site most distant from home, with OHV riders traveling an average of 227 miles to the site.

Table 8. Travel Distances By "Most Often Visited" Site

611	6 11		Distance (miles)			
Site number	Site name	Observations	Mean	Median		
	All sites combined	3,187	113	93		
49	Other public land	1,061	106	67		
2	Tillamook State Forest	233	65	51		
7	Winchester Bay	197	148	147		
8	Horsfall	161	120	120		
6	South Jetty	139	108	106		
37	Christmas Valley	129	185	195		
35	East Fort Rock	125	146	149		
4	Sand Lake	117	102	95		
26	Northwest Area	94	98	80		
27	McCubbins Gulch	89	109	85		
33	Millican Valley	83	149	162		
29	Santiam Pass	74	79	74		
25	Shotgun Creek	71	50	36		
24	Huckleberry Flats	53	95	76		
42	John Day Area	44	227	245		
30	Cline Buttes	43	111	132		
31	Henderson Flat	32	118	131		
21	Diamond Lake	32	95	69		
28	McCoy MRA	25	81	78		
23	Cottage Grove	24	54	47		
14	McGrew 4x4 Trail	23	218	220		
9	Winchester Trails	23	78	37		
46	Mt. Emily	19	151	73		
43	Blue Mountain	19	106	73		
40	Morrow/Grant Cty Trails	18	145	114		
45	Winom-Frazier	18	115	82		
15	Lily Prairie	17	81	19		
3	Upper Nestucca	17	33	36		

Site 49 reflects the "all other public land" category, while sites 51 through 57 reflect sites written in as visited (not necessarily the most visited) by at least five respondents, yet not on the list of 48 designated areas.

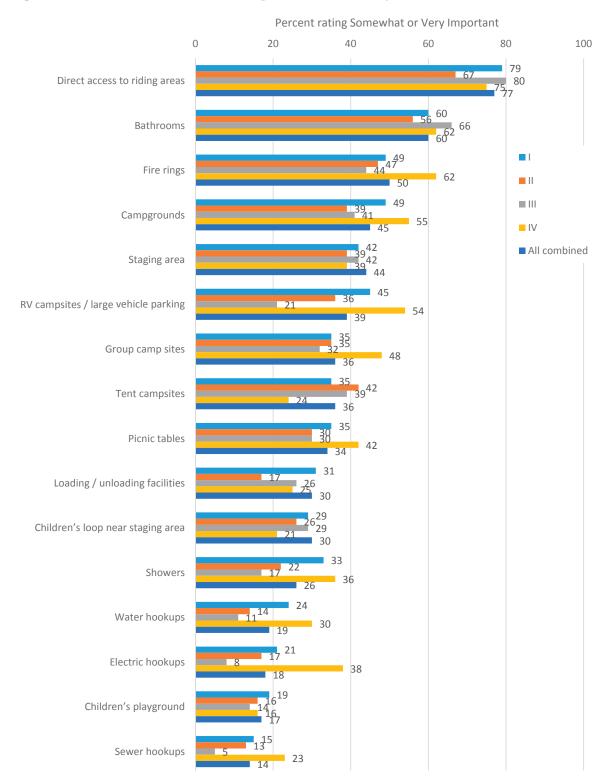
Table 8. (Continued)

			Distanc	e (miles)
Site number	Site name	Observations	Mean	Median
32	Green Mountain	15	119	146
16	Timber Mountain	15	103	72
19	Prospect	15	102	85
22	Three Trails	15	98	71
1	Nicolai Mountain	13	91	33
20	North Umpqua	13	63	35
5	Mt. Baber	13	51	39
12	Pine Grove / Ill. River	12	122	113
13	Galice	12	109	25
34	Edison Butte	10	162	172
11	Chetco	9	54	19
52	Spinreel	8	137	155
39	Radar Hill	7	212	233
51	Riley Ranch	6	111	107
55	Sumpter area	5	267	255
38	Crane Mountain	5	263	260
44	Virtue Flat	4	171	149
47	Breshears	4	163	62
10	Blue Ridge	4	156	176
17	Elliott Ridge	4	61	68
41	West End (Sunflower)	3	203	200
53	China Hat	3	123	156
18	Klamath Sportsman Park	3	52	28
48	Upper Walla Walla	3	38	21
57	Steens	2	301	311
54	Ochocos	2	74	74
56	Owyhee	1	70	71
36	Rosland	1	23	23

Considerations In Deciding Where To Ride

Figure 18 shows the importance of considerations when deciding where to ride, percent rating 4 or 5 on a 5-point scale, sorted by All respondents combined. The top consideration was direct access to riding areas.

Figure 18. Considerations In Deciding Where To Ride, By Class



Funding Need

Respondents indicated the importance of various potential improvements, with Figure 19 showing percent rating 4 or 5 on a 5-point scale. Maintenance of existing trails and more trail maps and information were rated most important across all respondents.

Results by region are included in Table 9.

Figure 19. Importance For Funding, By Class

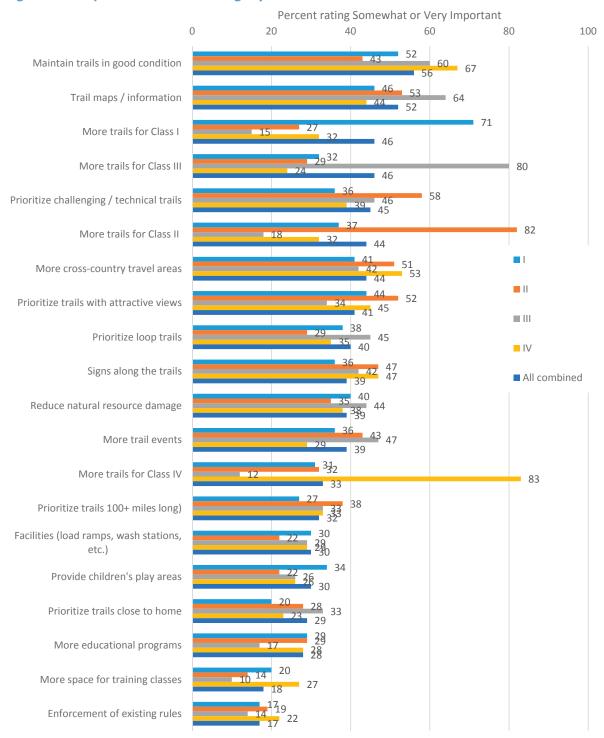


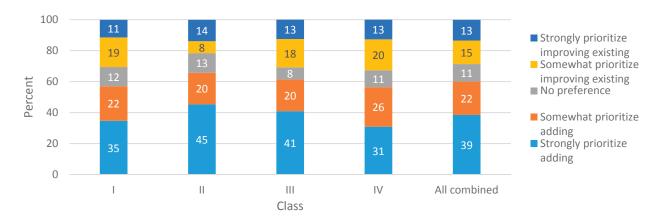
Table 9. Importance For Funding, Percent Rating Somewhat Or Very Important, By Region

	1	2	3	4	5	6	7	8	9	10	11	Total
Maintain trails in good condition	51	63	51	66	46	59	62	40	46	59	41	56
Trail maps / information	52	56	55	51	41	43	58	53	51	54	52	52
More trails for Class I	48	40	47	57	50	49	56	29	51	50	53	46
More trails for Class III	56	48	39	52	53	51	36	43	46	33	38	46
Prioritize challenging / technical trails	53	51	42	41	49	49	36	36	36	46	30	45
More trails for Class II	39	47	44	50	49	42	34	38	33	42	30	44
More cross-country travel areas	42	38	39	42	46	54	52	45	62	65	50	44
Prioritize trails with attractive views	40	38	38	46	39	44	41	41	43	53	44	41
Prioritize loop trails	46	43	39	35	40	35	48	37	39	39	34	40
Signs along the trails	34	46	45	40	30	34	35	37	32	27	20	39
Reduce natural resource damage	34	39	42	43	33	41	37	30	31	37	33	39
More trail events	47	41	36	41	38	47	41	22	34	40	27	39
More trails for Class IV	39	33	27	44	39	33	25	22	35	41	37	33
Prioritize trails 100+ miles long	45	29	32	26	32	32	37	31	28	49	31	32
Facilities (load ramps, wash stations, etc.)	31	29	28	42	30	32	31	27	27	29	28	30
Provide children's play areas	36	25	31	34	38	43	26	26	21	26	16	30
Prioritize trails close to home	39	36	20	26	23	25	24	33	35	25	25	29
More educational programs	24	23	31	31	26	33	28	17	34	40	34	28
More space for training classes	13	19	14	21	21	17	15	14	17	24	21	18
Enforcement of existing rules	14	15	23	20	17	13	17	14	17	9	18	17

Priorities For New Versus Improving Existing Riding Areas

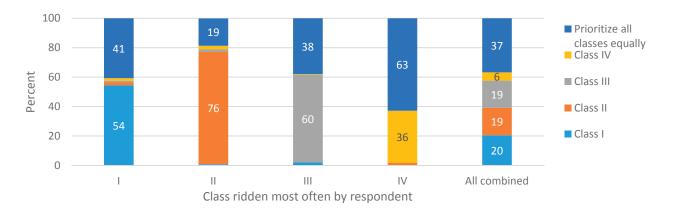
Figure 20 presents priorities for purchasing land to add new riding areas versus improving existing areas. In general, preferences favored adding new areas.

Figure 20. Priorities For New Versus Existing Areas, By Class



Respondents who preferred adding new areas typically prioritized the development of trails either their "most often ridden" class or for all classes equally (Figure 21).

Figure 21. Class Of Vehicle To Be Prioritized In Developing New Areas, By Class



Issue Importance

Figure 22 shows ratings of trail problems based on respondent experiences while riding OHVs, percent rating 4 or 5 on a 5-point scale. Closure of trails and logging roads are the most commonly rated problems, especially for Class II and Class IV riders.

Results by region are included in Table 10.

Figure 22. Problems On OHV Trails, By Class

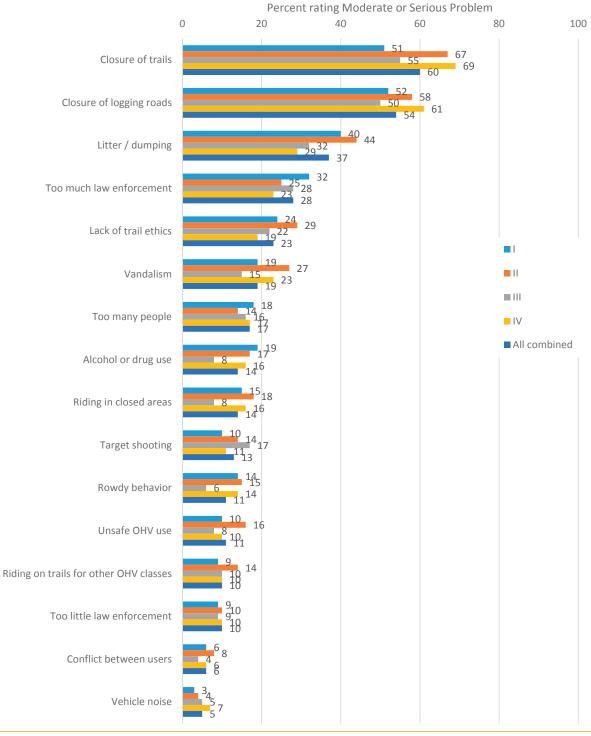


Table 10. Problems On OHV Trails, Percent Rating Moderate Or Serious Problem, By Region

	1	2	3	4	5	6	7	8	9	10	11	Total
Closure of trails	53	57	51	64	71	66	71	49	72	75	49	60
Closure of logging roads	46	51	48	47	61	54	72	49	75	80	58	54
Litter / dumping	39	32	38	41	40	42	33	42	37	45	34	37
Too much law enforcement	22	26	24	31	30	39	26	27	38	30	21	28
Lack of trail ethics	18	20	28	25	32	14	25	19	26	28	20	23
Vandalism	18	15	18	26	19	20	21	17	30	29	22	19
Too many people	13	17	17	26	21	15	19	16	24	9	10	17
Alcohol or drug use	18	7	14	27	24	18	10	8	15	15	18	14
Riding in closed areas	10	7	14	17	21	16	19	15	17	20	17	14
Target shooting	11	13	12	16	8	12	10	21	10	16	8	13
Rowdy behavior	11	5	13	17	14	9	13	11	20	18	15	11
Unsafe OHV use	12	7	11	18	14	12	10	12	19	6	10	11
Riding on trails for other OHV classes	7	8	11	13	6	13	13	11	14	10	10	10
Too little law enforcement	8	8	13	11	12	11	8	8	13	9	7	10
Conflict between users	8	6	3	8	3	5	6	10	9	5	7	6
Vehicle noise	4	2	4	9	12	7	5	4	3	6	3	5

Satisfaction With Trail Opportunities

Respondents completing the survey online were asked how satisfied they were, overall, with trail opportunities on public land in Oregon. Results in Figure 23 indicate a higher percentage who are satisfied than dissatisfied. Overall, 64% reported being very or somewhat satisfied with OHV trail opportunities on public lands in Oregon. The highest level of satisfaction was among Class III riders, with 70% reporting being very or somewhat satisfied. The lowest level of satisfaction was among Class IV operators, with 46% reporting being very or somewhat satisfied.

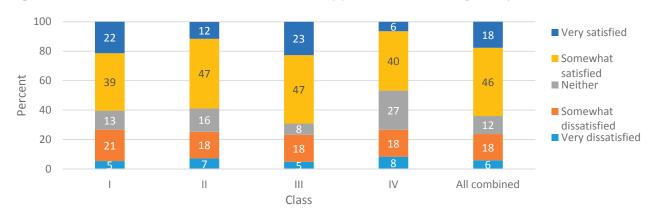


Figure 23. Overall Satisfaction With OHV Trail Opportunities In Oregon, By Class

Level Of Support For Permit Fee Increase

Respondents were asked whether they would oppose or support an increase in the permit fee to expand facilities and opportunities. The specific wording was:

An ATV permit is required when riding an OHV on public land in Oregon. The permit is valid for two years and currently costs \$10. Permit revenue is used to provide facilities and riding opportunities in Oregon. Would you support or oppose an increase in the permit fee from \$10 to \$15 to expand funding for facilities and opportunities?

Results in Figure 24 indicate greater support than opposition to such an increase. 60% indicated they strongly or somewhat supported the increase and 25% indicated they somewhat or strongly opposed it.

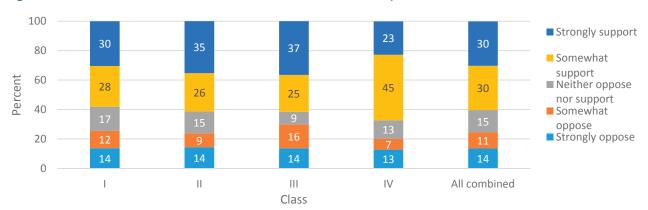


Figure 24. Views On a Potential \$5 Permit Fee Increase, By Class

EXPENDITURE AND ECONOMIC CONTRIBUTION

This section presents a summary of OHV rider expenditure, based on the "typical trips" described earlier. Note that this expenditure is only associated with travel, not with equipment purchase or maintenance. The expenditure and economic contribution reflects OHV riding activity by both local (to the OHV riding location) and non-local Oregon residents. Expenditures categories used in this analysis included:

- Hotel, motel, condo, cabin, B&B, or other lodging except camping
- Camping (RV, tent, etc.)
- · Restaurants, bars, pubs
- Groceries
- · Gas and oil
- Other transportation

In the analysis, survey spending question responses are used to calculate per person OHV rider expenditures for day and for multi-day trips for each region. The expenditure of OHV riders by region was "run" through the IMPLAN⁴ input-output model to

estimate the "multiplier effects" of money flowing through the local economy. To illustrate, assume that an OHV rider eats lunch at Restaurant X in Region 8. In order to provide the lunch, Restaurant X hires employees and purchases food that is then prepared for customers. Food is an input purchased from another business, and this process generates indirect effects. Wages paid to employees generate induced effects, because those employees spend a portion of their income in the local economy (perhaps by eating at Restaurant Y or shopping at Supermarket Z). Please see the full survey report for a thorough methods description.

Table 11 shows the results of the multiplier analysis, by region. The columns are as follows:

- Employment, full-time or part-time jobs.
- Labor income, which includes employee compensation (including wages, salaries, and benefits) and proprietary income (including self-employment income).
- Value added, which includes labor income, rents, profits, and indirect business taxes.
- Output, which is the dollar value of goods and services sold.

Table 11. Annual Multiplier Effects Of OHV Rider Trip Expenditure, By Region; Employment In Jobs, Other Measures In Dollars

Region	Employment	Labor Income	Value Added	Output
1	122	3,471,100	5,346,800	8,705,800
2	29	1,079,600	1,595,500	2,489,100
3	25	717,900	1,088,500	1,744,700
4	43	1,307,300	1,993,000	3,101,900
5	288	7,376,600	11,534,000	19,311,500
6	50	1,451,800	2,247,300	3,668,800
7	50	1,149,100	1,740,300	2,978,700
8	70	2,119,600	3,316,100	5,401,000
9	51	1,082,800	1,650,300	2,866,100
10	116	2,252,500	3,639,900	6,421,800
11	25	506,200	777,400	1,360,500
Total	869	22,514,500	34,929,200	58,049,700

⁴ IMPLAN is widely used to estimate the economic contribution of tourism, recreation, and other activities.

Statewide, OHV riding by Oregon residents annually contributes 869 jobs, \$23 million in labor income, and \$58 million in value added.

A 2009 report on the economic impact of OHV recreation in Oregon⁵ had a different scope and used a different methodology, such it does not provide a direct comparison for the results in Table 10. However, that report – and the sources it utilized – provides a reference point for the relative contribution of non-resident OHV riding in Oregon. In that analysis, 34% was used as the proportion of all riding days on the South Coast (Region 5) being from out-of-state visitors, with 15% used for all other regions. Thus, out-of-state riders are estimated to contribute an additional 52% of the Region 5 amount in Table 10 (34% / 66%) and an additional 18% (15% / 85%) of the amounts for other regions. Table 12 shows the statewide total for in-state riders from Table 10, together with the estimated contribution from out-of-state riders.

Table 12. Annual Multiplier Effects Of OHV Rider Trip Expenditure, Out-Of-State Riders Included; Employment In Jobs, Other Measures In Dollars

Origin	Employment	Labor Income	Value Added	Output
In-state	869	22,514,500	34,929,200	58,049,700
Out-of-state	251	6,471,500	10,070,300	16,784,500
Combined	1,120	28,986,000	44,999,500	74,834,200

When out-of-state visitors are included, the estimated amounts increase to 1,120 jobs, \$45 million in value added, and \$29 million in labor income.

CONCLUSIONS AND IMPLICATIONS

Oregon survey results show that 20% of OHV riders in the state are under the age of 18. The U.S. Consumer Product Safety Commission reports that children are at higher safety risk as OHV operators than older riders. As a result, the state of Oregon should continue to improve and expand user education and safety education programs for youth involved with or interested in OHV recreation. Such educational efforts should be incentive based, fun, and area specific to ensure youth participation.

Oregon OHV riders engage in a variety of activities while on day or multi-day trips, with exploring the town/areas, watching wildlife, fishing/crabbing,

5 Lindberg, K. 1999. The Economic Impacts of Off-Highway Vehicle (OHV) Recreation in Oregon. Report to the Oregon Parks and Recreation Department.

hunting, and dining out mentioned most. Land management agencies, tourism groups, local communities and businesses should use these results to assist out-of-town OHV riders with trip planning.

Class IV (side-by-side) permit sales began in 2012 in Oregon. Survey results show that Class IV riding is now 7% of total OHV rider days in the state. Of the four OHV classes, Class IV operators report the lowest level of satisfaction (46% being very or somewhat satisfied) with OHV trail opportunities in the state. Land managers should reach out to Class IV operators in future planning efforts to better serve their specific rider needs.

OHV riders reported that the greatest loss in riding opportunities in Oregon in the past 10 years was for riding opportunities outside the state's Designated Riding Areas. The 2015 Oregon OHV Guide includes a listing of 53 Designated Riding Areas in the state. These areas are high-intensity riding areas with associated high operation and maintenance costs. There are also many designated OHV routes and

trails on public lands in Oregon which are outside the boundaries of these Designated Riding Areas. Many OHV enthusiasts seek out these less crowded riding experiences and enjoy exploring new riding areas. As such, OPRD will provide additional points in the ATV grant program for projects intending to enhance existing or provide new riding opportunities outside the boundaries of the state's official list of 53 Designated Riding areas.

The survey identified a strong need for funding to maintain existing trails in good/sustainable condition. A recent GAO report⁶ found the USFS is only able to maintain about one-quarter of National Forest System trails to the agency standard, and the agency faces a trail maintenance backlog of \$314 million in fiscal year 2012. A consistent trail maintenance backlog is also reported on Oregon national forests. The state of Oregon should investigate the potential for initiating a trails foundation with a mission of protecting and maintaining recreational trails in the state.

The survey also identified a funding need for trail maps and information about riding opportunities. Riders continue to report confusion about where or when motorized access is or not allowed, or what type of vehicle, and how or where to find that information. The USFS and BLM should develop user-friendly maps and signs for route systems including large format signage, on-the-ground route markers, and information kiosks with maps to inform riders of the law and indicate where they can ride legally.

Closure of trails and unimproved backcountry roads were also identified as top OHV management issues. Land managers should reduce unwarranted OHV closures through comprehensive review/input/analysis by all stakeholders.

Survey respondents also identified illegal dumping in OHV areas as a top management issue. Bags of

6 U.S. Government Accountability Office (2013). Forest Service Trails: Long and short-term improvements could reduce maintenance backlog and enhance system sustainability. GAO-13-618.

household garbage, tires, yard debris, large residential appliances, automobiles, and hazardous materials are improperly dumped on public OHV riding areas in Oregon. Managing agencies should educate Oregon's OHV community about the problem of illegal waste disposal on riding areas, work with user groups to set up debris clean-up days, encourage OHV enthusiasts to report illegal dumping to proper authorities, implement adopt-a-site programs, and prosecute serious illegal dumping offenses in a timely manner.

Finally, this report identifies expenditure and economic contributions associated with OHV riding on public lands in Oregon. Statewide, OHV use by Oregon residents supports 869 jobs, \$23 million in labor income, and \$58 million in value added. When out-of-state visitors are included, the estimated amounts increased to 1,120 jobs, \$45 million in value added, and \$29 million in labor income. This information should be used to educate Oregonians about the economic benefits received from their investment in OHV riding areas, facilities, and services in the state.



► CHAPTER 3

Oregon Resident Snowmobiler Survey Summary



INTRODUCTION

Background

In preparation for the 2016-2025 Oregon Trails Plan, the Oregon Parks and Recreation Department (OPRD) contracted with Oregon State University (OSU) to conduct a survey of Oregon resident snowmobilers regarding their current use patterns (amount, location, and type of use), user experiences and preferences, and the economic contribution of recreation activity.

SURVEY METHODS

The probability sample was designed to be as representative as possible of Oregon resident snow-mobilers. It was drawn at random from the list of all persons with snowmobiles registered with the Oregon Department of Motor Vehicles (DMV). The sample design was developed to derive information at the statewide scale.

This chapter includes a summary of selected survey results. The full survey report, Oregon Snowmobiler Participation and Priorities, is available online at: oregon.gov/oprd/Trail_Programs_Services/ Documents/Snowmobile_report2015.pdf

Survey respondents could complete the questionnaire in either online or paper format. Surveys were sent out to 1,250 residents. Of those delivered (1,242), 528 were obtained, for an overall response rate of 42%. This included 40% for those who snowmobiled in the past year (501 respondents) and 2% for those who did not snowmobile. This response rate is good by current standards. With respect to format, 68% of the surveys were completed online and 32% in paper format.

Sample data were weighted by age. The DMV list was "cleaned" by removing persons under 18 years old or with a mailing address outside of Oregon. Duplicate entries per household were removed. The resulting age distribution matched those of snowmobiler studies in Wyoming and Pennsylvania, except in the lower and upper age groups. The registration

list distribution was modified by adding 4% to the lowest age group (18 to 29) and subtracting 4% from the highest age group (70 or older). The resulting adjusted distribution was a reasonable match with the Wyoming and Pennsylvania results and was used to calculate age weights.

Figure 1 (page 29) shows the planning regions across the state.

DEMOGRAPHICS AND SNOWMOBILE OWNERSHIP

This section presents demographic results from the snowmobiler survey probability sample.

Gender

Within the sample, 77% of respondents were male and 23% female (Table 13). Respondents also reported the gender and age of additional snowmobilers in

the household. When these additional snowmobilers are accounted for, 56% were male and 44% were female.

Table 13. Gender Of Snowmobilers In Household, Percent

	Male	Female
Respondent	77	23
2nd snowmobiler	39	61
3rd snowmobiler	57	43
4th snowmobiler	43	58
5th snowmobiler	56	44
6th snowmobiler	65	35
Total	56	44

Age

Figure 25 shows the age distribution for respondents and all adult Oregonians. Snowmobiling participation occurs across age groups, though it is particularly high amongst people in the 40 to 59 age range.

Figure 25. Snowmobiler Age Distribution

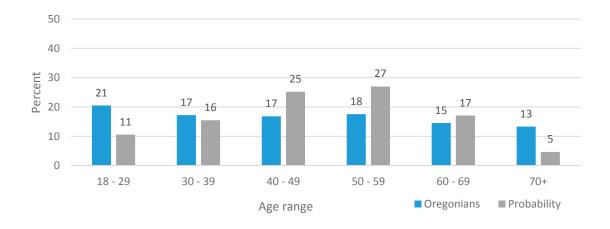


Figure 26 shows the age distribution, by region, for owners of snowmobiles registered with the Oregon DMV. There is regional variation, but most owners are in the middle age ranges (from 40 to 60 years old). Relatively few registrants live in Region 1 and 5, so results for those regions should be interpreted with caution.

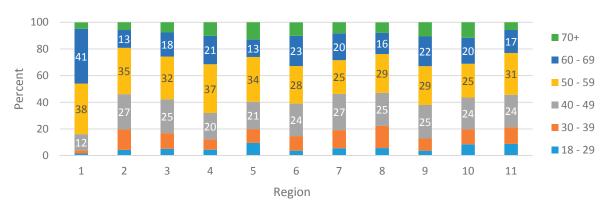


Figure 26. Age Distribution, DMV Snowmobiler Registrants, By Region

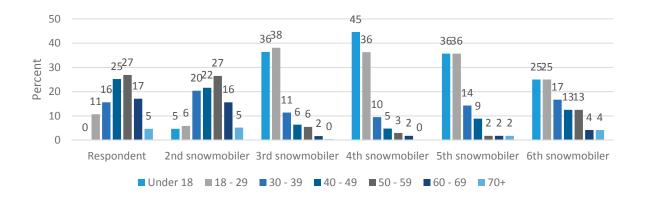
As with gender, respondents reported the ages of additional snowmobilers in the household. As shown in Table 14, the age of additional snowmobilers was lower than that of the respondent. The average age across all snowmobilers was 39.

Evaluation of the full distributions suggests that the "2nd snowmobiler" typically was an additional adult, whereas the 3rd or higher snowmobilers often were children (Figure 27).

Table 14. Age Of Snowmobilers In Household, Years Old

	Mean age			
Respondent	49			
2nd snowmobiler	47			
3rd snowmobiler	24			
4th snowmobiler	21			
5th snowmobiler	24			
6th snowmobiler	34			
Total	39			

Figure 27. Age Distribution, Additional Snowmobilers



Income

Figure 28 shows the distribution of annual household pre-tax income for snowmobilers, OHV riders, and Oregonians as a whole. Snowmobilers and OHV riders (at least those in each group who own and register their vehicles) have higher income than Oregonians as a whole. This is especially true for snowmobilers.

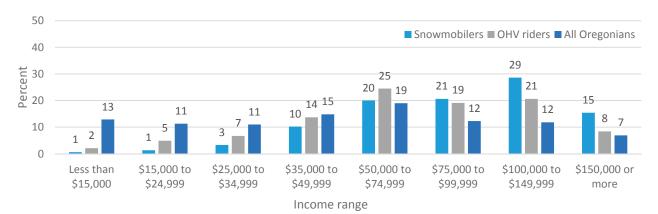


Figure 28. Annual Snowmobiler and OHV Rider Household Pre-Tax Income

Household Vehicle Ownership

Figure 29 shows number of vehicles owned by snowmobile households. Most snowmobile households own more than one snowmobile, with two, three, and four being the most common number of snowmobiles owned. With the small number of "more than 8 snowmobiles" responses set to eight, the average number of snowmobiles owned per household was 3.4.

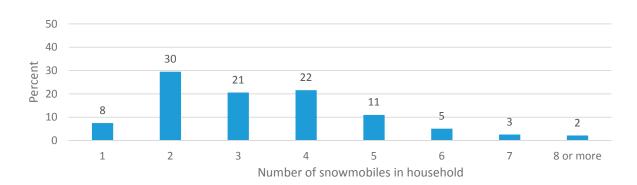


Figure 29. Number Of Snowmobiles Owned In Household

Snowmobile Registrations

All snowmobiles in Oregon must be registered with the DMV, and Figure 30 shows registration counts by class over time.⁷ Figure 31 shows registration rates across regions in per capita terms, using registrations per 1,000 residents.

⁷ Some snowmobiles are ridden without being registered. The level of non-compliance is unknown, but anecdotal reports indicate that in some locations it may be as high as 20%.

Figure 30. Snowmobile Registrations Over Time, By Region (regions on left axis, statewide on right axis)

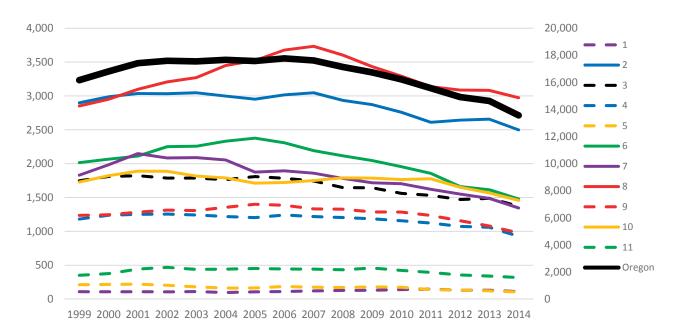
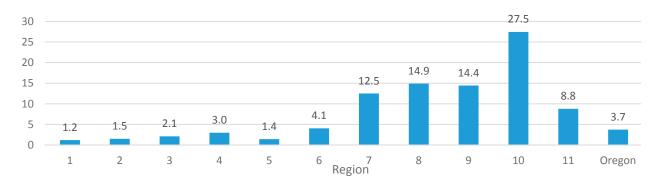


Figure 31. Snowmobile Registrations By Region, Registrations Per 1,000 Residents (2013)



Statewide registrations peaked in 2006 at 17,771. The subsequent drop presumably reflects the recession, though registrations have not recovered as the economy has improved in recent years. Snow amounts may help explain the lack of recovery in registration numbers. Figure 32 shows the average across December and February for snow water equivalents at the Cascades Summit monitoring site, at 5,100 feet near Odell Lake, between Highway 58 and Diamond Peak.⁸ There is substantial year-to-year variation, but the general trend since 2006 is downward. This has been noticed by snowmobilers, as indicated in Figure 39 below (low snow is a reason for fewer snowmobiling trips).

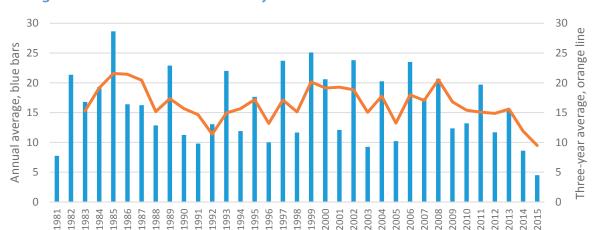


Figure 32. Snow Water Equivalent (Inches) At Cascade Summit, Average Of December 15 and February 15

Figure 33 shows the average age of registered snowmobiles, by region. Figures were calculated as 2014 minus the model year for snowmobiles registered as of May 2014. Statewide, the average registered vehicle was 12 years old. Median values were close to the presented means, which indicates that the means are not "pulled up" by a small number of particularly old vehicles.

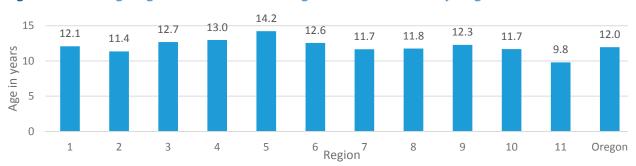


Figure 33. Average Age Of Snowmobiles Registered With DMV, By Region

TRIP CHARACTERISTICS AND PARTICIPATION

This section presents trip characteristics and participation estimates.

Day Trip and Multi-Day Trip Characteristics

Almost all respondents (96%) took at least one day trip, while 72% took at least one multi-day trip in an average season over the past five years. Statewide, 47% of the total days were spent on day trips and 53% on multi-day trips. Multi-day trips are defined as those involving an overnight stay away from home, even if the respondent only rode a snowmobile one day during the trip. The day versus multi-day distinction is used in presenting results in this section as well as in estimating economic contributions.

The following results are for the "typical" day and multi-day trips, defined as the single location where respondents most often engaged in each type of trip in the average season in the past five years. Figure 34 indicates that two-thirds of day trips (67%) were within 60 miles from home while more than two-thirds (70%) of multi-day trips were more than 60 miles from home.

100 80 67 70 40 30 33 20 33

■ Dav ■ Multi-dav

Within 60 miles of home

0

Figure 34. Typical Day And Multi-Day Snowmobile Trips, Distance Traveled

The remaining results in this section and estimating expenditure and economic significance are based on travel parties. The National Visitor Use Monitoring (NVUM) approach to outliers is followed here⁹.

Figure 35 shows number of persons in travel party for day and multi-day trips. For both types of trips, four people in the travel party being the most common. The average number of persons is 3.3 for day trips and 3.6 for multi-day trips.

Further than 60 miles from home

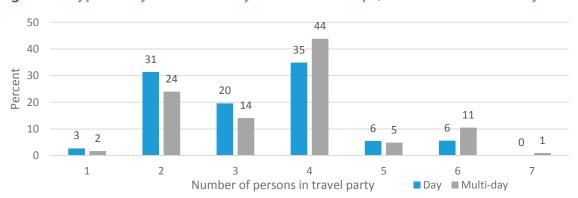


Figure 35. Typical Day And Multi-Day Snowmobile Trips, Persons In Travel Party

Figure 36 shows number of days for multi-day trips. Three days is the most common trip length, which may reflect a high portion of "long weekend" trips. The average number of days was 4.7 days, keeping in mind that this mean is "pulled up" by longer trips (10 or more days). The median is 3 days.

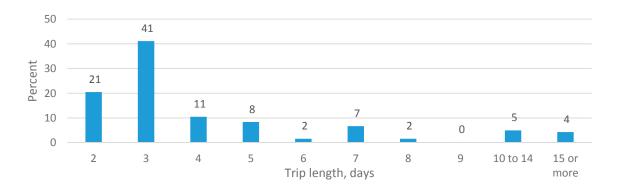


Figure 36. Typical Multi-Day Snowmobile Trips, Trip Length in Days

9 White, E.M., D.B. Goodding, and D.J. Stynes. 2013. Estimation of national forest visitor spending averages from National Visitor Use Monitoring: round 2. Gen. Tech. Rep. PNW-GTR-883. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Respondents indicated whether the numbers of each type of trip (day trip and multi-day trip) had increased in the past five years, with results in Figure 37. Results are similar across trip type, and the percentage of respondents for whom number of trips has increased is similar to the percentage for whom number of trips has decreased.

50 45 44 40 31 28 27 25 30 20 10 0 Increased Stayed the same Decreased ■ Day ■ Multi-day

Figure 37. Change In Number Of Snowmobile Day Trips In The Past Five Years By Trip Type

As shown in Figure 38, the main reason for an increase in snowmobiling trips was more free time. Respondents in the Other category were diverse and included kids becoming old enough to ride, better access to overnight facilities, more interest among friends, and better snowmobiles.

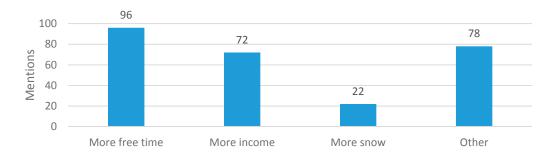


Figure 38. Reasons For Increase In Snowmobile Trips, Number Of Mentions

Less snow was the most common reason for a decrease in snowmobiling trips (Figure 39). The most common Other responses were related to age or to less interest among children or friends.

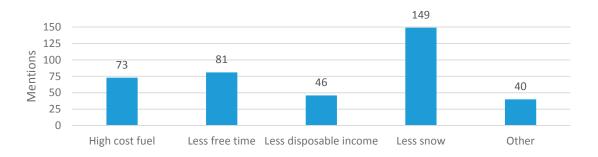


Figure 39. Reasons For Decrease In Snowmobile Trips, Number Of Mentions

Snowmobilers engage in a variety of activities while on day or multi-day trips (Figure 40), with dining out being the most frequent.

Mentions 50 100 150 200 250 300 Dine out 253 Explore the town 167 Watch wildlife 148 Visit brewpubs 146 Other outdoor activities 94 Shop 89 Visit historic places 85 Other Downhill ski 60 Hunt Cross-country ski 29

Figure 40. Activities In Addition To Snowmobiling, Number of Mentions

Figure 41 indicates that hotels are the most commonly used form of lodging while on multi-day trips. Responses to the Other category were varied, with "own cabin" being the most common. Other common responses included renting a cabin, owning a second home, and staying in sno-parks with RVs.

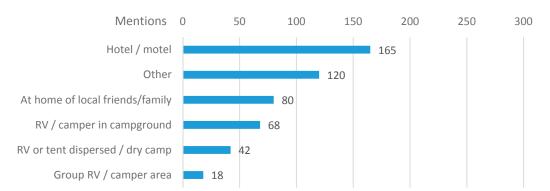


Figure 41. Lodging Used During Multi-Day Snowmobile Trips, Number of Mentions

Respondents completing the online survey indicated the types of information they would like to see on the internet for Oregon riding areas. As shown in Figure 42, the most preferred information was trail maps and information on snow depth.



Figure 42. Preferred Online Snowmobile Information, Number of Mentions

Participation By Region

Table 15 shows the estimated number of days snowmobiling per respondent and across all Oregon resident snowmobilers, per year. The per respondent estimate is derived from this survey. The estimate for all snowmobilers is the product of the per respondent estimate and the number of registered snowmobiles in 2014 (13,563). In total, Oregon residents are estimated to engage in snowmobiling 352,500 days per year.

Across all national forests in Oregon, Forest Service National Visitor Use Monitoring (NVUM) data suggest that 83.4% of snowmobile visits are made by Oregon residents and 16.6% by non-residents. Non-resident visits are in addition to those shown in Table 15.

Table 15. Days Per Year Snowmobiling By Oregon Resident Snowmobiler

	Per respondent	All snowmobilers	
Region 1	0.2	2,600	
Region 2	1.4	18,900	
Region 3	1.9	26,300	
Region 4	0.6	7,500	
Region 5	0.0	400	
Region 6	3.6	48,600	
Region 7	2.4	32,800	
Region 8	9.2	124,600	
Region 9	3.2	43,300	
Region 10	3.5	46,900	
Region 11	0.1	700	
Statewide	26.0	352,500	

Across all national forests in Oregon, Forest Service National Visitor Use Monitoring (NVUM) data suggest that 83.4% of snowmobile visits are made by Oregon residents and 16.6% by non-residents. Non-resident visits are in addition to those shown in Table 15.

Participation By Parking Area

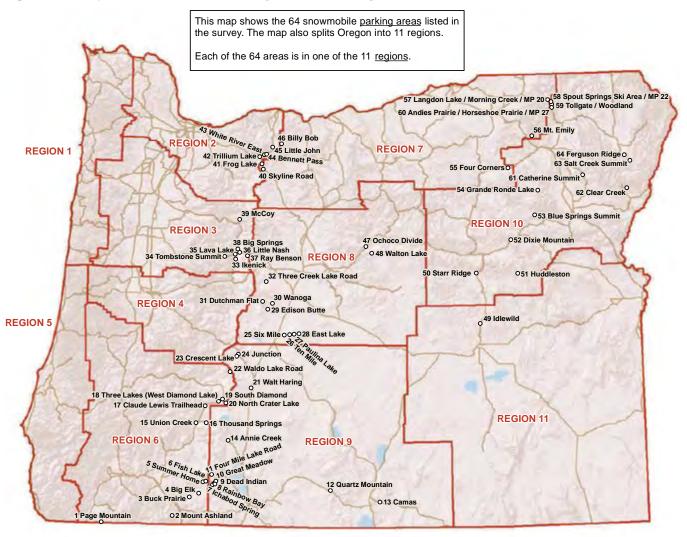
A map showing the 64 snowmobile parking areas listed in the survey by planning region is included below (Figure 43). Table 16 shows the average number of days snowmobiled by parking area, across all respondents in the survey. Dutchman Flat and Wanoga are the parking areas with the highest number of days.

The sum across all listed sites (24.7 days) is lower than the statewide total in Table 15 (26.0 days) because the latter includes days at sites other than those specifically listed in the survey. Respondents had the opportunity to write/ type in sites other than those listed in the survey (shown in Table 16). This provided some indication of the proportion of snowmobiling that involved parking at listed sites versus other sites. However, an estimate of this proportion is difficult for various reasons, including the possibility that some sites were not entered (doing so required additional time) and the possibility that some entered sites correspond with a listed site in Table 16 (respondents know the site by a name other than that listed). Given this caveat, responses suggest that between 5% and 15% of snowmobiling days on public land in Oregon involve parking areas other than those in Table 16.

Table 16. Days Snowmobiled Per Year By Site, Average Across All Respondents

Site	Site	Average	Site	Site	Avera
number	name	days	number	name	day
	All listed sites combined	24.7	56	Mt. Emily	0.1
31	Dutchman Flat	2.80	11	Four Mile Lake Road	0.1
30	Wanoga	2.07	22	Waldo Lake Road	0.1
26	Ten Mile	1.65	15	Union Creek	0.1
37	Ray Benson	1.28	53	Blue Springs Summit	0.1
23	Crescent Lake	1.26	43	White River East	0.1
27	Paulina Lake	0.95	45 Little John		0.1
29	Edison Butte	0.92	50	Starr Ridge	0.1
40	Skyline Road	0.86	17	Claude Lewis Trailhead	0.1
32	Three Creek Lake Road	0.85	38	Big Springs	0.1
19	South Diamond	0.82	42	Trillium Lake	0.1
18	Three Lakes (West	0.79	46	Billy Bob	0.1
	Diamond Lake)		9	Dead Indian	0.1
16	Thousand Springs	0.77	25	Six Mile	0.1
57	Langdon Lake / Morning	0.70	44	Bennett Pass	0.1
	Creek / MP 20		58	Spout Springs Ski Area /	0.1
41	Frog Lake	0.69		MP 22	
24	Junction	0.53	64	Ferguson Ridge	0.0
61	Catherine Summit	0.52	13	Camas	0.0
59	Tollgate / Woodland	0.44	35	Lava Lake	0.0
10	Great Meadow	0.41	52	Dixie Mountain	0.0
62	Clear Creek	0.32	33	Ikenick	0.0
2	Mount Ashland	0.28	21	Walt Haring	0.0
6	Fish Lake	0.28	47	Ochoco Divide	0.0
14	Annie Creek	0.28	12	Quartz Mountain	0.0
28	East Lake	0.27	34	Tombstone Summit	0.0
60	Andies Prairie / Horseshoe	0.27	8	Rainbow Bay	0.0
	Prairie / MP 27		49	Idlewild	0.0
54	Grande Ronde Lake	0.26	1	Page Mountain	0.0
36	Little Nash	0.25	4	Big Elk	0.0
55	Four Corners	0.25	7	Ichabod Spring	0.0
39	39 McCoy		3	Buck Prairie	0.0
48	Walton Lake	0.24	5	Summer Home	0.0
20	North Crater Lake	0.23			
51	Huddleston	0.21			
63	Salt Creek Summit	0.20			

Figure 43. Map Of Snowmobile Parking Areas And Regions



Area#	Area Name	Region #	Area #	Area Name	Region #	Area #	Area Name	Region #
Area #				1				
I	Page Mountain	6	23	Crescent Lake	9	46	Billy Bob	7
2	Mount Ashland	6	24	Junction	9	47	Ochoco Divide	8
3	Buck Prairie	6	25	Six Mile	8	48	Walton Lake	8
4	Big Elk	6	26	Ten Mile	8	49	Idlewild	11
5	Summer Home	6	27	Paulina Lake	8	50	Starr Ridge	10
6	Fish Lake	6	28	East Lake	8	51	Huddleston	10
7	Ichabod Spring	9	29	Edison Butte 8		52	Dixie Mountain	10
8	Rainbow Bay	9	30	Wanoga	8	53	Blue Springs Summit	10
9	Dead Indian	9	31	Dutchman Flat	8	54	Grande Ronde Lake	10
10	Great Meadow	9	32	Three Creek Lake Road	8	55	Four Corners	7
11	Four Mile Lake Road	9	33	Ikenick	3	56	Mt. Emily	7
12	Quartz Mountain	9	34	Tombstone Summit	3	57	Langdon LK /	7
13	Camas	9	35	Lava Lake	3		Morning CRK / MP 20	
14	Annie Creek	9	36	Little Nash	3	58	Spout Springs Ski Area	10
15	Union Creek	6	37	Ray Benson	3		/ MP 22	
16	Thousand Springs	6	38	Big Springs 3		59	Tollgate / Woodland	10
17	Claude Lewis Trailhead	6	39	McCoy 3		60	Andies PR /	10
18	Three Lakes	6	40	Skyline Road	7		Horseshoe PR / MP 27	
	(West Diamond Lake)		41	Frog Lake	2	61	Catherine Summit	10
19	South Diamond	6	42	Trillium Lake	2	62	Clear Creek	10
20	North Crater Lake	6	43	White River East	2	63	Salt Creek Summit	10
21	Walt Haring	9	44	Bennett Pass	2	64	Ferguson Ridge	10
22	Waldo Lake Road	6	45	Little John	2			

EXPERIENCES, PREFERENCES, AND PRIORITIES

Travel Distances And Crowding

Respondents indicated the parking area where they rode most, then reported the distance traveled to the area (one-way driving from home) and how crowded they felt in the area (separately for crowding in the parking area and while riding). Feelings or crowding were based on the following 1 to 9 scale:

How crowded	Not at all		Slig	htly	N	loderate	ly	Extremely		
do you feel	crowded		crowded			crowded		crowded		
In the parking area	1	2	3	4	5	6	7	8	9	
While riding	1	2	3	4	5	6	7	8	9	

Table 17 presents results, sorted by the number of observations by parking area. Gold highlights indicate the three sites with at least five observations and with the highest values in each category (one-way driving miles from home, crowding in parking areas, crowding while riding). Salt Creek Summit was the site most distant from home, with snowmobilers traveling an average of 281 miles to the site. Dutchman Flat had the highest crowding rating in the parking area, while Langdon Lake had the highest crowding rating while riding.

Table 17. Snowmobile Travel Distances And Crowding By "Most Often" Site

Site	Site	Observations	Distanc	e (miles)	Perceived	crowding
number	name		Mean	Median	Parking area	Riding
	All sites combined	805	95	66	4.6	3.0
23	Crescent Lake	61	115	100	3.4	2.8
31	Dutchman Flat	56	78	37	8.0	4.3
40	Skyline Road	45	69	59	6.2	3.5
37	Ray Benson	44	77	76	4.7	3.5
30	Wanoga	42	84	31	5.9	4.6
26	Ten Mile	40	81	59	5.7	3.6
41	Frog Lake	38	67	60	4.8	2.7
27	Paulina Lake	30	162	158	4.9	3.4
10	Great Meadow	27	94	48	3.9	2.5
18	Three Lakes (W. Diamond Lake)	25	161	120	4.8	3.4
19	South Diamond	19	137	124	4.3	3.5
57	Langdon Lake / Morning Crk	19	46	38	5.7	4.7
59	Tollgate / Woodland	19	125	76	2.9	2.7
61	Catherine Summit	18	94	35	4.4	2.7
16	Thousand Springs	17	74	65	5.2	2.7
29	Edison Butte	16	82	79	6.1	3.1
32	Three Creek Lake Road	13	74	75	5.7	3.6
63	Salt Creek Summit	13	281	299	3.0	1.9
62	Clear Creek	12	167	183	4.0	2.5
46	Billy Bob	11	107	84	2.9	2.9
24	Junction	10	94	95	3.5	2.5

Table 17. (Continued)

Site	Site	Observations	Distanc	e (miles)	Perceived	crowding
number	name		Mean	Median	Parking area	Riding
65	Diamond Lake (unspec.)	10	112	100	4.2	3.0
55	Four Corners	9	73	62	4.7	2.7
39	McCoy	8	77	86	3.3	2.6
14	Annie Creek	7	43	42	3.4	2.5
22	Waldo Lake Road	6	68	75	2.6	1.3
51	Huddleston	6	85	37	4.5	3.7
54	Grande Ronde Lake	6	59	38	2.9	1.6
56	Mt. Emily	6	104	40	2.3	2.1
48	Walton Lake	5	32	30	5.2	3.0
60	Andies / Horseshoe Prairie	5	66	21	4.5	3.1
13	Camas	4	43	18	1.6	1.3
20	North Crater Lake	4	500	500	5.4	2.0
66	Halfway	4	266	307	1.6	1.3
9	Dead Indian	3	34	34	2.9	2.6
15	Union Creek	3	60	55	1.6	1.6
33	Ikenick	3	40	40	9.0	5.0
34	Tombstone Summit	3	189	189	2.0	1.0
35	Lava Lake	3	114	109	2.0	1.3
49	Idlewild	3	226	289	1.9	1.9
53	Blue Springs Summit	3	52	48	1.2	1.0
64	Ferguson Ridge	3	6	6	1.0	1.0
6	Fish Lake	2	70	70	2.0	1.0
25	Six Mile	2	119	153	5.0	3.5
36	Little Nash	2	59	59	2.1	2.0
38	Big Springs	2	95	95	4.9	4.9
42	Trillium Lake	2	85	85	4.0	2.5
43	White River East	2	62	62	2.7	2.3
45	Little John	2	40	40	3.4	1.6
50	Starr Ridge	2	71	71	1.9	1.3
3	Buck Prairie	1	300	300	1.0	1.0
8	Rainbow Bay	1	150	150	6.0	5.0
21	Walt Haring	1	34	34	3.5	1.5
28	East Lake	1	35	35	3.0	1.0
47	Ochoco Divide	1	30	30	3.0	2.0
52	Dixie Mountain	1	140	140	1.0	1.0
58	Spout Springs Ski Area / MP 22	1	43	43	5.0	3.0
67	Sumpter	1	30	30	2.5	2.0
99	Other (specified)	67	75	46	3.5	2.2
98	Other (unspec.)	37	76	65	3.3	2.6

Considerations In Deciding Where To Ride

Figure 44 shows the importance of considerations when deciding where to ride, percent rating 4 or 5 on a 5-point scale. The two top considerations in deciding where to ride are backcountry off-trail riding opportunities and availability of parking. Responses in the Other category included a range of considerations, with the most common being access to good snow throughout the season.

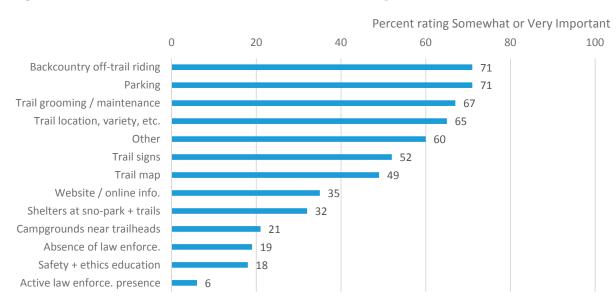


Figure 44. Snowmobiler Considerations When Deciding Where To Ride

Trail Length Preferences

Figure 45 shows preferences for various trail lengths, which were described in the survey as follows:

- Long interconnected trails (more than 100 miles)
- Medium trails (50 to 100 miles)
- Short trails (fewer than 50 miles)

Many respondents rate all trail lengths as important, but trails over 100 miles received the fewest ratings of 4 or 5 on the 5-point scale. The average ratings were 2.9, 3.6, and 3.7 for Long, Medium, and Short, respectively.

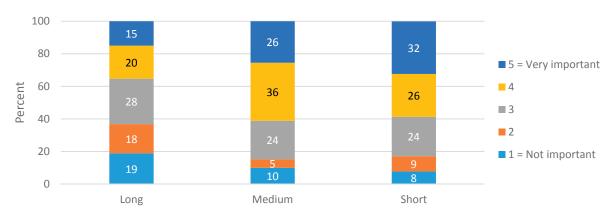


Figure 45. Importance Of Alternate Snowmobile Trail Lengths

Funding Need

Respondents indicated the funding importance of various potential improvements, with Figure 46 showing percent rating 4 or 5 on a 5-point scale. The Other category received the highest ratings, keeping in mind that most people did not provide "write-in actions" and associated ratings for the Other category. Percentages are those that listed an action/ rating in the Other category, those that did so presumably considered it a high priority for funding. Actions written in the Other category were diverse, with many focusing on access – expanding current access and avoiding future access restrictions. Backcountry off-trail riding opportunities and expanded trail systems also were rated highly by respondents.

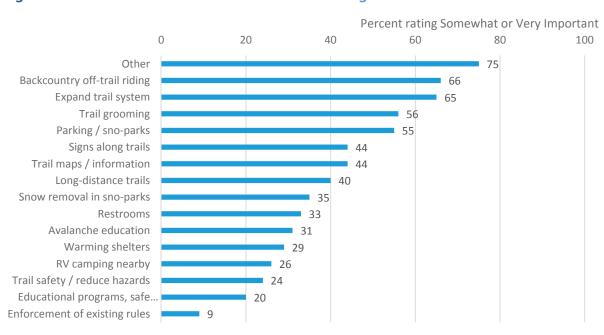
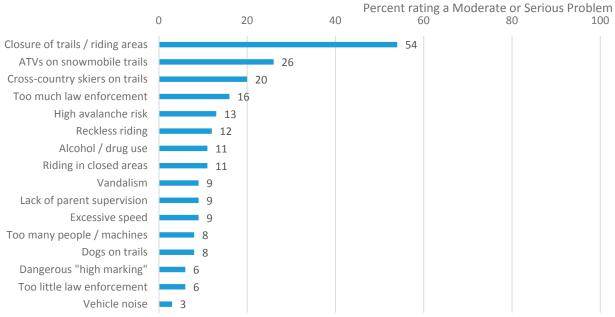


Figure 46. Snowmobiler Priorities For Future Funding

Issue Importance

Figure 47 shows ratings of problems based n respondent experiences while riding snowmobiles, percent rating 4 or 5 on a 5-point scale. Closure of trails and riding areas was the most commonly rated as a moderate or serious problem.

Figure 47. Problems On Snowmobile Trails



EXPENDITURE AND ECONOMIC CONTRIBUTION

This section presents a summary snowmobiler expenditure, based on the "typical trips" described earlier. Note that this expenditure is only associated with travel, not with equipment purchase or maintenance. The expenditure and economic contribution reflects snowmobiling activity by both local (to the snowmobiling location) and non-local Oregon residents. Expenditures categories used in this analysis included:

- Hotel, motel, condo, cabin, B&B, or other lodging except camping
- Camping (RV, tent, etc.)
- Restaurants, bars, pubs
- Groceries
- · Gas and oil
- Other transportation

In the analysis, survey spending question responses are used to calculate per person snowmobiler expenditures for day and for multi-day trips for each region. The expenditure of snowmobilers by region was "run" through the IMPLAN¹⁰ input-output model to estimate the "multiplier effects" of money flowing through the local economy. To illustrate, assume that a snowmobiler eats lunch at Restaurant X in Region 8. In order to provide the lunch, Restaurant X hires employees and purchases food that is then prepared for customers. Food is an input purchased from another business, and this process generates indirect effects. Wages paid to employees generate induced effects, because those employees spend a portion of their income in the local economy (perhaps by eating at Restaurant Y or shopping at Supermarket Z). Please see the full survey report for a thorough methods description.

¹⁰ IMPLAN is widely used to estimate the economic contribution of tourism, recreation, and other activities.

Table 18 shows the results of the multiplier analysis, by region. The columns are as follows:

- Employment, full-time or part-time jobs.
- Labor income, which includes employee compensation (including wages, salaries, and benefits) and proprietary income (including self-employment income).
- Value added, which includes labor income, rents, profits, and indirect business taxes.
- Output, which is the dollar value of goods and services sold.

Statewide, snowmobiling by Oregon residents annually contributes 129 jobs, \$4.1 million in labor income, and \$6.5 million in value added. Inclusion of out-of-state snowmobilers is estimated to add another 20% to these figures. Table 18 shows statewide multiplier effects. When out-of-state visitors are included, the estimate amounts increase to 155 jobs, \$7.7 million in value added, and \$5.0 million in labor income.

Table 18. Multiplier Effects Of Snowmobiler Trip Expenditure, In-State and Out-Of-State Snowmobilers, Employment In Jobs, Other Measures In Dollars

Origin	Employment	Labor Income	Value Added	Output
In-state	129	4,137,500	6,453,000	10,999,400
Out-of-state	26	827,500	1,290,600	2,199,900
Combined	155	4,965,000	7,743,600	13,199,300

CONCLUSIONS AND IMPLICATIONS

The general trend is for lower snow amount accumulations at Oregon snowmobile areas. Less snow was the most common reason for survey respondents reporting a decrease in snowmobiling trips in the state. The USFS should consider the effects of changing climate (e.g., receding snowpack and earlier spring runoff) on future recreation use patterns when conducting OSV travel management.

Approximately 49% of snowmobile survey respondents are 50 years of age and older, compared to 27% of snowshoeing participants and 29% of cross-country skiing participants. These results suggest that snowmobiling provides an opportunity for older Oregonians to continue to enjoy the outdoors and access to public lands during winter months. The OSSA reports that many club members suffer from a variety of age-related disabilities (arthritis, heart, walking) and continue to snowmobile on a regular basis.

Oregon snowmobilers engage in a variety of activities while on day or multi-day trips, with dining out, exploring the town/areas, watching wildlife, and visiting brewpubs mentioned most. Land management agencies, tourism groups, local communities and businesses should use these results to assist out-of-town snowmobilers with trip planning.

Snowmobilers reported perceived crowding at parking and riding areas in the state. To address reported crowding, the USFS should evaluate the need for additional parking at Dutchman Flat, Skyline Road, and Edison Butte, and the need for expanded trail systems at Landon Lake/ Morning Creek, Wanoga, and Dutchman Flat.

The survey identified a strong need for funding for backcountry off-trail riding and expanded trail systems. The State of Oregon should work with the USFS Region 6 Office to develop a long-term strategy for using state snowmobile gas tax funds for snowmobile expanding existing trail systems, creating more backcountry off-trail riding opportunities, trail grooming, and trail rehabilitation on

USFS lands in Oregon. In addition, a Federal funding mechanism should be implemented to fund such projects on USFS lands in Oregon.

A recent court ruling requires that all Oregon Forest Districts will need to go through a public planning process in the next five years to review and designate roads, trails, and cross country areas which are open to snowmobile use (similar to OHV Travel Management). This survey identified closure of trails and riding areas as the top snowmobile management issue in Oregon. As a result, land managers should reduce unwarranted snowmobile trail and riding area closures through comprehensive review/input/ analysis by all stakeholders.

The survey also identified a need for trail maps, current snow depth, and safety/ avalanche information for snowmobile riding areas on the internet. Recreation providers should also consider developing geospatial PDF maps of snowmobile routes to allow on-the-snow wayfinding. Such maps can be uploaded onto mobile devices (smartphone or tablet) and then, using an app, use built-in GPS to track the users location on the map.

Finally, this report identifies expenditure and economic contributions associated with snowmobiling on public lands in Oregon. Statewide, snowmobiling by Oregon residents supports 129 jobs, \$4.1 million in labor income, and \$6.5 million in value added. When out-of-state visitors are included, the estimated amounts increased to 155 jobs, \$7.7 million in value added, and \$5.0 million in labor income. This information should be used to educate Oregonians about the economic benefits received from their investment in snowmobiling areas, facilities, and services in the state.

► CHAPTER 4

Oregon Resident Non-Motorized Trail Survey Summary



INTRODUCTION

Background

In preparation for the 2016-2025 Oregon Trails Plan, the Oregon Parks and Recreation Department (OPRD) contracted with Oregon State University (OSU) to conduct a survey of Oregon resident non-motorized trail users regarding their current use patterns (amount, location, and type of use), user experiences and preferences, and the economic contribution of recreation activity. The probability sample was designed to be as representative as possible of all non-motorized trail users in Oregon. For this project, non-motorized trails were defined as linear routes (not including roads and sidewalks) used for recreation, commuting, and other purposes. They can be narrow or wide, and of any surface, such as dirt, asphalt, wood, woodchip, gravel, or beach/ sand. The questionnaire covered non-motorized use of trails anywhere in Oregon, including those "near respondent homes and those further away." The

sample design was developed to derive information at the region level. Results of the survey are provided at the statewide scale and region scale (Figure 1 on page 29). In some cases, multiple rural regions are combined to achieve an adequate sample size. In this chapter, all references to trails and trail users refer to non-motorized trails and users.

This chapter includes a summary of selected state-wide and region scale survey results. The full survey report, Oregon Non-Motorized Trail Participation and Priorities, is available online at: oregon.gov/oprd/Trail_Programs_Services/Documents/Nonmotorized_%20trail_report.pdf.

SURVEY METHODS

The project involved both a probability sample and a convenience sample. This summary will focus on results from the probability sample. The probability sample drawn included all respondents in the 2013-2017 Oregon Statewide Comprehensive Outdoor

Recreation Plan (SCORP) data file who engaged in one or more of the following activities:¹¹

- Walking on local trails or paths
- Walking/ day hiking on non-local trails or paths
- Long-distance hiking (backpacking)
- · Jogging or running on trails or paths
- Bicycling on paved trails
- Bicycling on unpaved trails
- Horseback riding
- Cross-country/ nordic skiing/ skijoring on groomed trails
- Cross-country/ nordic skiing/ skijoring on ungroomed trails or off designated trails
- Snowshoeing

Persons in the probability sample could complete the questionnaire in either online or paper format. Surveys were sent out to 4,910 residents. Of those delivered (4,887), 2,027 were obtained, for an overall response rate of 41%. This included 28% for those engaging in trail use in the past year (1,377 respondents) and 13% for those who did not engage. This response rate is good by current survey standards, especially considering the long median online completion time of 25 minutes. With respect to format, 56% of the surveys were completed online and 44% in paper format. Sample data were weighted on age and gender distributions in the SCORP sample of non-motorized trail users.

DEMOGRAPHIC PROFILES – SCORP SURVEY

Results from the 2011 survey conducted for the 2013-2017 Oregon SCORP provide additional information and a reference point for the current trail user survey results. This section includes demographic profiles from SCORP.

Age

Figure 48 shows that, as expected, older Oregonians are less likely to engage in trail activities, with walking on local trails or paths and cross-country skiing having the highest representations of older age groups. Conversely, backpacking and running have the highest proportions of younger age groups.

Gender

As shown in Figure 49, the gender distribution across activities is reasonably close to the balance in the population as a whole, though women are noticeably more common than men in horseback riding, snowshoeing, and biking on paved trails. Women are less common than men in backpacking.

¹¹ A small number (less than 10%) of these SCORP trail respondents were removed from this sample so they could be sent the boater questionnaire.

Figure 48. Non-Motorized Trail User Age Distribution, SCORP

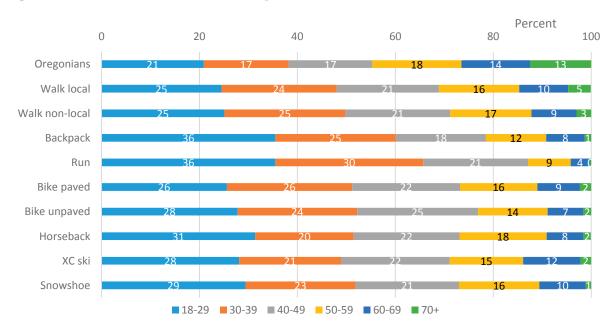
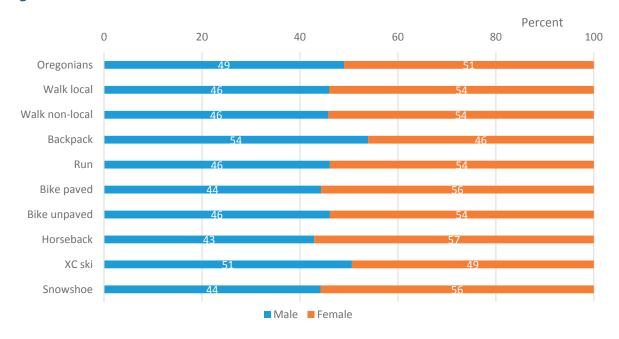


Figure 49. Non-Motorized Trail User Gender Distribution, SCORP



Education

Trail users tend to be more highly educated than Oregonians as a whole, especially for cross-country skiers and snowshoers (Figure 50).

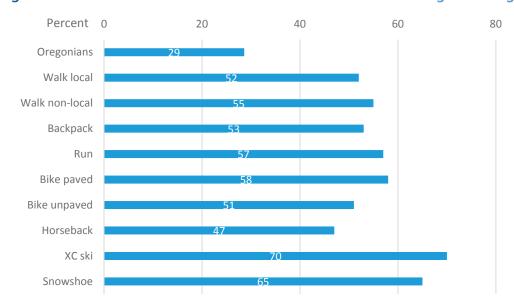


Figure 50. Percent Non-Motorized Trail Users With Bachelor's Degree Or Higher, SCORP

Race/ Ethnicity

With respect to race and ethnicity, minorities are under represented among trail users (Figure 51).



Figure 51. Race/ Ethnicity Distribution, All Non-Motorized Trail Activities, SCORP

Income

Figure 52 presents household annual income distribution, with trail users having higher income levels than Oregonians overall. This is especially true for cross-country skiing and snowshoeing, but also true for other activities.

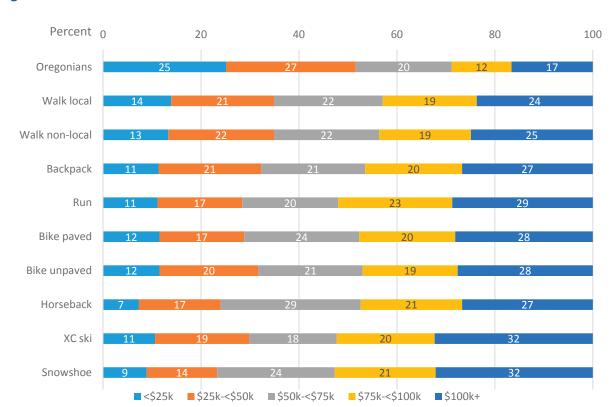


Figure 52. Annual Non-Motorized Trail User Household Income Distribution, SCORP

ACTIVITY DAYS, PARTICIPATION, AND TRIP CHARACTERISTICS

Activity Days By County and Region

Table 19 presents estimated activity days by county and region, separated into trail use categories. Days are by location of use (county in which the trail activity occurred) and are rounded to the nearest hundred. Blank cells reflect 1,000 or fewer activity days.

Some recreation activities involve licenses/ permits or equipment that must be registered (e.g., hunting, fishing, OHV riding, and snowmobiling). For those activities, license/ permit and vehicle registration counts provide a good foundation for estimating use. For other activities, large general population surveys such as those conducted for SCORP processes, provide the best foundation. Given the inevitable potential for error in survey measurement, a conservative approach is used here. In recent years, both Oregon and Washington State¹² completed general population surveys for their respective SCORP processes. For each of the non-motorized trail activities included in this chapter, estimated user days from the Oregon SCORP and Washington SCORP (applied to the Oregon population base) were compared, and the smaller of the two estimates was used. Extrapolation was used when the Washington SCORP activity categories did not fully match the Oregon SCORP categories.

¹² The Washington SCORP survey is: Responsive Management. 2012. Results of general population survey in support of the development of the Washington State comprehensive outdoor recreation plan.

Table 19. Estimates Of Non-Motorized Trail Activity Days By County Where Occurred

	Walk local	Walk non-local	Backpack	Run	Bike paved
Clatsop	987,700	541,600	93,200	364,900	181,000
Lincoln	798,300	939,900	8,500	165,700	24,200
Tillamook	584,500	589,900	55,800	34,100	22,800
Region 1	2,370,500	2,071,400	157,500	564,600	228,000
Clackamas	4,331,900	2,401,900	244,400	1,521,200	361,500
Columbia	718,100	112,000	8,000	279,300	109,600
Hood River	538,000	933,600	99,000	254,200	107,700
Multnomah	20,380,700	4,075,700	121,000	11,248,600	4,552,200
Washington	8,263,400	1,584,000	168,100	4,830,300	1,459,800
Region 2	34,232,100	9,107,300	640,600	18,133,600	6,590,700
Benton	4,380,100	1,822,900	70,600	3,479,500	1,833,100
Linn	1,696,100	392,000	18,600	337,700	354,200
Marion	4,324,400	1,304,600	105,000	502,700	490,700
Polk	740,800	185,700	1,200	193,700	59,900
Yamhill	1,270,100	94,700	700	185,200	185,900
Region 3	12,411,400	3,799,900	196,000	4,698,800	2,923,700
Lane	6,075,500	1,889,300	294,500	2,174,800	2,207,900
Region 4	6,075,500	1,889,300	294,500	2,174,800	2,207,900
Coos	1,313,800	758,100	18,600	230,300	174,200
Curry	568,600	199,300	12,200	121,300	26,100
Region 5	1,882,500	957,500	30,900	351,600	200,300
Douglas	1,267,700	412,900	90,800	442,000	195,300
Jackson	3,405,500	1,444,900	491,900	1,091,400	850,400
Josephine	859,600	271,500	39,200	445,900	170,600
Region 6	5,532,900	2,129,300	621,900	1,979,300	1,216,300
Gilliam	23,600				
Morrow	63,900	30,600	1,200	32,100	10,900
Sherman	15,600				
Umatilla	781,100	158,000	13,400	130,600	68,900
Wasco	278,900	168,600	6,500	75,500	83,200
Region 7	1,163,100	357,200	21,100	238,200	163,000
Crook	220,700	72,600	11,300	47,100	27,200
Deschutes	6,809,900	1,985,400	374,200	2,660,600	2,368,900
Jefferson	230,500	232,900	46,900	88,300	43,100
Wheeler		17,500			
Region 8	7,261,100	2,308,300	432,400	2,795,900	2,439,300
Klamath	1,130,600	368,900	106,700	743,600	174,900
Lake	120,800	62,400	4,300	23,900	4,700
Region 9	1,251,400	431,300	111,000	767,500	179,700
Baker	372,300	184,100	25,400	133,200	61,300

Table 19. (continued)

	Bike unpaved	Horseback	XC groomed	XC ungroomed	Snowshoe
Clatsop	43,100	43,200			
Lincoln	31,000	20,100			
Tillamook	33,500	21,000			
Region 1	107,700	84,300			
Clackamas	178,500	509,300	110,400	102,000	196,700
Columbia	138,200	60,200	2,400		
Hood River	171,000	16,100	169,400	83,700	183,900
Multnomah	2,496,100	19,400	11,300		30,900
Washington	566,400	147,800	500		
Region 2	3,550,100	752,900	294,000	185,700	411,400
Benton	275,800	57,400		1,600	1,900
Linn	86,700	24,900	8,600	14,100	3,900
Marion	121,500	187,700	9,400	3,600	15,300
Polk	24,200	18,000			
Yamhill	51,300	44,500			
Region 3	559,500	332,400	18,000	19,300	21,100
Lane	509,700	62,500	89,700	99,100	186,100
Region 4	509,700	62,500	89,700	99,100	186,100
Coos	86,800	91,300			
Curry	42,200	34,900			
Region 5	129,000	126,100			
Douglas	28,300	89,100	1,200	6,300	7,000
Jackson	274,400	154,100	47,300	56,700	23,600
Josephine	85,200	5,400		1,800	7,200
Region 6	387,900	248,600	48,500	64,800	37,800
Gilliam					
Morrow	4,900	9,900			
Sherman		5,600			
Umatilla	34,500	104,900	1,100	4,300	9,100
Wasco	25,000	39,800			9,700
Region 7	64,500	160,200	1,100	4,300	18,800
Crook	11,800	39,600		4,400	1,000
Deschutes	518,600	1,868,500	330,600	218,600	203,400
Jefferson	27,500	25,100		2,800	5,100
Wheeler					
Region 8	557,900	1,933,300	330,600	225,800	209,500
Klamath	171,500	61,100	10,700	19,500	73,500
Lake	12,000	27,300		1,500	2,600
Region 9	183,500	88,400	10,700	20,900	76,100
Baker	22,700	91,700	17,800	8,300	33,200

Table 19. (continued)

	Walk local	Walk non-local	Backpack	Run	Bike paved
Grant	123,100	673,400	13,200	47,400	6,100
Union	424,100	219,700	68,600	108,500	118,800
Wallowa	136,200	89,600	65,400	26,900	2,900
Region 10	1,055,700	1,166,800	172,600	316,100	189,000
Harney	85,900	98,600	6,600	17,500	
Malheur	225,500	72,500	10,500	154,900	12,000
Region 11	311,500	171,000	17,100	172,400	12,000
State total	73,547,700	24,389,100	2,695,300	32,192,800	16,349,900

Across all trail activities, there were an estimated 162,311,200 activity days in Oregon in the reference year of 2011.

Note that the SCORP and current trail survey estimates are based on surveys of Oregon residents and do not include trail use in Oregon by non-residents. The US Forest Service National Visitor Use Monitoring (NVUM) program provides one reference point for estimating the balance of Oregon resident versus non-resident trail use in Oregon. Across all national forest units in Oregon, there are an estimated 2.62 million non-motorized trail visits annually. Of these, 76% are visits by Oregon residents and 24% by non-residents. However, the majority of the user occasions in this trail analysis likely occur on trails in or near communities rather than in more distant national forests. The recent Washington State economic analysis provides estimates of activity days in local parks, with non-residents representing approximately 11% of use¹³. Non-resident trail use across the activities in this chapter fall within the 11% to 24% range, with the lower end used here to be conservative.



¹³ See Table 7 and Table 17 in Briceno, T. and G. Schundler. 2015. Economic Analysis of Outdoor Recreation in Washington State. Earth Economics, Tacoma, WA. Available at: http://www.rco.wa.gov/documents/ORTF/EconomicAnalysisOutdoorRec.pdf

Table 19. (continued)

	Bike unpaved	Horseback	XC groomed	XC ungroomed	Snowshoe
Grant	1,300	13,200		1,200	
Union	71,100	106,100	12,600	11,200	33,700
Wallowa	6,800	80,300		8,300	6,500
Region 10	101,900	291,400	30,400	29,100	73,300
Harney	16,100	38,100		2,500	
Malheur	19,200	321,600			
Region 11	35,300	359,700		2,500	
	•				
State total	6,187,100	4,439,900	823,000	651,500	1,034,900

Trail Survey Participation Across Activities

Trail respondents reported how many days they participated in various trail activities on trails in Oregon during the past 12 months. As shown in Figure 53, the activity with the most participation is walking/ hiking, with the "total" category for walking including days participating in sub categories. The sub categories include walking and/ or running on ocean beaches, with a dog on-leash, and with a dog off-leash. A given walking or running occasion may fall into none, one, two, or all three of these sub categories.

Figure 53. Non-Motorized Trail Participation Frequency By Activity

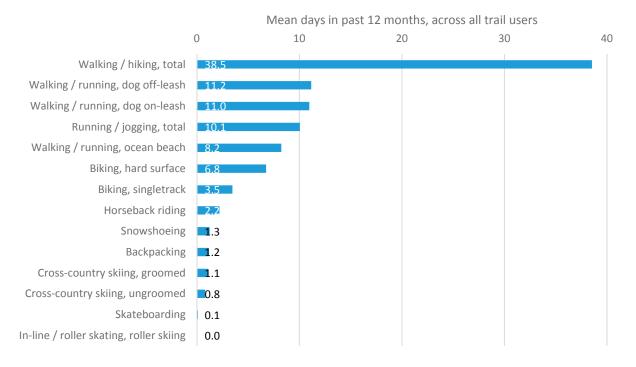


Figure 54 shows the participation rate by activity – the percentage of respondents who engaged in each activity at least once in the past 12 months. Almost everyone (96%) engaged in walking/ hiking at least once. Two-thirds of respondents walked specifically on an ocean beach at least once. Different ordering between Figure 53 and 54 reflects participation frequency. For example, more people walk on an ocean beach than walk their dog on-leash (Figure 54). However, those who walk their dog on-leash do so more frequently than those who walk on an ocean beach, which leads to a higher average number of days for on-leash dog walking (Figure 53).

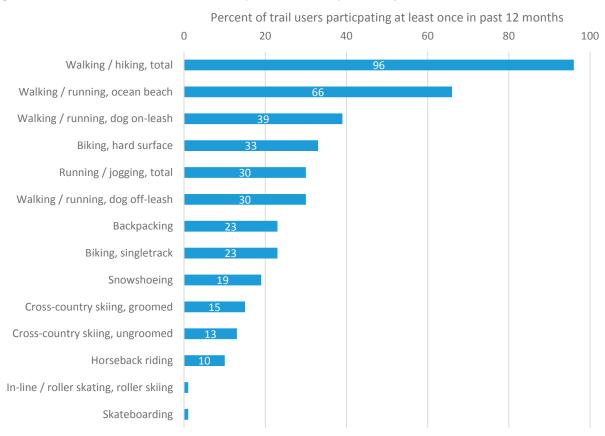


Figure 54. Non-Motorized Trail Participation Rate By Activity

Figure 55 shows hours per day spent on trails while engaging in each activity. Backpacking and horseback riding involves the highest percentage of people with six or more hours while engaging. Running has the highest percentage of people with an hour or less, followed by walking/ running with dog on-leash and biking on hard surface trails.

Figure 56 shows activity level while engaging in each activity on trails. These were self-evaluated levels using the following guidelines presented in the questionnaire:

- Low for example, walking or bicycling at a slow pace.
- Medium for example, walking or bicycling at a moderate pace.
- Vigorous for example, jogging, walking, or bicycling at a vigorous pace, breaking a sweat, heart beating rapidly.

Biking on singletrack trails and running were the activities with the highest percentage at the vigorous activity level, while walking/ running on an ocean beach had the highest percentage at the low activity level.

Figure 55. Hours Per Day Engaged By Non-Motorized Trail Activity

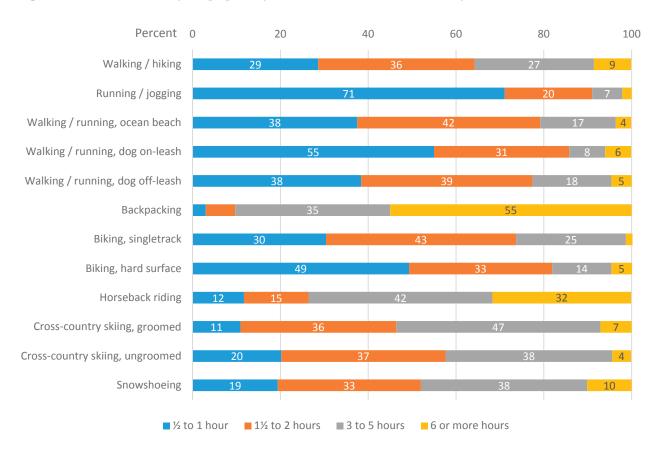
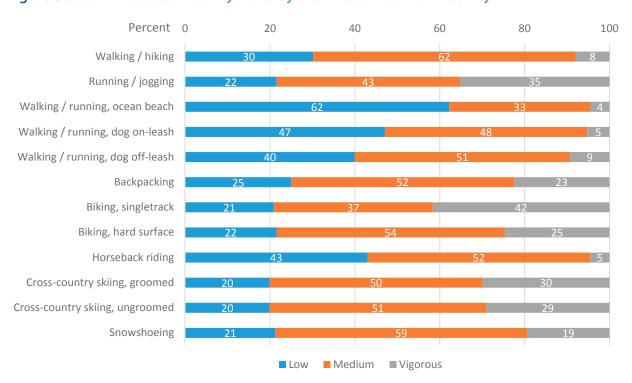


Figure 56. Self-Evaluated Activity Level By Non-Motorized Trail Activity



Eleven percent of respondents use recreation-oriented trails to walk or bicycle to work, with Figure 57 showing differences across regions. The highest percentage is in Region 4 (Lane County).

Percent 0 10 20 30 40 50 Region 4 36 Region 5 Region 2 13 Region 8 13 Region 3 12 Region 1 Region 7 Region 6 Region 10 Region 9+11

Figure 57. Use Of Recreation Trails To Walk Or Bike To Work

Day Trip And Multi-Day Trip Characteristics

Almost all respondents (98%) took at least one trail-related day trip and 81% took at least one multi-day trip in the past year (12 months). Multi-day trips are defined as those involving an overnight stay away from home, even if the respondent only used trails one day during the trip. The day versus multi-day distinction is used in presenting results in this section as well as in estimating economic contribution later in the chapter.

Figure 58 shows the percentage of trail days in each region that involved day trips versus multi-day trips. The percentages are similar across regions, though the northern Willamette Valley (Regions 2 and 3) is particularly dominated by day use; this is not suprising given the large residential population in that area.

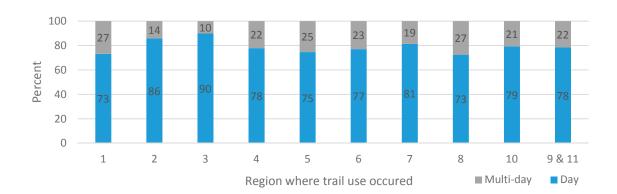


Figure 58. Percent of Non-Motorized Trail Days Spent On Day Versus Multi-Day Trips By Region

The following results are for the "typical" day and multi-day trips, defined as the single location where respondents most often engaged in each type of trail activity trip in the past 12 months. Figure 59 indicates that 60% of day trips are within 30 miles of home while two-thirds of multi-day trips were more than 60 miles from home.

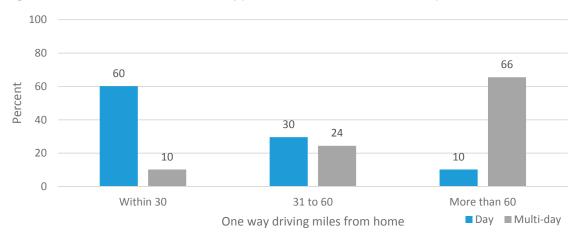


Figure 59. Distance Traveled For Typical Non-Motorized Trail Trip

The remaining results in this section and the expenditure and economic significance section are based on travel parties. The NVUM approach to outliers is followed in this analysis.¹⁴

Figure 60 shows the number of persons in travel party for day and multi-day trips. Travel parties are larger for multi-day trips, but two persons is most common for both trip types.

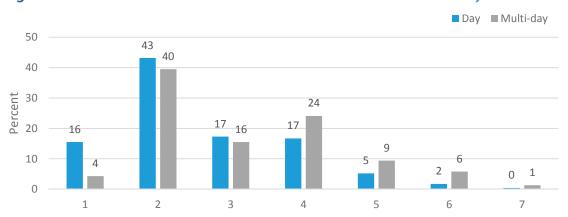


Figure 60. Number of Persons In Non-Motorized Trail User Travel Party

Figure 61 shows number of days for multi-day trips, with two and three days being the most common.

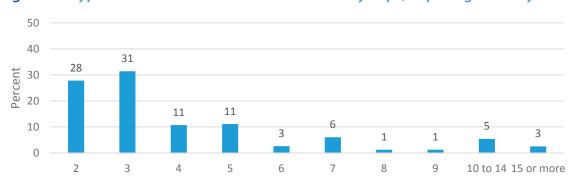


Figure 61. Typical Non-Motorized Trail User Multi-Day Trips, Trip Length In Days

14 White, E.M., D.B. Goodding, and D.J. Stynes. 2013. Estimation of national forest visitor spending averages from National Visitor Use Monitoring: round 2. Gen. Tech. Rep. PNW-GTR-883. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

FAVORITE ACTIVITY, TRAIL PREFERENCES, AND PRIORITIES

Respondents reported their favorite among the listed trail activities, then reported trail preferences for that activity.

Favorite Activity And Trail Preferences

As shown in Figure 62 walking/ hiking is the favorite activity for almost half the respondents. Note that respondents could choose only one activity and that the walking/ running sub categories were presented as separate activities in this question. Thus, 48% who chose walking/ hiking presumably reflect people whose favorite activity is walking/ hiking not on an ocean beach and not involving a dog.

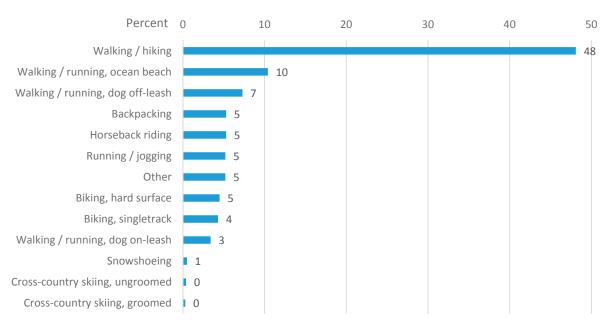
There were fewer than 10 respondents who indicated that each of the winter trail activities was their favorite. No respondent indicated that inline skating or skateboarding was their favorite. Therefore, these categories are omitted from the following "by favorite activity" analyses. In addition, walking/running on an ocean beach is omitted from trail surface, length, and difficulty results.

Figure 63 shows satisfaction with three aspects of trail opportunities for engaging in their favorite activity. The aspects were described as follows:

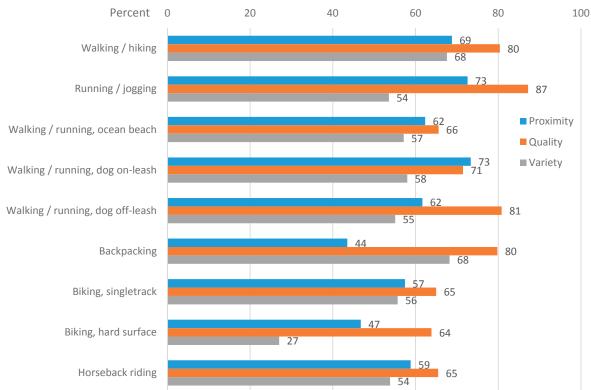
- Proximity you can access trails for this activity near your home.
- Quality the trails are well-suited to the experience you seek.
- Variety you can access multiple trails.

Across all activities, the percent somewhat or very satisfied (4 or 5 on the 1 to 5 scale) is highest for quality and lowest for variety. There were high ratings (80% or higher) for some aspects of some activities, but opportunities for improvement remain for other aspects and activities.









Respondents then indicated whether opportunities to engage in their favorite activity have decreased, not changed, or increased in the past 10 years, with results shown in Figure 64. In general, increased opportunities outweighed decreased opportunities.

Figure 64. Changes In Opportunities To Engage In Favorite Non-Motorized Trail Activity In Past 10 Years

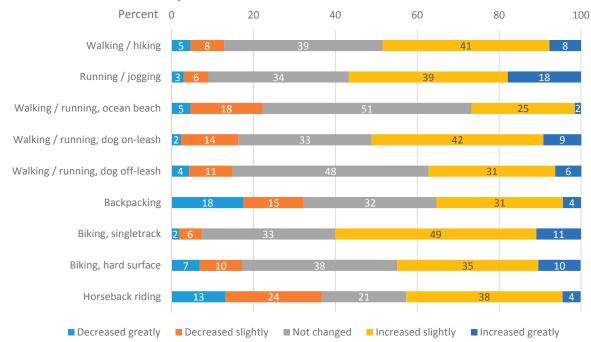


Figure 65 shows preferred trail surface by favorite activity, excluding walking/ running on ocean beaches. Dirt is the preferred surface for all activities other than biking on hard surface trails.

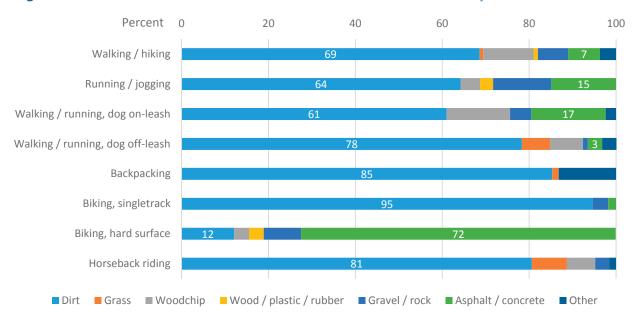


Figure 65. Preferred Trail Surface For Favorite Non-Motorized Activity

Preferred trail length is illustrated in Figure 66. The majority of walkers and runners preferred lengths of one to five miles, while those engaging in backpacking, biking (singletrack or hard surface), and horseback riding tend to prefer lengths of six or more miles.

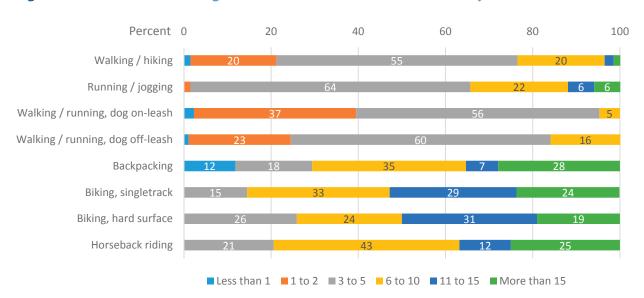
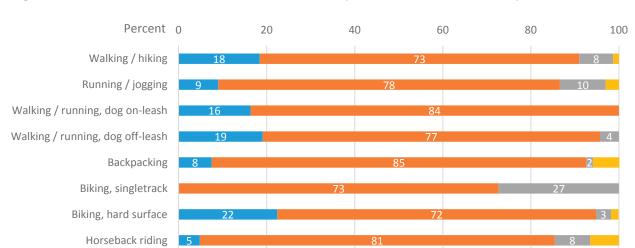


Figure 66. Preferred Trail Length For Favorite Non-Motorized Activity, Miles

Preferred trail difficulty was asked with respect to trails both within the community and outside the community, with results in shown in Figures 67 and Figure 68. Moderate, varied trails were preferred by most respondents, with interest in challenging trails being greater for trails outside one's community. Singletrack bikers were more likely than others to prefer challenging trails.



■ Moderate, varied

■ Challenging

Figure 67. Preferred Non-Motorized Trail Difficulty Inside One's Community

Figure 68. Preferred Non-Motorized Trail Difficulty Outside One's Community

■ Easy, level or flat



Trail Management Preferences

Several questions were asked regarding preferences for responding to crowding or conflict. Figure 69 indicates that respondents generally prefer creating new trails to reduce crowding, where it exists, rather than letting existing trails remain crowded. This is especially true for singletrack bikers. The potential for additional financial and environmental costs due to creating new trails was noted, so preferences for new trails presumably reflect a high value for quality trail experiences.

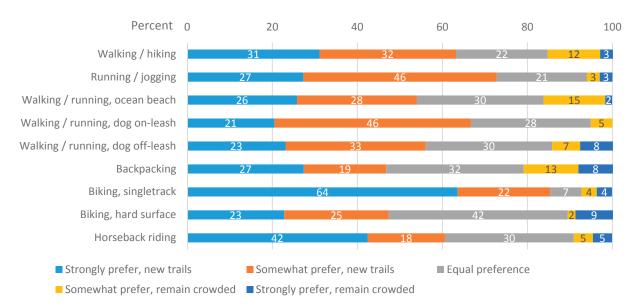


Figure 69. Preferred Response To Crowded Non-Motorized Trails

Figure 70 includes preferences for trail widening and one-way designation as tools to reduce crowding and conflict, with means on a scale of 1 being strongly oppose to 5 being strongly support. Across all respondents (bottom category), there was support for trail widening, but less support (below neutral) for one-way designation. That relationship occurred for all favorite activity categories except singletrack biking. For that activity, respondents were more supportive of one-way designation (though still only neutral on average) than of trail widening.

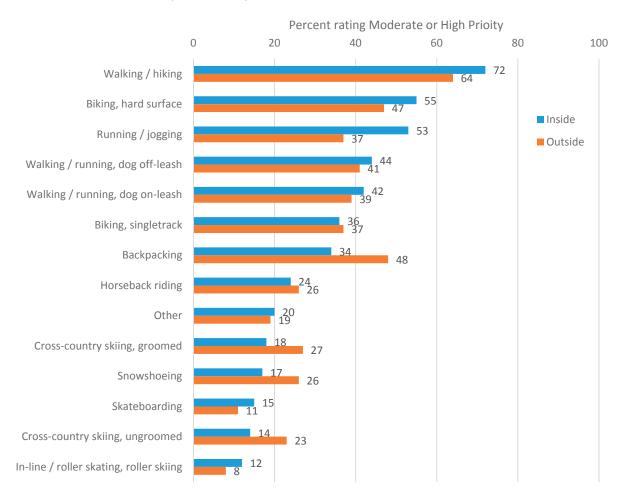
Figure 70. Support For Trail Widening And One-Way Designation To Reduce Non-Motorized Trail User Crowding And Conflict



Priorities For Trails And Facilities

Figure 71 shows priorities for additional trails, separately for inside and outside one's community. Trails for walking/ hiking were the highest priority for both locations. Trails for hard surface biking were the next highest priority for inside, while trails for backpacking were the next highest priority for outside one's community. For most activities, a higher priority was placed on trails inside the community over trails outside.

Figure 71. Priority For Additional Non-Motorized Trails, Inside And Outside Community, Sorted By Inside



Results by region are included in Table 20 (inside one's community) and Table 21 (outside one's community).

Table 20. Priority For Additional Non-Motorized Trails, Inside One's Community, Percent Rating Moderate Or High Priority By Region

	1	2	3	4	5	6	7	8	9+11	10	Total
Walking / hiking	70	76	72	56	78	75	78	77	64	65	72
Biking, hard surface	62	59	49	76	56	54	58	53	53	49	55
Running / jogging	48	54	63	33	30	51	39	56	60	47	53
Walking / running, dog off-leash	51	49	39	21	45	57	18	61	53	42	44
Walking / running, dog on-leash	47	40	40	18	41	56	33	55	47	43	42
Biking, singletrack	45	47	30	22	46	25	30	45	35	35	36
Backpacking	35	36	28	16	42	40	49	33	32	35	34
Horseback riding	30	27	13	5	11	27	44	35	22	30	24
Other	24	37	10	0	36	27	11	8	29	17	20
Cross-country skiing, groomed	20	16	4	6	20	22	14	48	25	35	18
Snowshoeing	17	17	7	11	18	20	11	40	18	31	17
Skateboarding	35	10	14	4	28	23	12	10	14	16	15
Cross-country skiing, ungroomed	21	13	4	8	21	20	7	24	20	35	14
In-line / roller skating, roller skiing	25	7	12	4	10	8	7	15	12	18	12

Table 21. Priority For Additional Non-Motorized Trails, <u>Outside</u> One's Community, Percent Rating Moderate Or High Priority By Region

	1	2	3	4	5	6	7	8	9+11	10	Total
Walking / hiking	71	69	60	92	62	81	77	53	53	53	64
Biking, hard surface	40	48	49	76	37	54	71	34	38	37	48
Running / jogging	55	53	43	52	51	36	49	40	34	62	47
Walking / running, dog off-leash	41	47	38	14	45	59	23	53	46	30	41
Walking / running, dog on-leash	43	44	39	15	36	55	37	44	33	30	39
Biking, singletrack	42	37	46	26	20	36	26	43	37	23	37
Backpacking	39	43	33	43	45	15	36	43	27	44	37
Horseback riding	27	32	14	20	30	18	30	34	42	37	27
Other	26	23	20	35	21	28	38	36	21	30	26
Cross-country skiing, groomed	24	29	21	27	30	19	21	24	37	34	26
Snowshoeing	26	26	15	20	33	11	17	20	35	41	23
Skateboarding	12	40	20	0	36	21	8	9	10	20	19
Cross-country skiing, ungroomed	26	10	11	4	25	6	9	0	11	8	11
In-line / roller skating, roller skiing	16	4	6	4	13	6	4	14	14	8	8

Priorities for additional trails and maintenance are shown in Figure 72, based on the question "please share your priorities for trails in Oregon over the next 10 years, keeping in mind limited funding and land". Repair of major trail damage was the highest priority.

Results by region are included in Table 22.

Figure 72. Non-Motorized Trail And Maintenance Priorities

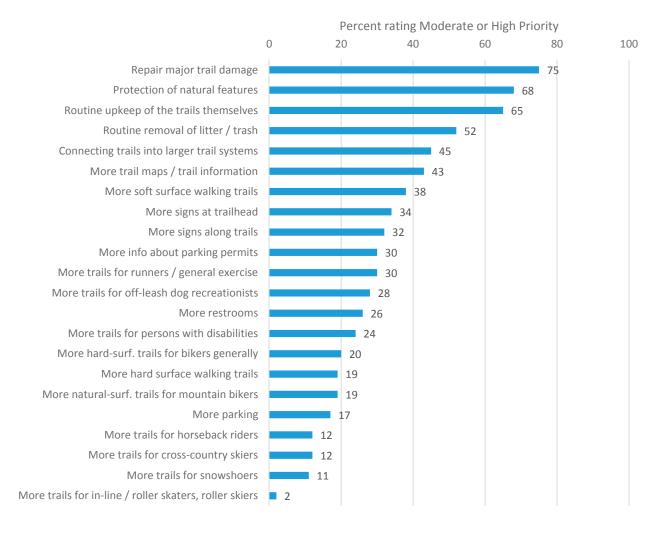


Table 22. Priorities For Additional Non-Motorized Trails And Maintenance, Percent Rating Moderate Or High Priority By Region

	1	2	3	4	5	6	7	8	9+11	10	Total
Repair major trail damage	79	77	73	72	84	70	68	74	88	67	75
Protection of natural features	83	77	70	74	54	61	46	67	70	54	68
Routine upkeep of the trails	72	60	63	63	82	65	67	62	73	64	65
themselves											
Routine removal of litter / trash	65	49	51	64	63	46	38	52	62	52	52
Connecting trails into larger trail	43	46	49	75	41	43	42	36	42	44	45
systems											
More trail maps / trail information	44	35	51	51	34	42	45	39	41	38	43
More soft surface walking trails	33	39	42	53	38	37	33	43	27	28	38
More signs at trailhead	32	33	38	26	29	33	30	31	42	36	34
More signs along trails	35	33	36	21	23	26	33	30	34	27	32
More info about parking permits	36	34	26	43	33	32	27	25	36	31	30
More trails for runners/general	29	38	27	36	27	11	29	45	38	15	30
exercise											
More trails for off-leash dog	20	25	24	14	48	38	15	35	52	27	28
recreationists											
More restrooms	20	35	28	49	26	15	20	17	27	18	26
More trails for persons with	24	28	16	32	25	21	20	25	49	12	24
disabilities											
More hard-surf. trails for bikers	17	31	21	34	21	21	7	18	19	11	20
generally											
More hard surface walking trails	18	26	16	25	13	10	11	27	23	11	19
More natural-surf. trails for	14	24	17	37	30	13	13	17	18	14	19
mountain bikers											
More parking	14	23	15	21	9	21	12	20	18	14	17
More trails for horseback riders	9	13	6	1	11	19	26	18	13	13	12
More trails for cross-country skiers	3	14	9	24	4	3	6	25	13	18	12
More trails for snowshoers	4	14	9	23	11	8	8	15	14	12	11
More trails for in-line / roller	1	2	1	0	5	1	2	5	1	5	2
skaters, roller skiers											

Information Sources

Figure 73 includes information sources utilized when seeking information about trails by age of respondent, sorted by Total (all ages combined). Word of mouth is the most frequent source of information. As expected, there is some variation by age. For example, those in younger age categories are more likely than those in older age categories to use word of mouth and social media. Conversely, those in older age categories are more likely to use newspapers.

Information sources utilized by region are included in Table 23.

Figure 73. Non-Motorized Trail Information Sources By Age

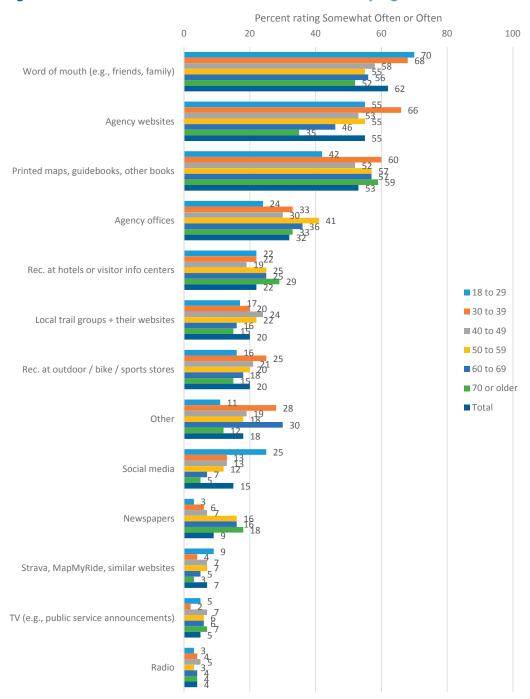


Table 23. Non-Motorized Trail Information Sources, Percent Reporting Somewhat Often Or Often By Region

	1	2	3	4	5	6	7	8	9+11	10	Total
Word of mouth	67	61	62	91	54	55	66	66	47	65	62
(e.g., friends, family)											
Agency websites	57	60	61	32	53	47	55	46	60	47	55
Printed maps, guidebooks, other books	51	53	53	37	52	67	53	53	44	59	53
Agency offices	39	36	19	28	39	34	37	25	41	49	32
Rec. at hotels or visitor info centers	33	26	13	15	42	22	17	18	49	15	22
Local trail groups + their websites	21	23	24	33	16	10	10	25	12	16	20
Rec. at outdoor/bike/sports stores	19	26	17	41	13	8	21	25	17	20	20
Other	16	28	18	0	10	28	3	34	22	6	19
Social media	13	12	14	2	7	13	16	23	30	10	15
Newspapers	13	5	8	8	14	8	8	12	7	10	9
Strava, MapMyRide, similar websites	5	11	9	2	5	3	4	5	6	1	7
TV (e.g., public service announcements)	4	3	2	2	2	12	10	7	7	3	5
Radio	6	4	1	0	11	3	4	2	11	3	4



Issue Importance

Respondents were asked, based on their trail use in the past 12 months, how important they felt each of several issues was on trails in Oregon. The ability to experience the natural environment was the most important (Figure 74), followed by more trail information on the internet.

Results by region are included in Table 24.

Figure 74. Non-Motorized Trail Issue Importance

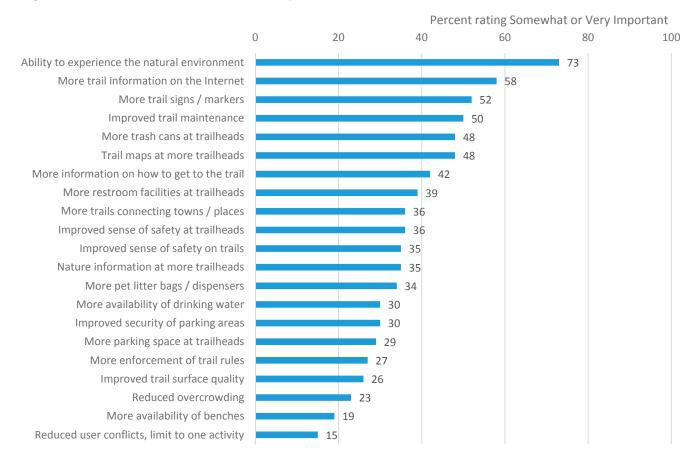


Table 24. Non-Motorized Trail Issue Importance, Percent Rating Somewhat Or Very Important By Region

	- 1	2	3	4	5	6	7	8	9+11	10	Total
Ability to experience the natural environment	77	78	77	76	65	83	53	74	71	64	73
More trail information on the Internet	52	53	69	68	27	70	40	67	56	43	58
More trail signs / markers	58	53	53	67	36	52	59	47	40	51	52
Improved trail maintenance	50	43	53	32	44	45	51	55	52	54	50
More trash cans at trailheads	63	44	46	48	55	62	50	42	55	38	48
Trail maps at more trailheads	54	44	55	51	35	50	49	42	42	39	48
More information on how to get to the trail	51	40	49	36	26	56	37	35	40	30	42
More restroom facilities at trailheads	41	42	38	60	43	37	47	34	37	30	39
More trails connecting towns / places	44	42	32	40	51	26	30	40	41	27	36
Improved sense of safety at trailheads	53	47	32	28	31	38	28	33	36	27	36
Improved sense of safety on trails	43	41	34	41	34	38	29	41	36	19	35
Nature information at more trailheads	52	35	39	19	32	41	26	25	26	37	35
More pet litter bags / dispensers	49	34	38	23	41	37	29	34	27	23	34
More availability of drinking water	31	30	33	48	29	17	43	24	24	27	30
Improved security of parking areas	44	39	29	28	27	27	26	29	26	22	30
More parking space at trailheads	31	30	30	45	16	33	31	26	25	20	29
More enforcement of trail rules	30	29	25	30	21	20	30	26	39	16	27
Improved trail surface quality	39	24	26	21	25	18	33	30	35	13	26
Reduced overcrowding	16	27	23	14	15	20	21	36	24	16	23
More availability of benches	27	17	16	24	30	21	31	10	20	11	19
Reduced user conflicts, limit to one activity	20	16	11	18	13	19	8	22	21	7	15

EXPENDITURE AND ECONOMIC CONTRIBUTION

This section presents a summary of trail user expenditure, based on the "typical trips" described earlier. Note that this expenditure is only associated with travel, not with equipment purchase outside of trips nor other non-trip expenditure (e.g., purchase and care of horses). Expenditure and economic contribution reflect trail use by both local (to the trail location) and non-local Oregon residents. Expenditures categories use in this analysis included:

- Hotel, motel, condo, cabin, B&B, or other lodging except camping
- Camping (RV, tent, etc.)
- Restaurants, bars, pubs
- Groceries
- Gas and oil
- Other transportation

In the analysis, survey spending question responses are used to calculate per person trail user expenditures for day and for multi-day trips for each region. Three reference points were used for expenditure reported on this trip: US Forest Service NVUM program survey results, Oregon State Park survey results, and results of a recent Washington State economic analysis¹⁵.

Regional trail user occasions were extrapolated from SCORP estimates and used with trip expenditure data to calculate annual expenditures by destination region. The expenditure of trail users by region was "run" through the IMPLAN input-output model to estimate the "multiplier effects" of money flowing through the local economy. To illustrate, assume that a hiker, mountain biker, or equestrian eats lunch at Restaurant X in Region 8. In order to provide the lunch, Restaurant X hires employees and purchases

15 Briceno, T. and G. Schundler. 2015. Economic Analysis of Outdoor Recreation in Washington State. Earth

Economics, Tacoma, WA. Available at: http://www.rco.wa.gov/documents/ORTF/EconomicAnalysisOutdoorRec.pdf

food that is then prepared for customers. Food is an input purchased from another business, and this process generates indirect effects. Wages paid to employees generate induced effects, because those employees spend a portion of their income in the local economy (perhaps by eating at Restaurant Y or shopping at Supermarket Z). Please see the full survey report for a thorough methods description.

Table 25 shows the results of the multiplier analysis, by region. The columns are as follows:

- Employment, full-time or part-time jobs.
- Labor income, which includes employee compensation (including wages, salaries, and benefits) and proprietary income (including self-employment income).
- Value added, which includes labor income, rents, profits, and indirect business taxes.
- Output, which is the dollar value of goods and services sold.

Statewide, non-motorized trail use by Oregon residents supports 21,730 jobs, \$672 million in labor income, and \$1.0 billion in value added.

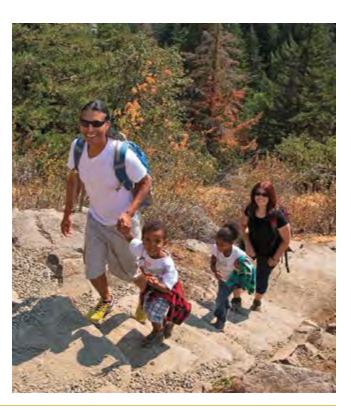


Table 25. Multiplier Effects Of Non-Motorized Trail User Trip Expenditure, By Region; Employment in Jobs, Other Measures in Dollars

Region	Employment	Labor Income	Value Added	Output
1	850	22,620,000	36,427,000	63,722,000
2	9,590	342,059,000	513,083,000	829,943,000
3	3,060	84,563,000	130,398,000	217,566,000
4	1,540	44,591,000	70,169,000	117,209,000
5	780	16,810,000	28,119,000	49,461,000
6	1,450	40,154,000	64,205,000	111,020,000
7	240	5,031,000	8,166,000	14,368,000
8	2,930	87,508,000	139,629,000	236,213,000
10	400	7,181,000	12,771,000	23,352,000
9 & 11	920	21,931,000	35,349,000	62,896,000
Total	21,730	672,448,000	1,038,317,000	1,725,751,000

Non-residents who engage in non-motorized trail use in Oregon contribute additional amounts to regional economies. The magnitude of this additional contribution is unknown, but can be estimated from external data sources such as the US Forest NVUM program and the Washington State economic analysis. Non-resident trail use across the activities in this report likely fall within the 11% to 24% range, with the lower end used here to be conservative. Thus, the statewide contribution of non-resident trail users is estimated as an additional 12% of the resident estimates.

Table 26. Multiplier Effects of Non-Motorized Trail User Trip Expenditure, Out-of-State Trail Users Included; Employment in Jobs, Other Measures in Dollars

Origin	Employment	Labor Income	Value Added	Output
In-state	21,730	672,448,000	1,038,317,000	1,725,751,000
Out-of-state	2,610	80,694,000	124,598,000	207,090,000
Combined	24,340	753,142,000	1,162,915,000	1,932,841,000

When out-of-state visitors are included, the estimated amounts increase to 24,340 jobs, \$1.2 billion in value added, and \$753 million in labor income.

Statewide expenditure and economic contributions was also estimated separately for walking/ hiking, mountain biking on unpaved trails, and horseback riding. There were insufficient observations to estimate expenditure for other individual trail activities. Table 27 shows the annual economic contribution by activity and metric.

Table 27. Multiplier Effects Of Non-Motorized Trail User Trip Expenditure, By Activity, Employment in Jobs, Other Measures in Dollars

Activity	Employment	Labor Income	Value Added	Output	
Walking / hiking	13,280	365,295,000	574,020,000	972,100,000	
Biking, singletrack	1,090	30,850,000	47,937,000	82,169,000	
Horseback riding	590	15,839,000	24,397,000	40,396,000	

- Walking/ hiking was estimated to generate \$1.1 billion in expenditure, which led to 13,280 jobs, \$574 million in value added, and \$365 million in labor income.
- Mountain biking was estimated to generate \$83 million in expenditure, which led to 1,090 jobs, \$48 million in value added, and \$31 million in labor income.
- Horseback riding was estimated to generate \$58 million in expenditure, which led to 590 jobs,
 \$24 million in value added, and \$16 million in labor income.

CONCLUSIONS AND IMPLICATIONS

Relative to all Oregonians, non-motorized trail users tend to be younger and less ethnically diverse. According to the 2013-2017 Oregon SCORP, the state's elderly population (65 years and older) and minority populations (Hispanic, Asian, and African-American) are growing at a much higher rate than the population as a whole. As a result, Oregon's recreation providers should consider developing marketing strategies to encourage regular use of existing trail systems by elderly and minority populations in their jurisdictions.

Survey results showed that dirt was the most common preferred trail surface for all activities other than biking on hard surface trails. Soft trail surface preference was also identified in the 2011 Oregon Outdoor Recreation Survey. Soft surface trails are typically constructed of natural earth, crushed rocks, or recycled concrete materials. They can also be made of gravel, dirt, limestone, and mulch. Recreation planners should note this preference in trail planning efforts.

The survey also identified that the highest priority for additional trails was for walking/ hiking both inside and outside one's community. Trails for hard surface biking were the next highest priority for inside, while trails for backpacking were the next highest priority for outside one's community. Overall, a higher priority was placed on trails inside the community over trails outside. Close-to-home trail investments will maximize everyday use by local residents.

Respondents preferred creating new trails to reduce crowding, where it exists, rather than letting existing trails remain crowded. Given a choice between trail widening and one-way designations as tools to reduce crowding and conflict, trail widening was preferred for all favorite activity categories except singletrack biking.

Repair of major trail damage was identified as the highest trail funding priority by survey respondents. Such projects involve extensive trail repair (e.g., resurfacing of asphalt trails or complete replacement, regrading, and resurfacing of all trails) needed to bring a facility up to standards suitable for public use. As a result, OPRD will provide additional points for projects intending to repair major trail damage in the RTP evaluation criteria.

The most important trail issue to respondents was a need to improve the settings along trail corridors to provide a more natural experience. The study of evolutionary psychology and the human relationship with nature has been developed under the scientific framework of the "biophilia hypothesis." Based on this study, contemporary landscape preferences are thought to reflect innate landscape qualities that enhanced survival or dominance throughout human evolutionary history. For decades, research scientists and design practitioners have been working to define aspects of nature that most impact our satisfaction with the built environment. Biophilic design can reduce stress, improve cognitive function and creativity, improve our well-being and expedite healing.16 As a result, Oregon's recreation providers should consider designed landscape improvements along trail

¹⁶ Browning, W., Ryan, C., and Clancy, J. (2014). 14 Patterns of Biophilic Design: Improving Health & Well-Being in the Built Environment. Terrapin Bright Green LLC, 1-60.



corridors using biophilic design practices such as¹⁷:

- Visual connection with nature (preferred view is looking down a slope to a scene that includes a thicket of shade trees, flowering plants, calm non-threatening animals, indications of human habitation and bodies of clean water¹⁸).
- Presence of water.
- Prospect (An unimpeded view over a distance, for surveillance and planning).
- Refuge (A place for withdrawal from environmental conditions or the main flow of activity, in which the individual is protected from behind and overhead).
- Mystery (The promise of more information, achieved through partially obscured views or
- 17 Browning, W., Ryan, C., and Clancy, J. (2014). 14 Patterns of Biophilic Design: Improving Health & Well-Being in the Built Environment. Terrapin Bright Green LLC, 1-60.
- 18 Orians, G.H. & Heerwagen, J.H. (1992). Evolved Responses to Landscapes. In J.H. Barkow, L. Cosmides, & J. Tooby (Eds.), The Adapted Mind: Evolutionary Psychology and the Generation of Culture (555-579). New York, NY: Oxford University Press.

- other sensory devices that entice the individual to travel deeper into the environment).
- Risk/Peril (An identifiable threat coupled with a reliable safeguard).

By combining exposure to biota with natural materials and nature-influenced design strategies, recreational trails can better improve people's health and overall fitness.

Finally, this report identifies expenditure and economic contributions associated with non-motorized trail use in Oregon. Statewide, non-motorized trail use by Oregon residents supports 21,730 jobs, \$672 million in labor income, and \$1.0 billion in value added. When out-of-state visitors are included, the estimated amounts increased to 24,340 jobs, \$1.2 billion in value added, and \$753 million in labor income. This information should be used to educate Oregonians about the economic benefits received from their investment in non-motorized trails in the state.

► CHAPTER 5

Oregon Resident Non-Motorized Boater Survey Summary



INTRODUCTION

Background

In preparation for the 2016-2025 Oregon Trails Plan, the Oregon Parks and Recreation Department (OPRD) contracted with Oregon State University (OSU) to conduct a survey of Oregon resident non-motorized boaters regarding their current use patterns (amount, location, and type of use), user experiences and preferences, and the economic contribution of recreation activity. The probability sample was designed to be as representative as possible of all non-motorized boaters in Oregon. For this project, non-motorized boating referred to recreating with non-motorized watercraft that rely primarily on paddles or oars for propulsion. Coverage included drift and row boating, canoeing, kayaking, rafting, and standup paddle boarding. It excluded outrigger canoes and sculling/ sweep boats, as well as sailboats, surf boards, windsurfing

boards, kiteboards, float tubes, inner tubes, inflatable mattresses, and similar "floatie" craft. The sample design was developed to derive information at the region level. Results of the survey are provided at the statewide scale and region scale (Figure 1 on page 29). All references to boating in this report summary are to non-motorized boating.

This chapter includes a summary of selected statewide and region scale survey results. The full survey report, Oregon Non-Motorized Boater Participation and Priorities, is available online at: oregon.gov/ oprd/Trail_Programs_Services/Documents/ Nonmotorized_Boater_Participation_Priorities.pdf

SURVEY METHODS

The project involved both a probability sample and a convenience sample. This summary will focus on results from the probability sample. The probability sample was drawn from two sources: 1) persons who reported participating in one of the

relevant activities in the 2011 survey conducted for the 2013-2017 Oregon Statewide Comprehensive Outdoor Recreation Plan (SCORP) and 2) persons who purchased an Oregon Aquatic Invasive Species Prevention (AIS) permit. Approximately 23% of the mail out sample was from SCORP respondents, the remainder from AIS permit holders.

Persons in the probability sample could complete the questionnaire in either online or paper format. Surveys were sent out to 5,675 residents. Of those delivered (5,428), 2,326 were obtained, for an overall response rate of 43%. This response rate is good by current survey standards, especially considering the long median online completion time of 27 minutes. With respect to format, 73% of the surveys were completed online and 27% in paper format. Most (37%) of the surveys were participants, with the remainder (6%) by non-participants. Sample data were weighted by age and whether respondent most often engaged in whitewater or flat water boating.

information and a reference point for the current boater survey results. The following demographic profile results show 2011 results for Oregonians as a whole, Oregon outdoor recreationists as a whole, for residents who engaged in white-water non-motorized boating activities (canoeing, kayaking, and rafting), and flat-water non-motorized boating activities (canoeing, sea kayaking, rowing, stand-up paddling, tubing/ floating), and those engaged in both types (white-water and flat-water) of non-motorized boating.

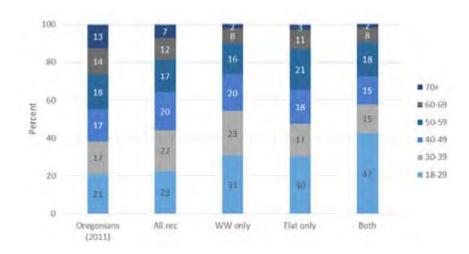
Figure 75 shows that, as expected, older Oregonians are under-represented amongst participants in boating activities. Conversely, younger residents are overrepresented. Oregonians who engage in both WW and Flat boating have a particularly "youthful" distribution. Oregonians who engage in Flat only tend to be somewhat older than those who engage in WW only.

DEMOGRAPHIC PROFILES – SCORP SURVEY

Age

Results from the 2011 survey conducted for the 2013-2017 Oregon SCORP provide additional





Gender

As shown in Figure 76, women tend to be over-represented amongst Oregonians who participate in Flat only and under-represented amongst those who participate in Both.

100
80
51
53
53
53
54
Female
Male

Oregonians (2011) All rec WW only Flat only Both

Figure 76. Non-Motorized Boater Gender Distribution, SCORP

Education

As shown in Figure 77, boaters have education levels similar to all Oregon recreationists, with somewhat higher levels of university degrees for WW only and Flat only and slightly lower levels for Both. The lower level of university education for those in the Both category may be due in part to the higher proportion of young people in that category (see Figure 77); some may be in the process of completing a bachelor's degree.

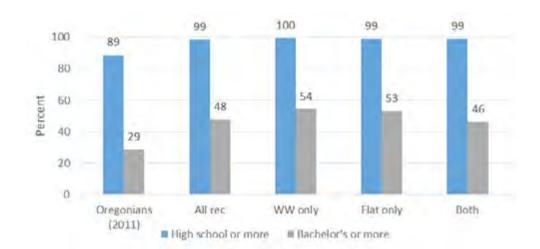


Figure 77. Non-Motorized Boater Education Distribution, SCORP

Race/Ethnicity

With respect to race and ethnicity, boaters follow the general Oregon recreationist population insofar as most identify as white and non-Latino (Figure 78). Note that respondents could select multiple races, and that Latino/ non-Latino was asked separately, following the US Census approach.

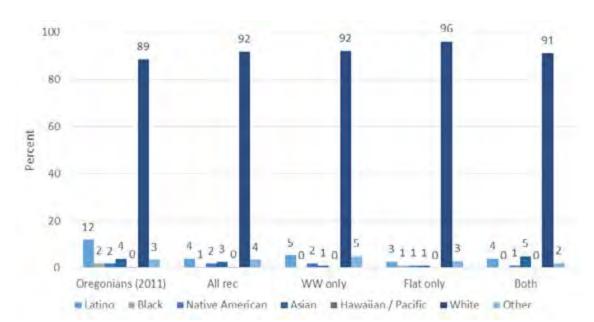


Figure 78. Non-Motorized Boater Race/ Ethnicity Distribution, SCORP

Income

Figure 79 presents household annual income distribution, with boaters having slightly higher income levels than Oregonians overall who participate in outdoor recreation. Residents who engage in WW only are less likely than residents who engage in Flat only to be in the lowest income category, though residents who engage in Both are more likely to be in that category. This may be due in part to the high proportion of young people who engage in Both (see Figure 75).

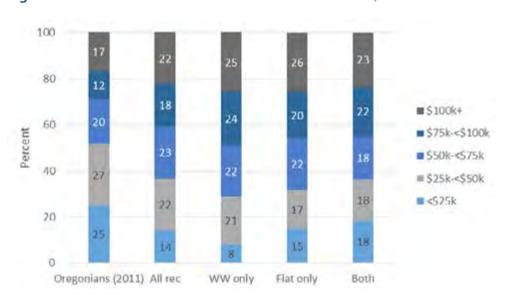


Figure 79. Non-Motorized Boater Income Distribution, SCORP

OWNERSHIP, TRIP CHARACTERISTICS, AND PARTICIPATION

Boat Ownership and Use Characteristics

Table 28 shows ownership patterns by boat type. For example, 24% of non-motorized boating households own one drift or row boat, 2% own two, and 1% own three or more. In total, 27% (the sum of the previous three columns) own one or more. An average of .31 drift or row boats are owned across all non-motorized boating households. An average of .033 drift or row boaters were new to the households in the past 12 months. This represents 11% of those owned (0.033/0.31). As expected, given the novelty of the sport, stand up paddle board (SUP) has the highest percentage of "new to the household." WW rafts and canoes have the lowest percentages.

Table 28. Non-Motorized Boat Ownership By Type

	Perc	ent ownir	ng number of	boats	Mean number New in past 12		New as percent
	1	2	3 or more	1 or more	owned	months	of owned
Drift or row	24	2	1	27	0.31	0.033	11
Canoe	28	6	1	35	0.44	0.037	8
WW kayak	13	8	7	28	0.59	0.057	10
Other kayak	11	17	6	34	0.69	0.111	16
WW raft	22	5	3	30	0.44	0.027	6
Other raft	16	3	1	20	0.25	0.026	10
SUP	4	3	1	8	0.13	0.071	54

Figure 80 shows ownership patterns, in percentage of non-motorized boating households owning each number of boats. Note that one or more people in a household may have engaged in non-motorized boating in the past 12 months despite owning non boats (due to borrowing, renting, participating in a guided trip, etc.). Most households own one or two boats.

Figure 80. Number Of Non-Motorized Boats In Household

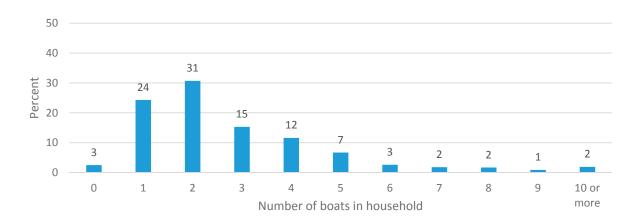


Figure 81 shows the number of types of boats (drift/ row, canoe, WW kayak, etc.) in households, across the number of boats in each household. For example 100% of households with only one boat (far left column) have only one type of boat, as one would expect. Of the households with two boats (second column from the left), 49% own one boat type of boat (both of the household's two boats are the same type) and 51% own two types of boats (the two boats are different types).



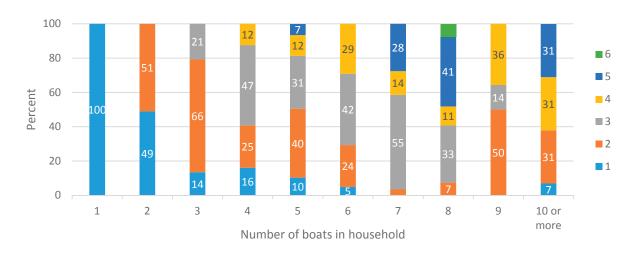


Figure 82 presents type of boat used most often, with Other (non-WW) kayak being the most common category. Allowing for differences in topography, and thus WW versus Flat balance, the results shown in Figure 81 are broadly consistent with national participation (relative across boat/ activity types) in the Outdoor Foundation 2014 Outdoor Participation report¹⁹.

Figure 82. Type of Non-Motorized Boat Used Most Often

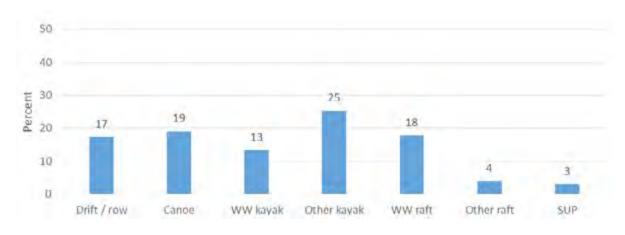


Figure 83 presents results by region. The absence of SUP from some regions may accurately reflect no residents in that region using SUP most often. However, it also may reflect the inevitable potential for error due to small numbers of observations.

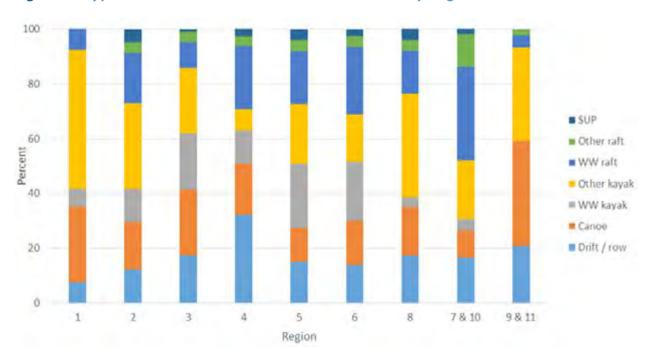


Figure 83. Type Of Non-Motorized Boat Used Most Often, By Region Of Residence

Figure 84 presents percentage of days paddling Oregon water bodies by type of water body, with Figure 85 showing results by region. Almost one-third of the days are spent on each of whitewater parts of rivers and streams, flat water parts of rivers and streams, and lakes, reservoirs and ponds. Fewer days are spent in bays and on the Pacific Ocean. As expected, residents of coastal regions spend a greater percentage of their days in bays and on the ocean relative to residents of inland regions.

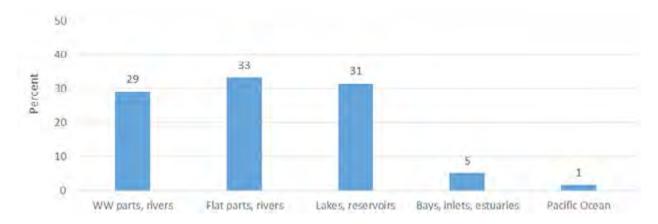


Figure 84. Percent Of Days By Type Of Water Body

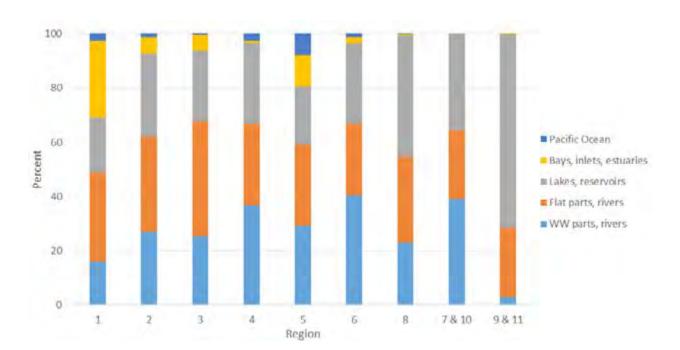


Figure 85. Percent Of Days By Type Of Water Body, By Region Of Residence

Day Trip and Multi-Day Trip Characteristics

Almost all respondents (95%) took at least one day trip and the majority (52%) took at least one multi-day trip in the past year (12 months). In the mail questionnaire, respondents reported the number of days boating in each region and the allocation of those days into day and multi-day trips. Multi-day trips are defined as those involving an overnight stay away from home, even if the respondent only boated one day during the trip. The day versus multi-day distinction is used in presenting results in this section as well as in estimating economic contribution.

Figure 86 shows the percentage of all days boating in each region that involved day trips versus multi-day trips.

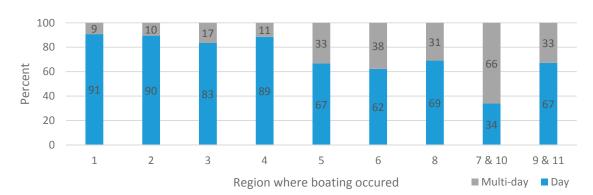


Figure 86. Percent Of Boating Days Spent On Day Versus Multi-Day Trips By Region

The following results are for the "typical" day and multi-day trips, defined as the single location where respondents most often engaged in each type of trip in the past 12 months. Figure 87 indicates that the majority of day trips (59%) were within 30 miles of home while almost half (47%) of multi-day trips were more than 90 miles away from home.

100 80 59 Percent 60 47 40 24 23 18 20 11 11 8 O. Fewer than 30 miles 31 to 60 miles 61 to 90 miles More than 90 miles Day Multi-day

Figure 87. Typical Day And Multi-Day Trips, Distance Traveled To Launch Point

The remaining results in this section and the expenditure and economic significance section are based on travel parties. The National Visitor Use Monitoring (NVUM) approach to outliers is followed in this analysis.²⁰

Figure 88 shows number of persons in travel party for Day and Multi-day trips. For both types of trips, two people in the travel party is the most common. Figure 89 shows number of boats used by travel party. Most trips involve one or two boats.

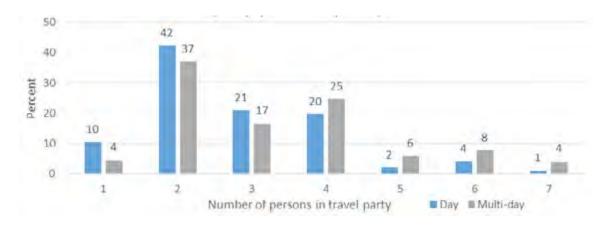


Figure 88. Typical Day And Multi-Day Trips, Persons In Travel Party

20 White, E.M., D.B. Goodding, and D.J. Stynes. 2013. Estimation of national forest visitor spending averages from National Visitor Use Monitoring: round 2. Gen. Tech. Rep. PNW-GTR-883. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

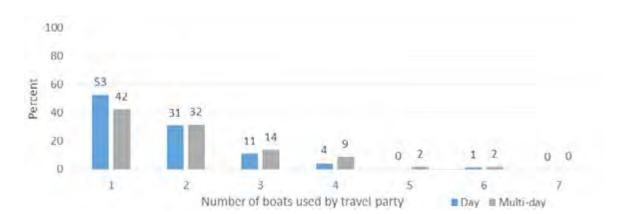


Figure 89. Typical Day and Multi-Day Trips, Boats Used By Travel Party



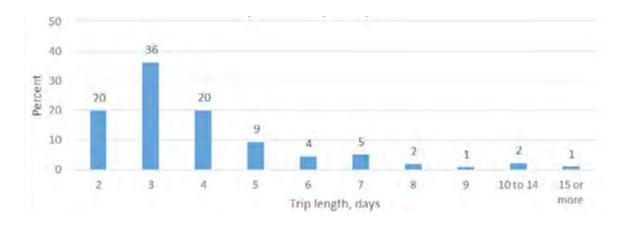


Figure 90 shows number of days for multi-day trips. As a reminder, this includes trip days that did not involve boating. Three days is the most common trip length, which may reflect a high proportion of "long weekend" trips.

Participation by County

The 2011 SCORP survey was a large general population survey and, therefore, provides the best foundation for estimating recreation use across Oregon counties. Table 29 presents 2011 SCORP estimates, separated into WW and Flat based on the following categories:

- White-water canoeing, kayaking, rafting.
- Flat-water canoeing, sea kayaking, rowing, stand-up paddling, tubing/ floating.

Note that the SCORP estimates reflect a different set of activities relative to the current boater survey. User occasions are the number of times people engage in an activity; in this report, they are treated as the equivalent of user days. Occasions are by location of use (the boating activity occurred in that county) and are rounded to the nearest hundred. Blank user occasions reflect 1,000 or fewer occasions. Percent participation is by location of residence (the percent of county residents who engaged in activity in the category) and are rounded to the nearest whole number. For percent participating, an asterisk by the county name (Gilliam, Grant, Harney, Lake, Morrow, Sherman, Wallowa and Wheeler) indicates that 2011 SCORP regional values were used due to low sample sizes for those counties.

Table 29. SCORP Estimates Of 2011 Non-Motorized Boating User Occasions And Participation

	Location, us	er occasions	Percent pai	rticipating
	Whitewater	Flat water	Whitewater	Flat water
Clatsop	12,000	432,500	6	11
Lincoln	33,800	71,400	10	12
Tillamook	10,500	63,800	5	10
Region 1	56,300	567,600		
Clackamas	260,800	345,000	11	11
Columbia	8,200	29,800	7	10
Hood River	27,900	59,000	14	20
Multnomah	155,800	1,173,100	9	12
Washington	3,700	23,000	14	8
Region 2	456,400	1,629,900		
Benton	18,400	48,100	11	14
Linn	274,000	48,200	9	11
Marion	30,900	67,900	11	7
Polk	-	3,400	13	8
Yamhill	-	16,000	8	11
Region 3	325,300	183,600		
Lane	130,100	359,900	13	13
Region 4	130,100	359,900		
Coos	30,400	174,500	22	25
Curry	18,100	29,500	16	16
Region 5	48,500	204,000		
Douglas	48,500	80,100	11	16
Jackson	183,100	160,400	29	11
Josephine	152,500	14,200	29	11
Region 6	384,100	254,700		
Gilliam*	-	-	9	10
Morrow*	-	21,500	9	10
Sherman*	-	-	9	10
Umatilla	4,900	32,000	8	12
Wasco	215,600	9,100	15	7
Region 7	223,400	64,500		
Crook	9,600	21,600	10	11
Deschutes	1,196,800	503,800	14	32
Jefferson	18,100	26,100	10	10
Wheeler*	2,100	-	12	7
Region 8	1,226,600	552,600		
Klamath	25,600	106,000	16	11
Lake*	-	13,800	15	12
Region 9	26,600	119,800		

Table 29. (Continued)

	Location, us	er occasions	Percent pa	rticipating
	Whitewater	Flat water	Whitewater	Flat water
Baker	2,800	11,300	10	9
Grant*	8,600	2,800	12	12
Union	16,700	23,200	13	13
Wallowa*	9,800	10,000	12	12
Region 10	37,900	47,300		
Harney*	-	-	5	3
Malheur	2,600	1,700	5	3
Region 11	3,600	2,700		

Accounting for rounding, there were an estimated 2,911,800 whitewater and an estimated 3,982,700 flat water occasions in 2011. Combined, there were 6,894,500 user occasions.

Participation by Region and Water Body

Tables 30 through 40 show weighted user days by water body (river stretch, lake, or bay) for the online questionnaire. Respondent write-ins of water bodies were allocated where possible. The Other category reflects regional water bodies that were not on the list and only written-in once.

For example, the results in Table 30 indicate that respondents in the probability sample spent 381 days on the Siletz River. This represents 30% of all sample user days on rivers in Region 1 and 20% of all sample user days across Region 1 rivers, lakes, and bays combined. A total of 1,285 user days were spent on rivers in Region 1. This represents 68% of all user days across Region 1 rivers, lakes, and bays combined. Table 3 also shows that 13% of all user days across Region 1 were on lakes and 19% were on bays.

Summary tables follow the detailed set of regional tables.

Table 30. Non-Motorized Boating User Days Across Water Bodies, Weighted, Region 1

	Site	% of	% of
	days	category	region
Rivers			
R17 Siletz River (Mainstem from confluence of North and South Forks to Siletz Bay)	381	30	20
R18 Yaquina River	154	12	8
R21 Alsea River (RM 12 near Tidewater to USFS boundary)	135	10	7
Salmon River (Lincoln County)	97	8	5
R5 Nehalem River	77	6	4
R127 Columbia River (Mouth to Saint Helens)	77	6	4
R12 Nestucca River (RM 7 to RM 15, near Beaver)	52	4	3
R9 Wilson River	41	3	2
R20 Alsea River (Pacific Ocean to head of tide, RM 12 near Tidewater)	35	3	2
Beaver Creek (Lincoln County)	35	3	2
R11 Nestucca River (mouth up to RM 7, near Cloverdale)	32	3	2
R10 Trask River	32	2	2
R22 Alsea River (Mainstem from confluence of North and South Forks to USFS	28	2	1
boundary)			
Drift Creek	20	2	1
R4 Necanicum River	18	1	1
R16 Little Nestucca River	17	1	1
Other	10	1	1
R19 Elk Creek	10	1	1
R8 Kilchis River	8	1	0
R7 Salmonberry River	6	0	0
R2 Lewis and Clark River	6	0	0
R24 Yachats River	4	0	0
R6 North Fork Nehalem River	3	0	0
R1 Youngs River	3	0	0
Tillamook River	2	0	0
John Day River (Clatsop County)	2	0	0
R13 Nestucca River (RM 15 to RM 26, above confluence of Limestone Creek and Blaine)	1	0	0
R15 Nestucca River (RM 35 to RM 47, near the lower end of Old Meadow Lake)	0	0	0
R23 Five Rivers	0	0	0
Rivers total	1,285	100	68
Lakes			
Ollala Reservoir	110	45	6
Big Creek Reservoir	44	18	2
L7 Devils Lake	44	18	2
L1 Coffenbury Lake	23	9	1
L5 Cape Meares Lake	7	3	0
Eckman Lake	7	3	0

Table 30. (Continued)

	Site	% of	% of
	days	category	region
Other	4	2	0
Lake Lytle	2	1	0
L4 Cullaby Lake	1	1	0
L3 Sunset Lake	1	1	0
L6 Town Lake	1	0	0
Hebo Lake	1	0	0
Lost Lake, Clatsop County	0	0	0
Lakes total	244	100	13
Bays			
B1 Nehalem Bay	76	21	4
B7 Yaquina Bay	65	18	3
B6 Siletz Bay	40	11	2
Salmon River (Lincoln County)	40	11	2
B8 Alsea Bay	38	11	2
B3 Netarts Bay	33	9	2
B2 Tillamook Bay	30	8	2
B5 Nestucca Bay	26	7	1
Ocean (Region 1)	8	2	0
B4 Sand Lake Estuary	4	1	0
Depoe Bay	2	0	0
R127 Columbia River (mouth to Saint Helens)	1	0	0
Beaver Creek (Lincoln County)	0	0	0
Bays total	364	100	19
Region total	1,892		100

Table 31. Non-Motorized Boater User Days Across Water Bodies, Weighted, Region 2

	Site days	% of category	% of region
Rivers			
R128 Columbia River (Saint Helens to Troutdale)	918	26	21
R124 Willamette River (Columbia River to Canby)	858	25	20
R57 Sandy River (Confluence with Bull Run River to Columbia River)	251	7	6
R51 Clackamas River (Source to River Mill Dam)	235	7	5
R50 Clackamas River (River Mill Dam to Willamette River	217	6	5
confluence)			
R49 Tualatin River	213	6	5
R130 Columbia River (Bonneville Dam to Deschutes River)	162	5	4
R127 Columbia River (Mouth to Saint Helens)	139	4	3
Hood River (mainstem)	101	3	2
R58 Sandy River (Source to confluence with Bull Run River)	77	2	2

Table 31. (Continued)

	Site days	% of category	% of region
R125 Willamette River (Canby to Sam Daws Bend, near Peoria)	63	2	1
R56 Molalla River (Glen Avon to Willamette River, near Canby)	38	1	1
Multnomah Channel	37	1	1
R64 Pudding River	35	1	1
W Fork Hood River	29	1	1
R5 Nehalem River	28	1	1
R61 Middle Fork Hood River	19	1	0
R52 North Fork Clackamas River	16	0	0
Willamette (Region 2)	13	0	0
R129 Columbia River (Troutdale to Bonneville)	10	0	0
R59 Salmon River	8	0	0
R60 White River	7	0	0
R55 Molalla River (Source to Glen Avon)	6	0	0
R48 Clatskanie River	5	0	0
R54 Oak Grove Fork Clackamas River	3	0	0
Gilbert River	0	0	0
Other	0	0	0
R53 South Fork Clackamas River	0	0	0
Rivers total	3,488	100	80
Lakes			
L27 Henry Hagg Lake	214	25	5
L32 Trillium Lake	210	25	5
L34 Timothy Lake	171	20	4
Oswego Lake	71	8	2
L31 Laurance Lake	40	5	1
L28 Sturgeon Lake	28	3	1
Smith & Bybee Lakes	26	3	1
Frog Lake	25	3	1
L30 Green Peter Reservoir	23	3	1
L26 Vernonia Lake	9	1	0
Lost Lake (Hood River County)	9	1	0
Benson Lake	6	1	0
L29 Blue River Lake	5	1	0
L33 Harriet Lake	4	0	0
Estacada Lake (Clackamas)	3	0	0
Other	2	0	0
North Fork Reservoir	2	0	0
Fairview Lake & Blue Lake	0	0	0
Lakes total	849	100	20
Region total	4,337		100

Table 32. Non-Motorized Boater User Days Across Water Bodies, Weighted, Region 3

Rivers Site Calys Sol Category Sol Pegins		C'to do	0/ - 5 - 1	0/ - 5
R125 Willamette River (Canby to Sam Daws Bend, near Peoria) R66 North Santiam River R70 McKenzie River R126 Willamette River (Sam Daws Bend, near Peoria, to Mid Fork Junction) R65 Santiam River (Junction with N Santiam to Willamette River (Lower)) Other R86 Santiam River (Junction with N Santiam to Willamette River (Lower)) Other R86 Santiam River (Confluence of North and South Forks to Siletz Bay) R83 Spantiam River R85 South Santiam River R86 South Santiam River R86 South Santiam River R86 South Santiam River R87 Silete River R87 Silete River R87 Silete River R88 South Santiam River R89 South Santiam River R89 South Santiam River R80 South South Spantiam River R80 South South Spantiam River R80 South Santiam River R80 South Fork Alsea River R80 South Fork Alsea River (Bailey Creek to confluence with Alsea River, R80 Santiam River R80 South Fork Alsea River (Bailey Creek to confluence with Alsea River, R80 Santiam R80 R10 R10 R10 R10 R10 R10 R10 R10 R10 R1	P *	Site days	% of category	% of region
R66 North Santiam River 302 16 12 R70 McKenzie River 189 10 8 R126 Willamette River (Sam Daws Bend, near Peoria, to Mid Fork Junction) 168 9 7 R65 Santiam River (Junction with N Santiam to Willamette River (Lower)) 88 5 4 Other 86 5 4 R17 Siletz River (Confluence of North and South Forks to Siletz Bay) 83 5 3 R63 Yamhill River 48 3 2 R68 South Santiam River 46 3 2 Luckiamute River 37 2 2 R67 Little North Santiam River 31 2 1 Mary's River 27 1 1 Calapoola River 25 1 1 R62 North Yamhill River 25 1 1 R62 North Yamhill River 19 1 1 R69 Middle Santiam River 18 1 1 Williamette (Region 3) 17 1 1 R15 Nestucca River (RM 35, near Bea			22	25
R70 McKenzie River 189 10 8 R126 Willamette River (Sam Daws Bend, near Peoria, to Mid Fork Junction) 168 9 7 7 7 7 7 7 7 7 7	·		-	
R126 Willamette River (Sam Daws Bend, near Peoria, to Mid Fork Junction)				
Junction R65 Santiam River (Junction with N Santiam to Willamette River (Lower) 98				
CLOWER S6		168	9	/
Other 86 5 4 R17 Siletz River (Confluence of North and South Forks to Siletz Bay) 83 5 3 R63 Yamhill River 48 3 2 R68 South Santiam River 46 3 2 Luckiamute River 37 2 2 R67 Little North Santiam River 31 2 1 Mary's River 27 1 1 Calapooia River 25 1 1 R62 North Yamhill River 24 1 1 R62 North Yamhill River 22 1 1 R18 Squin River 19 1 1 R18 Yaquina River 18 1 1 R15 Nestucca River (RM 35, ne	R65 Santiam River (Junction with N Santiam to Willamette River	98	5	4
R17 Siletz River (Confluence of North and South Forks to Siletz Bay) 83 5 3 R68 Yamhill River 48 3 2 R68 South Santiam River 46 3 2 Luckiamute River 37 2 2 R67 Little North Santiam River 31 2 1 Mary's River 27 1 1 Calapooia River 25 1 1 R62 North Yamhill River 24 1 1 R62 North Yamhill River 24 1 1 R18 Yaquina River (Mainstem from confluence of North and South 22 1 1 Forks to USFS boundary, near Fall Cr) 19 1 1 R18 Yaquina River 19 1 1 R18 Yaquina River 19 1 1 R18 Yaquina River (Region 3) 17 1 1 R15 Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R16 Little Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R72 North Fork Alsea River (Bailey Creek to confluence with Alsea 0 <t< td=""><td>(Lower))</td><td></td><td></td><td></td></t<>	(Lower))			
R63 Yamhill River 48 3 2 R68 South Santiam River 46 3 2 Luckiamute River 37 2 2 R67 Little North Santiam River 31 2 1 Mary's River 27 1 1 Calapooia River 25 1 1 R62 North Yamhill River 24 1 1 R22 Alsea River (Mainstem from confluence of North and South 22 1 1 Forks to USFS boundary, near Fall Cr) 8 1 1 R18 Yaquina River 19 1 1 R69 Middle Santiam River 18 1 1 Willamette (Region 3) 17 1 1 R15 Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R16 Little Nestucca River 2 0 0 R73 South Fork Alsea River 0 0 0 R64 Pudding River 0 0 0 R64 Pudding River 18 100 0 Rivers total 1,848 100 76 <t< td=""><td>Other</td><td>86</td><td>5</td><td>4</td></t<>	Other	86	5	4
R68 South Santiam River 46 3 2 Luckiamute River 37 2 2 R67 Little North Santiam River 31 2 1 Mary's River 27 1 1 Calapooia River 25 1 1 R62 North Yamhill River 24 1 1 R22 Alsea River (Mainstem from confluence of North and South Forks to USFS boundary, near Fall Cr) 22 1 1 R18 Yaquina River 19 1 1 1 R69 Middle Santiam River 18 1 1 1 Willamette (Region 3) 17 1 1 1 R15 Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 0 R73 South Fork Alsea River 1 0 0 0 0 R74 South Fork Alsea River (Bailey Creek to confluence with Alsea 0 0 0 0 R72 North Fork Alsea River (Bailey Creek to confluence with Alsea 1,848 100 76 Lake Rivers total 1,848 100 76 Lake	R17 Siletz River (Confluence of North and South Forks to Siletz Bay)	83	5	3
Luckiamute River 37 2 2 R67 Little North Santiam River 31 2 1 Mary's River 27 1 1 Calapooia River 25 1 1 R62 North Yamhill River 24 1 1 R22 Alsea River (Mainstem from confluence of North and South Forks to USFS boundary, near Fall Cr) 1 1 R18 Yaquina River 19 1 1 R69 Middle Santiam River 18 1 1 Willamette (Region 3) 17 1 1 R15 Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R16 Little Nestucca River 2 0 0 R73 South Fork Alsea River 1 0 0 R64 Pudding River 0 0 0 0 R672 North Fork Alsea River (Bailey Creek to confluence with Alsea 0 0 0 Rivers total 1,848 100 76 Lakes 1 1,848 100 76 Lake	R63 Yamhill River	48	3	2
R67 Little North Santiam River 31 2 1 Mary's River 27 1 1 Calapooia River 25 1 1 R62 North Yamhill River 24 1 1 R22 Alsea River (Mainstem from confluence of North and South Forks to USFS boundary, near Fall Cr) 22 1 1 R18 Yaquina River 19 1 1 R69 Middle Santiam River 18 1 1 Willamette (Region 3) 17 1 1 R15 Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R15 Little Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R15 Little Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R64 Pudding River 2 0 0 0 R64 Pudding River 0 0 0 0 R72 North Fork Alsea River (Bailey Creek to confluence with Alsea River, near Alsea) 1,848 100 76 Lakes 1 1,848 100 76 Lakes 1 1,848 100	R68 South Santiam River	46	3	2
Mary's River 27 1 1 Calapooia River 25 1 1 R62 North Yamhill River 24 1 1 R22 Alsea River (Mainstem from confluence of North and South Forks to USFS boundary, near Fall Cr) 22 1 1 R18 Yaquina River 19 1 1 R69 Middle Santiam River 18 1 1 Willamette (Region 3) 17 1 1 R15 Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R16 Little Nestucca River 2 0 0 R73 South Fork Alsea River 1 0 0 R64 Pudding River 0 0 0 R64 Pudding River 0 0 0 R72 North Fork Alsea River (Bailey Creek to confluence with Alsea River, near Alsea) 0 0 0 Rivers total 1,848 100 76 Lakes 1 139 23 6 L44 Big Lake 108 18 4 L44 Big Lake 108 18 4 L41 Foster Reservoir	Luckiamute River	37	2	2
Calapooia River 25 1 1 R62 North Yamhill River 24 1 1 R22 Alsea River (Mainstem from confluence of North and South Forks to USFS boundary, near Fall Cr) 22 1 1 R18 Yaquina River 19 1 1 R69 Middle Santiam River 18 1 1 Willamette (Region 3) 17 1 1 R15 Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R16 Little Nestucca River Reserver 2 0 0 R73 South Fork Alsea River 1 0 0 R64 Pudding River 0 0 0 R72 North Fork Alsea River (Bailey Creek to confluence with Alsea River, Roral Alsea) 0 0 0 Rivers total 1,848 100 76 1 Lakes 1 1 3 6	R67 Little North Santiam River	31	2	1
R62 North Yamhill River 24 1 1 R22 Alsea River (Mainstem from confluence of North and South Forks to USFS boundary, near Fall Cr) 22 1 1 R18 Yaquina River 19 1 1 R69 Middle Santiam River 18 1 1 Willamette (Region 3) 17 1 1 R15 Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R16 Little Nestucca River Rhaiser 1 0 0 R73 South Fork Alsea River 1 0 0 R64 Pudding River 0 0 0 R72 North Fork Alsea River (Bailey Creek to confluence with Alsea River, near Alsea) 0 0 0 Rivers total 1,848 100 76 1 Lakes 1 139 23 6 L44 Big Lake 108 18 4 L43 Clear Lake 64 11 3 L41 Foster Reservoir 59 10 2 L40 Detroit Lake 55 9 2 L47 Trail Bridge Reservoir 43 7 2	Mary's River	27	1	1
R22 Alsea River (Mainstem from confluence of North and South Forks to USFS boundary, near Fall Cr) 19 1 1 R18 Yaquina River 19 1 1 R69 Middle Santiam River 18 1 1 Willamette (Region 3) 17 1 1 R15 Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R16 Little Nestucca River 2 0 0 R73 South Fork Alsea River 1 0 0 R64 Pudding River 0 0 0 R72 North Fork Alsea River (Bailey Creek to confluence with Alsea River, near Alsea) 0 0 0 Rivers total 1,848 100 76 Lakes 1 3 6 L44 Big Lake 108 18 4 L43 Clear Lake 64 11 3 L41 Foster Reservoir 59 10 2 L40 Detroit Lake 55 9 2 L45 Smith Reservoir 43 7 2 L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20	Calapooia River	25	1	1
Forks to USFS boundary, near Fall Cr) 19 1 1 R18 Yaquina River 18 1 1 R69 Middle Santiam River 18 1 1 Willamette (Region 3) 17 1 1 R15 Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R16 Little Nestucca River 2 0 0 R73 South Fork Alsea River 1 0 0 R64 Pudding River 0 0 0 R72 North Fork Alsea River (Bailey Creek to confluence with Alsea 0 0 0 River, near Alsea) 1,848 100 76 Rivers total 1,848 100 76 Lakes 1 3 6 L44 Big Lake 108 18 4 L43 Clear Lake 64 11 3 L41 Foster Reservoir 59 10 2 L40 Detroit Lake 55 9 2 L47 Trail Bridge Reservoir 43 7 2 <td>R62 North Yamhill River</td> <td>24</td> <td>1</td> <td>1</td>	R62 North Yamhill River	24	1	1
R18 Yaquina River 19 1 1 R69 Middle Santiam River 18 1 1 Willamette (Region 3) 17 1 1 R15 Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R16 Little Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R16 Little Nestucca River (Bailey Creek to River (Bailey Creek to Confluence With Alsea River (Bailey Creek to Confluen	R22 Alsea River (Mainstem from confluence of North and South	22	1	1
R69 Middle Santiam River 18 1 1 Willamette (Region 3) 17 1 1 R15 Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R16 Little Nestucca River 2 0 0 R73 South Fork Alsea River 1 0 0 R64 Pudding River 0 0 0 R72 North Fork Alsea River (Bailey Creek to confluence with Alsea River (Bailey Creek to Confluence Wi	Forks to USFS boundary, near Fall Cr)			
Willamette (Region 3) 17 1 1 R15 Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R16 Little Nestucca River 2 0 0 R73 South Fork Alsea River 1 0 0 R64 Pudding River 0 0 0 R72 North Fork Alsea River (Bailey Creek to confluence with Alsea River, near Alsea) 0 0 0 Rivers total 1,848 100 76 Lakes L36 Silverton Reservoir 139 23 6 L44 Big Lake 108 18 4 L43 Clear Lake 64 11 3 L41 Foster Reservoir 59 10 2 L40 Detroit Lake 55 9 2 L46 Smith Reservoir 52 9 2 L47 Trail Bridge Reservoir 43 7 2 L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	R18 Yaquina River	19	1	1
R15 Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr) 3 0 0 R16 Little Nestucca River 2 0 0 R73 South Fork Alsea River 1 0 0 R64 Pudding River 0 0 0 R72 North Fork Alsea River (Bailey Creek to confluence with Alsea River, near Alsea) 0 0 0 Rivers total 1,848 100 76 Lakes 139 23 6 L44 Big Lake 108 18 4 L43 Clear Lake 64 11 3 L41 Foster Reservoir 59 10 2 L40 Detroit Lake 55 9 2 L45 Smith Reservoir 52 9 2 L47 Trail Bridge Reservoir 43 7 2 L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	R69 Middle Santiam River	18	1	1
R16 Little Nestucca River 2 0 0 R73 South Fork Alsea River 1 0 0 R64 Pudding River 0 0 0 R72 North Fork Alsea River (Bailey Creek to confluence with Alsea River, near Alsea) 0 0 0 Rivers total 1,848 100 76 Lakes 139 23 6 L44 Big Lake 108 18 4 L43 Clear Lake 64 11 3 L41 Foster Reservoir 59 10 2 L40 Detroit Lake 55 9 2 L45 Smith Reservoir 52 9 2 L47 Trail Bridge Reservoir 43 7 2 L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	Willamette (Region 3)	17	1	1
R73 South Fork Alsea River 1 0 0 R64 Pudding River 0 0 0 R72 North Fork Alsea River (Bailey Creek to confluence with Alsea River, near Alsea) 0 0 0 Rivers total 1,848 100 76 Lakes Use Silverton Reservoir L36 Silverton Reservoir 139 23 6 L44 Big Lake 108 18 4 L43 Clear Lake 64 11 3 L41 Foster Reservoir 59 10 2 L40 Detroit Lake 55 9 2 L45 Smith Reservoir 52 9 2 L47 Trail Bridge Reservoir 43 7 2 L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	R15 Nestucca River (RM 35, near Bear Cr, to RM 47, below Walker Cr)	3	0	0
R64 Pudding River 0 0 0 R72 North Fork Alsea River (Bailey Creek to confluence with Alsea River, near Alsea) 0 0 0 River, near Alsea) 1,848 100 76 Lakes 139 23 6 L44 Big Lake 108 18 4 L43 Clear Lake 64 11 3 L41 Foster Reservoir 59 10 2 L40 Detroit Lake 55 9 2 L47 Trail Bridge Reservoir 52 9 2 L47 Trail Bridge Reservoir 43 7 2 L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	R16 Little Nestucca River	2	0	0
R72 North Fork Alsea River (Bailey Creek to confluence with Alsea River, near Alsea) 0 0 0 River, near Alsea) 1,848 100 76 Lakes L36 Silverton Reservoir 139 23 6 L44 Big Lake 108 18 4 L43 Clear Lake 64 11 3 L41 Foster Reservoir 59 10 2 L40 Detroit Lake 55 9 2 L46 Smith Reservoir 52 9 2 L47 Trail Bridge Reservoir 43 7 2 L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	R73 South Fork Alsea River	1	0	0
River, near Alsea) 1,848 100 76 Lakes Use of the proof of the p	R64 Pudding River	0	0	0
Lakes L36 Silverton Reservoir 139 23 6 L44 Big Lake 108 18 4 L43 Clear Lake 64 11 3 L41 Foster Reservoir 59 10 2 L40 Detroit Lake 55 9 2 L46 Smith Reservoir 52 9 2 L47 Trail Bridge Reservoir 43 7 2 L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	· ·	0	0	0
L36 Silverton Reservoir 139 23 6 L44 Big Lake 108 18 4 L43 Clear Lake 64 11 3 L41 Foster Reservoir 59 10 2 L40 Detroit Lake 55 9 2 L46 Smith Reservoir 52 9 2 L47 Trail Bridge Reservoir 43 7 2 L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	Rivers total	1,848	100	76
L44 Big Lake 108 18 4 L43 Clear Lake 64 11 3 L41 Foster Reservoir 59 10 2 L40 Detroit Lake 55 9 2 L46 Smith Reservoir 52 9 2 L47 Trail Bridge Reservoir 43 7 2 L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	Lakes	'	'	
L43 Clear Lake 64 11 3 L41 Foster Reservoir 59 10 2 L40 Detroit Lake 55 9 2 L46 Smith Reservoir 52 9 2 L47 Trail Bridge Reservoir 43 7 2 L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	L36 Silverton Reservoir	139	23	6
L41 Foster Reservoir 59 10 2 L40 Detroit Lake 55 9 2 L46 Smith Reservoir 52 9 2 L47 Trail Bridge Reservoir 43 7 2 L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	L44 Big Lake	108	18	4
L40 Detroit Lake 55 9 2 L46 Smith Reservoir 52 9 2 L47 Trail Bridge Reservoir 43 7 2 L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	L43 Clear Lake	64	11	3
L46 Smith Reservoir 52 9 2 L47 Trail Bridge Reservoir 43 7 2 L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	L41 Foster Reservoir	59	10	2
L47 Trail Bridge Reservoir 43 7 2 L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	L40 Detroit Lake	55	9	2
L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	L46 Smith Reservoir	52	9	2
L38 Freeway Lakes 23 4 1 L45 Carmen Reservoir 20 3 1	L47 Trail Bridge Reservoir	43	7	2
L45 Carmen Reservoir 20 3 1		23	4	1
L39 Elk Lake 10 2 0	·	20	3	1
	L39 Elk Lake	10	2	0

Table 32. (Continued)

	Site days	% of category	% of region
L42 Lost Lake	10	2	0
Other	5	1	0
L35 Mission Lake	4	1	0
L37 Walter Wirth Lake	3	0	0
Breitenbush Lake	2	0	0
Marion Lake	1	0	0
Big Cliff Reservoir	0	0	0
Silver Creek Reservoir	0	0	0
Fish Lake	0	0	0
Lakes total	598	100	24
Region total	2,447		100

Table 33. Non-Motorized Boater User Days Across Water Bodies, Weighted, Region 4

	Site days	% of category	% of region
Rivers			
R70 McKenzie River	464	40	27
R126 Willamette River (Sam Daws Bend, near Peoria, to Mid Fork	218	19	13
Junction)			
R80 Middle Fork Willamette River	125	11	7
R81 North Fork Middle Fork Willamette River	107	9	6
R79 Coast Fork Willamette River	76	7	4
R74 Lake Creek	43	4	2
Other	31	3	2
R76 Siuslaw River (Wildcat Cr, near Austa, to Clay Creek Campground)	27	2	2
R25 Siuslaw River (mouth to confluence with Lake Creek, near	17	2	1
Swisshome)			
R75 Siuslaw River (Confluence of Lake Cr, near Sweethome, to	15	1	1
Wildcat Cr, near Austa)			
R82 South Fork McKenzie River	15	1	1
R73 South Fork Alsea River	8	1	0
Row River	4	0	0
Coyote Creek	3	0	0
R77 Siuslaw River (Clay Creek Campground to Siuslaw Falls)	2	0	0
R78 Siuslaw River (Siuslaw Falls to junction of North and South Fork)	1	0	0
Rivers total	1,156	100	67
Lakes			
L50 Fern Ridge Reservoir	214	38	12
L58 Waldo Lake	93	16	5
L56 Hills Creek Reservoir	82	14	5
L51 Fall Creek Lake	43	7	2

Table 33. (Continued)

	Site days	% of category	% of region
L59 Gold Lake	32	6	2
L54 Dorena Reservoir	21	4	1
L52 Dexter Reservoir	21	4	1
Leaburg Reservoir	15	3	1
L55 Cottage Grove Lake	13	2	1
L48 Triangle Lake	10	2	1
Blair Lake	9	2	1
L49 Hult Reservoir	7	1	0
L57 Cougar Reservoir	2	0	0
L60 Summit Lake	2	0	0
Blue River Reservoir	1	0	0
Clear Lake	1	0	0
Other	0	0	0
L53 Lookout Point Reservoir	0	0	0
Lakes total	568	100	33
Region total	1,724		100

Table 34. Non-Motorized Boater User Days Across Water Bodies, Weighted, Region 5

	Site days	% of category	% of region
Rivers			
R42 Rogue River (Grave Creek confluence to Illinois River Confluence)	669	41	29
R36 South Fork Coquille River	271	16	12
R27 Umpqua River (mainstem from confluence of North and South	133	8	6
Fork to mouth at Pacific Ocean)			
R38 Elk River	122	7	5
R41 Rogue River (Illinois River confluence to mouth at Pacific Ocean)	94	6	4
R43 Illinois River (Deer Creek to Agness)	64	4	3
R37 Sixes River	53	3	2
R25 Siuslaw River (mouth to confluence with Lake Creek, near	42	3	2
Swisshome)			
R29 Coos River	40	2	2
R33 North Fork Coquille River	32	2	1
R46 Chetco River (from Boulder Creek to Loeb State Park)	28	2	1
R32 Coquille River, mainstem	25	2	1
R28 Smith River	19	1	1
R31 South Fork Coos River	16	1	1
R34 East Fork Coquille River	10	1	0
R24 Yachats River	9	1	0
R45 Chetco River (from Loeb State Park to the mouth at Pacific Ocean)	5	0	0
Other	4	0	0

Table 34. (Continued)

	Site days	% of category	% of region
Tenmile Creek	4	0	0
Siltcoos River	3	0	0
R30 Millicoma River	3	0	0
R26 North Fork Siuslaw River	2	0	0
New River	2	0	0
R136 Pistol River	1	0	0
R35 Middle Fork Coquille River	0	0	0
Rivers total	1,648	100	72
Lakes		•	
L23 Floras Lake	94	26	4
L25 Powers Park Pond	73	20	3
L17 N. Tenmile Lake	35	10	2
L16 Eel Lake	23	6	1
L21 Empire Lakes	19	5	1
L9 Mercer Lake	18	5	1
L19 Tenmile Lake	17	5	1
L12 Siltcoos Lake	17	5	1
L11 Woahink Lake	14	4	1
L20 Loon Lake	12	3	1
L10 Munsel Lake	10	3	0
L14 Tahkenich Lake	8	2	0
Cleawox Lake	7	2	0
L8 Sutton Lake	6	2	0
L18 Saunders Lake	3	1	0
L15 Elbow Lake	2	1	0
Other	2	0	0
L13 Carter Lake	0	0	0
L22 Bradley Lake	0	0	0
Lakes total	359	100	16
Bays			
B10 Coos Bay	134	49	6
B9 Winchester Bay	95	35	4
Other	18	7	1
R41 Rogue River (Illinois River confluence to mouth at Pacific Ocean)	14	5	1
Sunset Bay	12	4	1
R45 Chetco River (from Loeb State Park to the mouth at Pacific Ocean)	1	0	0
Siltcoos River	0	0	0
Port Orford	0	0	0
Bays total	275	100	12
Region total	2,283		100

Table 35. Non-Motorized Boater User Days Across Water Bodies, Weighted, Region 6

	Site days	% of category	% of region
Rivers			
R42 Rogue River (Grave Creek confluence to Illinois River Confluence)	550	34	26
R89 Rogue River (Lost Creek Lake to Grave Creek)	531	33	25
R27 Umpqua River (From confluence of North and South Forks to the	211	13	10
Pacific Ocean)			
R84 North Umpqua River	160	10	8
R43 Illinois River (Deer Cr to Agness near confluence w/ Rogue R)	53	3	3
R87 South Umpqua River (Tiller to confluence with North Umpqua	34	2	2
River, near Riversdale)			
R86 South Umpqua River (Source to Tiller)	23	1	1
Other	20	1	1
R90 Rogue River (above Lost Creek Lake)	18	1	1
R91 Applegate River	11	1	1
R85 Little River	8	0	0
R44 Illinois River (Illinois River Forks State Park to Deer Creek)	1	0	0
R28 Smith River	1	0	0
R88 Cow Creek	0	0	0
Rivers total	1,621	100	77
Lakes			
L72 Emigrant Lake	125	26	6
L69 Lake Selmac	53	11	3
L68 Lost Creek Lake	52	11	2
L71 Applegate Lake	51	10	2
L76 Hyatt Reservoir	40	8	2
L62 Ben Irving Reservoir	34	7	2
L67 Diamond Lake	33	7	2
L75 Howard Prairie Lake	32	7	2
L66 Lemolo Lake	22	5	1
L65 Toketee Reservoir	15	3	1
L63 Galesville Reservoir	8	2	0
Squaw Lakes	7	1	0
L73 Fish Lake	6	1	0
L74 Agate Lake	2	0	0
L64 Hemlock Lake	2	0	0
Other	2	0	0
L61 Cooper Creek Reservoir	1	0	0
L70 Bolan Lake	0	0	0
Willow Lake	0	0	0
Lakes total	485	100	23
Region total	2,106		100

Table 36. Non-Motorized Boater User Days Across Water Bodies, Weighted, Region 7

	Site days	% of category	% of region
Rivers			
R96 Deschutes River (Pelton Dam to Columbia River)	809	62	56
R99 John Day River (Service Cr. to Columbia River)	304	23	21
R102 Umatilla River	68	5	5
R103 North Fork John Day River	60	5	4
R130 Columbia River (Bonneville Dam to Deschutes River)	34	3	2
R133 Columbia River (Heppner Junction, near Hwy 74, to state line	27	2	2
above Hat Rock State Park)			
Other	8	1	1
R131 Columbia River (Deschutes River to John Day Dam)	4	0	0
R132 Columbia River (John Day Dam to Heppner Junction, near	1	0	0
Hwy 74)			
Rivers total	1,315	100	91
Lakes			
L79 McKay Reservoir	72	52	5
Rock Creek Reservoir	58	42	4
Pine Hollow Reservoir	4	3	0
Indian Lake	3	2	0
Other	0	0	0
L78 Willow Creek Reservoir	0	0	0
L77 Lake Wallula	0	0	0
Lakes total	138	100	9
Region total	1,452		100

Table 37. Non-Motorized Boater User Days Across Water Bodies, Weighted, Region 8

	Site days	% of category	% of region
Rivers			
R95 Deschutes River (Upper, source to Pelton Dam)	912	57	39
R96 Deschutes River (Lower, Pelton Dam to Columbia River)	396	25	17
R99 John Day River (Service Cr. to Columbia River)	235	15	10
R98 Crooked River	26	2	1
R97 Metolius River	19	1	1
R100 John Day River (Source to Service Cr.)	17	1	1
Little Deschutes River	9	1	0
Other	0	0	0
Rivers total	1,612	100	68
Lakes			
L91 Hosmer Lake	113	15	5
L89 Sparks Lake	104	14	4
L85 Suttle Lake	84	11	4
L83 Lake Billy Chinook	51	7	2
L87 Prineville Reservoir	48	6	2
L98 Wickiup Reservoir	46	6	2
L90 Elk Lake	45	6	2
L100 East Lake	41	5	2
L96 Crane Prairie Reservoir	36	5	2
L99 Paulina Lake	29	4	1
L94 Cultus Lake	25	3	1
Devils Lake (Deschutes)	18	2	1
L95 Little Cultus Lake	17	2	1
South Twin Lake (Deschutes)	17	2	1
L93 Little Lava Lake	14	2	1
L92 Lava Lake	11	2	0
L81 Olallie Lake	9	1	0
L82 Lake Simtustis	8	1	0
L96 North Twin Lake	8	1	0
L86 Ochoco Reservoir	6	1	0
Three Creeks Lake	6	1	0
L88 Antelope Flat Reservoir	4	1	0
Walton Lake	4	0	0
L84 Haystack Reservoir	3	0	0
Lakes total	747	100	32
Region total	2,360		100

Table 38. Non-Motorized Boater User Days Across Water Bodies, Weighted, Region 9

	Site days	% of category	% of region
Rivers			
R92 Klamath River (Boyle Dam to CA state line)	167	84	42
R94 Williamson River	13	7	3
Other	6	3	2
Wood River	3	2	1
Spring Creek	3	1	1
Sprague River	3	1	1
R93 Klamath River (Klamath River Falls to Boyle Dam)	2	1	1
Rivers total	197	100	49
Lakes			
L103 Crescent Lake	48	24	12
L110 Lake of the Woods	38	19	9
L109 Upper Klamath Lake	24	12	6
L101 Odell Lake	18	9	5
L126 Vee Lake	11	6	3
L102 Davis Lake	11	6	3
L120 Lofton Reservoir	8	4	2
L121 Cottonwood Meadow Lake	8	4	2
L104 Miller Lake	6	3	2
L122 Willow Valley Reservoir	5	3	1
L116 Campbell Lake	5	3	1
L107 Fourmile Lake	5	3	1
L108 Agency Lake	4	2	1
L118 Holbrook Reservoir	3	1	1
L115 Deadhorse Lake	2	1	0
L111 Lake Ewauna	1	1	0
L114 Thompson Reservoir	1	1	0
L119 Heart Lake	1	0	0
L105 Duncan Reservoir	1	0	0
L112 J.C. Boyle Reservoir	1	0	0
L106 Ana Reservoir	1	0	0
L124 Drews Reservoir	0	0	0
L123 Dog Lake	0	0	0
Other	0	0	0
L128 Hart Lake	0	0	0
Lakes total	204	100	51
Region total	401		100

Table 39. Non-Motorized Boater User Days Across Water Bodies, Weighted, Region 10

	Site days	% of category	% of region
Rivers			
R110 Grande Ronde River (Confluence with the Wallowa River to	290	40	32
WA state line, near Troy)			
R116 Snake River (Baker Co Line, near Copper Cr, to WA state line)	148	20	17
R114 Wallowa River (Minam to confluence with the Grande Ronde	99	14	11
River)			
R113 Wallowa River (Wallowa Lake to Minam)	49	7	6
R100 John Day River (Source to Service Cr.)	37	5	4
R115 Imnaha River	26	4	3
R103 North Fork John Day River	25	3	3
R108 Grande Ronde River (Red Bridge State Park to Hilgard	20	3	2
Junction State Park)			
R104 Middle Fork John Day River	13	2	1
R107 Grande Ronde River (Confluence with East Fork Grande Ronde	9	1	1
to Red Bridge State Park)			
R109 Grande Ronde River (Hilgard Junction State Park to conflu-	9	1	1
ence with the Wallowa River)			
R111 Minam River	2	0	0
Other	0	0	0
R112 Lostine River	0	0	0
Rivers total	728	100	81
Lakes			
L134 Wallowa Lake	40	23	4
L132 Jubilee Reservoir	29	17	3
L133 Morgan Lake	26	15	3
L144 Olive Lake	24	14	3
L143 Anthony Lake	17	10	2
L145 Phillips Lake	10	6	1
L139 Hells Canyon Reservoir	5	3	1
L142 Grande Ronde Lake	5	3	1
L141 Oxbow Reservoir	5	3	1
L148 Magone Lake	3	2	0
L146 Brownlee Reservoir	2	1	0
L135 Pilcher Creek Reservoir	1	1	0
L136 Wolf Creek Reservoir	1	0	0
Other	0	0	0
L138 Fish Lake	0	0	0
Lakes total	170	100	19
Region total	898		100

Table 40. Non-Motorized Boater User Days Across Water Bodies, Weighted, Region 11

	Site days	% of category	% of region
Rivers			
R122 Owhyee River (Lake Owyhee to Rome, near Hwy 95)	48	96	50
R121 Owhyee River (Owyhee Dam to Snake River)	1	2	1
R123 Owhyee River (Rome, near Hwy 95, to state line)	1	2	1
R120 Snake River (Owyhee River to State Line)	0	1	1
Rivers total	50	100	52
Lakes			
L151 Bully Creek Reservoir	32	68	33
Fish Lake (Harney County)	6	13	6
L160 Mann Lake	6	12	6
L158 Krumbo Reservoir	1	2	1
L154 Chickahominy Reservoir	1	2	1
L153 Delintment Lake	1	1	1
L157 Lake Owyhee	0	1	1
Lakes total	46	100	48
Region total	97		100

Table 41 presents summary results by region and type of water body, while Table 42 presents results by region across all types of water bodies. Table 43 presents the "Top 5" rivers and lakes in terms of site days within the probability sample. Note that a given river (or river stretch) may occur in more than one region; site days reflect only the region with the greatest number of days for that water body.

Table 41. Non-Motorized Boater User Days Across Regions And Water Body Categories, Weighted

Water body category + region	Site days	% of category	% of statewide total
Rivers			
Region 1	1,285	9	6
Region 2	3,488	23	17
Region 3	1,848	12	9
Region 4	1,156	8	6
Region 5	1,648	11	8
Region 6	1,621	11	8
Region 7	1,315	9	7
Region 8	1,612	11	8
Region 9	197	1	1
Region 10	728	5	4
Region 11	50	0	0
Rivers total	14,949	100	75
Lakes			

Table 41. (Continued)

Water body category + region	Site days	% of category	% of statewide total
Region 1	244	6	1
Region 2	849	19	4
Region 3	598	14	3
Region 4	568	13	3
Region 5	359	8	2
Region 6	485	11	2
Region 7	138	3	1
Region 8	747	17	4
Region 9	204	5	1
Region 10	170	4	1
Region 11	46	1	0
Lakes total	4,409	100	22
Bays			
Region 1	364	57	2
Region 5	275	43	1
Bays total	639	100	3
Statewide, all water bodies	19,997		100

Table 42. Non-Motorized Boater User Days Across Regions, Weighted

	Site days	% of statewide total
Region 1	1,892	9
Region 2	4,337	22
Region 3	2,447	12
Region 4	1,724	9
Region 5	2,283	11
Region 6	2,106	11
Region 7	1,452	7
Region 8	2,360	12
Region 9	401	2
Region 10	898	4
Region 11	97	0
Statewide, all water bodies	19,997	100

Table 43. Top 5 Rivers And Lakes By Site Days, Weighted

Region	Waterbody	Site days
	Rivers	
2	R128 Columbia River (Saint Helens to Troutdale)	918
8	R95 Deschutes River (Upper, source to Pelton Dam)	912
2	R124 Willamette River (Columbia River to Canby)	858
7	R96 Deschutes River (Pelton Dam to Columbia River)	809
5	R42 Rogue River (Grave Creek confluence to Illinois River Confluence)	669
	Lakes	
4	L50 Fern Ridge Reservoir	214
2	L27 Henry Hagg Lake	214
2	L32 Trillium Lake	210
2	L34 Timothy Lake	171
3	L36 Silverton Reservoir	139

SCENIC WATERWAYS

Respondents were asked whether they support the Scenic Waterway Program, with results shown in Figure 91. When interpreting these results, readers should keep in mind that land designated can have complex effects across multiple stakeholders, and that this survey was of boaters, not of adjacent landowners nor the general public. One would expect boaters to have positive perspectives regarding this type of designation.

Figure 92 shows support by region, on a scale of 1=Strongly oppose to 5=Strongly support. The highest level of support is in the Willamette Valley while the lowest level of support is in southern Oregon.

Figure 91. Support For Scenic Waterway Program

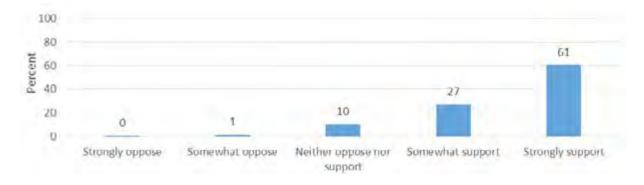


Figure 92. Support For Scenic Waterway Program By Region

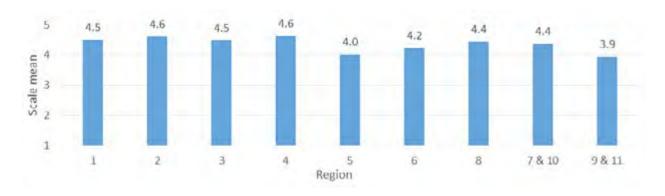


Figure 93 shows respondent importance of various qualities when evaluating potential additions to the Scenic Waterway Program, in percent of respondents who selected 4 or 5 on a scale of 1=Not important to 5=Very important. Scenery and environmental values (including fish and wildlife habitat) were most important.

Figure 93. Scenic Waterway Qualities, Percent Rating Somewhat Or Very Important

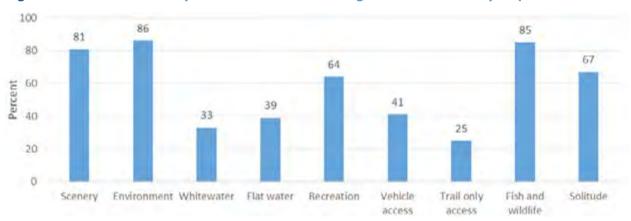
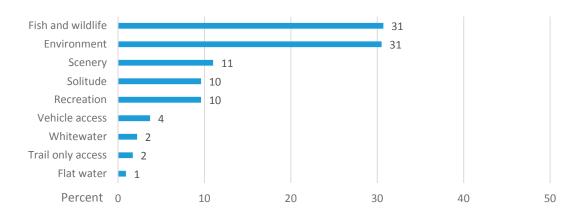


Figure 94 shows respondent selection of the single most important quality for consideration when adding waterways to the program. Environmental qualities clearly dominate.

Figure 94. Scenic Waterway Single Most Important Quality



Respondents were then asked to recommend additional rivers for inclusion in the Scenic Waterway Program.

In the online questionnaire, recommended additions were identified using drop-down menus to select the highest, second highest, and third highest priority additions for each region. The list included separate segments for longer rivers. Rivers that already are scenic waterways were excluded.

Table 44 includes the number of times a river segment was identified as either a first, second, or third priority addition in the online questionnaire (priority = 1, 2, or 3). The overall points score was calculated based on three points for each time the river was identified as a first priority addition, two points for a second priority, and one point for a third priority. Some rivers cross regional boundaries and were recommended in more than one region in the online questionnaire. In such cases, the highest region-level score was used for that river segment.

Table 44. Recommended Scenic Waterway Additions by Priority and Total Points, Unweighted, Top 20

	Regions	1	2	3	Points
R98 Crooked River	8	109			327
R70 McKenzie River	4	68	14	11	243
R66 North Santiam River	3	40	17	9	163
R89 Rogue River (Lost Creek Lake to Grave Creek)	6	34	21	10	154
R94 Williamson River	9	24	32		136
R93 Klamath River (Klamath River Falls to Boyle Dam)	9	35	15		135
R100 John Day River (Source to Service Cr.)	10	32	13	11	133
R80 Middle Fork Willamette River	4	13	30	13	112
R60 White River	2,7	31	6	4	109
R27 Umpqua River (From confluence of North and South Forks to	5,6	24	9	12	102
the Pacific Ocean)					
R44 Illinois River (Illinois River Forks State Park to Deer Creek)	6	15	18	12	93
R58 Sandy River (Source to confluence with Bull Run River)	2	19	13	10	93
R5 Nehalem River	1,2	20	13	6	92
R115 Imnaha River	10	17	11	13	86
R49 Tualatin River	2	21	9	5	86
R121 Owhyee River (Owyhee Dam to Snake River)	11	20	7	7	81
R126 Willamette River (Sam Daws Bend, near Peoria, to Mid Fork	3,4	17	3	21	78
Junction)					
R124 Willamette River (Columbia River to Canby)	2	17	7	12	77
R69 Middle Santiam River	3	17	9	6	75
R101 Warm Springs River	7	11	17	6	73
R125 Willamette River (Canby to Sam Daws Bend, near Peoria)	2,3	8	19	11	73
R68 South Santiam River	3	4	21	19	73
R102 Umatilla River	7	11	8	16	65
R113 Wallowa River (Wallowa Lake to Minam)	10	9	14	10	65
R134 North Fork Owyhee River	11	8	14	13	65

WATER TRAILS

In the online questionnaire, respondents reported the information they would like a "water trail" smart app to provide if it were created for water bodies in Oregon. Figure 95 shows the percent giving a rating of 4 or 5 on a scale of 1 = "Not important" to 5 = "Very important".

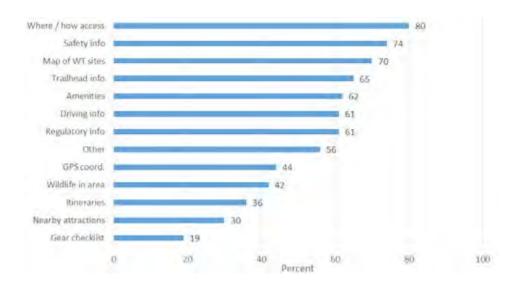
Complete wording for the items is as follows:

- Where/ how to access the water body
- Safety/ information/ water body obstructions
- Map of water trail sites
- Trailhead information
- List of amenities that are available at launch site

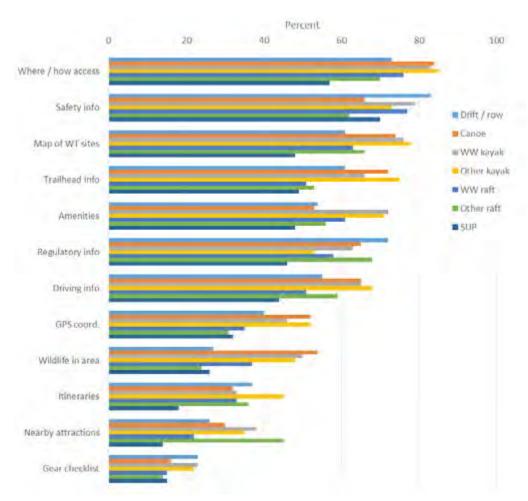
- · Driving directions
- Regulatory information (e.g., fishing and hunting regulations)
- Other
- GPS coordinates
- Common wildlife in area
- Suggested itineraries
- Nearby attractions
- Gear checklist

Location and safety information were rated as the most important. Items noted in the Other category included water levels, difficulty ratings (e.g., whitewater class), level of use/ crowding in area, nearby camping/ lodging, and user ratings/ feedback. Figure 96 shows results by boat type used most often.

Figure 95. Information Needs For Water Trail App, Percent Rating Somewhat Or Very Important







As for scenic waterways, respondents were asked to recommend additional water bodies for inclusion in the water trails program. In the online questionnaire, recommended additions were identified using drop-down menus to select the highest, second highest, and third highest priority additions for each region. The list included separate segments for longer rivers.

Table 45 includes the number of times a water body was identified as either a first, second, or third priority addition in the online questionnaire. The overall points score was calculated based on three points for each time the water body was identified as a first priority addition, two points for a second priority, and one point for a third priority. Some rivers cross regional boundaries and were recommended in more than one region in the online questionnaire. In such cases, the highest region-level score was used for that river segment.

Table 45. Recommended Water Trail Additions by Priority and Total Points, Unweighted, Top 20

	Regions	1	2	3	Points
R70 McKenzie River	4	19	8	0	73
R97 Metolius River	8	19	3	3	66
R49 Tualatin River	2	15	3	5	56
R103 North Fork John Day River	7,10	14	4	4	54
R98 Crooked River	8	9	12	3	54
R84 North Umpqua River	6	10	5	4	44
R81 North Fork Middle Fork Willamette River	4	8	6	3	39
R27 Umpqua River (From confluence of North and South Forks to	5,6	9	4	3	38
the Pacific Ocean)					
R66 North Santiam River	3	5	10	2	37
L109 Upper Klamath Lake	9	10	1	2	34
R110 Grande Ronde River (Confluence with the Wallowa River to	10	9	2	3	34
WA state line, near Troy)					
L58 Waldo Lake	4	8	2	4	32
R100 John Day River (Source to Service Cr.)	10	8	4	0	32
R63 Yamhill River	3	8	3	0	30
R50 Clackamas River (River Mill Dam to Willamette River	2	7	2	4	29
confluence)					
R109 Grande Ronde River (Hilgard Junction State Park to conflu-	10	4	7	2	28
ence with the Wallowa River)					
R94 Williamson River	9	5	5	3	28
B10 Coos Bay	5	6	3	2	26
L91 Hosmer Lake	8	4	5	4	26
R43 Illinois River (Deer Cr to Agness near confluence w/ Rogue R)	5,6	3	8	0	25

EXPERIENCES, PREFERENCES, AND PRIORITIES

Waiting Time

Respondents were asked how long they have to wait at launch areas for others to launch or take out. Figure 97 suggests that waiting is not a major issue. Figure 98 shows results by region, using averages on a scale of 1 = "Do not have to wait at all" to 6 = "More than 20 minutes." Even in the "highest" regions, average reported waiting time is only "1 to 5 minutes."

Figure 97. Waiting Time

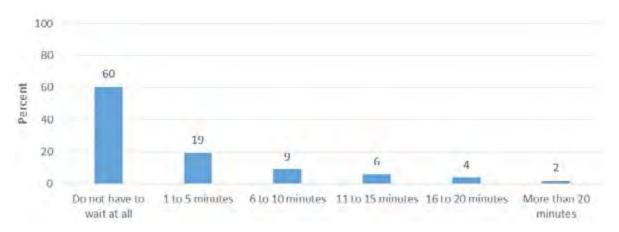
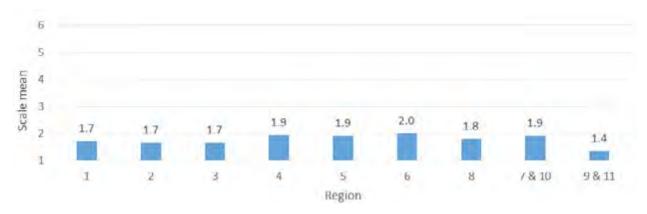


Figure 98. Waiting Time By Region



Boat Camping

With respect to non-motorized boat camping, 22% of respondents indicated they camp less often than they would like to on Oregon water bodies. Figure 99 shows the frequency of concerns that constrain camping from boats. "Campground" is abbreviated as "CG." Write-in responses in the "Other" category include cost, crowds, kayaks too small for overnight gear, and lack of available permits, launch sites, and/ or camp sites.

Vehicle safety Lack of primitive CGs Not enough information Lack of first-come-first-serve Lack of developed CGs Lack of shuttle service Other CGs too close together No advance reservation Not enough group CGs CGs too far apart Facilities too rustic Risk of bad weather Personal safety 25 50 100 125 150 175 Number of mentions

Figure 99. Concerns Limiting Boat Camping

Activity Importance

Respondents indicated the importance of various activities to their enjoyment of non-motorized boating, with Figure 100 showing percent giving a rating of 4 or 5 on a scale of 1 = "Not important" to 5 = "Very important." Fishing, viewing nature, and camping were the most important, while whitewater close-to-town was the least important. The high percentages across diverse activities may reflect a general "enthusiasm" for indicating importance.

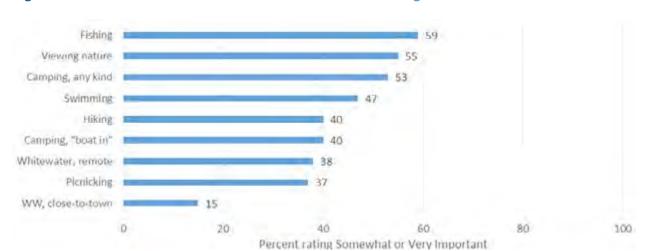
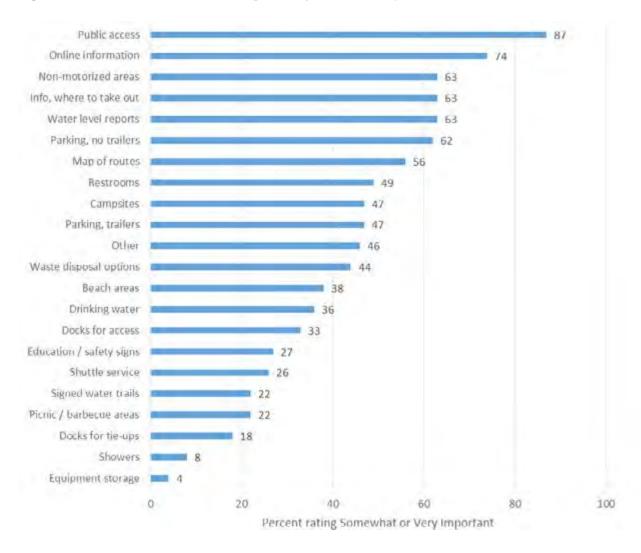


Figure 100. Activities In Addition To Non-Motorized Boating

Facility/ Service Importance

Figure 101 shows importance ratings for facilities and services, in percent giving a rating of a 4 or 5 on a scale of 1 = "Not important" to 5 = "Very important." Access is clearly the most important followed by online information.

Figure 101. Non-Motorized Boating Facility/ Service Importance



Support for Management Actions

Figure 102 shows support for various management actions, on a scale from 1 = "Strongly oppose" to 5 = "Strongly support," with 3 = "Neutral." The strongest support was for restricting development along the shoreline, while the least support was for prohibiting wood fires at campsites. Open-ended comments suggest that the concern about shoreline development may reflect the effect on water access.

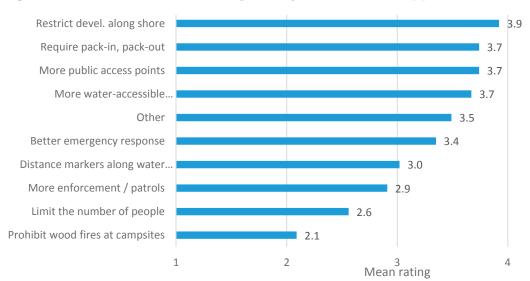


Figure 102. Non-Motorized Boating Management Action Support

Issue Importance

Figure 103 shows importance ratings for non-motorized boating issues, in percent giving a rating of 4 or 5 on a scale of 1 = "Not important" to 5 = "Very important." Car safety (e.g., from car clouts) and access were the most important issues.

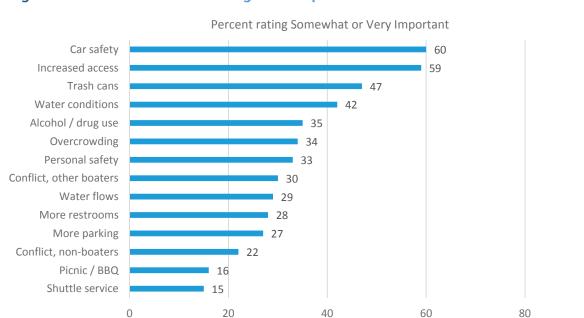


Figure 103. Non-Motorized Boating Issue Importance

100

Support For Annual Fee For Boating Enhancement

Respondents were asked whether they would support a fee that would fund land acquisition and other enhancements to non-motorized boating. In the online questionnaire, the question included one of the following fee amounts: \$10, \$15, or \$20. In the paper questionnaire, the question included either \$10 or \$20 as the fee amount. Question wording was as follows:

Would you oppose or support an annual fee of \$10 [amount varied] that would be required for all non-motorized boats (regardless of length) and would be transferable across boats?

The fee would include the current Aquatic Invasive Species permit, with \$5 of the total fee used to fund the invasive species program. The remaining amount would fund land acquisition for boater access, expanded parking and restrooms, camping facilities along paddling routes, and safety and educational material.

Figure 104 shows results for the probability sample. The majority of boaters were supportive or neutral, but there was a substantial level of opposition. As expected, the level of "strong" support decreased with higher fees. The level of "strong" opposition increased at the highest fee level.

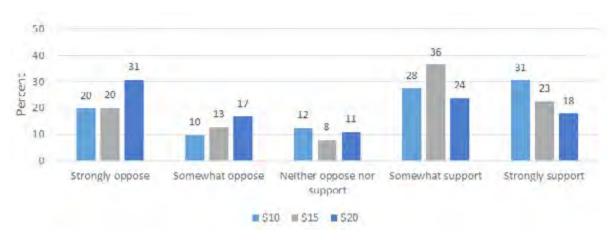


Figure 104. Support For Annual Non-Motorized Boater Fee

Open-Ended Comments Summary

Respondents were asked to write suggestions for improving non-motorized boating opportunities in Oregon. A categorical analysis of responses identified these most common comment themes:

- Desire for more access to boating opportunities including more access, more put-ins, increased parking, or improving existing ramps.
- Conflicts with motorized boaters along with calls for more speed limits, no wake areas, or areas exclusively for non-motorized use.
- Desire for additional information from managers including calls for more maps, information on boating areas, conditions or regulations, and such information to be made available online.
- Complaints about fees, including that fees are too high or too complicated, or that fees should be used differently or administered in a different way.

EXPENDITURE AND ECONOMIC CONTRIBUTION

This section presents a summary of boater expenditure, based on the "typical trips" described earlier. Note that this expenditure is only associated with travel, not with equipment purchase. The expenditure and economic contribution reflects boating activity by both local (to the boating location) and non-local Oregon residents. Expenditures categories use in this analysis included:

- Hotel, motel, condo, cabin, B&B, or other lodging except camping
- Camping (RV, tent, etc.)
- Restaurants, bars, pubs
- Groceries
- · Gas and oil
- Other transportation

In the analysis, survey spending question responses are used to calculate per person boater expenditures for day and for multi-day trips for each region. Regional boater user occasions were extrapolated from SCORP estimates and used with trip expenditure data to calculate annual expenditures by destination region. The expenditure of non-motorized boaters by region was "run" through the IMPLAN

input-output model to estimate the "multiplier effects" of money flowing through the local economy. Please see the full survey report for a thorough methods description.

Table 46 shows the results of the multiplier analysis, by region. The columns are as follows:

- Employment, full-time or part-time jobs.
- Labor income, which includes employee compensation (including wages, salaries, and benefits) and proprietary income (including self-employment income).
- Value added, which includes labor income, rents, profits, and indirect business taxes.
- Output, which is the dollar value of goods and services sold.

Statewide, non-motorized boating by Oregon residents contributes 1,084 jobs, \$34 million in labor income, and \$54 million in value added.

Non-residents who engage in non-motorized boating in Oregon contribute additional amounts to regional economies. The magnitude of this additional contribution is unknown, but can be estimated from external data sources. The US Forest Service National Visitor Use Monitoring (NVUM) program provides one reference point for estimating the balance of Oregon resident versus non-resident boating

Table 46. Multiplier Effects Of Non-Motorized Boater Trip Expenditure, By Region; Employment In Jobs, Other Measures In Dollars

Region	Employment	Labor Income	Value Added	Output
1	144	4,017,900	6,690,500	10,319,800
2	264	9,807,100	15,241,200	23,147,500
3	61	1,759,100	2,864,400	4,429,600
4	94	2,880,200	4,701,700	7,106,300
5	32	834,000	1,383,100	2,221,100
6	114	3,284,100	5,413,900	8,593,300
8	252	7,805,500	12,824,100	20,391,400
7 & 10	91	2,301,800	3,820,800	6,352,700
9 & 11	34	822,100	1,395,400	2,237,800
Total	1,084	33,511,900	54,335,300	84,799,500

Table 47. Multiplier Effects of Non-Motorized Boater Trip Expenditure, Out-of-State Boaters Included; Employment in Jobs, Other Measures in Dollars

Origin	Employment	Labor Income	Value Added	Output
In-state	1,084	33,511,900	54,335,300	84,799,500
Out-of-state	174	5,361,900	8,693,600	13,567,900
Combined	1,258	38,873,800	63,028,900	98,367,400

activity in Oregon. Across all national forest units in Oregon, there are an estimated 137,425 non-motorized water visits annually. Of these, 83% are visits by Oregon residents and 17% by non-residents. If this pattern is the same for non-motorized boating outside national forests, the statewide contribution of non-resident boaters would be an additional 20% of the estimates provided here (16.9% / 83.1%). Recent analysis in Washington state indicates that their ration of out-of-state versus in-state expenditure is 16%.21 This suggests that out-of-state spending in Oregon adds another 16% to 20% to the figures shown in Table 19. Table 47 shows the statewide total for in-state boaters from Table 46, together with estimated contribution from out-of-state boaters, using the 16% reference point.

When out-of-state visitors are included, the estimated amounts increase to 1,258 jobs, \$39 million in labor income, and \$63 million in value added.

CONCLUSIONS AND IMPLICATIONS

The 2011 Oregon SCORP survey and the National Survey on Recreation and the Environment show that non-motorized boating is growing in Oregon and nationally. There are now more non-motorized boating participants in the state than motorized boating participants.

Relative to all Oregonians, non-motorized boaters tend to be younger and have higher incomes.

21 Briceno, T. and G. Schundler. 2015. Economic Analysis of Outdoor Recreation in Washington State. Earth Economics, Tacoma, WA. Available at: http://www.rco.wa.gov/documents/ORTF/EconomicAnalysisOutdoorRec.pdf

Non-motorized boaters spend equal amounts of time paddling in whitewater parts of rivers and streams, flatwater parts of rivers and streams, and on lakes, reservoirs and ponds. Most boat in travel parties of two people, involving one or two boats, with non-whitewater kayaks being the most commonly used watercraft.

Survey results show that increased public access for non-motorized boating is the top facility/service funding priority. These findings can reinforce local efforts to plan and develop non-motorized access sites in their jurisdictions. Access refers to a specific location where the public has the legal right and physical means to get to the water to launch a non-motorized boat. Non-motorized boating access may be unimproved or enhanced to varying degrees. Formal non-motorized boater access areas may be paved launch ramps, parking areas with dirt trails, or roadside-to-the-waterway trails.

The survey also identified a strong funding need for online boating information. Providing online non-motorized boating maps and information will also address the need for increased access for non-motorized boating by informing boaters about existing paddling opportunities in the state. Survey results also identify if water trail smart apps were provided, they should include where/how to access the waterbody, safety information/ waterbody obstructions, a map of water trail sites, trailhead information, list of amenities that are available at the launch site, driving directions, and regulatory information. Recreation providers should also consider developing geospatial PDF maps of water trail routes to allow on-the-water wayfinding. Such maps can be uploaded onto mobile devices (smartphone

or tablet) and then, using an app, use built-in GPS to track the users location on the map.

Twenty-two percent of survey respondents indicated that they camp less often than they would like to on Oregon water bodies. Lack of primitive campgrounds, lack of first-come first-serve boat camping, and lack of developed campgrounds were top concerns limiting boat camping. Vehicle safety and not enough information about camping opportunities were also identified as top concerns limiting camping. Land managers should continue to develop non-motorized boater camping facilities to meet public boating needs.

Vehicle safety at non-motorized boating parking lots was identified by non-motorized boaters as the top boater issue. As a result, recreation providers should consider improving parking security at waterway put-in and take-out locations. Strategies to consider include upgrading parking lots and access facilities so that other land-based and water-based recreationists are using the parking lot and facilities reducing opportunities for vandals to break into parked cars. More frequent ranger patrols also reduce break-ins. Placing signs at parking areas to identify who to call in the event of a break-in can also be considered.

Although the demand is increasing for non-motorized boating access and facilities, a funding mechanism is lacking to address this need on a statewide basis. The Oregon State Marine Board is funded primarily by marine fuel tax and title and registration fees for motorized boaters. Survey results suggest support among non-motorized boaters for a \$10 or \$15 fee (with \$5 of this amount for the invasive species program). The Marine Board should work with non-motorized boaters to identify a fee to support non-motorized boater services, including access to waterways.

The survey identified non-motorized boater participation (site days) by water body (river stretch, lake, or bay) in each of the 11 planning regions.

OPRD should consider providing grant emphasis for non-motorized boater projects that are on the list

and have the highest concentration of non-motorized boater participation for land acquisition, facility development, and water trail projects for OPRD administered grant programs (LWCF, LGGP, and RTP programs).

The survey was also used to assist in identifying top potential additions to the Scenic Waterway program and water trail additions in the state. Regional public workshop voting and advisory committee review were used to finalize top potential additions. OPRD should encourage water trail development on these waterways during the 10-year planning horizon.

Finally, this report identifies expenditure and economic contributions associated with non-motorized boating in Oregon. Statewide, non-motorized boating by Oregon residents generated \$114 million in expenditure across the state. In turn, this expenditure contributed 1,084 jobs, \$54 million in value added, and \$34 million in labor income. When out-of-state visitors are included, the estimated amounts increased to 1,258 jobs, \$63 million in value added, and \$39 million in labor income. This information should be used to educate Oregonians about the economic benefits received from their investment in non-motorized boating facilities in the state.



► CHAPTER 6

Needs Assessment



INTRODUCTION

The 2016-2025 trails planning effort included a region-level analysis to identify priority projects for OHV, snowmobile, non-motorized, and water trails. The following is a description of needs assessment methods and lists of identified statewide and regional funding priority need.

NEEDS ASSESSMENT METHODS

OHV Needs Assessment Methods

The OHV planning effort included four distinct methods to identify OHV trail need at the state and region levels. The first method involved an online survey (Survey Monkey website) of Oregon OHV area managers conducted in March-April, 2014. Of the 54 providers contacted, 33 completed the survey for a 61% response rate. Respondents were asked to rate the importance of region-level OHV funding need.

The second method was a component of the statewide survey of OHV trail users (Oregon Offhighway Vehicle Participation and Priorities) conducted by Oregon State University (OSU). Resident OHV participants were asked to rate the importance of 20 priorities by answering the following question. "Trail managers have limited resources to provide for all types of OHV trail experiences. How important is each of the following for you at the area you wrote in above (rode the most)?" Specific items were rated using a 5-point Likert scale (1=Not important to 5=Very important).

Next, a series of regional public meeting workshops were held at 14 locations across the state in October 2014. Each workshop included an afternoon session open to all public recreation providers and an evening session open to the general public. Following a presentation describing the trails planning process, workshop attendees were given three colored dots to prioritize the importance of OHV funding need in the region.

Finally, the OHV trails planning advisory committee members were given an opportunity to prioritize the importance of statewide OHV trail funding need during the July 29, 2015 committee meeting.

Snowmobile Needs Assessment Methods

The snowmobile planning effort included four distinct methods to identify snowmobile trail need at the state and region levels. The first method involved an online survey (Survey Monkey website) of Oregon snowmobile area managers conducted in June 2014. Of the 100 providers contacted, 52 completed the survey for a 52% response rate. Respondents were asked to rate the importance of region-level snowmobile funding need.

The second method was a component of the state-wide survey of snowmobilers (Oregon Snowmobiler Participation and Priorities) conducted by OSU. Resident snowmobilers were asked to rate the importance of 16 priorities by answering the following question. "How important is it for trail managers to allocate funding for each of the following actions at the area you wrote in Question 3 above (rode in the most)?" Specific items were rated using a 5-point Likert scale (1=Not important to 5=Very important).

Next, as with other trail category types, workshop attendees were given three colored dots to prioritize the importance of snowmobile funding need in the region.

Finally, the snowmobile trails planning advisory committee members were given an opportunity to prioritize the importance of statewide trail funding need during the June 29, 2015 committee meeting.

Non-Motorized Trail Needs Assessment Methods

The non-motorized trails planning effort included four distinct methods to identify non-motorized trail need at the state and region levels. The first method involved an online survey (Survey Monkey website) of Oregon non-motorized trail providers conducted in July to August, 2014. Of the 558 providers contacted, 232 completed the survey for a 42% response rate. Respondents were asked to rate the importance of region-level non-motorized trail funding need both within Urban Growth Boundaries (UGBs) and in dispersed settings.

The second method was a component of the state-wide survey of non-motorized trail users (Oregon Non-motorized Trail Participation and Priorities) conducted by OSU. Resident non-motorized trail users were asked to rate the importance of 22 priorities by answering the following question. "Please share your priorities for trails in Oregon over the next 10 years, keeping in mind limited funding and land." Specific items were rated using a 5-point Likert scale (1=Not important to 5=Very important).

Next, at regional trails workshops, attendees were given three colored dots to prioritize the importance of non-motorized trail funding need within UGBs and in dispersed settings.

Finally, the non-motorized trails planning advisory committee members were given an opportunity to prioritize the importance of non-motorized trail funding need both within UGBs and in dispersed settings during the May 11, 2015 committee meeting.

At the statewide level, top non-motorized trail funding need within Urban Growth Boundaries is for connecting trails into larger trail systems, routine upkeep of the trails themselves, and more signs along trails/ wayfinding. In dispersed settings, top funding need is for routine upkeep of the trails themselves, connecting trails into larger trail systems, and more trail maps/ trail information/ wayfinding. The RTP grant program does not fund routine trail maintenance projects. As a result, funding priority for routine maintenance will be replaced repair of major trail damage in the RTP evaluation criteria.

Water Trail Needs Assessment Methods

The water trails planning effort included four distinct methods to identify non-motorized boating need at the state and region levels. The first method involved an online survey (Survey Monkey website) of Oregon non-motorized boating facility managers conducted in July 2014. Of the 330 providers contacted, 215 completed the survey for a 65% response rate. Respondents were asked to rate the importance of region-level non-motorized boating funding need and to nominate water bodies (rivers, lakes, or bays) they would like to nominate for water trail development.

The second method was a component of the state-wide survey of non-motorized boaters (Oregon Non-motorized Boater Participation and Priorities) conducted by OSU. Resident non-motorized boaters were asked to rate the importance of 22 priorities by answering the following question. "How important are the following facilities and services to the enjoyment of your non-motorized boating trips in Oregon?" Specific items were rated using a 5-point Likert scale (1=Not important to 5=Very important). Respondents were also asked to nominate water bodies for water trail development.

Next, at regional trails workshops, attendees were given three colored dots to prioritize the importance of non-motorized boating funding needs.

Finally, the water trails planning advisory committee members were given an opportunity to prioritize the importance of non-motorized boating funding need during the March 27, 2015 committee meeting.

The plan also included three distinct methods to nominate water trail additions and identify a list of potential State Scenic Waterway study areas for the plan's ten-year planning horizon. The State Scenic Waterway nomination process and final list of potential study areas is included in Chapter Nine. The following is a description of the methods used and final list of top water trail additions identified.

First, Oregon non-motorized boating facility managers were asked in the online survey to nominate top waterways for water trail development. Recommended waterways were identified by respondents using drop-down menus to select the highest, second highest, and third highest priority additions for each region. The overall point score for each nominated waterway was calculated based on three points for each time the waterway was identified as a first priority addition, two points for a second priority, and one point for a third priority.

The second method was a component of the statewide survey of non-motorized boaters. In the same manner as the survey of Oregon boating facility managers, respondents were asked to nominate top waterways for water trail development.

Figure 105 and Table 48 include the list of the 33 waterways identified for water trail development from this process. OPRD would like to encourage water trail development projects on these waterways and potential Scenic Waterway additions (Table 49) during the 10-year planning horizon. In many cases, nominated water trails were also identified as potential Scenic Waterway additions.

Figure 105. Map Of Top Nominated Water Trail Additions

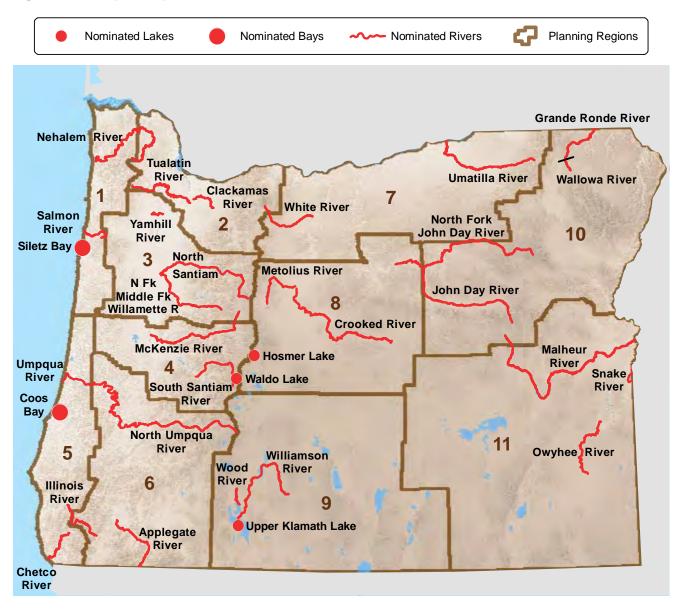


Table 48. List Of Top Nominated Water Trail Additions

Region 1

Salmon River

R5 Nehalem River

B6 Siletz Bay

Region 2

R49 Tualatin River

R50 Clackamas River (River Mill Dam to Willamette River confluence)

R5 Nehalem River

Region 3

R63 Yamhill River

R66 North Santiam River

R68 South Santiam River

Region 4

R70 McKenzie River

L58 Waldo Lake

R81 North Middle Fork Willamette River

Region 5

R45 & R46 Chetco River (From Boulder Creek to mouth at Pacific Ocean)

B10 Coos Bay

R27 Umpqua River (Mainstem from confluence of N & S Forks to mouth at Pacific Ocean)

Region 6

R84 North Umpqua River

R27 Umpqua River (From confluence of N & S Forks to mouth at Pacific Ocean)

R43 Illinois River (Deer Creek to Agness near confluence with Rogue River)

Region 7

R102 Umatilla River

R103 North Fork John Day River

R60 White River

Region 8

R98 Crooked River

R97 Metolius River

L91 Hosmer Lake

Region 9

R94 Williamson River

Wood River

L109 Upper Klamath Lake

Region 10

R110 Grande Ronde River (Confluence with the Wallowa River to WA state line, near Troy)

R114 Wallowa River (Minam to confluence with the Grande Ronde River)

R100 John Day River (Source to Service Creek)

Region 11

R120 Snake River (Owyhee Dam to state line)

R122 Owyhee River (Lake Owyhee to Rome, near Hwy 95)

R118 Lake Owhyee

IDENTIFIED NEED

The following is a summary of trail needs identified through this planning process related to the ATV and RTP grant programs.

OHV Funding Priorities

Statewide Need

OHV funding priorities

Maintaining existing trails in good/sustainable condition More single-track off-road motorcycle trails (Class III) Prioritize loop over out and back trails

Regional Need

Trails Planning Region 1

(Clatsop, Tillamook, and Lincoln Counties)

OHV funding priorities

More single-track off-road motorcycle trails (Class III)

Maintaining existing trails in good/sustainable condition

Reduce natural resource damage near trails

Trails Planning Region 2 (Columbia, Washington, Clackamas, Multnomah, and Hood River Counties)

OHV funding priorities

Maintaining existing trails in good/sustainable condition

More single-track off-road motorcycle trails (Class III)

Trail maps/information

Trails Planning Region 3 (Yamhill, Polk, Benton, Marion, and Linn Counties)

OHV funding priorities

Maintaining existing trails in good/sustainable condition

Trail maps/information

Reduce natural resource damage near trails

Trails Planning Region 4 (Non-coastal Lane County)

OHV funding priorities

Maintaining existing trails in good/sustainable condition

More single-track off-road motorcycle trails (Class III)

More trails for quads (Class I)

Trails Planning Region 5 (Coastal Lane, Coastal Douglas, Coos, and Curry Counties)

OHV funding priorities

More single-track off-road motorcycle trails (Class III)

More trails for quads(Class I)

More trails for 4x4s (Class II)

Trails Planning Region 6 (Non-Coastal Douglas, Josephine, and Jackson Counties)

OHV funding priorities

More trails for 4x4s (Class II)

More enforcement of existing rules/regulations

in trail areas

Maintaining existing trails in good/sustainable condition

Trails Planning Region 7 (Wasco, Sherman, Gilliam, Morrow, and Umatilla Counties)

OHV funding priorities

Maintaining existing trails in good/sustainable condition

Reduce natural resource damage near trails

Trail maps/information

Trails Planning Region 8 (Jefferson, Deschutes, Crook, and Wheeler Counties)

OHV funding priorities

More single-track off-road motorcycle trails (Class III)

Prioritize long-distance trails (over 100 miles)

More cross-country travel areas

Trails Planning Region 9 (Klamath and Lake Counties)

OHV funding priorities

More cross-country travel areas

More trails for quads (Class I)

More trails for 4x4s (Class II)

Trails Planning Region 10 (Grant, Baker, Union, and Wallowa Counties)

OHV funding priorities

More cross-country travel areas

Maintaining existing trails in good/sustainable condition

Trail maps/information

Trails Planning Region 11 (Harney and Malheur Counties)

OHV funding priorities

More trails for quads (Class I)

More single-track off-road motorcycle trails (Class III)

More cross-country travel areas

Snowmobile Funding Priorities

Statewide Need

Snowmobile funding priorities

Expand existing trail system

More trail grooming/trail rehabilitation

More back-country off-trail riding

Regional Need

Snowmobile Trails Planning Region 1 (Clatsop, Tillamook, and Lincoln Counties)

Snowmobile trail funding priorities

No snowmobile trails in region

Snowmobile Trails Planning Region 2 (Columbia, Washington, Clackamas, Multnomah, and Hood River Counties)

Snowmobile trail funding priorities

Expand existing trail system

More trail grooming/ trail rehabilitation

More parking/sno-parks in the area

Snowmobile Trails Planning Region 3 (Yamhill, Polk, Benton, Marion, and Linn Counties)

Snowmobile trail funding priorities

Expand existing trail system

More trail grooming/trail rehabilitation

More signs along trails

Snowmobile Trails Planning Region 4 (Non-coastal Lane County)

Snowmobile trail funding priorities

More enforcement of existing rules/regulations

in trail areas

Expand existing trail system

More back-country off-trail riding

Snowmobile Trails Planning Region 5 (Coastal Lane, Coastal Douglas, Coos, and Curry Counties)

Snowmobile trail funding priorities

No snowmobile trails in region

Snowmobile Trails Planning Region 6 (Non-Coastal Douglas, Josephine, and Jackson Counties)

Snowmobile trail funding priorities

More parking/sno-parks in the area

Expand existing trail system

More back-country off-trail riding

Snowmobile Trails Planning Region 7 (Wasco, Sherman, Gilliam, Morrow, and Umatilla Counties)

Snowmobile trail funding priorities

More parking/sno-parks in the area

Increase safety/ reduce hazards

Expand existing trail system

Snowmobile Trails Planning Region 8 (Jefferson, Deschutes, Crook, and Wheeler Counties)

Snowmobile trail funding priorities

More back-country off-trail riding

Expand existing trail system

More parking/sno-parks in the area

Snowmobile Trails Planning Region 9 (Klamath and Lake Counties)

Snowmobile trail funding priorities

More signs along trails

More trail maps/information

Increase safety/ reduce hazards

Snowmobile Trails Planning Region 10 (Grant, Baker, Union, and Wallowa Counties)

Snowmobile trail funding priorities

More back-country off-trail riding

Expand existing trail system

More trail maps/information

Snowmobile Trails Planning Region 11 (Harney and Malheur Counties)

Snowmobile trail funding priorities

More back-country off-trail riding

Expand existing trail system

More parking/sno-parks in the area

Non-Motorized Trail Funding Priorities

Statewide Need Within Urban Growth Boundaries And In Dispersed Settings

Non-motorized trail funding priorities		
Within Urban Growth Boundaries Dispersed Settings		
Connecting trails into larger trail systems	Routine upkeep of the trails themselves	
Routine upkeep of the trails themselves	Connecting trails into larger trail systems	
More signs along trails/ wayfinding	More trail maps/trail information/ wayfinding	

Regional Need Within Urban Growth Boundaries And In Dispersed Settings

Non-Motorized Trails Planning Region 1 (Clatsop, Tillamook, and Lincoln Counties)

Within Urban Growth Boundaries	Dispersed Settings
Connecting trails into larger trail systems	Connecting trails into larger trail systems
Protection of natural features, including wildlife habitat	Protection of natural features, including wildlife habitat
Repair major trail damage	Repair major trail damage

Non-Motorized Trails Planning Region 2 (Columbia, Washington, Clackamas, Multnomah, and Hood River Counties)

Within Urban Growth Boundaries	Dispersed Settings
Connecting trails into larger trail systems	More trails
Repair of major trail damage	Repair of major trail damage
Protection of natural features, including wildlife habitat	Connecting trails into larger trail systems

Non-Motorized Trails Planning Region 3 (Yamhill, Polk, Benton, Marion, and Linn Counties)

Within Urban Growth Boundaries	Dispersed Settings
Connecting trails into larger trail systems	Repair of major trail damage
Repair of major trail damage	Connecting trails into larger trail systems
Protection of natural features, including wildlife habitat	More trails

Non-Motorized Trails Planning Region 4 (Non-coastal Lane County)

Within Urban Growth Boundaries	Dispersed Settings
Connecting trails into larger trail systems	Connecting trails into larger trail systems
Protection of natural features, including wildlife habitat	Repair major trail damage
More trails	More trails

Non-Motorized Trails Planning Region 5 (Coastal Lane, Coastal Douglas, Coos, and Curry Counties)

Within Urban Growth Boundaries	Dispersed Settings
Connecting trails into larger trail systems	Repair of major trail damage
Repair major trail damage	Connecting trails into larger trail systems
More trail maps/ trail information	More trails

Non-Motorized Trails Planning Region 6 (Non-Coastal Douglas, Josephine, and Jackson Counties)

Within Urban Growth Boundaries	Dispersed Settings
Connecting trails into larger trail systems	Repair of major trail damage
Repair major trail damage	Connecting trails into larger trail systems
Protection of natural features, including wildlife habitat	Protection of natural features, including wildlife habitat

Non-Motorized Trails Planning Region 7 (Wasco, Sherman, Gilliam, Morrow, and Umatilla Counties)

Within Urban Growth Boundaries	Dispersed Settings
Connecting trails into larger trail systems	Repair of major trail damage
Protection of natural features, including wildlife habitat	Protection of natural features, including wildlife habitat
Repair of major trail damage	Connecting trails into larger trail systems

Non-Motorized Trails Planning Region 8 (Jefferson, Deschutes, Crook, and Wheeler Counties)

Within Urban Growth Boundaries	Dispersed Settings
Connecting trails into larger trail systems	Connecting trails into larger trail systems
Repair of major trail damage	More trails
Protection of natural features, including wildlife habitat	Protection of natural features, including wildlife habitat

Non-Motorized Trails Planning Region 9 (Klamath and Lake Counties)

Within Urban Growth Boundaries	Dispersed Settings
Repair of major trail damage	Repair of major trail damage
Connecting trails into larger trail systems	Connecting trails into larger trail systems
More trail maps/ trail information	Protection of natural features, including wildlife habitat

Non-Motorized Trails Planning Region 10 (Grant, Baker, Union, and Wallowa Counties)

Within Urban Growth Boundaries	Dispersed Settings
Connecting trails into larger trail systems	More trails
More trails	Repair major trail damage
Repair major trail damage	Protection of natural features, including wildlife habitat

Non-Motorized Trails Planning Region 11 (Harney and Malheur Counties)

Within Urban Growth Boundaries	Dispersed Settings
More trail maps/ trail information	Repair major trail damage
Connecting trails into larger trail systems	More trails
Repair major trail damage	More trail maps/ trail information

Water Trail Funding Priorities

Statewide Need

Water trail funding priorities Public access to the water (developed or undeveloped) Non-motorized boat launch facilities Restrooms

Regional Need

Water Trails Planning Region 1 (Clatsop, Tillamook, and Lincoln Counties)

Water Trail Funding Priorities	Top Water Trail Nominations	Potential Scenic Waterway Additions
Public access to the water (developed or undeveloped	Salmon River	R5 Nehalem River
Information available online	R5 Nehalem River	R17 Siletz River (Mainstem from confluence of North and South Forks to Siletz Bay
Map of routes	B6 Siletz Bay	

Water Trails Planning Region 2 (Columbia, Washington, Clackamas, Multnomah, and Hood River Counties)

Water Trail Funding Priorities	Top Water Trail Nominations	Potential Scenic Waterway Additions
Public access to the water (devel-	R49 Tualatin River	R60 White River
oped or undeveloped)		
Non-motorized boat launch	R50 Clackamas River (River Mill Dam	R58 Sandy River (Source to confluence with
facilities	to Willamette River confluence)	Bull Run River)
Parking for cars without trailers	R5 Nehalem River	R5 Nehalem River
		R49 Tualatin River
		R125 Willamette River (Canby to Sam Daws
		Bend, near Peoria)

Water Trails Planning Region 3 (Yamhill, Polk, Benton, Marion, and Linn Counties)

Water Trail Funding Priorities	Top Water Trail Nominations	Potential Scenic Waterway Additions
Public access to the water (devel-	R63 Yamhill River	R66 North Santiam River (Pending dam
oped or undeveloped)		status review)
Non-motorized boat launch	R66 North Santiam River	R126 Willamette River (Sam Daws Bend,
facilities		near Peoria, to Mid Fork Junction
Parking for cars without trailers	R68 South Santiam River	R69 Middle Santiam River
		R125 Willamette River (Canby to Sam Daws
		Bend, near Peoria)
		R68 South Santiam River
		R17 Siletz River (Mainstem from confluence
		of North and South Forks to Siletz Bay

Water Trails Planning Region 4 (Non-coastal Lane County)

Water Trail Funding Priorities	Top Water Trail Nominations	Potential Scenic Waterway Additions
Public access to the water (developed)	R70 McKenzie River	R70 McKenzie River (Paradise South)
Non-motorized boat launch	L58 Waldo Lake	R126 Willamette River (Sam Daws Bend,
facilities		near Peoria, to Mid Fork Junction
Restrooms	R81 North Middle Fork Willamette	R79 Coast Fork Willamette River
	River	

Water Trails Planning Region 5 (Coastal Lane, Coastal Douglas, Coos, and Curry Counties)

Water Trail Funding Priorities	Top Water Trail Nominations	Potential Scenic Waterway Additions
Public access to the water (devel-	R45 & R46 Chetco River (from	R27 Umpqua River (Mainstem from
oped or undeveloped)	Boulder Creek to the mouth at	confluence of North and South Fork to the
	Pacific Ocean)	Pacific Ocean)
Designated water trails with signs	B10 Coos Bay	R28 Smith River
Information available online	R27 Umpqua River (mainstem from	
	confluence of North and South Fork	
	to mouth at Pacific Ocean)	

Water Trails Planning Region 6 (Non-Coastal Douglas, Josephine, and Jackson Counties)

Water Trail Funding Priorities	Top Water Trail Nominations	Potential Scenic Waterway Additions
Public access to the water (devel-	R84 North Umpqua River	R89 Rogue River (Lost Creek Lake to
oped or undeveloped)		Applegate River)
Non-motorized boat launch	R27 Umpqua River (from conflu-	R27 Umpqua River (Mainstem from
facilities	ence of North and South Forks to	confluence of North and South Fork to the
	mouth at Pacific Ocean)	Pacific Ocean)
Restrooms	R43 Illinois River (Deer Creek to	R44 Illinois River (Illinois River Forks State
	Agness near confluence with Rogue	Park to Deer Creek)
	River)	
		R28 Smith River

Water Trails Planning Region 7 (Wasco, Sherman, Gilliam, Morrow, and Umatilla Counties)

Water Trail Funding Priorities	Top Water Trail Nominations	Potential Scenic Waterway Additions
Public access to the water (developed or undeveloped)	R102 Umatilla River	R60 White River
Areas without motorized boats	R103 North Fork John Day River	R102 Umatilla River (Source to McKay)
Information available online	R60 White River	

Water Trails Planning Region 8 (Jefferson, Deschutes, Crook, and Wheeler Counties)

Water Trail Funding Priorities	Top Water Trail Nominations	Potential Scenic Waterway Additions
Public access to the water (developed)	R98 Crooked River	R98 Crooked River
Information available online	R97 Metolius River	
Parking for cars without trailers	L91 Hosmer Lake	

Water Trails Planning Region 9 (Klamath and Lake Counties)

Water Trail Funding Priorities	Top Water Trail Nominations	Potential Scenic Waterway Additions
Public access to the water (devel-	R94 Williamson River	R94 Williamson River
oped or undeveloped)		
Non-motorized boat launch	Wood River	
facilities		
Map of routes	L109 Upper Klamath Lake	

Water Trails Planning Region 10 (Grant, Baker, Union, and Wallowa Counties)

Water Trail Funding Priorities	Top Water Trail Nominations	Potential Scenic Waterway Additions
Public access to the water (devel-	R110 Grande Ronde River	R100 John Day River (Picture Cr. To Service
oped or undeveloped)	(Confluence with the Wallowa River	Cr.)
	to WA state line, near Troy)	
Areas without motorized boats	R114 Wallowa River (Minam to	R115 Imnaha River
	confluence with the Grande Ronde	
	River)	
Designated water trails with signs	R100 John Day River (Source to	
	Service Creek)	

Water Trails Planning Region 11 (Harney and Malheur Counties)

Water Trail Funding Priorities	Top Water Trail Nominations	Potential Scenic Waterway Additions
Public access to the water (devel-	R120 Snake River (Owyhee Dam to	R121 Owhyee River (Owyhee Dam to Snake
oped or undeveloped)	state line)	River
Non-motorized boat launch	R122 Owhyee River (Lake Owyhee	
facilities	to Rome, near Hwy 95)	
Information available online	R118 Lake Owhyee	

► CHAPTER 7

Identification of Management Issues



INTRODUCTION

The 2016-2025 trails planning effort included a region-level analysis to the most significant issues effecting OHV, snowmobile, non-motorized, and water trail provision in the state of Oregon. The following is a description of issue identification methods and lists of identified statewide and regional management issues.

ISSUE IDENTIFICATION METHODS

OHV Issues Identification Methods

The OHV planning effort included four distinct methods to identify OHV trail management issues at the state and region levels. The first method involved an online survey of Oregon OHV area managers conducted in March-April, 2014. Respondents were asked to rate the importance of region-level OHV management issues.

The second method was a component of the state-wide survey of OHV trail users. Resident OHV participants were asked to rate the importance of 16 issues by answering the following question. "Based on your OHV riding in the past 12 months, how much of a problem do you think each of the following is on OHV trails on public land in Oregon?" Specific items were rated using a 5-point Likert scale (1=Not a problem to 5=A serious problem).

Next, a series of regional public meeting workshops were held at 14 locations across the state in October 2014. Each workshop included an afternoon session open to all public recreation providers and an evening session open to the general public. Following a presentation describing the trails planning process, workshop attendees were given three colored dots to prioritize the importance of OHV issues in the region.

Finally, the OHV trails planning advisory committee members were given an opportunity to prioritize the importance of statewide OHV management issues during the July 29, 2015 committee meeting.

Snowmobile Issues Identification Methods

The snowmobile planning effort included four distinct methods to identify snowmobile trail need at the state and region levels. The first method involved an online survey of Oregon snowmobile area managers conducted in June 2014. Respondents were asked to rate the importance of region-level snowmobile management issues.

The second method was a component of the state-wide survey of snowmobilers (Oregon Snowmobiler Participation and Priorities). Resident snowmobilers were asked to rate the importance of 16 issues by answering the following question. "Based on your snowmobile riding, how much of a problem do you think each of the following is on snowmobile trails on public lands in Oregon?" Specific items were rated using a 5-point Likert scale (1=Not a problem to 5=A serious problem).

Next, as with other trail category types, workshop attendees were given three colored dots to prioritize the importance of snowmobile management issues in the region.

Finally, the snowmobile trails planning advisory committee members were given an opportunity to prioritize the importance of statewide management issues during the June 29, 2015 committee meeting.

Non-Motorized Trail Issues Identification Methods

The non-motorized trails planning effort included four distinct methods to identify non-motorized trail management issues at the state and region levels. The first method involved an online survey of Oregon non-motorized trail providers conducted in July to August, 2014. Respondents were asked to rate the importance of region-level non-motorized trail management issues both within Urban Growth Boundaries (UGBs) and in dispersed settings.

The second method was a component of the

statewide survey of non-motorized trail users (Oregon Non-motorized Trail Participation and Priorities). Resident non-motorized trail users were asked to rate the importance of 21 issues by answering the following question. "Based on your trail use in the past 12 months, how important do you feel each of the following is on trails in Oregon?" Specific items were rated using a 5-point Likert scale (1=Not important to 5=Very important).

Next, at regional trails workshops, attendees were given three colored dots to prioritize the importance of non-motorized trail management issues within UGBs and in dispersed settings.

Finally, the non-motorized trails planning advisory committee members were given an opportunity to prioritize the importance of non-motorized trail issues both within UGBs and in dispersed settings during the May 11, 2015 committee meeting.

Water Trail Issues Identification Methods

The water trails planning effort included three distinct methods to identify non-motorized management issues at the state and region levels. The first method involved an online survey of Oregon non-motorized boating facility managers conducted in July 2014. Respondents were asked to rate the importance of region-level non-motorized boating management issues.

The second method was a component of the state-wide survey of non-motorized boaters (Oregon Non-motorized Boater Participation and Priorities). Resident non-motorized boaters were asked to rate the importance of 14 issues by answering the following question. "Based on your non-motorized boating in Oregon in the past 2 months, how important do you feel each of the following is?" Specific items were rated using a 5-point Likert scale (1=Not important to 5=Very important).

Next, at regional trails workshops, attendees were given three colored dots to prioritize the importance of non-motorized boating issues.

Finally, the water trails planning advisory committee members were given an opportunity to prioritize the importance of non-motorized boating issues during the March 27, 2015 committee meeting.

IDENTIFIED MANAGEMENT ISSUES

The following is a summary of trail management issues identified through this planning process for each trail category type.

OHV Management Issues

Statewide Issues

	OHV trail issues
Closure of trails	
Closure of unimproved backcountry roads	
Riding in closed areas	

Regional Issues

Trails Planning Region 1 (Clatsop, Tillamook, and Lincoln Counties)

OHV trail issues	
Closure of trails	
Closure of unimproved backcountry roads	
Riding in closed areas	

Trails Planning Region 2 (Columbia, Washington, Clackamas, Multnomah, and Hood River Counties)

OHV trail issues
Closure of trails
Closure of unimproved backcountry roads
Riding in closed areas

Trails Planning Region 3 (Yamhill, Polk, Benton, Marion, and Linn Counties)

	OHV trail issues
Riding in closed areas	
Closure of trails	
Closure of unimproved backcountry roads	

Trails Planning Region 4 (Non-coastal Lane County)

OHV trail issues	
Closure of trails	
Closure of unimproved backcountry roads	
Litter/ dumping	

Trails Planning Region 5 (Coastal Lane, Coastal Douglas, Coos, and Curry Counties)

OHV trail issues

Litter/dumping

Closure of trails

Riding in closed areas

Trails Planning Region 6 (Non-Coastal Douglas, Josephine, and Jackson Counties)

OHV trail issues

Closure of trails

Vandalism

Too little law enforcement

Trails Planning Region 7 (Wasco, Sherman, Gilliam, Morrow, and Umatilla Counties)

OHV trail issues

Litter/dumping

Closure of unimproved backcountry roads

Closure of trails

Trails Planning Region 8 (Jefferson, Deschutes, Crook, and Wheeler Counties)

OHV trail issues

Closure of trails

Closure of unimproved backcountry roads

Litter/ dumping

Trails Planning Region 9 (Klamath and Lake Counties)

OHV trail issues

Closure of trails

Closure of unimproved backcountry roads

Vandalism

Trails Planning Region 10 (Grant, Baker, Union, and Wallowa Counties)

OHV trail issues

Closure of trails

Closure of unimproved backcountry roads

Litter/ dumping

Trails Planning Region 11 (Harney and Malheur Counties)

OHV trail issues

Closure of trails

Closure of unimproved backcountry roads

Litter/ dumping

Snowmobile Management Issues

Statewide Issues

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Closure of snowmobile trails/ riding areas

Riding in closed areas

Lack of snowmobile trail maintenance

Regional Issues

Trails Planning Region 1 (Clatsop, Tillamook, and Lincoln Counties)

Snowmobile trail issues

No snowmobile trails in region

Trails Planning Region 2 (Columbia, Washington, Clackamas, Multnomah, and Hood River Counties)

Snowmobile trail issues

Closure of snowmobile trails/ riding areas

ATVs on snowmobile trails

Irresponsible/ dangerous/ reckless riding

Trails Planning Region 3 (Yamhill, Polk, Benton, Marion, and Linn Counties)

Snowmobile trail issues

ATVs on snowmobile trails

Too little law enforcement

Closure of snowmobile trails/ riding areas

Trails Planning Region 4 (Non-coastal Lane County)

Snowmobile trail issues

Too little law enforcement

Riding in closed areas

Irresponsible/dangerous/reckless riding

Trails Planning Region 5 (Coastal Lane, Coastal Douglas, Coos, and Curry Counties)

Snowmobile trail issues

No snowmobile trails in region

Trails Planning Region 6 (Non-Coastal Douglas, Josephine, and Jackson Counties)

Snowmobile trail issues

Closure of snowmobile trails/ riding areas

Riding in closed areas

ATVs on snowmobile trails

Trails Planning Region 7 (Wasco, Sherman, Gilliam, Morrow, and Umatilla Counties)

Snowmobile trail issues

Closure of snowmobile trails/ riding areas

Riding in closed areas

Natural resource damage

Trails Planning Region 8 (Jefferson, Deschutes, Crook, and Wheeler Counties)

Snowmobile trail issues

Closure of snowmobile trails/ riding areas

Riding in closed areas

Irresponsible/ dangerous/ reckless riding

Trails Planning Region 9 (Klamath and Lake Counties)

Snowmobile trail issues

ATVs on snowmobile trails

Riding in closed areas

Irresponsible/ dangerous/ reckless riding

Trails Planning Region 10 (Grant, Baker, Union, and Wallowa Counties)

Snowmobile trail issues

Riding in closed areas

Closure of snowmobile trails/ riding areas

Irresponsible/ dangerous/ reckless riding

Trails Planning Region 11 (Harney and Malheur Counties)

Snowmobile trail issues

Closure of snowmobile trails/ riding areas

More riding areas

ATVs on snowmobile trails

Non-Motorized Trail Management Issues

Statewide Issues

Non-motorized trail issues		
Within Urban Growth Boundaries	Dispersed Settings	
Need for more trails connecting towns/ public places.	Need for improved trail maintenance. For this issue, trail maintenance includes routine trail maintenance and trail rehabilitation/ restoration.	
Need for improved trail maintenance. For this issue, trail maintenance includes routine trail maintenance and trail rehabilitation/ restoration.	Need for more trails connecting towns/ public places.	
Need for more trail signs (directional and distance markers, and level of difficulty).	Need for more trail signs (directional and distance markers, and level of difficulty).	

Regional Issues

Non-Motorized Trails Planning Region 1 (Clatsop, Tillamook, and Lincoln Counties)

Within Urban Growth Boundaries	Dispersed Settings
More trails connecting towns/ public places	Ability to experience the natural environment
Ability to experience the natural environment	Improved trail maintenance
Trail maps at trailheads	More trails connecting towns/ public places

Non-Motorized Trails Planning Region 2 (Columbia, Washington, Clackamas, Multnomah, and Hood River Counties)

Within Urban Growth Boundaries	Dispersed Settings
Improved trail maintenance	More trails connecting towns/ public places
More trails connecting towns/ public places	Improved trail maintenance
Ability to experience the natural environment	Ability to experience the natural environment

Non-Motorized Trails Planning Region 3 (Yamhill, Polk, Benton, Marion, and Linn Counties)

Within Urban Growth Boundaries	Dispersed Settings
More trails connecting towns/ public places	Improved trail maintenance
Improved trail maintenance	More trails connecting towns/ public places
More trail signs (directional & distance markers, and level	More trail signs (directional & distance markers, and level
of difficulty)	of difficulty)

Non-Motorized Trails Planning Region 4 (Non-coastal Lane County)

Within Urban Growth Boundaries	Dispersed Settings
More trails connecting towns/ public places	Improved trail maintenance
More trails	More trails connecting towns/ public places
Improved trail maintenance	More parking space at trailheads

Non-Motorized Trails Planning Region 5 (Coastal Lane, Coastal Douglas, Coos, and Curry Counties)

Within Urban Growth Boundaries	Dispersed Settings
More trails connecting towns/ public places	Improved trail maintenance
Improved trail maintenance	Ability to experience the natural environment
Trail maps at trailheads	Trail maps at trailheads

Non-Motorized Trails Planning Region 6 (Non-Coastal Douglas, Josephine, and Jackson Counties)

Within Urban Growth Boundaries	Dispersed Settings
More trails connecting towns/ public places	Improved trail maintenance
Improved trail maintenance	Ability to experience the natural environment
More trail information on the Internet	More trail information on the Internet

Non-Motorized Trails Planning Region 7 (Wasco, Sherman, Gilliam, Morrow, and Umatilla Counties)

Within Urban Growth Boundaries	Dispersed Settings
Improved trail maintenance	Improved trail maintenance
Ability to experience the natural environment	Ability to experience the natural environment
More trails connecting towns/ public places	More trails connecting towns/ public places

Non-Motorized Trails Planning Region 8 (Jefferson, Deschutes, Crook, and Wheeler Counties)

Within Urban Growth Boundaries	Dispersed Settings
More trails connecting towns/ public places	Improved trail maintenance
Improved trail maintenance	More trails connecting towns/ public places
Ability to experience the natural environment	Ability to experience the natural environment

Non-Motorized Trails Planning Region 9 (Klamath and Lake Counties)

Within Urban Growth Boundaries	Dispersed Settings
Improved trail maintenance	Improved trail maintenance
More trails connecting towns/ public places	More trail information on the Internet
More trail information on the Internet	More trails connecting towns/ public places

Non-Motorized Trails Planning Region 10 (Grant, Baker, Union, and Wallowa Counties)

Within Urban Growth Boundaries	Dispersed Settings
More trails	Improved trail maintenance
More trails connecting towns/ public places	More trails connecting towns/ public places
Improved trail maintenance	More trail signs (directional & distance markers, and level of difficulty)

Non-Motorized Trails Planning Region 11 (Harney and Malheur Counties)

Within Urban Growth Boundaries	Dispersed Settings
More trails	Improved trail maintenance
More trails connecting towns/ public places	More trails connecting towns/ public places
Trail maps at trailheads	Trail maps at trailheads

Water Trail Management Issues

Statewide Issues

Water trail issues

Need for increased access for non-motorized boating

Lack of funding for non-motorized boater facilities

Lack of non-motorized boating maps and information.

Regional Issues

Trails Planning Region 1 (Clatsop, Tillamook, and Lincoln Counties)

Water trail issues

Too few water trails

Increased access for non-motorized boating

Lack of funding for non-motorized boating facilities

Trails Planning Region 2 (Columbia, Washington, Clackamas, Multnomah, and Hood River Counties)

Water trail issues

Increased access for non-motorized boating

Lack of funding for non-motorized boating facilities

Improved water conditions (quality, obstructions, rapids, currents, low levels, floating debris)

Trails Planning Region 3 (Yamhill, Polk, Benton, Marion, and Linn Counties)

Water trail issues

Increased access for non-motorized boating

Lack of funding for non-motorized boating facilities

More parking

Trails Planning Region 4 (Non-coastal Lane County)

Water trail issues

Increased access for non-motorized boating

Lack of funding for non-motorized boating facilities

Lack of law enforcement

Trails Planning Region 5 (Coastal Lane, Coastal Douglas, Coos, and Curry Counties)

Water trail issues

Increased access for non-motorized boating

More restrooms

Lack of funding for non-motorized boating facilities

Trails Planning Region 6 (Non-Coastal Douglas, Josephine, and Jackson Counties)

Water trail issues

Increased access for non-motorized boating

More trash receptacles

Lack of non-motorized boating maps/information

Trails Planning Region 7 (Wasco, Sherman, Gilliam, Morrow, and Umatilla Counties)

Water trail issues

Lack of funding for non-motorized boating facilities

Increased access for non-motorized boating

Lack of separation at existing sites between motorized and non-motorized uses

Trails Planning Region 8 (Jefferson, Deschutes, Crook, and Wheeler Counties)

Water trail issues

Increased access for non-motorized boating

Lack of water accessible campsites

More parking

Trails Planning Region 9 (Klamath and Lake Counties)

Water trail issues

Increased access for non-motorized boating

Lack of water accessible campsites

More parking

Trails Planning Region 10 (Grant, Baker, Union, and Wallowa Counties)

Water trail issues

Increased access for non-motorized boating

More consistent water flows and/ or dam releases

Lack of funding for non-motorized boater facilities

Trails Planning Region 11 (Harney and Malheur Counties)

Water trail issues

Increased access for non-motorized boating

Lack of non-motorized boating maps/information

More restrooms

► CHAPTER 8

Top Statewide Trail Issues and Stategic Actions



INTRODUCTION

This chapter provides a description of the most significant issues effecting recreational trail provision in the state of Oregon. It also provides a framework for collective action in addressing these issues for the next ten years.

The previous chapter describes the process used to determine top statewide trail issues. Top statewide trail issues were finalized at the trails advisory committee meetings for each trail category type. A set of strategic actions for addressing each statewide issue were also finalized at the trails advisory committee meetings.

OFF-HIGHWAY VEHICLE TRAIL ISSUES AND ACTIONS

Statewide Issue 1: Closure of trails

Closure of Off-Highway Vehicle (OHV) trails was identified as a top motorized trail issue during the trail's planning public workshops, in the statewide survey of resident OHV riders, and during the July 29, 2015 OHV trails plan advisory committee meeting.

The majority of OHV trails and riding areas in Oregon are on federal lands managed by the U.S. Forest Service (USFS) and the Bureau of Land Management (BLM). In recent years, these federal agencies have begun to reevaluate the procedures they use to make OHV designations—or are in the process of developing additional regulations for OHV use—in light of the recent increase in popularity of OHV use. Specifically, in 2005, the USFS issued a travel management regulation, in part to standardize the



process that individual national forests and grasslands use to designate the roads, trails, and areas that will be open to motorized travel. Prior to travel management, unless a road or trail is designated closed, it's considered open. Under the new rule, roads, trails and areas will be considered closed to motorized use unless they're designated as open.

The Travel Management Rule was passed because of a need to resolve a number of resource and social concerns related to unregulated motorized travel that were detailed in the Rule. These included concerns such as:

- 1. Confusion about where or when motorized access is or is not allowed, or for what type of vehicle, and how or where to find that information.
- 2. Resource damage from inappropriate motorized uses.
- 3. Conflicts between motorized and non-motorized users.
- 4. Quality of recreational experiences for all forest users.

This designation process applies only to motorized vehicles and does not address other forms of transportation, such as biking, horseback riding, and hiking. After roads, trails, and areas are designated, the travel management regulation requires that

motorized travel be limited to designated roads, trails, and areas, reducing the acreage within national forests that is open to cross-country travel. The travel management regulation also requires that designated roads, trails, and areas be displayed on a motor vehicle use map. The USFS developed a schedule to complete the route designations and to develop the required motor vehicle use maps by the end of calendar 2009. In January 2009, the USFS updated its travel management guidance to provide individual forests with details on how to designate roads, trails, and areas for motorized use. This guidance, among other things, describes the process that forests should go through to make travel management decisions, including the criteria for making these decisions. These criteria include effects on natural and cultural resources, effects on public safety, provision of recreation opportunities, access needs, conflicts among uses of national forest lands, the need for maintenance, and the availability of resources for such maintenance.

Like the Forest Service, BLM has also begun to reevaluate the procedures it uses to make OHV designations. Over the past 10 years, BLM has issued increasingly detailed guidance on how its field offices should address travel management in their resource management plans. In accordance with the executive orders, BLM regulations require that all its lands be given an area designation of either open, limited, or closed with respect to motorized travel and that these designations be based on protecting resources, promoting the safety of users, and minimizing conflicts between users. Open areas are areas where all types of vehicle use are permitted at all times, anywhere in the area. Limited areas are lands where OHV use is restricted at certain times or use is only authorized on designated routes, and close areas are lands where OHV use is prohibited.

BLM's most recent guidance, issued in 2007, provided additional details related to how field units should conduct travel planning in the context of resource management planning. While updating a resource management plan, BLM field unit officials are to

inventory and evaluate OHV routes and area designations (such as open, limited, and closed), seek public input, and make changes as appropriate. For areas designated for limited OHV use, BLM guidance states that the resource management plan must include a map identifying the OHV route system. In addition, because of recent increases in OHV use on public lands and the potential for related resource damage, BLM's latest guidance encourages field units not to designate large areas as open to cross-country motorized travel.

Action 1: USFS Region 6 should place a higher priority on motorized recreation in Oregon.

Action 2: Federal land managers should make outdoor recreation management a viable career path within their agencies.

Action 3: Land managers should hold monthly local multi-user recreation committee meetings to gather public feedback regarding trail issues and concerns.

Action 4: The USFS and BLM should provide funding from the federal budget to create a staff position dedicated to OHV management at the Portland Region 6 office.

Action 5: The USFS and BLM should allocate adequate resources for travel management planning in Oregon.

Action 6: Federal land managers should follow travel management guidelines when conducting travel management planning in Oregon.

Action 7: Federal land managers should adopt the National Off-Highway Vehicle Conservation Council (NOHVCC) motorized access plan agreement for engaging OHV clubs in travel management planning in Oregon.

Action 8: A Federal funding mechanism should be implemented to fund increased OHV law enforcement, trail maintenance, user education, signage, mapping, and rehabilitation of damaged areas. **Action 9:** Reduce unwarranted OHV closures through comprehensive review/input/analysis by all stakeholders.

Action 10: No Oregon ATV grant funds will be used for federal travel management planning.

Action 11: Land managers should work with user groups to inventory all existing roads and trails prior to the start of travel management planning.

Action 12: As federal recreation budgets decline, land managers should build more public-private partnerships (e.g., with OHV user groups and manufacturers) to manage OHV recreation on federal lands in Oregon (e.g., trail maintenance, trail building, user education). For example, the Stay the Trail program, a joint project between the Colorado Off-Highway Vehicle Coalition and Federal agencies, reinforces and highlights responsible OHV use and seeks to reduce irresponsible use, thus minimizing resource damage.

Action 13: The USFS and BLM should develop user-friendly maps and signs for route systems including large format signage, on-the-ground route markers, and information kiosks with maps to inform riders of the law and indicate where they can legally ride.

Action 14: Land managers should close or relocate problem OHV routes.

Action 15: Work with Sports Utility Vehicle (SUV) and OHV manufactures and dealers to stop the use of product development and marketing strategies (e.g., vehicles riding off-routes and cross-country) which are in conflict with travel management objectives.

Statewide Issue 2: Closure of unimproved backcountry roads

Closure of unimproved backcountry roads was identified as a top statewide OHV trail issue during the trails planning workshops, in the statewide survey

of resident OHV riders, and during the July 29, 2015 OHV trails plan advisory committee meeting.

Nationally, the Forest Service manages approximately 280,000 miles of National Forest System roads open to motor vehicle use. In addition, approximately 144,000 miles of trails are managed by the Forest Service, with an estimated 33 percent or 47,000 miles open to motor vehicle use. This transportation system ranges from paved roads, designed for passenger cars to single-track trails used by dirt bikes. Many roads designed for high-clearance vehicles (such as log trucks, and sport utility vehicles) also accommodate use by ATVs and other OHVs not normally found on city streets.

In Oregon, the USFS manages approximately 72,000 miles and the BLM another 21,000 miles of unpaved backcountry roads. In the 1960s, motorized recreational traffic on the National Forest System roads was relatively light compared with timber traffic. Today, recreational traffic is 90 percent of all traffic on National Forest System roads. Much of the road system maintenance needs and resource damage concerns are the result of continuous recreation use of roads only designed for controlled intermittent commercial use. During transportation planning, the USFS and BLM consider capability to maintain roads in decisions to designate roads for motorized use.



Transportation planning is being conducted as the USFS considers how to maintain logging roads no longer used for timber harvesting traffic. For example, the Mount Hood National Forest has about 3,380 miles of logging roads, built when it produced up to 370 million board feet of timber annually, as it did in 1990. Due primarily to environmental restrictions, timber sales now are about 25 million board feet annually, according to forest reports. The USFS will decide which roads to maintain, close or decommission.

Action 1: No state ATV grant funds should be used for closing and decommissioning unimproved backcountry roads in Oregon.

Action 2: Oregon land managers should consider the importance of shared-use roads for OHV use.

Action 3: Federal land managers should follow travel management guidelines when conducting travel management planning in Oregon.

Action 4: Federal land managers should adopt the National Off-Highway Vehicle Conservation Council (NOHVCC) motorized access plan agreement for engaging OHV clubs in travel management planning in Oregon.

Action 5: Land managers should develop standard motor vehicle use maps for each management area in a consistent manner that provides adequate detail to inform users of the open areas and serves as legal notification for enforcement purposes.

Action 6: Reduce unwarranted OHV closures through comprehensive review/input/analysis by all stakeholders.

Action 7: Land managers should work with user groups to inventory all existing roads and trails prior to the start of travel management planning.

Action 8: Land managers should develop user-friendly maps and signs for route systems including large format signage, on-the-ground

route markers, and information kiosks with maps to inform riders of the law and indicate where they can legally ride.

Action 9: Land managers should close or relocate problem OHV routes.

Action 10: Work with Sports Utility Vehicle (SUV) and OHV manufactures and dealers to stop the use of product development and marketing strategies (e.g., vehicles riding off-routes and cross-country) which are in conflict with travel management objectives.

Statewide Issue 3: Riding in closed areas

The problem of OHV riding in closed areas was identified as a top motorized trail issue in the survey of OHV area providers and during the July 29, 2015 OHV trails plan advisory committee meeting.

The USFS and other land managers have been confronted with a proliferation of trails arising from repeated unauthorized travel by OHVs. Such behavior can result from areas not being properly mapped, signed, or marked clearly as open or closed; or recreationists ignoring designations. A number of motorized users simply don't understand and/or have a lack of appropriate trail ethics. Cross-country travel occurs and unauthorized trails are created which adversely affect wildlife habitat, watersheds, cultural resources, grazing and other multiple-use activities.

Action 1: Land managers should develop OHV system plans which include a variety of riding challenge opportunities (easy, more difficult, most difficult) to satisfy diverse user needs. System plans should also develop OHV connectors and networks to create loop trails or provide longer rides.

Action 2: Land managers should provide trailhead kiosks to inform visitors about trail level-of-difficulty and available riding opportunities.



Action 3: Land managers should quickly repair resource damage caused by off-trail riding before more damage occurs. This may include land restoration, revegetation, invasive species treatment, long-term rehabilitation, barriers, route realignments, or closures. In some cases, alternative (sustainable) routes will need to replace user created trails. Replacement routes should be constructed and opened prior to closing off user created routes.

Action 4: Land managers should develop user-friendly maps and signs for route systems including large format signage, on-the-ground route markers, and information kiosks with maps to inform riders of the law and indicate where they can legally ride.

SNOWMOBILE ISSUES AND ACTIONS

Statewide Issue 1: Closure of snowmobile trails/ riding areas

Closure of snowmobile trails/ riding areas was identified as a top snowmobile trail issue during the trail's planning public workshops and in the statewide survey of resident snowmobilers. Almost all snowmobile trails and riding areas in Oregon are on federal lands managed by the U.S. Forest Service (USFS).

In 2006, Oregon national forests contained 3,257 miles of groomed winter trails.²² Of these 3,257 trail miles, 3,043 were open to snowmobiles, and 214 miles were closed to snowmobile trails (opened only to non-motorized trail uses). Oregon national forests with adequate snow cover for winter trail uses (including the Willamette, Wallowa-Whitman, Umpqua, Umatilla, Rogue River-Siskiyou, Mt. Hood, Malheur, Freemont-Winema, and Deschutes-Ochoco National Forests) contain 15,942,517 acres of land. Of these acres, 12,196,335 acres of land were open to snowmobiles, 1,323,764 acres of non-wilderness land were closed to snowmobiles, and 2,379,902 acres of designated wilderness land were also closed to snowmobiles. Oregon SCORP inventory data from 2001 identifies that there were approximately 66,565 miles of unpaved backcountry roads in these Oregon national forests with adequate snow cover for winter trail use.

In 2005, the Forest Service issued a travel management regulation, in part to standardize the process that individual national forests and grasslands use to designate the roads, trails, and areas that will be open to motorized travel. This rule governed the management of summer and winter off-road vehicle systems. Subpart B of the Travel Management Rule

22 Rivers, K.E., and M. Menlove. 2006. Winter Recreation on Western National Forest Lands: A comprehensive analysis of motorized and non-motorized opportunity and access. Winter Wildland's Alliance, Boise, ID. p 26-27.

(TMR) required the USFS to have a designated summertime off-road vehicle system, while subpart C allowed, but did not require, forests to designate a winter time off-road vehicle system.

In 2013, a Federal court found that subpart C failed to comply with the direction in the Executive Order to designate a system of trails and areas that minimize impacts to natural resources and conflicts. In response, the USFS issued a draft amendment to the TMR in 2014 to require the designation of roads, trails, and areas where over-snow vehicle (OSV) use is allowed, restricted, or prohibited. In January 2015, the USFS released the final policy for managing snowmobile and other OSV use on national forests and grasslands. The rule is effective February 27, 2015. As directed by the court order, the policy requires that roads, trails and areas where OSV use can occur be specifically designated by local Forest Service managers. Previously, managers had the discretion to decide whether to designate specific areas for OSV use. The policy maintains the requirement that all designations must be made with public input as well as ensure protection of natural resources, such as water and soils and wildlife, while continuing appropriate recreational opportunities for OSV and other recreational uses. In western states like Oregon, in addition to trail-based riding, larger wide-open, power-filled bowls can support cross-country OSV use. The final rule recognizes that cross-country travel by OSVs may be acceptable in appropriate circumstances.

The rule states that all Forest Districts will need to go through a public planning process to review and designate roads, trails, and cross country areas which are open to snowmobile use (similar to OHV Travel Management). Each Forest District will conduct its own NEPA process to designate areas in the next 5 years or so, according to the Portland office. The OSV travel management rule also requires that designated, roads, trails, and areas be displayed on a motor vehicle use map. Current riding opportunities will stay in place until planning is completed on each District.



Action 1: The USFS should allocate adequate resources for OSV travel management planning in Oregon.

Action 2: A Federal funding mechanism should be implemented to fund increased snowmobile law enforcement, user education, signage, mapping, and rehabilitation of damaged areas.

Action 3: Reduce unwarranted snowmobile riding closures through comprehensive review/input/analysis by all stakeholders.

Action 4: No OPRD grant funds will be used for federal travel management planning.

Action 5: Develop education and outreach programs that reduce conflicts between winter trail uses and to increase compliance.

Action 6: Consider the effects of changing climate (e.g., receding snowpack and earlier spring runoff) on future recreation use patterns when conducting OSV travel management.

Action 7: Identify routes and areas of particularly high value or demand for motorized and non-motorized use.

Action 8: Undertake proactive and systematic outreach programs in order to facilitate increased compliance of closures and reduce user conflicts.

Action 9: The USFS should develop user-friendly maps and signs for route systems including large format signage, on-the-ground route markers, and information kiosks with maps to inform riders of the law and indicate where they can legally ride.

Action 10: Land managers should implement outreach programs to raise public awareness of winter wildlife habitat, wildlife behavior, and ways to minimize user impact.

Statewide Issue 2: Riding in closed areas

Snowmobiling in closed areas was identified as a top snowmobile trail issue during the trail's planning public workshops. In recent years, the USFS has been confronted with a proliferation of trails arising from repeated unauthorized cross-country snowmobile travel. Unauthorized access can result from either areas not mapped, signed, or marked clearly as open or closed; or snowmobilers ignoring designations. Snowmobiling opportunities are dispersed

over large areas of the state, making enforcement of closures difficult, especially with limited law enforcement resources.

As stated earlier, all Oregon Forest Districts will need to go through a public planning process to review and designate roads, trails, and cross country areas which are open to snowmobile use. The statewide survey of Oregon snowmobilers and the survey of Oregon snowmobile area managers both show a high priority for funding backcountry off-trail riding opportunities in the state. These results indicate that large-scale closure of off-trail riding opportunities may not be the best strategy for addressing the issue of snowmobiling in closed areas in the state during the OSV travel management process.

Action 1: The USFS should develop standard OSV motor vehicle use maps for each management area in a consistent manner that provides adequate detail to inform users of the open areas and serves as legal notification for enforcement purposes.

Action 2: The USFS should develop user-friendly OSV maps and signs for route systems including large format signage, on-the-ground route markers, and information kiosks with maps to inform riders of the law and indicate where they can legally ride.

Action 3: The USFS should allocate adequate resources for OSV travel management planning in Oregon.

Action 4: Reduce unwarranted off-trail snow-mobile riding closures through comprehensive review/input/analysis by all stakeholders.

Action 5: The state should consider increasing penalties for violations of travel management rules on federal lands.

Action 6: The state should consider increasing penalties for violations and improved enforcement of non-registered vehicle operation.

Action 7: The USFS should expand snowmobile enforcement capacity in the state.

Action 8: The USFS should create opportunities for citizen reporting of snowmobile rule violations.

Action 9: The USFS should incorporate remote electronic monitoring technologies to assist with monitoring and enforcement of OSV travel restrictions.

Statewide Issue 3: Lack of snowmobile trail maintenance

Lack of snowmobile trail maintenance was identified as a top snowmobile trail issue during the June 29, 2015 Snowmobile Trails Plan Advisory Committee Meeting.

A recent GAO report²³ found the USFS is only able to maintain about one-quarter of National Forest System trails to the agency standard, and the agency faces a trail maintenance backlog of \$314 million in fiscal year 2012. A consistent trail maintenance backlog is also reported on Oregon national forests. According to USFS Off-Highway Vehicle Travel Management Rule (TMR) documentation, the USFS considers capability to maintain roads in decisions to designate roads (most snowmobile trails are existing logging roads) for motorized use. This situation creates a risk that many existing snowmobile trail miles in Oregon could be closed during forest-level OSV transportation planning efforts.

Action 1: Congress and the USFS should provide additional funding to maintain trails on national forest lands.

Action 2: The State of Oregon will work with the USFS Region 6 Office to develop a long-term strategy for using state snowmobile gas tax funds for snowmobile trail rehabilitation, maintenance, and grooming on USFS lands in Oregon.

23 U.S. Government Accountability Office (2013). Forest Service Trails: Long and short-term improvements could reduce maintenance backlog and enhance system sustainability. GAO-13-618.

Action 3: The USFS should develop a national trail maintenance strategy.

Action 4: The USFS should create a career path of standardized training program for trails staff to develop and retain professional trail expertise.

Action 5: The USFS should develop national standards for trail volunteer training, including chain saw requirements and dress codes that would work across all forests.

Action 6: The USFS should address the liability issue that hampers volunteer and partner trail maintenance activity in national forests.

Action 7: The USFS should provide more staffing for managing and supervising volunteers and training for field staff who manage volunteers.

Action 8: The USFS Region 6 Office should hire a full-time grant administrator to better leverage external trail funding opportunities such as the RTP program.

Strategy 9: Pursue the overlay of snowmobile and OHV trail routes to the greatest extent possible, to provide more cost-effective and efficient year-round trail maintenance.

NON-MOTORIZED TRAIL ISSUES AND ACTIONS

Statewide Issue 1: More trails connecting towns/public places

More trails connecting towns/public places was identified as a top non-motorized trail issue both within UGBs and in dispersed settings during the trails planning workshops and in the survey of within UGB non-motorized trail providers. Recreation providers strongly felt that increasing non-motorized trail connectivity will result in better use of the state's existing non-motorized trail infrastructure and provide more trail opportunities.

For the purposes of this planning effort, trail connectivity will include trail projects that:

- Connect communities to each other;
- Provide connections between existing trails;
- Close a gap within an existing trail;
- Provide links to trails outside UGBs:
- · Provide access to parks and open space; and
- Provide access to significant facilities within communities such as schools, libraries, indoor recreation facilities, and businesses.

Action 1: Give priority to trail proposals that connect to other trails, communities, parks and open space, schools, libraries, indoor recreation facilities, and businesses.

Action 2: Recognize and support cooperative regional trail planning, development, and promotion.

Action 3: Encourage the design of trails for increased Americans with Disabilities Act (ADA) accessibility.

Action 4: Provide financial assistance for sound planning that will enhance regional multi-jurisdictional trail systems.



Action 5: Identify and address critical gaps in regional trail²⁴ networks, including trails in local and regional transportations plans, coordinating planning among all trail providers. Where necessary, identify high-quality on-street connections and required directional signage.

Action 6: Prioritize the acquisition of corridors for use in developing trail systems.

Action 7: Initiate demonstration projects to implement key regional trail network segments.

Action 8: Encourage every community to prepare a recreational trail system plan and integrate the recreation trail system into the Comprehensive Plan and Transportation System Plan.

Action 9: OPRD will provide training, guidance, and information related to obtaining funding and other resources for trail development and maintenance.

Action 10: Trail partners should collaborate with the public health community to promote the use of trails for physical and mental health.

Action 11: Support efforts to improve on street/ sidewalk trail connections and highway right-ofway crossings.

24 Regional trails provide non-motorized recreation and transportation opportunities and connect communities to each other and to open spaces. Regional trails serve as a backbone to a larger trail network and provide non-motorized access to community centers and other developed areas as well as open space and other trails.

Action 12: OPRD and the Oregon Recreation Trails Council (ORTAC) should prepare case studies, resource lists and best practices for using existing linear corridors (parkways, railroads, utility ROWs, canals, rivers) in the development of trail systems in Oregon.

Action 13: Encourage trail advocates to participate in local and regional planning efforts to help facilitate the development of trail systems.

Action 14: Support the coordination of systems that collect and manage trail data.

Action 15: Support efforts to coordinate regional expertise for trail construction, management, and maintenance.

Statewide Issue 2: Improved trail maintenance

Improved trail maintenance was identified as a top non-motorized trail issue both within UGBs and in dispersed settings during the trails planning workshops, in the statewide survey of non-motorized trail users, and in the survey of non-motorized trail providers. Recreation providers strongly stated that they are struggling to maintain existing trails due to increasing use levels and declining maintenance budgets.

For this issue, trail maintenance includes both routine trail maintenance and trail rehabilitation/ restoration. Routine trail maintenance includes work

that is conducted on a frequent basis in order to keep a trail in its originally constructed serviceable standard (e.g., mowing, tree and brush pruning, leaf and debris removal, cleaning and repair of drainage structures such as culverts, water bars, and drain dips) maintenance of water crossings, and repairs to signs and other amenities. Routine maintenance work is usually limited to minor repair or improvements that do not significantly change trail location, width, surface, or trail structure. Trail rehabilitation, restoration involves extensive trail repair (e.g., resurfacing of asphalt trails or complete replacement, regrading, and resurfacing of all trails) needed to bring a facility up to standards suitable for public use (not routine maintenance). In some cases, trail rehabilitation/ restoration may include necessary relocation of minor portions of the trail.

Proper management and maintenance is essential to ensure that trail experiences are maximized. Ongoing maintenance of trails is also important for safety, minimizing capital outlay costs and protecting environmental integrity. Adequately maintaining Oregon's trails will be challenging as use increases, user expectations grow, and budgets tighten.

Action 1: Encourage the use of regularly scheduled trail monitoring and maintenance that includes inspection and assessment of trail conditions, use, signage, and structures followed by prompt repair.

Action 2: Foster the development of partnerships and "friends" groups to encourage community involvement, promote stewardship, and assist with trail maintenance. Also, encourage the donation of materials, equipment, and labor by local businesses to relive maintenance costs.

Action 3: Conduct training in best practices for trail construction management or maintenance as needed.

Action 4: Adhere to design standards in constructing or rehabilitating trails.

Action 5: Standardize yearly maintenance plans

that recognize the type, use, and challenge being offered by the trail for all trail types.

Action 6: Actively seek out financial support, partnerships, and volunteers to supplement trail budgets.

Action 7: Provide volunteer training for trail design and maintenance techniques.

Action 8: Encourage the use of volunteers to accomplish multiple goals such as controlling invasive species while maintaining trails.

Action 9: OPRD will develop a statewide trail maintenance handbook including best management practices and maintenance funding alternatives.

Action 10: Assess the feasibility of a trails foundation with a mission of funding trail maintenance and rehabilitation.

Action 11: Standardize trail planning guidelines, information, and funding decision criteria to build a sustainable statewide trail system.

Action 12: OPRD will consider funding routine trail maintenance work in the Recreational Trails Grant Program (RTP). Currently, the RTP grant program does not fund routine trail maintenance work, but does fund trail rehabilitation/restoration projects.



Statewide Issue 3: More trail signs (directional and distance markers and level of difficulty)

The need for more trail signs/ markers was identified as a top non-motorized trail issue in the statewide survey of non-motorized trail users and during the May 11, 2015 Non-motorized Trails Advisory Committee Meeting.

Trail users require a number of different types of signs to safely and enjoyably pursue their trail experience. Locator signs that lead people to trailheads and parking areas, directional signs along the trail, destination signs to let people know they have reached end points, interpretive signs that describe the natural or cultural history of the area, and regulatory signs that explain the do's and don'ts of the area are important trail components. Trail managers should provide information about their trails that allows users to choose the trails within their skill and capability level. It is important for all users, but especially elderly or disabled users, to understand a specific trail's maximum grade and cross-slope, trail width, surface, obstacles and length before using the trail.

Action 1: OPRD will finalize a trail sign manual for use in the Oregon State Park system and make the document available on the agency website.

Action 2: Encourage the development of trail wayfinding master plans by Oregon recreation providers.

Action 3: OPRD will develop a generic trail wayfinding master planning document for use by small communities in Oregon. The document will be designed to be in compliance with the Federal Highway Administration's Manual on Uniform Traffic Control Devices.

Action 4: Ensure that trailhead signs and maps include trail characteristics such as allowable uses, surface conditions, slope, trail length, and distance to significant barriers to a person with limited mobility.

Action 5: Consider the installation of distance markers along trails to aid in management and emergency response.

Action 6: Encourage the use of universal symbols in trail signage.

Action 7: Provide bilingual signage where applicable.

Action 8: OPRD will provide priority for trail signing projects in the RTP grant program.



WATER TRAIL ISSUES AND ACTIONS

Statewide Issue 1: Increased access for non-motorized boating

Increased access for non-motorized boating was identified as a top non-motorized boating issue during the trail's planning public workshops and in the statewide survey of non-motorized boaters. More public access points, along with restricting development along shorelines, requiring pack-in, pack-out in more locations, and more water-accessible campsites along waterbodies, were also identified as management actions with the strongest level of support by non-motorized boaters in the non-motorized boater survey.

The need for increased access for non-motorized boating is driven by a continuing increase in participation in non-motorized boating activities in both Oregon and the U.S. in recent decades. This rise in non-motorized boating has been attributed in part to outdoor adventure films, new boating design materials, new paddling techniques, demographic changes among participants, and the increased desire of tourists to view nature.²⁵

The National Survey on Recreation and the Environment (NSRE) represents the continuation of the ongoing National Recreation Survey (NRS) series. Begun in 1960 by the congressionally created Outdoor Recreation Resources Review Commission (OORC), the survey is designed to measure outdoor recreation participation in the United States. Currently, the survey is conducted by the U.S. Forest Service. Author Ken Cordell (2008)²⁶ cites kayaking as one of the fastest-growing US nature-based outdoor activities, with an estimated 12.5 million participants, representing a 63% increase from 2000 to 2007.

25 Manning, R., Valliere, W., Wang, B. and Jacobi, C. (1999). Crowding Norms: Alternative Measurements Approaches. Leisure Sciences, 21, 97-115.

26 Cordell, K. (2008). The latest on trends in outdoor recreation. Forest History Today, Spring, 4-10.



In 2011, 12.5% of the Oregon population (432,087 individuals) participated in non-motorized white-water canoeing, kayaking, or rafting for 2,911,759 user occasions. In addition, 11.7% of the Oregon population (455,177 individuals) participated in non-motorized flat-water canoeing, sea kayaking, rowing, stand-up padding or tubing/ floating for 3,982,657 user occasions. In terms of total participants, there were 768,523 individuals (Note: individuals participating in both white-water and flat-water activities were counted as one person) who participated in non-motorized boating activities compared to 504,653 individuals who participated in motorized boating (Oregon Parks and Recreation Department, 2013)²⁷.

The Oregon 2011 outdoor recreation survey also asked Oregonians about their opinions about recreation priorities for the future. Respondents were asked to rate several items for investment by park and forest agencies using a 5-point Likert scale (1 = Lowest priority need to 5 = Highest priority need). The top priority needs for Oregonians are:

- Soft surface walking trails;
- Public access sites to waterways;
- Nature and wildlife viewing areas;

27 Oregon Parks and Recreation (2013). 2013-2017 Statewide Comprehensive Outdoor Recreation Plan, 68.

- Playgrounds with natural materials (Natural Play Areas);
- Picnic areas for small groups; and
- Off-street bicycle trails.

Public access sites to waterways were identified as a top three priority need in all 36 Oregon counties and a top priority need in eight counties.

Access refers to a specific location where the public has the legal right and physical means to get to the water to launch a non-motorized boat. Nonmotorized boating access may be unimproved, or enhanced to varying degrees. Formal non-motorized boater access areas may be paved launch ramps, parking areas with dirt trails, or roadside-to-the-waterway trails. Where there is inadequate formal access, non-motorized boaters may be tempted to use whatever routes are convenient to access the water with their boats. Informal boater access often results in boaters hiking down steep slopes, trespassing through private property, and damaging soil, vegetation, and water quality. Inadequate formal access can also deny paddlers the opportunity to access waterways.

Action 1: Work with non-motorized boaters to identify a fee that can be used for land acquisition and facility development to satisfy non-motorized boating need. (Note: The Oregon State Marine Board is engaging non-motorized boaters to identify how to better serve non-motorized boaters and a funding mechanism to support those services, including access to the waterways.)

Action 2: Educate land managers and non-profit organizations on funding options available for non-motorized boating land acquisition and facility development projects.

Action 3: Provide grant emphasis for non-motorized boating land acquisition, facility development, and water trail projects on the list of nominated water trail additions identified in this planning process (Land and Water

Conservation Fund (LWCF), Local Government Grant Program (LGGP), and Recreational Trails Program (RTP) grant programs).

Action 4: Provide grant emphasis for projects that are on the list of top nominations for water trail development, list of potential Scenic Waterway additions, and waterways having the highest concentration of non-motorized boater participation for non-motorized boater land acquisition, facility development, and water trail projects identified in this planning process (LWCF, LGGP, and RTP grant programs).

Action 5: The Oregon State Marine Board should have designated staff to promote public non-motorized boating access to waterways, including identifying and acquiring public access sites, and to enhancing public access outreach and communication.

Action 6: Collect waterfront property information from land managers to create a database of publically-owned sites along waterways to establish new paddling access points.

Action 7: Continue to acquire and develop non-motorized boating access to meet public boating needs.

Action 8: Support community-based efforts to increase access to waterways.

Action 9: Encourage development of parking lots for existing and new non-motorized boating use.

Action 10: Use universal design principals in non-motorized boater access design.

Action 11: Legally add safe non-motorized boater access points and safe parking around roadway bridges.

Action 12: Assist public, non-profit or grass roots organizations to inventory waterway corridors to identify water trail development opportunities.



Action 13: All land managers should identify and prioritized where more paddling access is appropriate and needed.

Action 14: Prevent the loss of traditional sites to other uses.

Action 15: Disperse demand among priority waters by acquiring land on priority waters where public access is currently unavailable or traditional access is in danger of being lost.

Action 16: Maintain the serviceability of existing sites.

Action 17: Develop close-to-home paddling opportunities.

Action 18: Give preference to sites and site designs requiring minimal maintenance and to those projects where state or federal assistance funds will leverage local funding and/or encourage local responsibility for operation and maintenance.

Action 19: Funding priority will be given to projects where public access rights are established in perpetuity.

Action 20: Locate access points at intervals that could be paddled comfortably in an afternoon (5-10 miles).

Action 21: Incorporate water access into transportation and other projects and programs that are associated with water bodies (e.g., highway, hydroelectric, local waterfront planning).

Statewide Issue 2: Lack of funding for non-motorized boater facilities

Lack of funding for non-motorized boater facilities was identified as a top non-motorized boating issue during the trail's planning public workshops and in the statewide survey of non-motorized boater facility providers. Again, this issue is driven by a continuing increase in non-motorized boater participation in the state. As mentioned earlier, based on Oregon SCORP survey findings, there are now more resident individuals participating in non-motorized boating than in motorized boating in the state. Currently, non-motorized boaters access the water through sites developed for motorboat use leading to conflicts over parking, use of boat ramps, boarding docks, and increasing congestion on the water.

Although the demand is increasing for non-motorized boating access and facilities, a funding mechanism is lacking to address this need on a statewide basis. The Oregon State Marine Board is funded primarily by marine fuel tax and title and registration fees for motorized boaters. These funds are used for boating facility development and services such as waterway law enforcement and safety education. While hundreds of boat access points have been developed with the use of these funds, the sites are primarily designed to serve recreational motorboat operators, rather than paddlesports enthusiasts. Many of these facilities are regularly used by non-motorized boaters to access the waterway, which increases the potential for user conflict. A small number of access points have been developed for non-motorized boaters, but more are needed.

Currently, non-motorized boat users do not register their boats, and as a result, there is no dedicated funding source specifically for non-motorized facility development. The lack of a specific funding source limits the establishment of new opportunities solely for people who enjoy non-motorized boating in Oregon. Therefore, there is a need to address this programmatically by creating a dedicated funding source for non-motorized boat access and launch facilities.

Action 1: Work with non-motorized boaters to identify a fee to support non-motorized boating. (Note: The Oregon State Marine Board is engaging non-motorized boaters to identify how to better serve non-motorized boaters and a funding mechanism to support those services, including access to the waterways.)

Action 2: Partner with other agencies and non-profit and environmental organizations to make the case for non-motorized boater fees for Oregon.

Action 3: Educate the Oregon public on the economic benefits of non-motorized boating in the state using results from the trails plan's economic impact analysis.

Action 4: Educate Oregon non-motorized boaters on how additional funding could improve the paddling experience in Oregon.

Action 5: Create a trust fund for non-motorized boating water trail development projects through an organization such as the Oregon Community Foundation supported by donations and corporate sponsorships. Funding would be used for water trail management planning, land acquisition, facility development, maintenance, operations and maintenance equipment, and information resources (e.g., guides, informational brochures, maps, sign projects, websites).

Action 6: Create an Oregon Water Trails Association to promote and protect non-motorized boater access to Oregon's waterways by promoting water trails and through supporting stewardship work.

Action 7: Establish parking fees where intensive management is necessary to maintain the condition and orderly use of the site.

Statewide Issue 3: Lack of nonmotorized boating maps and information

Lack of non-motorized boating maps and information was identified as a top non-motorized boating issue during the March 27, 2015 Water Trails Advisory Committee Meeting. Online information was the second highest ranked non-motorized boating facility/service (74% rated somewhat of very important) in the statewide survey of non-motorized boaters. Providing non-motorized boating maps and information will also address the top statewide issue, increased access for non-motorized boating, by informing boaters about existing paddling opportunities in the state.

Resident non-motorized boater survey respondents also reported the information they would like a "water trail" smart app to provide if it were created for waterbodies in Oregon. Most highly ranked



items included where/ how to access the waterbody (80% reporting somewhat or very important), safety information/ waterbody obstructions (74%), map of water trail sites (70%), trailhead information (65%), list of amenities that are available at launch site (62%), driving directions (61%), and regulatory information (61%).

Action 1: Develop a statewide website to house general information about non-motorized boating opportunities and water trails in Oregon. Only those water trails meeting established standard requirements identified in this plan will be included on the website.

Action 2: Develop a user-friendly map showing all non-motorized boating access points in the state based on the existing Oregon State Marine Board boat access database.

Action 3: Develop a set of minimum standards for water trail providers to share site-specific information and a map template for posting water trail maps online.

Action 4: Develop minimum-standard requirements for water trail guides, water trail informational brochures, and water trail signage.

Action 5: Develop geospatial PDF maps of water trail routes to allow on the water way finding. Such maps can be uploaded onto mobile devices (smartphone or tablet) and then, using an app, use built-in GPS to track the users location on the map.

Action 6: Develop a promotional package template that can be used by water trail managers to market water trails in Oregon.

Action 7: Travel Oregon should put increased emphasis on non-motorized boating tourism in Oregon.

Action 8: Provide grant emphasis for development of water trail guides, information brochures, and water trail signage projects (Land and Water Conservation Fund (LWCF), Local Government Grant Program (LGGP), and Recreational Trails Program (RTP) grant programs).

► CHAPTER 9

State Scenic Waterway Planning



INTRODUCTION

The Oregon Parks and Recreation Department (OPRD) is directed to periodically study rivers or segments of rivers and their related adjacent land for potential inclusion in the State Scenic Waterway Program. The purpose of this chapter is to describe how OPRD will conduct State Scenic Waterway planning in the next ten-year period (2016-2025).

Background

The Oregon Scenic Waterway Program, established by a vote of the people in 1969, is administered under the authority of the State Parks Commission through the State Parks and Recreation Department (ORS 390.805 to ORS 390.925). The scenic waterway program seeks to preserve, protect and enhance scenic, recreational, fish and wildlife and cultural values possessed by each individual scenic waterway. The Scenic Waterways Act was created to strike a balance between protecting the natural resources, scenic value, and recreational uses of Oregon's rivers by designating them. The state program currently

includes approximately 1,150 miles on 20 waterways (Figure 106). No new waterways have been designated since 1988.

The Commission's rules specifically outline the manner in which the Scenic Waterways Act is to be carried out. The Act and the Commission's rules generally require proposed changes of land use within ¼ mile on each side of the river to be evaluated for their potential to impair the natural scene. Property owners wanting to build roads, houses, develop mines, cut timber or other activities that may alter the existing scene, must notify the Commission in advance. Within one year of notification, the Commission must decide if the proposal will impair the scenic beauty of the river. The Commission relies on its rules for each designated scenic waterway to make the determination. Other local and state agencies must comply with the Act; and the Commission is instructed to study other rivers for possible inclusion in the scenic waterways system.

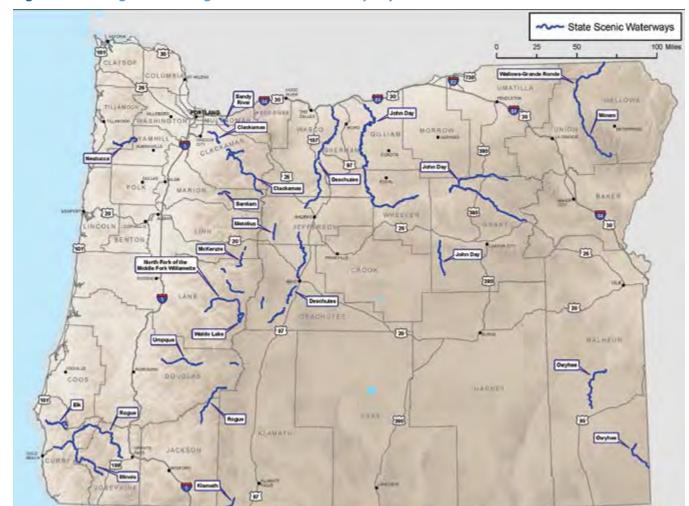


Figure 106. Oregon's Existing State Scenic Waterways System

Filling in the river, removing soil and gravel from the river or changing the riverbank in any way, regardless of the amount of soil or rock involved, requires special prior approval of the State Land Board and the Director of the Division State Lands. The Director of the Oregon Department of Water Resources is required to insure that new water rights issued within the scenic waterway will be used only for human consumption, livestock, fish, wildlife and recreation unless adequate flows can be assured to protect fish, wildlife and recreation. Dams, impoundments, reservoirs and some mining activities are prohibited within the scenic waterway corridor including tributary streams within the ¼ mile boundary. The complete Oregon Scenic Waterways Act and Administrative Rules are available on the OPRD website at: oregon.gov/OPRD/RULES/Pages/waterways.aspx.

Designation Process for New Scenic Waterways

The Oregon Scenic Waterways Act (ORS 390.855 to 390.865) establishes procedures by which new scenic waterways may be designated (Figure 107). A river or river segment can be designated as an Oregon Scenic Waterway by one of three ways:

1. Public initiative. The voters of Oregon, following a successful initiative campaign, established the program in 1970 by a vote of two to one. In 1988 the system doubled as a result of Ballot Measure 7. The governor or the legislature cannot veto a public initiative.

- 2. Direct legislative action. The Clackamas River was added to the system by the Legislature in 1975. Parts of new rivers (and Waldo Lake) were added this way in 1983, 1985, and 1987. The governor can veto this legislation at any point.
- 3. By the governor. After studies by OPRD and favorable recommendations from the Oregon State Parks and Recreation Commission and the Water Resources Commission, the governor may designate a scenic waterway. The new designation becomes effective if the legislature has no objections.

The following is a further explanation of river or river segment designation through the governor involving actions required by state agencies.

With concurrence of the State Water Resources Commission, the Oregon State Parks and Recreation Commission may recommend to the governor designation of additional scenic waterways. Favorable recommendation is necessary before the governor may designate a scenic waterway. The governor may or may not choose to designate the candidate scenic waterway. Scenic Waterway designation by the governor becomes effective the day following final adjournment of the next or current regular session of the Oregon Legislature. The legislature could (by joint resolution) act to void all, or part of, the governor's designation.

ORS 390.855 establishes the three criteria for qualification which must be considered in the commision's study and report:

- 1. The river or segment of river is relatively free-flowing and the scene as viewed from the river and related adjacent land is pleasing, whether primitive or rural-pastoral or these conditions are restorable.
- The river or segment of river and its setting possess natural and recreation values of outstanding quality.
- 3. The river or segment of river and its setting are large enough to sustain substantial recreation use and to accommodate existing uses without undue impairment of the natural values of the resource quality or the recreation experience.

Before a river can be designated a State Scenic Waterway it must be found to meet these qualifications.

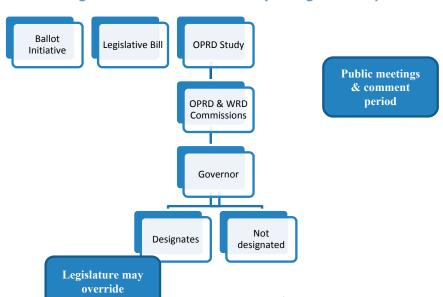


Figure 107. Oregon's State Scenic Waterway Designation Options

2013-2016 Scenic Waterway Planning Pilot Study

Since the OPRD is directed to periodically study rivers or river segments and their related adjacent land for potential inclusion in the State Scenic Waterway Program, in September 2013, the agency made a decision to analyze up to three waterways for potential designation every future State biennium (two-year period). The pilot study effort (2013-2016) is to establish a method for future scenic waterway planning efforts.

An initial screening of all Oregon waterways by OPRD resulted in a list of approximately 80 river segments having the potential to meet the State's waterway designation criteria. Based on a broad coalition of agencies and stakeholders, OPRD's capacity to complete the waterway assessments, and to provide geographical distribution throughout the State, sections of the Molalla, Chetco, and Grande Ronde rivers were included in the 2013-2016 pilot study. These study areas are show in red in Figure 108.

Pilot Study Reaches State Scenic Waterways

Federal Wild & Scenic Rivers

O 25 50 100 Miles

UMATILLA

WINDERS

WASHINGTON

WANTER

WASHINGTON

WASHIN

Figure 108. Location Of The Molalla, Chetco, And Grande Ronde River Study Areas

In 2014, OPRD evaluated the Molalla (13.2 mile segment), Chetco (14 mile segment), and Grande Ronde (29 mile segment) river segments through on-river evaluations and public input. These evaluations found:

- Based on eligibility findings and significant support for the potential designation, the Molalla River study area is a strong candidate for the State Scenic Waterway program.
- Based on eligibility findings and significant support for the potential designation, the Chetco River study area is a strong candidate for the State Scenic Waterway program.
- Based on eligibility findings, the Grande Ronde River study area is not a strong candidate for the State Scenic Waterway program.

The full state scenic waterway reports for these three river segments are available online at: oregon.gov/oprd/NATRES/scenicwaterways/Pages/index.aspx.

Effective Scenic Waterway management is affected by the balance between waterway protection and the development rights of area property and business owners. It is also critical that OPRD and local proponents develop a strong partnership in environmental stewardship efforts and promotion of recreation opportunities along the waterway. In 2015, OPRD convened a voluntary local proponent group to draft non-binding management plans for the Molalla and Chetco rivers as an addendum to the river study reports approved by the Oregon State Parks and Recreation Commission. These plans will be used as a starting point for formal rulemaking if the waterways are officially designated.

The Oregon State Parks and Recreation and Water Resources Commissions have recommended the governor designate these segments as new state scenic waterway additions.

Management of New Scenic Waterways

If the Molalla or Chetco River segments are designated as part of the Oregon Scenic Waterway System, the law requires OPRD to administer the area in order to protect and enhance the value which caused the scenic waterway to be included in the system. Management would be based on the "special attributes of each area" and give primary emphasis to protecting the scenic, fish and wildlife and recreational features. The aim of the program is to maintain the scenic "status quo" condition of the area without "turning back the clock" on land developments. If directed to do so by designation, ORPD would classify the rivers, or segments of the river according to the level of existing development, into one or more of six possible classifications. Once the classifications are set then specific guidelines for development are established as state rules. The classifications have been established by the commission and are in use on other scenic waterways. The classifications and their general management direction are described as follows:

- Natural River Areas are generally inaccessible except by trail or river with primitive or minimally developed shorelands. Preservation of the primitive character of these areas is the goal of this classification.
- 2. Accessible Natural River Areas is reserved for relatively primitive, undeveloped areas with access by road or railroad. Management emphasis is to preserve the primitive qualities of the area.
- 3. **Scenic River Areas** may be accessible by roads but are largely undeveloped and primitive except for agriculture and grazing. Management seeks to preserve the undeveloped nature of the area.
- 4. **Natural Scenic View Areas** are designated where one riverbank is inaccessible, undeveloped or primitive in character while the opposite bank is accessible and developed. Preservation of the natural primitive qualities are sought after by management.

- 5. Recreational River Areas are readily accessible by road or railroad with some agricultural, commercial and/or residential development along the banks. Management is aimed at allowing development consistent with what is present while protecting the view and other natural features.
- 6. **River Community Areas** are highly developed areas of commercial or residential uses in natural settings. Allowing development with an eye toward maintaining the natural setting is the aim of management.

The rules established for each classified river segment generally allow continuation of the use of existing structures or improvements. In fact, though some improvements would require notification/ review/approval by the commission, many others do not. For example, on most scenic waterways, notification and approval is not needed for construction of new fences; maintenance of farm buildings, fences or outbuildings; laying of irrigation lines; crop rotation; removal of dangerous trees; construction of grain storage facilities under certain conditions; maintenance of existing residences and outbuildings; minor residential remodeling; construction of garages adjacent to existing homes; certain changes in home site landscaping; maintenance of roads and bridges; and firewood cutting for personal use.

Mining, road-building, construction of some new structures, placement of mobile homes, land clearing and timber harvest are examples of activities requiring approval, if they are visible from the river. River classification and the rules or guidelines that apply to the given classification determine exactly how the natural and scenic beauty of the river will be maintained.

If designation on the Molalla or Chetco River takes place, then OPRD will work with the local proponents and other state agencies to finalize draft plans describing how each river segment would be managed. Public hearings associated with formal state administrative rule-making would be held.

Identification of Potential Scenic Waterway Study Reaches

The 2016-2025 Oregon trails planning effort included three distinct methods to identify a list of potential state scenic waterway study areas for the plan's ten-year planning horizon. The following is a description of these methods.

The first method involved an online survey (Survey Monkey website) of Oregon non-motorized boating facility managers conducted in July 2014. Of the 330 providers contacted, 215 completed the survey for a 65% response rate. Respondents were asked to nominate river segments they would like to see added to the Oregon State Scenic Waterway Program. Recommended additions were identified by respondents using drop-down menus to select the highest, second highest, and third highest priority additions for each region. The overall point score for each nominated waterway was calculated based on three points for each time the waterway was identified as a first priority addition, two points for a second priority, and one point for a third priority.

The second method was a component of the state-wide survey of non-motorized boaters (Oregon Non-motorized Boater Participation and Priorities) conducted by Oregon State University in the fall of 2014. The survey included a random sample of 5,428 resident non-motorized boaters. Of the 5,428 individuals contacted, 1,983 completed the survey for a 37% response rate. In the same manner as the survey of Oregon recreation providers, respondents were asked to nominate river segments they would like to see added to the Oregon State Scenic Waterway Program.

Finally, a series of regional public meeting workshops were held at 14 locations across the state in October 2014. Each workshop included an afternoon session open to all public recreation providers and an evening session open to the general public. Following a presentation describing the trails planning process, workshop attendees were given an

opportunity to prioritize regional scenic waterway nominations.

Results of these public input processes were combined, summarized, and reviewed by OPRD management. The following is a list (Table 49) of these priority potential study reaches and a map (Figure 109) showing each of the 22 potential study reach locations.

Table 49. Potential Scenic Waterway Study Reaches (2016-2025)

Planning Region	River Reach
8	R98 Crooked River
4	R70 McKenzie River (Paradise South)
3	R66 North Santiam River (Pending dam status review)
6	R89 Rogue River (Lost Creek Lake to Applegate River)
9	R94 Williamson River
10	R100 John Day River (Picture Cr. to Service Cr.)
2 & 7	R60 White River
5 & 6	R27 Umpqua River (Mainstem from confluence of North and South Fork to the Pacific Ocean)
6	R44 Illinois River (Illinois River Forks State Park to Deer Creek)
2	R58 Sandy River (Source to confluence with Bull Run River)
1 & 2	R5 Nehalem River
10	R115 Imnaha River
2	R49 Tualatin River
11	R121 Owhyee River (Owyhee Dam to Snake River)
3 & 4	R126 Willamette River (Sam Daws Bend, near Peoria, to Mid Fork Junction)
3	R69 Middle Santiam River
2 & 3	R125 Willamette River (Canby to Sam Daws Bend, near Peoria)
3	R68 South Santiam River
7	R102 Umatilla River (Source to McKay)
5 & 6	R28 Smith River
1 & 3	R17 Siletz River (Mainstern from confluence of North and South Forks to Siletz Bay)
4	R79 Coast Fork Willamette River

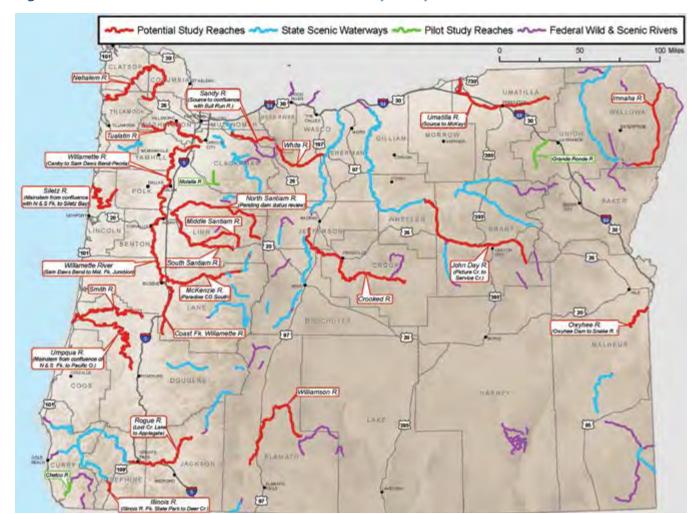


Figure 109. Location Of The Potential Scenic Waterway Study Reaches (2016-2025)

Future Scenic Waterway Planning

As previously mentioned, OPRD will facilitate the study of candidates for potential scenic waterway designations in coming biennia (two-year periods) using the process developed during the 2013-2016 pilot study. The schedule included in Figure 110 will be used for scenic waterway planning each biennium.

The following is a brief description of major planning components.

Step 1. OPRD distributes the list of potential scenic waterway study reaches (Table 49) to a broad list of government agencies and potential stakeholders in the state.

Step 2. OPRD will encourage potential proponent groups to champion the establishment of a scenic waterway included on the list of potential scenic waterway reaches (Table 49). If the proponent group intends to propose a river corridor not included in Table 49, the group could submit a proposed river study corridor map and a summary of how the study area meets the statutory scenic waterway eligibility criteria, to OPRD for review. If this river corridor study area is accepted, it will be added to the official list of potential scenic waterway study reaches. OPRD will select candidates for study after considering input from agencies, stakeholders, and, optionally, proponent groups.

Step 3. OPRD finalizes the list of potential study reaches for the biennium. OPRD will develop a set of evaluation criteria (based on those set in statute) to score and prioritize the nominated study reaches for each biennium.

Step 4. OPRD staff will conduct eligibility studies and final report writing in cooperation with an optional proponent group if it exists. The eligibility studies will include substantial public input (suitability evaluation) and an on-river evaluation during the optimal float season to assess the waterway's free-flowing nature, scenic characteristic, and recreation qualities (eligibility evaluation). Study conclusions will state if the study corridor is suitable for inclusion into the Scenic Waterways Program. If the study corridor is not suitable for inclusion, no further actions will be taken. If the study corridor is found suitable for inclusion, the study will move on to Step 5.

Step 5. OPRD and Water Resources Department (WRD) staff will present plan findings and recommendations to the Oregon State Park and Recreation and Water Resources Commissions for consideration as additions to the Scenic Waterways Program. If the study corridor is determined not suitable for inclusion by the commissions, no further actions will be taken. If the study corridor is found suitable by the commissions for inclusion, the proposed addition will move on to Step 6.

Step 6. The OPRD and WRD Commissions submit the proposed addition to the governor.

Step 7. If the corridor receives official designation, OPRD staff will finalize the management plan as part of a public process to develop a set of Administrative Rules for the waterway.

Figure 110. Scenic Waterway Planning Schedule (2017-2025)



► CHAPTER 10

All-Terrain Vehicle Grant Program Evaluation Criteria



ALLOCATION PROCESS

The All-Terrain Vehicle (ATV) Grant Program provides funding statewide for OHV recreation in Oregon. OPRD-administered grant funds come from ATV user permit sales and a percentage of gasoline tax money. ATV Grant Program grants are awarded to projects that best meet the needs identified in the Oregon Statewide OHV Trails Plan. This plan is updated every ten years based on input from trail users and land managing agencies in Oregon. ATV grants help pay for operation and maintenance, law enforcement, emergency medical services, land acquisition, leases, planning, and development in Oregon's OHV recreation areas. The following is a brief description of the program's administration.

- For each biennium, an estimate is made for total dollar amount of annual ATV grant funds to be made available and the percentage of these funds for each major grant category (e.g., Operation and Maintenance, Law Enforcement, etc.).
- A grant meeting, typically in February, will distribute Operation, Maintenance, Law Enforcement and Emergency Medical grant funding. Operation and Maintenance projects will be evaluated using the O&M project scoring criteria; Law Enforcement and Emergency Medical projects will evaluated using the Law Enforcement and Emergency Medical project scoring criteria. The ATV Grant Subcommittee (ATV-GS) will have the option to score the projects as presented and provide the applicant their score or hold a scoring session at the end of the meeting and provide their scores and funding recommendations at that time.
- A grant meeting, typically in April, will
 distribute the remaining annual funding for
 Acquisition, Development, and Planning projects. Acquisition, Development and Planning
 projects will be evaluated using the Acquisition,
 Development and Planning project scoring
 criteria. The ATV-GS will have the option to

- score the projects as presented and provide the applicant their score or hold a scoring session at the end of the meeting and provide their scores and funding recommendations at that time.
- Ineligible or incomplete applications will be returned to the project sponsor with an explanation of why their application was returned. If time allows, grant applicants will have an opportunity to submit a revised application addressing specific problems.
- If any grant application or presentation causes committee members concern, the ATV-GS will have the option to table a project and request staff to obtain additional information as may be necessary.

PROJECT PRIORITY SCORING SYSTEM

Once projects submitted to OPRD for grant funding make it through the technical review, they will then be scored by ATV-GS members according to the criteria, rating factors, and points shown in the following "Project Priority Scoring System." The criteria are based on the findings of the current state trails plan and reflect priorities identified by workshop participants, trail's plan advisory committee members, trail user survey respondents and land managers. These criteria have been designed to evaluate and prioritize Off-Highway Vehicle (OHV) operation and maintenance; law enforcement; acquisition, development and planning; and emergency medical project proposals.

A project's final score will be calculated as an average of the sum of all individual ATV-GS member scores. The highest possible score for a project will be 100 points. (See Potential ATV Program Rating Criteria Point Summary below for criteria point breakdowns.) The priority rank of a project will depend on its score relative to other projects and in relation to the amount of ATV grant funds available each year.

ATV Grant Program Rating Criteria Point Summary

Criteria Type	Possible Points	
Technical review		
1. Compliance Criteria	0	
ATV advisory grant subcommittee member rating		
criteria		
2. Operations	20	
3. Rider Benefit	20	
4 Project Planning	20	
5. Economic Benefit	10	
6. Financial Support	5	
7. Letters Of Support	5	
8. Discretionary Committee	20	
Member Criteria		
Total Points Possible	100	

FOR EVALUATING OPERATION AND MAINTENANCE PROJECT PROPOSALS

Eligible operation projects provide for the normal day-to-day routine operation of open OHV trails and facilities. Operation projects may also include funding for employees who make public contact to provide help and information to OHV users as part of their daily routine. Eligible maintenance projects include services and equipment necessary to maintain OHV trails and facilities. ATV sponsors must have an agency approved maintenance plan in place that includes how each trail or facility will be maintained, how often maintenance will be provided and the maintenance standard to be used. Maintenance funding is also available for equipment such as quads and excavators used to maintain OHV trails. Sign replacement and trail guides may also be included in maintenance applications.

Technical Review – Application Completeness

As part of the ATV grant evaluation process, OPRD first conducts a technical review of all grant applications. Each submitted grant application packet will need to include all materials requested in Section 2 (Application Submittal, Review and Approval Process) of the ATV Grant Instruction Manual & Application Packet. Ineligible or incomplete applications will be returned to the project sponsor with an explanation of why their application was returned. Project applicants are encouraged to contact OPRD grant staff with questions regarding the ATV grant application process.

Project Priority Scoring System

Once operation and maintenance projects submitted to OPRD for grant funding make it through the technical review, they will then be scored by ATV-GS members according to the criteria, rating factors, and points shown in the following "Project Priority Scoring System." These criteria have been designed to evaluate and prioritize OHV operation and maintenance project proposals.

A project's final score will be calculated as an average of the sum of all individual ATV-GS member scores. The highest possible score for a project will be 100 points. (See Potential ATV Program Rating Criteria Point Summary on page 175 for criteria point breakdowns.) The priority rank of a project will depend on its score relative to other projects and in relation to the amount of ATV grant funds available each year.

OPRD Staff Rating Criteria

1. Compliance Criteria

Due to the large number of requests for ATV funds, the following set of compliance criteria were developed to ensure that:

- Project sponsors with active and previously awarded grants through OPRD are in full compliance with federal and state programs;
- Funds are expended and projects completed within the agreement period; and
- Each new project proposal satisfies the requirements of the Oregon Revised Statutes, ORS 390.550-585, Oregon Administrative Rules, Chapter 736, and the most current version of the ATV Grant Instructions Manual.

Note: No scoring points will be awarded for compliance criteria. Failure to comply with or lack of sufficiently demonstrated progress with the following compliance criteria (a and b) may result in the <u>disqualification of consideration for new grant</u> <u>assistance</u> during the current grant review period.

A. Grant Performance and Compliance

The successful completion of projects in a timely and efficient manner is an important goal of the ATV grant program. A project sponsor's past performance in effectively meeting the administrative guidelines of the program is also an important factor in evaluating performance and compliance.

a. The project sponsor is on schedule with all active OPRD administered grant projects.

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b. The project sponsor is in compliance with applicable guidelines for current and past projects.

___ Yes__ No

ATV Grant Subcommittee Member Rating Criteria

2. Operations (0-20 Points)

A. Project Description

Please provide the following information related to your operation and maintenance project:

- Provide a detailed description of your grant project request.
- Describe the OHV riding area for this project.
- What Classes of ATVs will be allowed in the area?
- On an annual basis, what are the anticipated months of use? What are the typical wildlife, snow, or fire season closures? Also discuss conditions that reduce riding such as summer heat or dust or winter rain/ snow/ cold.
- Describe how this project will result in a
 well-designed, managed, and sustainable trail/
 facility. How will impacts and damage to trails
 and facilities be proactively prevented or minimized through innovative and sustainable trail
 and facility design and management practices?
 Describe how this project maintains or increases
 the carrying capacity at the existing riding area.
- Describe how the project will serve as a means to restore, improve or enhance, or conserve and maintain high quality or sensitive natural or cultural resources in the protected area, such as plant communities, wildlife, water bodies, terrain, and archeological or historic sites while striking a proper balance between the conservation of these resources and motorized trail use.
- Describe how you developed your maintenance schedule. How many facilities/ staging areas will be maintained in this proposal and how often?
- If you manage multiple riding areas, list each area and total miles of routes.

B. Miles Of Roads/Trails

 Please provide the number of miles of each type of road or trail in your system.

___ points awarded (0 - 20 points)

(The rating team will determine a value from 0-20 points based on the information provided by the applicant.)

3. Rider Benefits (0-20 Points)

OPRD intends to ensure that available ATV grant dollars are used to fund projects maximizing rider benefits.

A. Benefits

Please provide the following information related to your project:

How does this program benefit the OHV trail user?

B. Statewide Management Issues

The statewide planning process identified three top issues on OHV trails on public lands in Oregon. Please describe how the project addresses the following statewide motorized trail issues:

Issue 1. Closure of trails. The implementation of federal travel management planning has resulted in a loss of OHV trail riding opportunities in Oregon. Closure of designated trails and routes without providing other designated routes in the same area leads to overuse and impacts in new areas.

Issue 2. Closure of unimproved backcountry roads. Again, the implementation of federal travel management planning has also resulted in the loss of OHV riding on backcountry roads in Oregon.

Issue 3. Riding in closed areas. Land managers have reported a proliferation of user created trails arising from repeated unauthorized travel by OHVs.

C. Statewide Funding Need

The statewide planning process also identified three top funding needs for OHV trails on public lands in Oregon. Please describe how the project addresses the following three funding priorities:

- Funding Need 1. Maintaining existing trails in good/ sustainable condition.
- Funding Need 2. More single-track off-road motorcycle trails (Class III).
- Funding Need 3. Prioritize loop over out-andback trails.

D. Dispersed Riding Opportunities

The Oregon OHV Guide includes a listing of 53 Designated Riding Areas in the state. These areas are high-intensity riding areas with associated high operation and maintenance costs. There are also many designated Shared Use Roads, OHV routes and trails on public lands in Oregon which are outside the boundaries of these Designated Riding Areas. Many OHV enthusiasts seek out these less crowded riding experiences and enjoy exploring new riding areas. Others use these routes for access to special sites (lookouts, lakes, geographical features) or for activities such as hunting, fishing or gathering. A project sponsor that enhances existing or provides riding opportunities outside of the 53 Designated Riding Areas in the state will receive additional priority points. Eligible enhancement projects can include mapping and signing projects to help riders know where to ride.

Please describe how your program is maintaining or enhancing dispersed riding in your management area (forest, district, etc.). This may be outside the scope of this application, but is a use allowed in your area?

___ points awarded (0 - 20 points)

(The rating team will determine a value from 0-20 points based on the information provided by the applicant.)

4. Project Planning (0-20 Points)

Project sponsors are encouraged to develop project applications that meet high priority need of the intended clientele. Priority points are awarded for project sponsors demonstrating that they have conducted both long-term and short-term operation and maintenance planning and use innovative and sustainable trail and facility design and management practices.

- Is the project part of an overall OHV plan for the area and does the project contribute the implementation of the plan?
- Describe your planning efforts to determine the staffing levels and resources required. How do you make decisions on when and how staff will work on an annual basis, such as for seasonal peak use, seasonal closures (fire, snow), holiday weekends, weekdays/weekends, and number of employees at a given time?
- Describe how your O&M program uses innovative and sustainable practices. Please see specific sustainability recommendations for OPRD-administered grant programs are included in SCORP Chapter Seven (pages 115-117). Recommendations are included for land acquisition, new facility development, major rehabilitation, and trail projects. The full support document entitled, "Developing Sustainable Park Systems in Oregon," is available at the following link: http://www.oregon.gov/oprd/PLANS/docs/scorp/2013-2018_SCORP/2013-2017-SCORP_App_D.pdf.

_ points awarded (0 - 20 points)

(The rating team will determine a value from 0-20 points based on the information provided by the applicant.)

5. Economic Development Opportunities (0-10 Points)

The findings from the Oregon OHV trail user survey identified that spending by Oregon residents on OHV riding trips was an estimated \$100 million per year across the state. In turn, this expenditure contributed 869 jobs, \$35 million in value added, and \$23 million in labor income. When out-of-state visitors are included, the estimated amounts increase to 1,120 jobs, \$45 million in value added, and \$29 million in labor income.

• Please describe how this project will contribute to the local economy.

_ points awarded (0 - 10 points)

(The rating team will determine a value from 0-10 points based on the information provided by the applicant.)

6. Financial Support (0-5 Points)

Support can be demonstrated in both financial and non-financial ways and varies depending upon the project type.

 Please describe match to this project, such as volunteer labor, other grants, agency budgets or donations. Please list other grants you have received over the last 3 years which are not part of this grant, but relate to OHV use in your program.

___ points awarded (0 - 5 points)

(The rating team will determine a value from 0-5 points based on the information provided by the applicant.)

7. Letters Of Support (0-5 Points)

Current letters of support, from a variety of sources, help to demonstrate the need and success of your program. Letters from OHV riders and clubs are very important. Letters from local businesses, county commissioners, and other groups are also important. Letters from agencies also show support, but only

two letters from agencies are allowed. Please list the name, title, group, business or agency for each letter attached. Up to 10 letters of support will be accepted. No letters will be accepted from previous years.

___ points awarded (0 - 5 points)

(The rating team will determine a value from 0-5 points based on information provided by the applicant related to the degree to which the project demonstrates broad community support.)

8. Discretionary Committee Member Criteria (0 - 20 Points)

The ATV-GS membership is representative of state geographic regions, agencies, communities, and trail user groups. This assessment allows committee members to bring their knowledge of statewide and local recreation patterns, resources, and needs into consideration. The determination of points awarded is an individual decision, based on informed judgment.

ATV-GS members may award the project additional points based upon their subjective evaluation of key project considerations included in the list below²⁸. Please note that some considerations may add to while others may reduce the number of discretionary points a project receives.

Fiscal Consideration: Under this review, project sponsors will be asked to justify their request for financial assistance including the extent to which the project is cost comparable to other trail facilities of its type in their geographic area (e.g. cost-per mile comparisons), that the sponsor has budgeted enough money to successfully complete the project and if the requested amount is greater than the prior years' funding, a proper justification for increased funds.

Project Cost: Consideration will be given to

28 This list is not intended to be a complete list of all discretionary criteria to be considered by ATV-GS members. Other considerations could include exemplary design, special needs, project presentation and superior leverage of funding and partnership.

the degree to which a significant portion of the State's annual apportionment is requested for one project.

Mixed-Use Trails: Project sponsors should provide evidence that the project will support Class I, II, III, and IV riding opportunities serving a wide range of abilities including the handicapped and a range of skill levels.

Use Levels: Project sponsors should describe the level of use the trail and support facilities receive.

Special Maintenance Problems: If the site poses special maintenance problems, it may not be cost effective to continue maintenance over the long term.

Regional Issues: Regional trail issues were also identified in the current trails planning process. Where appropriate, project sponsors should describe how the project addresses appropriate regional trail issues. Regional motorized trail issues are included in Chapter 7.

Note: Locate the project sponsor's region and identify each regional trail issue addressed in the project proposal.

Each committee member will determine the number of points awarded for each project.

Assessment Score:

___ points awarded (0 - 20 points)

FOR EVALUATING LAW ENFORCEMENT PROJECT PROPOSALS

Eligible law enforcement projects include services and equipment that will provide a direct law enforcement presence by certified personnel in OHV riding areas for OHV recreational enthusiasts.

Technical Review – Application Completeness

As part of the ATV grant evaluation process, OPRD first conducts a technical review of all grant applications. Each submitted grant application packet will need to include all materials requested in Section 2 (Application Submittal, Review and Approval Process) of the ATV Grant Instruction Manual & Application Packet. Ineligible or incomplete applications will be returned to the project sponsor with an explanation of why their application was returned. Project applicants are encouraged to contact OPRD grant staff with questions regarding the ATV grant application process.

Project Priority Scoring System

Once law enforcement projects submitted to OPRD for grant funding make it through the technical review, they will then be scored by ATV-GS members according to the criteria, rating factors, and points shown in the following "Project Priority Scoring System." These criteria have been designed to evaluate and prioritize OHV law enforcement project proposals.

A project's final score will be calculated as an average of the sum of all individual ATV-GS member scores. The highest possible score for a project will be 100 points. (See Potential ATV Program Rating Criteria Point Summary on page 175 for criteria point breakdowns.) The priority rank of a project will depend on its score relative to other projects and in relation to the amount of ATV grant funds available each year.

OPRD Staff Rating Criteria

1. Compliance Criteria

Due to the large number of requests for ATV funds, the following set of compliance criteria were developed to ensure that:

- Project sponsors with active and previously awarded grants through OPRD are in full compliance with federal and state programs;
- Funds are expended and projects completed within the agreement period; and
- Each new project proposal satisfies the requirements of the Oregon Revised Statutes, ORS 390.550-585, Oregon Administrative Rules, Chapter 736, and the most current version of the ATV Grant Instructions Manual.

Note: No scoring points will be awarded for compliance criteria. Failure to comply with or lack of sufficiently demonstrated progress with the following compliance criteria (a and b) may result in the <u>disqualification of consideration for new grant</u> <u>assistance</u> during the current grant review period.

A. Grant Performance and Compliance

The successful completion of projects in a timely and efficient manner is an important goal of the ATV grant program. A project sponsor's past performance in effectively meeting the administrative guidelines of the program is also an important factor in evaluating performance and compliance.

a. The project sponsor is on schedule with all active OPRD administered grant projects.

____ Yes___ No

b. The project sponsor is in compliance with applicable guidelines for current and past projects.

Yes No

c. The project sponsor is in compliance with entering law enforcement data into the ATV Law Enforcement Tracking System.

ATV Grant Subcommittee Member Rating Criteria

2. Operations (0-20 Points)

Please provide the following information related to your operation and maintenance project:

- Provide a detailed description of your grant project request including seasons of use, how patrols are conducted, and types of vehicles used for patrols such as quads, motorcycles, side-bysides, or trucks.
- What OHV areas are you patrolling?
- Please describe the need for this project. List and describe the OHV law enforcement problems/ issues and how the grant will help to resolve them.
- How many law enforcement officers will patrol the OHV areas?
- What is the average hourly cost for OHV patrols including benefits?
- Provide a written summary of your OHV law enforcement activities over the previous 12 months.
- How many total hours will you patrol in the first year (12 months)? Include an estimate of hours for each of the 12 months (e.g., number of hours in July, number of hours in August, and so forth).

___ points awarded (0 - 20 points)

(The rating team will determine a value from 0-20 points based on the information provided by the applicant.)

3. Rider Benefits (0-20 Points)

OPRD intends to ensure that available ATV grant dollars are used to fund projects maximizing rider benefits.

Please provide the following information related to your law enforcement project:

- How does this project benefit the OHV trail user?
- Explain how this project is directly related to the safety of OHV users?

___ points awarded (0 - 20 points)

(The rating team will determine a value from 0-20 points based on the information provided by the applicant.)

4. Project Planning (0-20 Points)

Please provide the following information related to your law enforcement project:

- Describe your planning efforts to determine the staffing levels and resources requested.
 This should include initial planning with other agencies. How do you make decisions on when staff will patrol on an annual basis; such as seasonal peak use, seasonal closers (fire, snow); holiday weekends; weekend/weekends; and number of deputies at a given time? Please focus your responses on annual staff planning.
- How are you communicating with the land manager/ recreation staff and how often throughout the year to address issues and coordinate resources? Consider things such as events, changes in use patterns, problem riding areas, reducing duplication of patrols, providing backup, providing assistance, and sharing schedules. Please focus your responses on the day-to-day, on the ground, operations of staff.
- How are you working with other law enforcement agencies (OSP, other county Sheriffs, USFS LEOs, BLM Rangers, city police) throughout the year to assist with your patrols?

____ points awarded (0 - 20 points)

(The rating team will determine a value from 0-20 points based on the information provided by the applicant.)

5. Economic Development Opportunities (0-10 Points)

The findings from the Oregon OHV trail user survey identified that spending by Oregon residents on OHV riding trips was an estimated \$100 million per year across the state. In turn, this expenditure contributed 869 jobs, \$35 million in value added, and \$23 million in labor income. When out-of-state visitors are included, the estimated amounts increase to 1,120 jobs, \$45 million in value added, and \$29 million in labor income.

• Please describe how the riding areas you patrol will contribute to the local economy.

___ points awarded (0 - 10 points)

(The rating team will determine a value from 0-10 points based on the information provided by the applicant.)

6. Financial Support (0-5 Points)

Support can be demonstrated in both financial and non-financial ways and varies depending upon the project type.

 Please describe match to this project, such as volunteer labor, other grants, agency budgets or donations. Please list other grants you have received over the last 3 years which are not part of this grant, but relate to OHV use in your program.

___ points awarded (0 - 5 points)

(The rating team will determine a value from 0-5 points based on the information provided by the applicant.)

7. Letters Of Support (0-5 Points)

Current letters of support, from a variety of sources, help to demonstrate the need and success of your program. Letters from OHV riders and clubs are very important. Letters from local businesses, county commissioners, and other groups are also important. Letters from agencies also show support, but only

two letters from agencies are allowed. Please list the name, title, group, business or agency for each letter attached. Up to 10 letters of support will be accepted. No letters will be accepted from previous years.

___ points awarded (0 - 5 points)

(The rating team will determine a value from 0-5 points based on information provided by the applicant related to the degree to which the project demonstrates broad community support.)

8. Discretionary Committee Member Criteria (0-20 Points)

The ATV-GS membership is representative of state geographic regions, agencies, communities, and trail user groups. This assessment allows committee members to bring their knowledge of statewide and local recreation patterns, resources, and needs into consideration. The determination of points awarded is an individual decision, based on informed judgment.

ATV-GS members may award the project additional points based upon their subjective evaluation of key project considerations included in the list below²⁹. Please note that some considerations may add to while others may reduce the number of discretionary points a project receives.

Fiscal Consideration: Under this review, project sponsors will be asked to justify their request for financial assistance including the extent to which the project is cost comparable to other projects of its type in their geographic area, that the sponsor has budgeted enough money to successfully complete the project and if the requested amount is greater than the prior years' funding, a proper justification for increased funds.

29 This list is not intended to be a complete list of all discretionary criteria to be considered by ATV-GS members. Other considerations could include exemplary design, special needs, project presentation and superior leverage of funding and partnership.

Project Cost: Consideration will be given to the degree to which a significant portion of the State's annual apportionment is requested for one project.

Each committee member will determine the number of points awarded for each project.

Assessment Score:

___ points awarded (0 - 20 points)

FOR EVALUATING ACQUISITION, DEVELOPMENT AND PLANNING PROJECT PROPOSALS

Technical Review – Application Completeness

As part of the ATV grant evaluation process, the Oregon Parks and Recreation Department staff first conducts a technical review of all grant applications. Each submitted grant application packet will need to include all materials requested in Section 2 (Application Submittal, Review and Approval Process) of the ATV Grant Instruction Manual & Application Packet. Ineligible or incomplete applications will be returned to the project sponsor with an explanation of why their application was returned. Project applicants are encouraged to contact OPRD grant staff with questions regarding the ATV grant application process.

Project Priority Scoring System

Once acquisition, development and planning projects submitted to OPRD for grant funding make it through the technical review, they will then be scored by ATV-GS members according to the criteria, rating factors, and points shown in the following "Project Priority Scoring System." The criteria are based on the findings of the current state trails plan and reflect priorities identified by

workshop participants, trail's plan advisory committee members, trail user survey respondents and land managers. These criteria have been designed to evaluate and prioritize Off-Highway Vehicle (OHV) acquisition, development and planning project proposals.

A project's final score will be calculated as an average of the sum of all individual ATV-GS member scores. The highest possible score for a project will be 100 points. (See Potential ATV Program Rating Criteria Point Summary on page 175 for criteria point breakdowns.) The priority rank of a project will depend on its score relative to other projects and in relation to the amount of ATV grant funds available each year.

OPRD Staff Rating Criteria

1. Compliance Criteria

Due to the large number of requests for ATV funds, the following set of compliance criteria were developed to ensure that:

- Project sponsors with active and previously awarded grants through OPRD are in full compliance with federal and state programs;
- Funds are expended and projects completed within the agreement period; and
- Each new project proposal satisfies the requirements of the Oregon Revised Statutes, ORS 390.550-585, Oregon Administrative Rules, Chapter 736, and the most current version of the ATV Grant Instructions Manual.
- Available ATV grant dollars are used in a timely manner once funding is awarded to a project sponsor.

Note: No scoring points will be awarded for compliance criteria. Failure to comply with or lack of sufficiently demonstrated progress with the following compliance criteria (a and b) may result in the <u>disqualification of consideration for new grant</u> <u>assistance</u> during the current grant review period.

A. Grant Performance and Compliance

The successful completion of projects in a timely and efficient manner is an important goal of the ATV grant program. A project sponsor's past performance in effectively meeting the administrative guidelines of the program is also an important factor in evaluating performance and compliance.

a. The project sponsor is on schedule with all active OPRD administered grant projects.

____ Yes___ No

b. The project sponsor is in compliance with applicable guidelines for current and past projects.

____ Yes___ No

B. Permit Status (For development projects only)

Project sponsor has demonstrated what it will take to get their particular development project completed in a timely manner including such items as:

- Needed permits, environmental clearances and signed agreements.
- Permits such as building permits for a structure may be obtained at the time of construction, but applicant must research all permits by the time submitting application.
- NEPA, EA or Record of Decision on Federal Lands must be completed by the Committee Review Meeting date.
- Construction plans
- Archaeological surveys

C. Acquisition Status (For acquisition projects only)

Project sponsor has demonstrated what it will take to get their particular development project completed in a timely manner including such items as:

- Completed appraisal
- Preliminary Title Report
- Level 1 or higher Environmental Assessment
- Proof of willing seller or donor

D. Planning Status (For planning projects only)

Project sponsor has demonstrated the need for the plan and basic public involvement strategies including items such as:

- A clearly defined concept and purpose
- An advisory committee
- A method to involve landowners, neighbors, public officials, and user groups in the planning process

ATV Grant Subcommittee Member Rating Criteria

2. Operations (0-20 Points)

Please provide the following information related to your project:

- Provide a detailed description of your grant project request.
- Describe the OHV riding area for this project.
- What Classes of ATVs will be allowed in the area?
- On an annual basis, what are the anticipated months of use? What are the typical wildlife, snow, or fire season closures? Also discuss conditions that reduce riding such as summer heat or dust or winter rain/ snow/ cold.
- Describe how this project will result in a
 well-designed, managed, and sustainable trail/
 facility. How will impacts and damage to trails
 and facilities be proactively prevented or minimized through innovative and sustainable trail
 and facility design and management practices?
 Describe how this project maintains or increases
 the carrying capacity at the existing riding area.
- Describe how the project will serve as a means to restore, improve or enhance, or conserve and maintain high quality or sensitive natural or cultural resources in the protected area, such as plant communities, wildlife, water bodies, terrain, and archeological or historic sites while striking a proper balance between the conservation of these resources and motorized trail use.

 Explain your plan to continue trail/facility operation and maintenance. Include maintenance requirements and future funding and partnerships.

___ points awarded (0 - 20 points)

(The rating team will determine a value from 0-20 points based on the information provided by the applicant.)

3. Rider Benefits (0-20 Points)

OPRD intends to ensure that available ATV grant dollars are used to fund projects maximizing rider benefits.

A. Benefits

Please provide the following information related to your project:

 How does this program benefit the OHV trail user?

B. Statewide Management Issues

The statewide planning process identified three top issues on OHV trails on public lands in Oregon. Please describe how the project addresses the following statewide motorized trail issues:

Issue 1. Closure of trails. The implementation of federal travel management planning has resulted in a loss of OHV trail riding opportunities in Oregon. Closure of designated trails and routes without providing other designated routes in the same area leads to overuse and impacts in new areas.

Issue 2. Closure of unimproved backcountry roads. Again, the implementation of federal travel management planning has also resulted in the loss of OHV riding on backcountry roads in Oregon.

Issue 3. Riding in closed areas. Land managers have reported a proliferation of user created trails arising from repeated unauthorized travel by OHVs.

C. Statewide Funding Need

The statewide planning process also identified three top funding needs for OHV trails on public lands in Oregon. Please describe how the project addresses the following three funding priorities:

- Funding Need 1. Maintaining existing trails in good/ sustainable condition.
- Funding Need 2. More single-track off-road motorcycle trails (Class III).
- Funding Need 3. Prioritize loop over out-andback trails.

D. Dispersed Riding Opportunities

The Oregon OHV Guide includes a listing of 53 Designated Riding Areas in the state. These areas are high-intensity riding areas with associated high operation and maintenance costs. There are also many designated Shared Use Roads, OHV routes and trails on public lands in Oregon which are outside the boundaries of these Designated Riding Areas. Many OHV enthusiasts seek out these less crowded riding experiences and enjoy exploring new riding areas. Others use these routes for access to special sites (lookouts, lakes, geographical features) or for activities such as hunting, fishing or gathering. A project sponsor that enhances existing or provides riding opportunities outside of the 53 Designated Riding Areas in the state will receive additional priority points. Eligible enhancement projects can include mapping and signing projects to help riders know where to ride.

Please describe how your program is maintaining or enhancing dispersed riding in your management area (forest, district, etc.). This may be outside the scope of this application, but is a use allowed in your area?

___ points awarded (0 - 20 points)

(The rating team will determine a value from 0-20 points based on the information provided by the applicant.)

4. Project Planning (0-20 Points)

A. Readiness To Proceed

- Is the project ready to start? Demonstrate what it will take to get this project completed. Please include items such as permits, environmental clearances, signed agreements, construction plans, contract bids, cultural, historical, or archaeological surveys.
- Has an EA, EIS or Record of Decision been completed for this project? (Federal applicants only)
- Describe other information pertaining to this site, such as noise issues, noise impacts, environmental concerns, social issues, or tribal, cultural, or heritage issues.

B. Public Involvement

 Please describe how public involvement was received through public meetings/ workshops, open houses, interviews, club input, rider input, questionnaires. Summarize their comments both in support and opposition of the project.

C. Local Funding Need

Project sponsors are strongly encouraged to develop project applications that meet high priority need of the intended clientele. Need can be demonstrated through results of the trails plan needs assessment (item a below), coordinated, long-range planning with a minimum of a 5-year planning horizon (item b below), or through a substantive public involvement process (item c below). If the project isn't identified as a region-level need by the trails plan needs assessment, local need should be demonstrated through the project's inclusion in a current planning document or by describing the project's public involvement process.

- **a.** The 2016-2025 trails planning effort included a region-level analysis to identify priority projects. Please identify if the project satisfies region-level needs included in the tables in Chapter 6.
- **b.** The extent to which the project will satisfy priority needs, as identified in a current planning

document such as a comprehensive local plan or recreation master plan, county or regional master plan, trail system plan or land use/ management plan.

*Note: The local planning document must be adopted/ approved by the applicable governing body.

c. If the project is not included in a current planning document, describe the public involvement effort that led to the selection of the project such as citizen involvement through public meetings/workshops, open houses, interviews, questionnaires, etc.

____ points awarded (0 - 20 points)

(The rating team will determine a value from 0-20 points based on the information provided by the applicant.)

5. Economic Development Opportunities (0-10 Points)

The findings from the Oregon OHV trail user survey identified that spending by Oregon residents on OHV riding trips was an estimated \$100 million per year across the state. In turn, this expenditure contributed 869 jobs, \$35 million in value added, and \$23 million in labor income. When out-of-state visitors are included, the estimated amounts increase to 1,120 jobs, \$45 million in value added, and \$29 million in labor income.

 Please describe how the riding areas you patrol will contribute to the local economy.

____ points awarded (0 - 10 points)

(The rating team will determine a value from 0-10 points based on the information provided by the applicant.)

6. Financial Support (0-5 Points)

Support can be demonstrated in both financial and non-financial ways and varies depending upon the project type.

 Please describe match to this project, such as volunteer labor, other grants, agency budgets or donations. Please list other grants you have received over the last 3 years which are not part of this grant, but relate to OHV use in your program.

_ points awarded (0 - 5 points)

(The rating team will determine a value from 0-5 points based on the information provided by the applicant.)

7. Letters Of Support (0-5 Points)

Current letters of support, from a variety of sources, help to demonstrate the need and success of your program. Letters from OHV riders and clubs are very important. Letters from local businesses, county commissioners, and other groups are also important. Letters from agencies also show support, but only two letters from agencies are allowed. Please list the name, title, group, business or agency for each letter attached. Up to 10 letters of support will be accepted. No letters will be accepted from previous years.

___ points awarded (0 - 5 points)

(The rating team will determine a value from 0-5 points based on information provided by the applicant related to the degree to which the project demonstrates broad community support.)

8. Discretionary Committee Member Criteria (0-20 Points)

The ATV-GS membership is representative of state geographic regions, agencies, communities, and trail user groups. This assessment allows committee members to bring their knowledge of statewide and local recreation patterns, resources, and needs into consideration. The determination of points awarded is an individual decision, based on informed judgment.

ATV-GS members may award the project additional points based upon their subjective evaluation of the following³⁰:

- Site Suitability: The extent to which the site is suitable for the proposed development (e.g., minimizes negative impacts on the environment, surrounding neighborhood).
- Fiscal Consideration: Under this review, project sponsors will be asked to justify their request for financial assistance including the extent to which the project is cost comparable to other trail facilities of its type in the geographic area (e.g., cost-per mile comparisons), is justifiable in terms of the quantity and quality of recreation opportunities the facilities will provide, and that the sponsor has budgeted enough money to successfully complete the project.
- Commitment to Long-Term Operation and Maintenance: Sponsors should show evidence of a commitment to long-term operation and maintenance that their organization has demonstrated at existing trail and park resources. In those cases where the applicant does not presently have an operation/ maintenance responsibility for an existing trail or park, information about other public facilities or resources within the sponsor's jurisdiction may be presented.

- Project Cost: Consideration will be given to the degree to which a significant portion of the State's annual apportionment is requested for one project.
- Project Urgency. Project sponsors should show an urgent need for time-sensitive land acquisitions, immediate threat of closure because of non-compliance with state and federal law, threat of lost opportunity, meeting project completion deadlines, public health and safety concerns or impacts on cultural and natural resources.
- Mixed-Use Trails: Project sponsors should provide evidence that the specific trail design demonstrates that the project will support mixed-use recreational trail opportunities serving a wide range of abilities including the elderly and handicapped as well as the more active and highly skilled trail user.
- Regional Issues: Regional trail issues were also identified in the current trails planning process.
 Project sponsors should describe how the project addresses appropriate regional trail issues.
 Regional motorized trail issues are included in Chapter 7.

Note: Locate the project sponsor's region and identify each regional trail issue addressed in the project proposal.

Each committee member will determine the number of points awarded for each project.

Assessment Score:

points awarded (0-20 points)

³⁰ This list is not intended to be a complete list of all discretionary criteria to be considered by ATV-GS members. Other considerations could include exemplary design, special needs, project presentation and superior leverage of funding and partnership.

FOR EVALUATING EMERGENCY MEDICAL PROJECT PROPOSALS

Eligible emergency medical projects include equipment, services and supplies used for providing emergency medical attention to OHV users.

Technical Review – Application Completeness

As part of the ATV grant evaluation process, OPRD first conducts a technical review of all grant applications. Each submitted grant application packet will need to include all materials requested in Section 2 (Application Submittal, Review and Approval Process) of the ATV Grant Instruction Manual & Application Packet. Ineligible or incomplete applications will be returned to the project sponsor with an explanation of why their application was returned. Project applicants are encouraged to contact OPRD grant staff with questions regarding the ATV grant application process.

Project Priority Scoring System

Once emergency medical projects submitted to OPRD for grant funding make it through the technical review, they will then be scored by ATV-GS members according to the criteria, rating factors, and points shown in the following "Project Priority Scoring System." These criteria have been designed to evaluate and prioritize OHV emergency medical project proposals.

A project's final score will be calculated as an average of the sum of all individual ATV-GS member scores. The highest possible score for a project will be 100 points. (See Potential ATV Program Rating Criteria Point Summary on page 175 for criteria point breakdowns.) The priority rank of a project will depend on its score relative to other projects and in relation to the amount of ATV grant funds available each year.

OPRD Staff Rating Criteria

1. Compliance Criteria

Due to the large number of requests for ATV funds, the following set of compliance criteria were developed to ensure that:

- Project sponsors with active and previously awarded grants through OPRD are in full compliance with federal and state programs;
- Funds are expended and projects completed within the agreement period; and
- Each new project proposal satisfies the requirements of the Oregon Revised Statutes, ORS 390.550-585, Oregon Administrative Rules, Chapter 736, and the most current version of the ATV Grant Instructions Manual.

Note: No scoring points will be awarded for compliance criteria. Failure to comply with or lack of sufficiently demonstrated progress with the following compliance criteria (a and b) may result in the <u>disqualification of consideration for new grant</u> <u>assistance</u> during the current grant review period.

A. Grant Performance and Compliance

The successful completion of projects in a timely and efficient manner is an important goal of the ATV grant program. A project sponsor's past performance in effectively meeting the administrative guidelines of the program is also an important factor in evaluating performance and compliance.

a. The project sponsor is on schedule with all active OPRD administered grant projects.

____ Yes___ No

b. The project sponsor is in compliance with applicable guidelines for current and past projects.

____ Yes___ No

ATV Grant Subcommittee Member Rating Criteria

2. Operations (0-20 Points)

Please provide the following information related to your operation and maintenance project:

- Provide a detailed description of your grant project request including seasons of use, how patrols are conducted, and types of vehicles used for patrols such as quads, motorcycles, side-bysides, or trucks.
- What OHV areas are you patrolling?
- Please describe the need for this project. List and describe the medical problems/ issues and how the grant will help to resolve them.
- Provide a written summary of your ATV medical calls over the previous 12 months.

_ points awarded (0 - 20 points)

(The rating team will determine a value from 0-20 points based on the information provided by the applicant.)

3. Rider Benefits (0-20 Points)

OPRD intends to ensure that available ATV grant dollars are used to fund projects maximizing rider benefits.

Please provide the following information related to your law enforcement project:

- How does this program benefit the OHV trail user?
- Explain how this project is directly related to the safety of OHV users?

____ points awarded (0 - 20 points)

(The rating team will determine a value from 0-20 points based on the information provided by the applicant.)

4. Project Planning (0-20 Points)

Please provide the following information related to your law enforcement project:

- Describe your planning efforts to determine the staffing levels and resources requested. This should include initial planning with other agencies. How do you make decisions on when staff will patrol on an annual basis; such as seasonal peak use, seasonal closers (fire, snow); holiday weekends; weekend/weekends; and number of deputies at a given time? Please focus your responses on annual staff planning.
- How are you communicating with the land manager/ recreation staff and how often throughout the year to address issues and coordinate resources? Consider things such as events, changes in use patterns, problem riding areas, reducing duplication of patrols, providing backup, providing assistance, and sharing schedules. Please focus your responses on the day-to-day, on the ground, operations of staff.
- How are you working with other law enforcement agencies (OSP, other county Sheriffs, USFS LEOs, BLM Rangers, city police) throughout the year to assist with your patrols?

____ points awarded (0 - 20 points)

(The rating team will determine a value from 0-20 points based on the information provided by the applicant.)

5. Economic Development Opportunities (0-10 Points)

The findings from the Oregon OHV trail user survey identified that spending by Oregon residents on OHV riding trips was an estimated \$100 million per year across the state. In turn, this expenditure contributed 869 jobs, \$35 million in value added, and \$23 million in labor income. When out-of-state visitors are included, the estimated amounts increase to 1,120 jobs, \$45 million in value added, and \$29 million in labor income.

 Please describe how the riding areas you respond to will contribute to the local economy.

___ points awarded (0 - 10 points)

(The rating team will determine a value from 0-10 points based on the information provided by the applicant.)

6. Financial Support (0-5 Points)

Support can be demonstrated in both financial and non-financial ways and varies depending upon the project type.

 Please describe match to this project, such as volunteer labor, other grants, agency budgets or donations. Please list other grants you have received over the last 3 years which are not part of this grant, but relate to OHV use in your program.

points awarded (0 - 5 points)

(The rating team will determine a value from 0-5 points based on the information provided by the applicant.)

7. Letters Of Support (0-5 Points)

Current letters of support, from a variety of sources, help to demonstrate the need and success of your program. Letters from OHV riders and clubs are very important. Letters from local businesses, county commissioners, and other groups are also important. Letters from agencies also show support, but only

two letters from agencies are allowed. Please list the name, title, group, business or agency for each letter attached. Up to 10 letters of support will be accepted. No letters will be accepted from previous years.

___ points awarded (0 - 5 points)

(The rating team will determine a value from 0-5 points based on information provided by the applicant related to the degree to which the project demonstrates broad community support.)

8. Discretionary Committee Member Criteria (0-20 Points)

The ATV-GS membership is representative of state geographic regions, agencies, communities, and trail user groups. This assessment allows committee members to bring their knowledge of statewide and local recreation patterns, resources, and needs into consideration. The determination of points awarded is an individual decision, based on informed judgment.

ATV-GS members may award the project additional points based upon their subjective evaluation of the following³¹:

Site Suitability: The extent to which the site is suitable for the proposed development (e.g., minimizes negative impacts on the environment, surrounding neighborhood).

Fiscal Consideration: Under this review, project sponsors will be asked to justify their request for financial assistance including the extent to which the project is cost comparable to other trail facilities of its type in the geographic area (e.g., cost-per mile comparisons), is justifiable in terms of the quantity and quality of recreation opportunities the facilities will provide, and that the sponsor has budgeted enough money to successfully complete the project.

31 This list is not intended to be a complete list of all discretionary criteria to be considered by ATV-GS members. Other considerations could include exemplary design, special needs, project presentation and superior leverage of funding and partnership.

Commitment to Long-Term Operation and Maintenance: Sponsors should show evidence of a commitment to long-term operation and maintenance that their organization has demonstrated at existing trail and park resources. In those cases where the applicant does not presently have an operation/ maintenance responsibility for an existing trail or park, information about other public facilities or resources within the sponsor's jurisdiction may be presented.

Project Cost: Consideration will be given to the degree to which a significant portion of the State's annual apportionment is requested for one project.

Project Urgency: Project sponsors should show an urgent need for time-sensitive land acquisitions, immediate threat of closure because of non-compliance with state and federal law, threat of lost opportunity, meeting project completion deadlines, public health and safety concerns or impacts on cultural and natural resources.

Mixed-Use Trails: Project sponsors should provide evidence that the specific trail design demonstrates that the project will support mixed-use recreational trail opportunities serving a wide range of abilities including the elderly and handicapped as well as the more active and highly skilled trail user.

Regional Issues: Regional trail issues were also identified in the current trails planning process. Project sponsors should describe how the project addresses appropriate regional trail issues. Regional motorized trail issues are included in Chapter 7.

Note: Locate the project sponsor's region and identify each regional trail issue addressed in the project proposal.

Each committee member will determine the number of points awarded for each project.

Assessment Score:

___ points awarded (0-20 points)

► CHAPTER 11

Recreational Trails Program Grant Evaluation Criteria



TECHNICAL REVIEW - APPLICATION COMPLETENESS

As part of the Recreational Trails Program (RTP) grant evaluation process, the Oregon Parks and Recreation Department (OPRD) first conducts a technical review of all grant applications. Submitted grant application packets need to include all materials requested in Section 2 (Application Process – How to Apply) of the Recreational Trails Program Grant Manual and Application Packet. Ineligible or incomplete applications will be returned to the project sponsor with an explanation of why their application was returned, Project applicants are encouraged to contact OPRD grant staff regarding eligibility and for information on other suitable funding sources.

PROJECT PRIORITY SCORING SYSTEM

Following staff technical review, qualified applications are scored by Recreational Trails Program Grant Advisory Committee (RTPAC) members according to the application criteria, rating factors, and points shown in the following "Project Priority Scoring System." The criteria reflect the RTP program guidelines and are based on the findings of the current state trails plan and reflect priorities identified by workshop participants, trails plan advisory committee members, trail user survey respondents and land managers. These criteria have been designed to evaluate and prioritize non-motorized, water, Off-Highway Vehicle (OHV), and snowmobile trail projects.

The project score will be calculated as an average of the sum of all individual technical review and RTPAC member scores. The highest possible score will be 100 points (See Potential RTP Program

Rating Criteria Point Summary in the table below for criteria point breakdowns). The priority rank of a project will depend in its score relative to other projects and in relation to the amount of RTP grant funds available each year.

Recreational Trail Program Rating Criteria Point Summary

Criteria Type	Possible Points
OPRD technical review	
1. Compliance	0
2. Recent Awards	5
RTPAC member rating criteria	
3. Economic Development	5
Opportunities	
4. Project Scope and Plan	10
5. Issues and Need	30
6. Demonstration of Public	5
Support	
7. Sustainable Trail Design	5
8. Trail Maintenance and	10
Management	
9. Project Urgency	5
10. Youth Conservation Corps	5
11. Discretionary Committee	20
Member Criteria	
Total Points Possible	100

OPRD Staff Rating Criteria

1. Compliance (0 Points)

Due to the large number of requests for RTP funds, the following set of compliance criteria were developed to ensure that:

- Project sponsors with active and previously awarded grants through OPRD are in full compliance with federal and state programs;
- Funds are expended and projects completed within the agreement period; and
- Each new project proposal satisfies the requirements of the Moving Ahead for Progress in the 21st Century Act (MAP-21) and is consistent with the Federal RTP guidelines.

Note: No scoring points will be awarded for compliance criteria. Failure to comply with or lack of sufficiently demonstrated progress with the following compliance criteria (a and b) may result in the <u>disqualification of consideration for new grant</u> <u>assistance</u> during the current grant review period.

A. Grant Performance and Compliance

The successful completion of projects in a timely and efficient manner is an important goal of the RTP grant program. A project sponsor's past performance in effectively meeting the administrative guidelines of the program is also an important factor in evaluating performance and compliance.

a. The project sponsor is on schedule with all active OPRD administered grant projects.

b. The project sponsor is in compliance with applicable guidelines for current and past projects.

2. Recent Awards (0 or 5 Points)

Priority points are given to projects from project sponsors that have not received an RTP grant in the past ten years.

• The project sponsor has not received Recreational Trail Program funding in the last ten years.

___ points awarded (0 or 5 points)

(5 points for project sponsors who have not received an RTP grant in the last ten years, 0 points for all other project sponsors.)

Recreational Trails Program Advisory Committee Member Rating Criteria

3. Economic Development Opportunities (0-5 Points)

The Oregon trail-user surveys showed that trail-related trip expenditures result in substantial contributions to local economies. As a result, OPRD would like to encourage the development of recreational trails to assist local communities in economic development. Such areas could greatly benefit from the trip expenditures and job creation associated with trail-based recreation.

 How will the project facilitate economic development?

_ points awarded (0-5 points)

(The rating team will determine a value from 0-5 points based on the information provided by the applicant.)

4. Project Scope and Plan (0-10 Points)

OPRD intends to ensure that available RTP grant dollars are used in a timely manner once funding is awarded to a project sponsor. Having completed the necessary upfront tasks of detailing the project scope, budget and pre-project planning will show the project sponsor has a well thought out project that is ready to complete.

A. Are the project scope, budget, and plan clear and realistic?

Project sponsors should describe how their project will provide a clear and concise budget and identify how they plan to accomplish the project. Items to address include:

- What are you proposing to do?
- Project elements including trail amenities, users, length, width, structures (item description, width, length), standards.
- How are you proposing to complete the work (contractor, youth crews, staff, volunteers, etc.)?

- Why is the work being done?
- What is your project timeline?

B. Has the pre-project planning occurred and is the project ready to proceed?

a. Development and heavy restoration projects.

Project sponsors should describe how their project is ready to proceed by responding to the following questions/ requested items. A successful project need not address each bullet.

- What is the current level of design for the project (e.g., conceptual, percentage estimate, construction drawings)?
- Please provide project plans or drawings.
- When will project work begin? When will work be completed or the facility opened for use?
- Is any public involvement required or planned? If yes, is it completed or when will it be completed?
- What permits will be needed to complete the project and do you have these permits in hand at this time?

b. Acquisition projects

Project sponsor should describe what it will take to get their particular development project completed in a timely manner including such items as:

- Completed appraisal
- Preliminary Title Report
- Level 1 or higher Environmental Assessment
- Proof of willing seller or donor

c. Design, safety, or education projects

Project sponsors should describe how their project is ready to proceed by responding to the following questions/ requested items. A successful project need not address each bullet.

- Have you identified the scope and deliverables?
- Have you hired a firm or developed a request for proposal or similar bid document?

- Have you completed artwork, copy or curriculum?
- Do you have a proof of the product?
- Do you have production ready design, artwork, etc.?

d. How have you addressed Americans With Disabilities (ADA) Guidelines for this project?

Project sponsors should use the attached form to show how they are addressing ADA Guidelines for the project.

____ points awarded (0-10 points)

(The rating team will determine a value from 0-10 points based on the information provided by the applicant.)

5. Issues and Need

Project sponsors are strongly encouraged to develop project applications that meet high priority needs of the intended clientele. Project proposals addressing trail management issues and funding needs at the statewide and local levels identified through the statewide trails planning process or local planning efforts will be given priority points.

A. Statewide Trail Management Issues

The statewide trails planning process identified a set of three top statewide trail management issues for each trail type (non-motorized, water, OHV, and snowmobile). Project proposals addressing statewide trail issues will receive additional priority points (see top statewide trail issues listed below). To receive these points, project sponsors should describe how the project addresses these issues for their designated project type.

a. Non-motorized Trail Projects

Issue 1. Need for more trails connecting towns/ public places. This issue is addressed by trails projects that connect communities to each other; provide connections between existing trails; close a gap within an existing trail; provide links

to trails outside Urban Growth Boundaries; provide access to parks and open space; and provide access to significant facilities within communities such as schools, libraries, indoor recreation facilities, and businesses.

Issue 2. Need for improved trail maintenance. For this issue, trail maintenance includes routine trail maintenance and trail rehabilitation/ restoration.

Routine maintenance includes work that is conducted on a frequent basis in order to keep a trail in its originally constructed serviceable standards (e.g., mowing, tree and brush pruning, leaf and debris removal, cleaning and repair of drainage structures such as culvers, water bars, and drain dips), maintenance of water crossings, and repairs to signs and other amenities. Routine maintenance work is usually limited to minor repair or improvements that do not significantly change the trail location, width, surface, or trail structure.

Trail rehabilitation/ restoration involves extensive trail repair (e.g., resurfacing of asphalt trails or complete replacement, regrading, and resurfacing of all trails) needed to bring a facility up to standards suitable for public use (not routine maintenance). In some cases, trail rehabilitation/restoration may include necessary relocation of minor portions of the trail.

Issue 3. Need for more trail signs (directional and distance markers, and level of difficulty). Trail users require a number of different types of signs to safely and enjoyably pursue their trail experience. Location signs that lead people to trailheads and parking areas, directional signs along the trail, destination signs to let people know they have reached end points, interpretive signs that describe the natural or cultural history of the area, and regulatory signs that explain the do's and don'ts of the area are important trail components. Trail managers should provide information about their trails that allows users to choose the trails within their skill and capability

level. It is important for all users, but especially elderly or disabled users, to understand a specific trail's maximum grade and cross-slope, trail width, surface, obstacles and length before using the trail.

b. Water Trail Projects

Issue 1. Need for increased access for non-motorized boating. The need for increased access for non-motorized boating is driven by a continuing increase in participation in non-motorized boating activities in both Oregon and the U.S. in recent decades. Access refers to a specific location where the public has the legal right and physical means to get to the water to launch a non-motorized boat. Non-motorized boating access may be unimproved or enhanced to varying degrees.

Issue 2. Lack of funding for non-motorized boater facilities.

Issue 3. Lack of non-motorized boating maps and information. Projects addressing this issue could include water trail guides, information brochures, signage projects, websites, smartphone apps, and promotional materials.

c. Off-Highway Vehicle Trail Projects

Issue 1. Closure of trails. The implementation of federal travel management planning has resulted in a loss of OHV trail riding opportunities in Oregon. Closure of designated trails and routes without providing other designated routes in the same area leads to overuse and impacts in new areas.

Issue 2. Closure of unimproved backcountry roads. Again, the implementation of federal travel management planning has also resulted in the loss of OHV riding on backcountry roads in Oregon.

Issue 3. Riding in closed areas. Land managers have reported a proliferation of user created trails arising from repeated unauthorized travel by OHVs.

d. Snowmobile Trail Projects

Issue 1. Closure of snowmobile trails/ riding areas. In the coming years, all Oregon USFS Forest Districts will go through a public planning process to review and designate roads, trails, and cross country areas which are open to snowmobile use as part of the over-snow vehicle (OSV) travel management rule. There is a need to minimize unwarranted snowmobile riding closures during upcoming OSV travel management planning in Oregon.

Issue 2. Riding in closed areas. In recent years, the USFS has been confronted with a proliferation of trails arising from repeated unauthorized cross-country snowmobile travel. Unauthorized access can result from either areas not mapped, signed, or marked clearly as open or closed; or snowmobilers ignoring designations.

Issue 3. Lack of snowmobile trail maintenance. A consistent snowmobile trail maintenance backlog exists on Oregon national forests.

B. Regional Trail Management Issues

The statewide trails planning process also identified a set of three top regional trail management issues for each trail type (non-motorized, water, OHV, and snowmobile). Project proposals addressing regional trail issues will receive additional priority points (see top regional trail issues listed in Chapter 7). To receive these points, project sponsors should describe how the project addresses these issues for their designated project type and planning region.

C. Statewide Trail Need

The statewide trails planning process identified a set of three top statewide trail funding needs for each trail type (non-motorized, water, OHV, and snowmobile). Project proposals addressing statewide non-motorized, water, OHV, or snowmobile trail issues will receive additional points. To receive these points, project sponsors should describe how the project addresses these issues for their designated project type.

Non-motorized Trail Projects Within Urban Growth Boundaries and in Dispersed Settings

- Connecting trails into larger trail systems.
- More signs/ trail wayfinding.
- Repair of major trail damage.

Water Trail Projects

- Public non-motorized boater access to the water (developed or undeveloped).
- Non-motorized boat launch facilities.
- Restrooms.

OHV Trail Projects

- Maintain existing trails in good/ sustainable condition.
- More single-track off-road motorcycle trails (Class III).
- Prioritize loop over out-and-back trails.

Snowmobile Trail Projects

- Expand existing trail system.
- More trail grooming/ rehabilitation.
- More back-country off-trail riding opportunities.

D. Local Funding Need

Local need can be demonstrated through results of the trails plan needs assessment (item a below), coordinated, long-range planning with a minimum of a 5-year planning horizon (item b below), or through a substantive public involvement process (item c below). If the project isn't identified as a region-level need by the trails plan needs assessment, local need should be demonstrated through the project's inclusion in a current planning document or by describing the project's public involvement process.

- a. The 2016-2025 trails planning effort included a region-level analysis to identify priority projects. Project proposals addressing regional non-motorized, water, OHV, or snowmobile trail funding need will receive additional points. To receive these points, project sponsors should describe how the project addresses this need for their designated project type (regional funding need listings are included in Chapter 6). In addition to water trail funding need, top nominations for water trail development and potential Scenic Waterway additions are also included to encourage water trail development on these waterways (See Chapter 6 Water trail funding priorities).
- b. The extent to which the project will satisfy priority needs, as identified in a current planning document such as a comprehensive plan or recreation master plan, county or regional master plan, trail system plan, capital improvements plan or land use/ management plan. Is the plan part of an adopted plan? If yes, provide the name of the plan, governing body that adopted/approved the plan, and the date adopted/approved.
- c. If the project is not included in a current planning document, describe the public involvement effort that led to the selection of the project such as citizen involvement through public meetings/workshops, open houses, interviews, questionnaires, etc.

___ points awarded (0-30 points)

(The rating team will determine a value from 0-30 points based on the information provided by the applicant.)

6. Demonstration of Public Support (0 to 5 Points)

Public involvement is a means of building support and developing a constituency and a partnership for the development effort.

• The sponsor should show letters of support from citizens or user groups that articulate this specific project as a needed or supported project. A priority list developed out of planning process to identify public support for this trail project can be used in addition to letters of support. Letters of support from organizations and agencies are also acceptable, but should cover the specific project's public process, their fiscal support or other forms of support

___ points awarded (0- 5 points)

(The rating team will determine a value from 0 to 5 points based on the information provided by the applicant.)

7. Sustainable Trail Design (0 or 5 Points)

A sustainable trail system will allow for carrying more visitors into a natural area with little impact on the surrounding ecosystem. They will require less maintenance through sound construction techniques and using materials that are designed for long-term self-sustaining use and by using on-site materials as much as possible. The trail project will result in a well-designed, managed and sustainable trail or trail system.

Specific sustainability recommendations for OPRD-administered grant programs are included in SCORP Chapter Seven (pages 115-117). Recommendations are included for land acquisition, new facility development, major rehabilitation, and trail projects. The full support document entitled, "Developing Sustainable Park Systems in Oregon," is available at the following link:

http://www.oregon.gov/oprd/PLANS/docs/scorp/2013-2018_SCORP/2013-2017-SCORP_App_D.pdf

 The applicant should describe how the trail project results in a well-designed, managed and sustainable trail system. The applicant should also identify what trail standards or guidelines will be used to complete the project.

___ points awarded (0-5 points)

(The rating team will determine a value from 0-5 points based on the information provided by the applicant.)

8. Trail Maintenance and Management (0-10 Points) (For non-motorized, water, OHV, and snowmobile trail projects)

A. Commitment to Long-term Maintenance and Management

Maintaining existing trails in good/ sustainable condition was identified as the top statewide funding priority and trails issue for all user groups in the planning process. The applicant should carefully respond to the following questions related to trail maintenance and management after the project is complete.

- Do you have dedicated funding for ongoing trail operation and maintenance? If yes, what is the approval cycle (e.g., annual, bi-annual, permanent, fixed)?
- Do you have permanent staff for ongoing trail operation and maintenance? If yes, please identify the number of permanent and seasonal staff.
- Do you have an organization that adopts/ assists with trail maintenance? If yes, please identify these organization names.
- Do you have a trail management plan? If yes, please identify the title of the document and when it was adopted by a governing body.
- Do you have a resolution of support for longterm maintenance (or similar guarantee of financial support)?

___ points awarded (0-10 points)

9. Project Urgency (0-5 Points)

The RTPAC is aware that time can often be a critical factor in the acquisition and operation of valuable recreation properties. The intent of the following criteria is to provide priority for project proposals showing an urgent need for time-sensitive land acquisitions, immediate threat of closure because of non-compliance with state and federal law, threat of lost opportunity, public health and safety concerns or impacts on cultural and natural resources.

Opportunities that may be lost as a result of sponsors budget cycles or other activities within the control of the Project Sponsor will not be considered as "urgent."

___ points awarded (0-5 points)

(The rating team will determine a value from 0-5 points based on the information provided by the applicant.)

10. Youth Conservation Corps (0-5 Points)

"Youth Conservation Corps Involvement," originates from federal guidance for the Recreational Trails Program, which encourages use of Youth Conservation Corps or service corps to construct and maintain trails. This criterion recognizes this encouragement by giving credit to trail projects that use the Community Conservation Corps, Certified Conservation Corps and/or service corps.

____ points awarded (0-5 points)

(The rating team will determine a value from 0-5 points based on the information provided by the applicant.)

11. Discretionary Committee Member Criteria (0-20 Points)

Consistent with RTP guidance, RTPAC membership represents a broad range of motorized and non-motorized trail users within the state. This assessment allows committee members to bring their knowledge of statewide and local recreation patterns, resources, and needs into consideration. The determination of points awarded is an individual decision, based on informed judgment.

Reviewers may award the project additional points based upon their subjective evaluation of the following: superior design, ADA compliance, site suitability, fiscal consideration, state/regional issues (regional trail issues are included on the following pages), and the basic intent of MAP-21. Other considerations could include, superior leverage of funding and partnership including the use of volunteers, heritage, context, and potential for legacy. This is not intended to be a complete list of all discretionary criteria to be considered by RTPAC members.

Each committee member will determine the number of points awarded for each project.

___ points awarded (0-20 points)

Download the report online at: oregon.gov/oprd/trail_programs_services/pages/trail-plans.aspx



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